MiTek®

MiTek, Inc.
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200

Re: 241087-G
WILSHIRE HILLS III - ROOF

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Mattingly Millwork & Lumber.

Pages or sheets covered by this seal: I73183836 thru I73184023

My license renewal date for the state of Missouri is December 31, 2026.

Missouri COA: Engineering 001193

Approved (✔)
Approved as Noted ( )
If checked above, fabrication MAY be undertaken. Approval does not authorize changes to Contract Sum unless stated in separate letter or Change Order.

Not Reviewed ( )
If checked, this information is not required to be submitted as a shop drawing and is the sole responsibility of the contractor to ensure conformance with the Contract Documents.

If checked below, fabrication MAY NOT be undertaken. Resubmit corrected copies for final approval. Correction shall be limited to items marked.
Revise and Resubmit ( )
Not Approved ( )

Reviewing is only for conformance with the design concept of the project and compliance with the information given in the contract documents. The contractor is responsible for dimensions to be confirmed and correlated at the job site; for information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction and for coordination of the work of all trades. The architect's approval of a specific item does not indicate approval of an assembly of which the item is a component.

rosemann & ASSOCIATES PC
BY fmedrano DATE 5/12/2025

May 2,2025

Lu, Jie ,Engineer

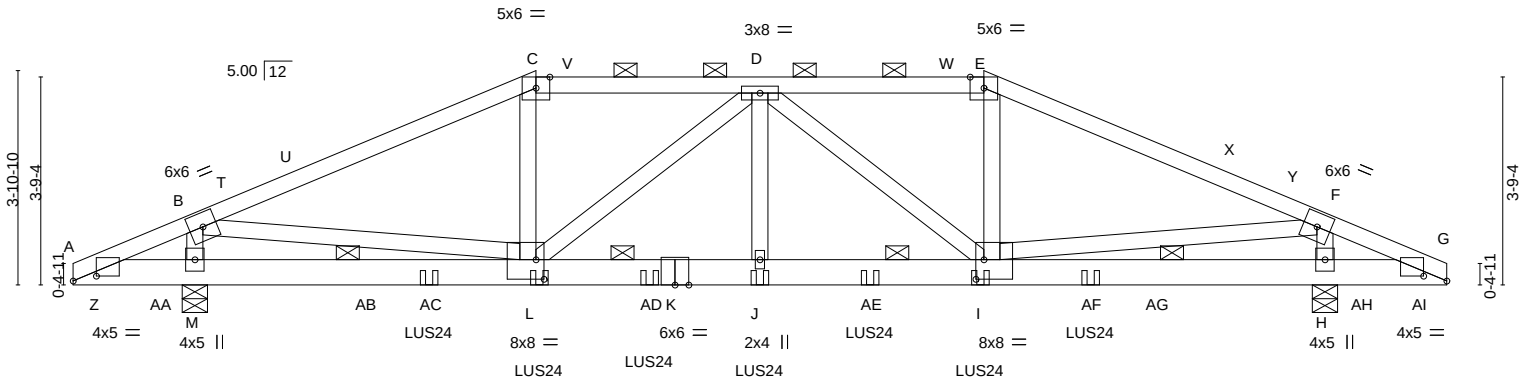
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	A	Hip Girder	2	1	I73183836
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:17 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-Yg9O57uX16eJrSWRltdgqF7SC9hhmY1hSPGAKgzKqTy

2-2-8	8-4-12	12-5-8	16-6-4	22-8-8	24-11-0
2-2-8	6-2-4	4-0-12	4-0-12	6-2-4	2-2-8

Scale = 1:41.8



1-11-12	2-2-8	8-4-12	12-5-8	16-6-4	22-8-8	22-11-4	24-11-0
1-11-12	0-2-12	6-2-4	4-0-12	4-0-12	6-2-4	0-2-12	1-11-12

Plate Offsets (X,Y)-- [A:0-5-1,0-1-1], [G:0-5-1,0-1-1], [I:0-1-12,0-4-4], [L:0-1-12,0-4-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.13	J	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.22	J	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.04	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.06	J	>999	240	Weight: 111 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF 2100F 1.8E *Except*
	C-E: 2x4 SPF No.2
BOT CHORD	2x6 SPF No.2
WEBS	2x4 SPF No.3 *Except*
	B-L,F-I: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-8-2 oc purlins, except 2-0-0 oc purlins (3-0-0 max.): C-E.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. (size) M=0-5-8, H=0-5-8
Max Uplift M=-291(LC 8), H=-291(LC 8)
Max Grav M=2551(LC 2), H=2551(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-554/327, B-C=-3656/381, C-D=-3281/373, D-E=-3281/373, E-F=-3656/381, F-G=-554/327
BOT CHORD	A-M=-282/568, L-M=-282/568, J-L=-331/3868, I-J=-331/3868, H-I=-282/568, G-H=-282/568
WEBS	B-M=-2044/294, B-L=-260/2749, C-L=-63/1088, D-L=-862/73, D-J=-18/632, D-I=-862/73, E-I=-63/1088, F-H=-2044/294, F-I=-260/2749

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-1-14, Exterior(2R) 4-1-14 to 20-9-3, Interior(1) 20-9-3 to 21-11-0, Exterior(2E) 21-11-0 to 24-11-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) M=291, H=291.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 6-5-8 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
13) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 8-5-8 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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NOTES-

14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 10-5-8 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
15) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 12-5-8 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
16) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 14-5-8 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
17) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 16-5-8 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
18) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 18-5-8 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
19) Fill all nail holes where hanger is in contact with lumber.
20) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-C=-51, C-E=-51, E-G=-51, N-Q=-30
   Concentrated Loads (lb)
   Vert: L=-282(F) J=-282(F) I=-282(F) AC=-436(F) AD=-282(F) AE=-282(F) AF=-436(F)

May 2,2025

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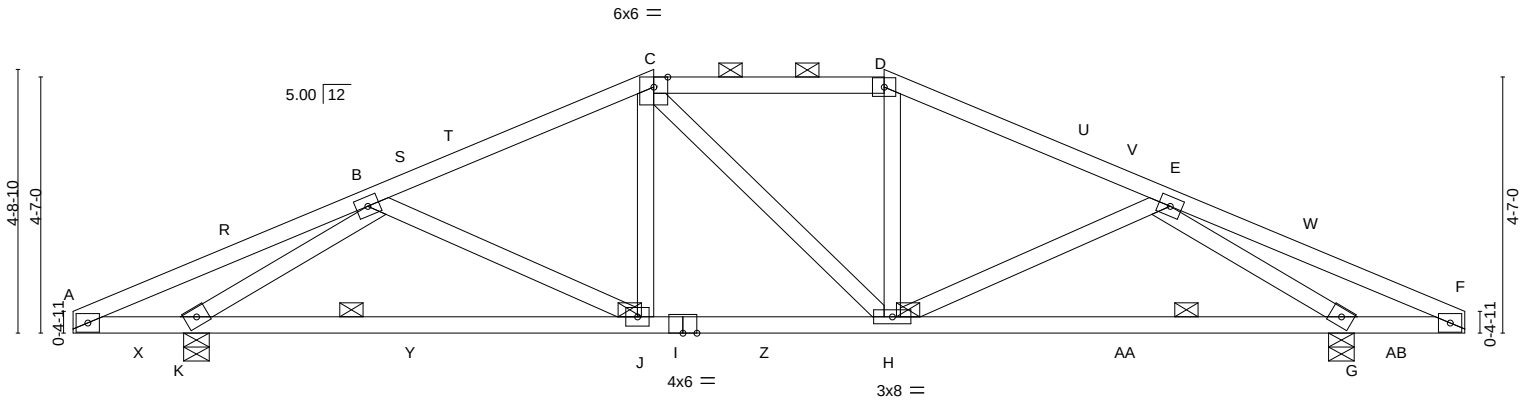
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	A2	Hip	2	1	I73183837
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:17 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-Yg9O57uX16eJrSWRltdgqF7WW9kwmYQhSPGAKgzKqTy

5-5-8	10-4-12	14-6-4	19-5-8	24-11-0
5-5-8	4-11-4	4-1-8	4-11-4	5-5-8

Scale = 1:41.3



1-11-12	2-2-8	10-4-12	14-6-4	22-8-8	22-11-4	24-11-0
1-11-12	0-2-12	8-2-4	4-1-8	8-2-4	0-2-12	1-11-12

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.22	J-K	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.35	J-K	>726	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.04	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	H-J	>999	240	Weight: 96 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-11-6 max.): C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) K=0-5-8, G=0-5-8
Max Uplift K=-96(LC 8), G=-96(LC 8)
Max Grav K=1370(LC 2), G=1370(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-423/458, B-C=-1525/82, C-D=-1334/94, D-E=-1525/81, E-F=-422/458
BOT CHORD A-K=-409/368, J-K=-37/1363, H-J=0/1334, G-H=-37/1363, F-G=-409/367
WEBS C-J=0/375, D-H=0/278, B-K=-1684/227, E-G=-1684/227

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-1-13, Exterior(2R) 6-1-13 to 18-9-3, Interior(1) 18-9-3 to 21-11-0, Exterior(2E) 21-11-0 to 24-11-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 4x5 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K, G.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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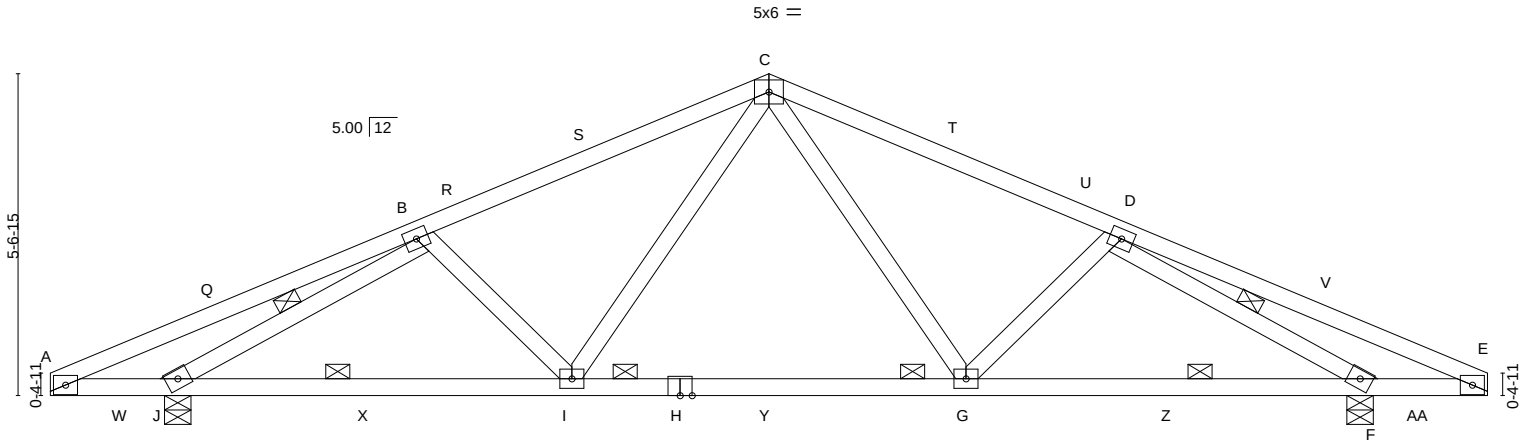
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	A3	Common	5	1	I73183838
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:18 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-0simISv9oPmATc5dJb8vMSfffZ6CV2Wrh30ks6zKqTx

6-5-14 | 12-5-8 | 18-5-2 | 24-11-0
6-5-14 | 5-11-10 | 5-11-10 | 6-5-14

Scale = 1:39.9



1-11-12 | 2-2-8 | 9-0-8 | 15-10-8 | 22-8-8 | 22-11-4 | 24-11-0
1-11-12 | 0-2-12 | 6-10-0 | 6-10-0 | 6-10-0 | 0-2-12 | 1-11-12

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.18	G-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.25	G-I	>996	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.04	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	G-I	>999	240	Weight: 93 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt B-J, D-F

REACTIONS. (size) J=0-5-8, F=0-5-8
Max Uplift J=-109(LC 8), F=-109(LC 8)
Max Grav J=1370(LC 2), F=1370(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-335/500, B-C=-1554/116, C-D=-1554/116, D-E=-335/500
BOT CHORD A-J=-443/285, I-J=-50/1472, G-I=0/1132, F-G=-50/1472, E-F=-443/285
WEBS C-G=0/493, C-I=0/493, B-J=-1780/195, D-F=-1780/195

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 9-5-8, Exterior(2R) 9-5-8 to 15-5-8, Interior(1) 15-5-8 to 21-11-0, Exterior(2E) 21-11-0 to 24-11-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are 4x5 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) J=109, F=109.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	AA1	Piggyback	1	1	I73183839
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:19 2025 Page 1
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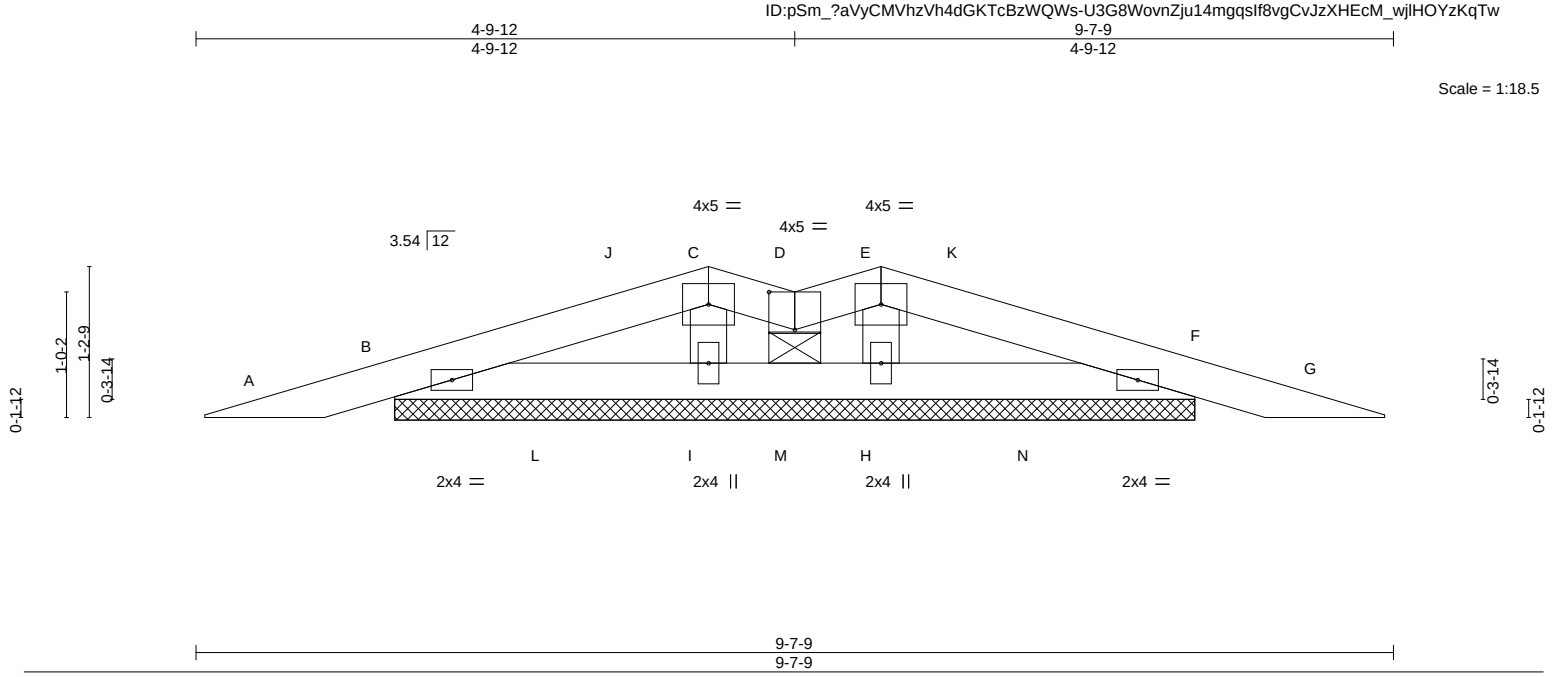

Plate Offsets (X,Y)-- [D:0-2-8,0-3-10]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.00	F	n/r	120	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.29	Vert(CT)	0.00	F	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-P							Weight: 20 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 9-7-9 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 6-5-3.
(lb) - Max Horz B=3(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) B, F, I, H
Max Grav All reactions 250 lb or less at joint(s) except B=325(LC 37), F=325(LC 40), I=357(LC 38), H=357(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-6-10 to 3-6-10, Exterior(2R) 3-6-10 to 4-1-7, Exterior(2E) 4-1-7 to 4-9-12, Exterior(2R) 4-9-12 to 6-0-15, Exterior(2E) 6-0-15 to 9-0-15; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) Gable requires continuous bottom chord bearing.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, F, I, H.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 2,2025

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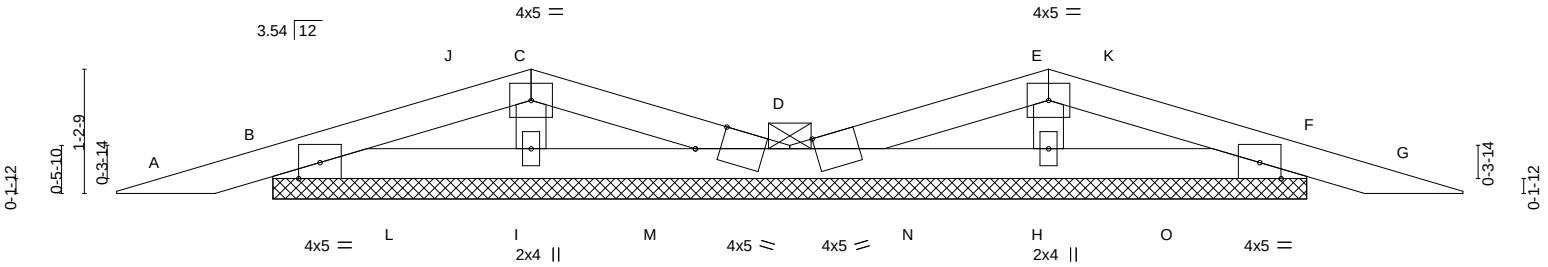
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	AA2	Piggyback	1	1	I73183840
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:19 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-U3G8WovnZju14mgqsIf8vgCvhzXcEcP_wjlHOYzKqTw

6-7-13 | 13-3-10
6-7-13 | 6-7-13

Scale = 1:22.5



6-7-13 | 13-3-10
6-7-13 | 6-7-13

Plate Offsets (X,Y)-- [D:0-2-13,Edge], [D:1-1-7,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00	F	n/r	120	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.27	Vert(CT)	0.00	F	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S							Weight: 28 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 10-1-4.
(lb) - Max Horz B=6(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) D, I, H except B=-107(LC 8), F=-108(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except D=374(LC 40), B=329(LC 38), F=329(LC 42), I=383(LC 39), H=383(LC 41)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-6-10 to 3-6-10, Exterior(2R) 3-6-10 to 4-1-7, Exterior(2E) 4-1-7 to 6-7-13, Exterior(2R) 6-7-13 to 9-9-0, Exterior(2E) 9-9-0 to 12-9-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) Gable requires continuous bottom chord bearing.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D, I, H except (jt=lb) B=107, F=108.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	AA3	GABLE	4	1	I73183841
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:20 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-zFqWj8wQK10uiwE0Q0ANStl3BNtLz2X79NVrw_zKqTv

4-1-7 8-2-14
4-1-7 4-1-7

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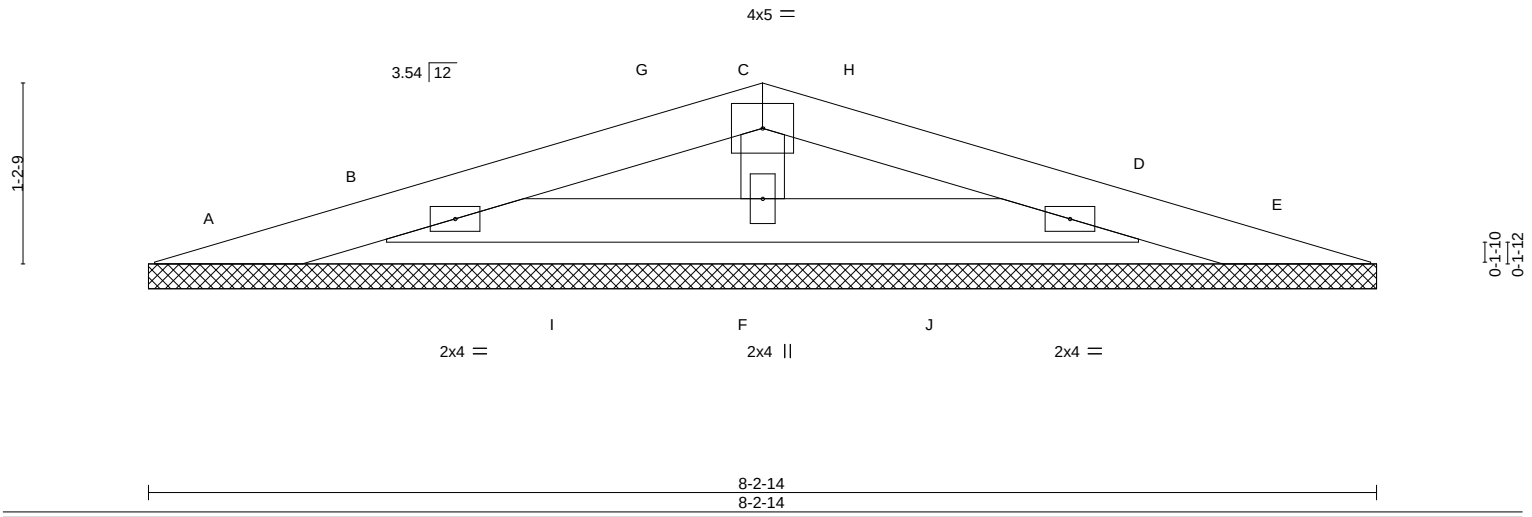

8-2-14
8-2-14

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.30	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-P							Weight: 16 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.3
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 8-2-14.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) F except B=-167(LC 8), D=-167(LC 8)
Max Grav All reactions 250 lb or less at joint(s) A, E except B=349(LC 24), D=349(LC 26), F=384(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) 0-6-7 to 3-6-7, Corner(3R) 3-6-7 to 4-8-7, Corner(3E) 4-8-7 to 7-8-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F except (jt=lb) B=167, D=167.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 2,2025

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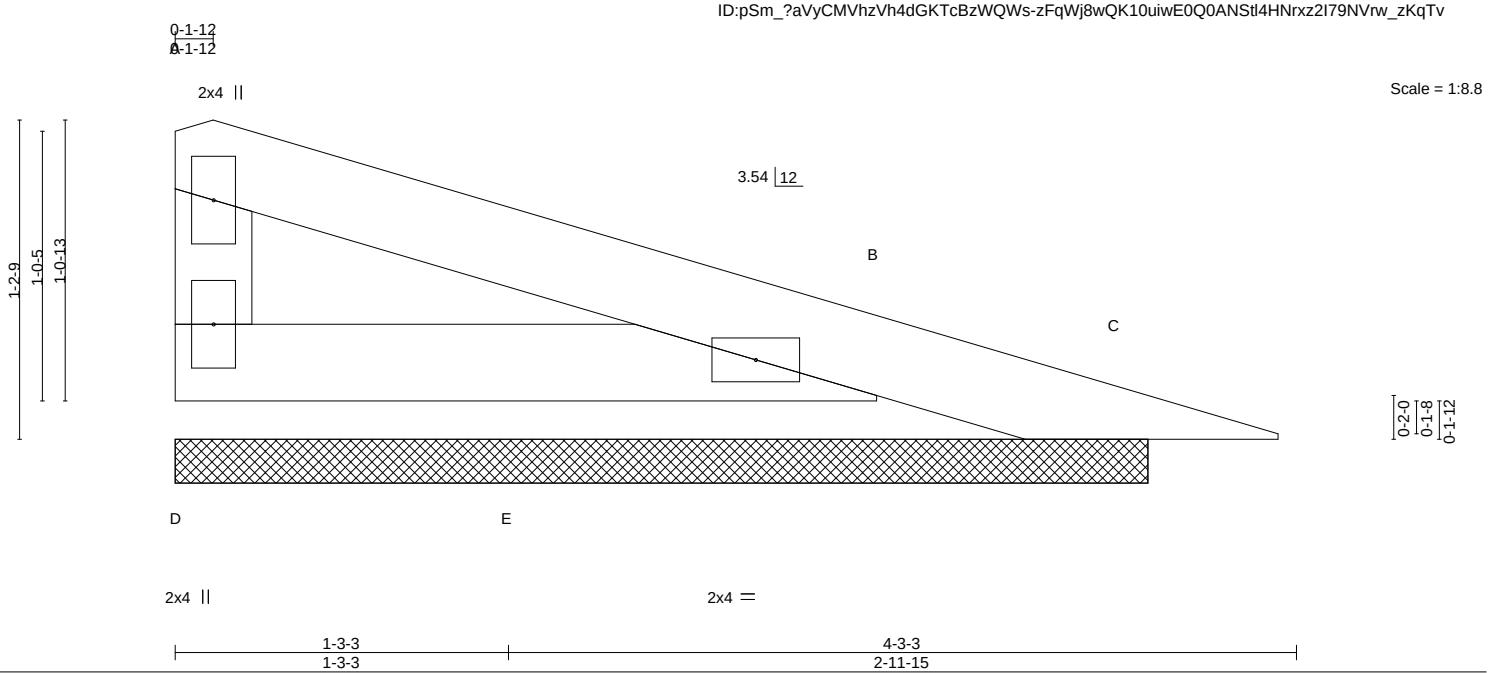
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	AA4	Piggyback	2	1	I73183842
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:20 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-zFqWj8wQK10uiwE0Q0ANStl4HNrxz2I79NVrw_zKqTv



LOADING (psf)			SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0		Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4		Lumber DOL	1.15	BC	0.39	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0		Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	C	n/a	n/a		
BCLL	0.0	*	Code IBC2018/TPI2014		Matrix-P							Weight: 9 lb	FT = 20%
BCDL	15.0												

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-3-3 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) D=3-8-6, C=3-8-6, B=3-8-6
Max Horz D=-81(LC 8)
Max Uplift D=-45(LC 8), B=-102(LC 8)
Max Grav D=308(LC 23), C=14(LC 7), B=358(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) C, B considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D except (jt=lb) B=102.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 2,2025

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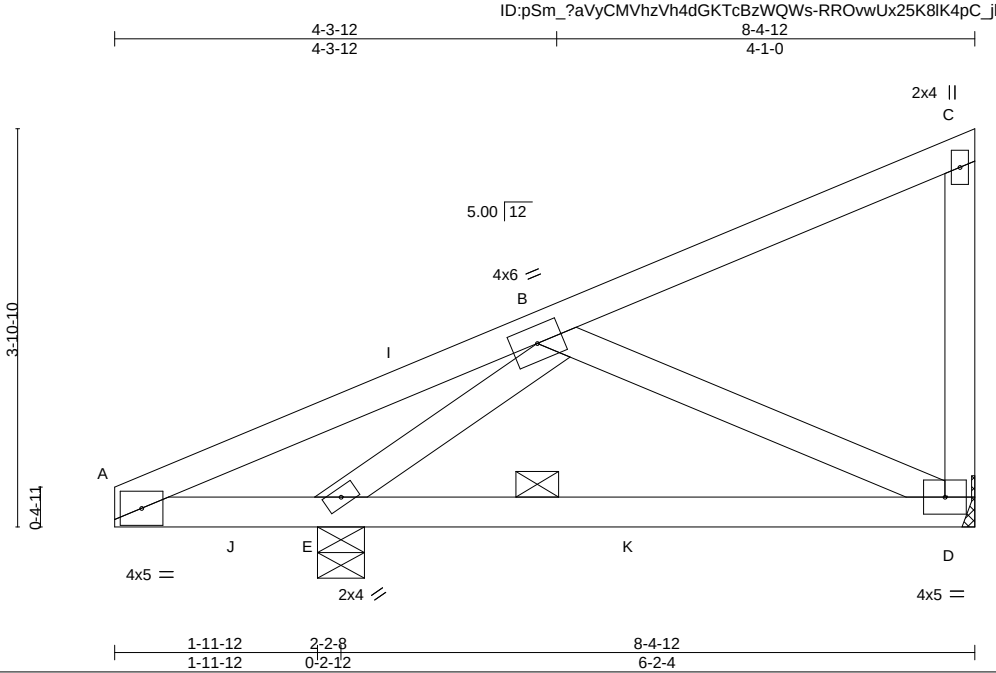
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	B	Jack-Closed	10	1	I73183843
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:21 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-RROvwUx25K8lK4pC_jhc_5HDYn9RiTVHN0EOTRzKqTu



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.14	D-E	>554	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.19	D-E	>393	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	-0.01	D-E	>999	240	Weight: 32 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) D=Mechanical, E=0-5-8
Max Horz E=-142(LC 9)
Max Uplift D=-65(LC 8), E=-155(LC 8)
Max Grav D=390(LC 27), E=602(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-307/548
BOT CHORD A-E=-493/266, D-E=-92/300
WEBS B-D=-298/126, B-E=-520/259

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-0-2, Exterior(2R) 4-0-2 to 8-3-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D except (jt=lb) E=155.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	B2	Half Hip Girder	4	1	I73183844
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:21 2025 Page 1
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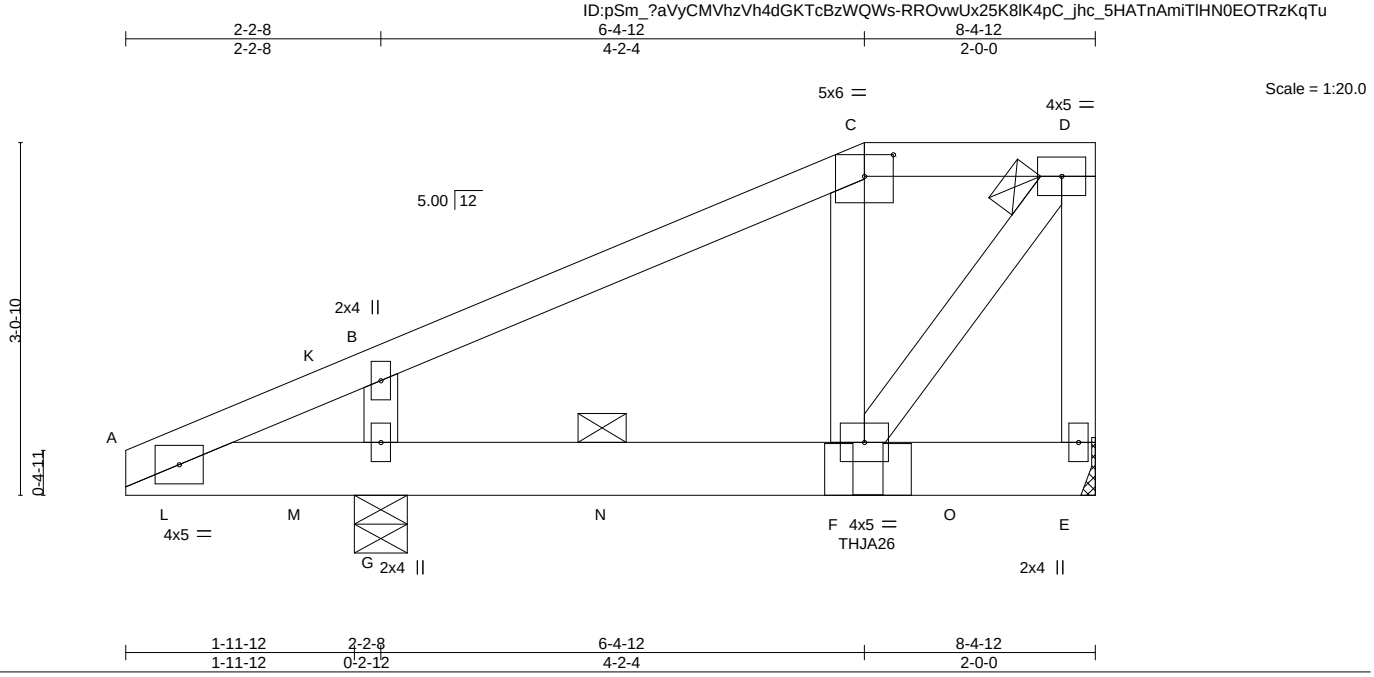

Plate Offsets (X,Y)-- [C:0-3-0,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.01	F	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.02	F	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.18	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MP		Wind(LL)	0.01	F	>999	240	Weight: 35 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) E=Mechanical, G=0-5-8
Max Horz G=-109(LC 9)
Max Uplift E=-111(LC 8), G=-209(LC 8)
Max Grav E=513(LC 2), G=746(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-339/69, D-E=-400/101
WEBS D-F=-86/406, B-G=-426/211

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-0-0 to 3-0-0, Exterior(2R) 3-0-0 to 6-4-12, Exterior(2E) 6-4-12 to 8-3-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) E=111, G=209.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Use Simpson Strong-Tie THJA26 (THJA26 on 1 ply, Left Hand Hip) or equivalent at 6-5-2 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
14) Fill all nail holes where hanger is in contact with lumber.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

May 2,2025

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-C=-51, C-D=-51, E-H=-30
   Concentrated Loads (lb)
   Vert: F=-332(F)

May 2,2025

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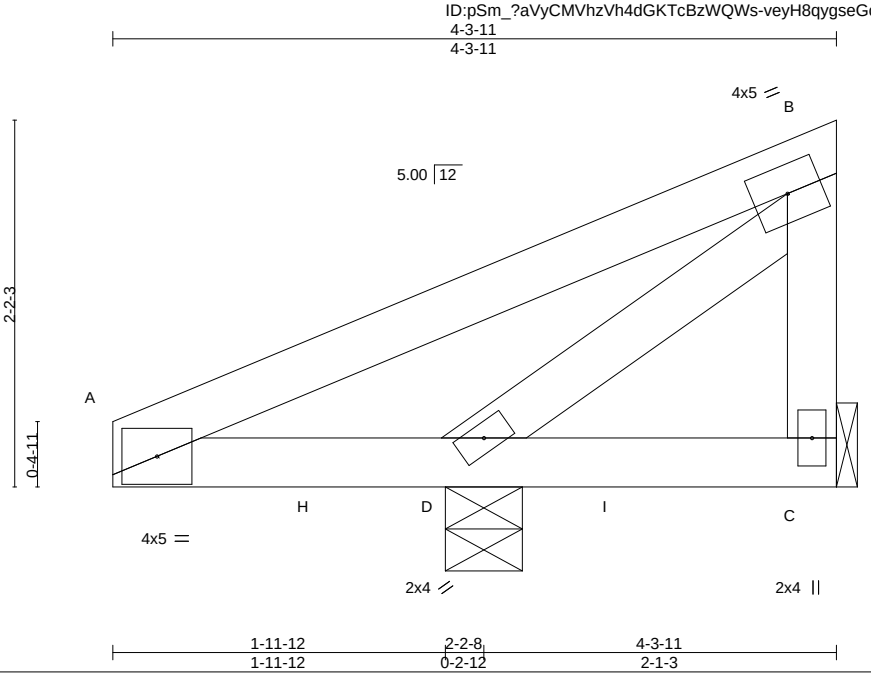
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	B3	Jack-Closed	8	1	I73183845
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:22 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-veyH8qygseGcxDOOYRDrXIqOrAXHRw1Qcg_x?tzKqTt



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.01	C-D	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.01	C-D	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	C	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	-0.00	C-D	>999	240	Weight: 15 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) C=Mechanical, D=0-5-8
Max Horz D=-79(LC 9)
Max Uplift C=-224(LC 21), D=-175(LC 8)
Max Grav C=258(LC 27), D=682(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-111/629
BOT CHORD A-D=-574/153
WEBS B-D=-751/115

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) C=224, D=175.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	B4	Jack-Closed	4	1	I73183846
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:22 2025 Page 1
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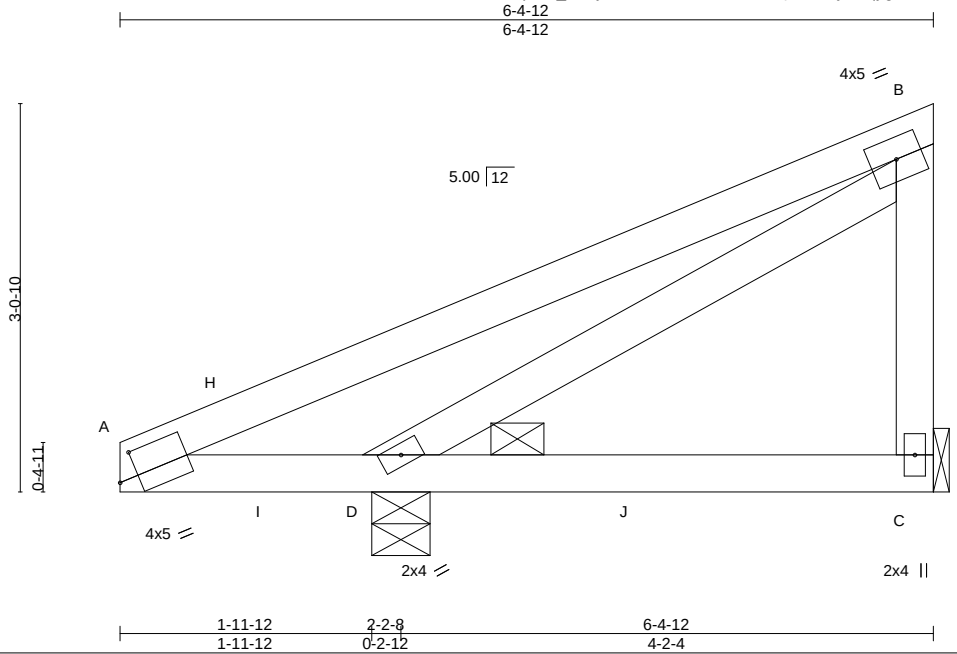

Plate Offsets (X,Y)-- [A:0-1-13,0-2-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.06	C-D	>835	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.07	C-D	>695	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.00	C	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	-0.01	C-D	>999	240	Weight: 24 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) C=Mechanical, D=0-5-8
Max Horz D=-114(LC 9)
Max Uplift C=-52(LC 8), D=-166(LC 8)
Max Grav C=336(LC 27), D=590(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-153/569
BOT CHORD A-D=-514/138
WEBS B-D=-606/137

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) C except (jt=lb) D=166.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	B5	Monopitch	8	1	I73183847
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:23 2025 Page 1
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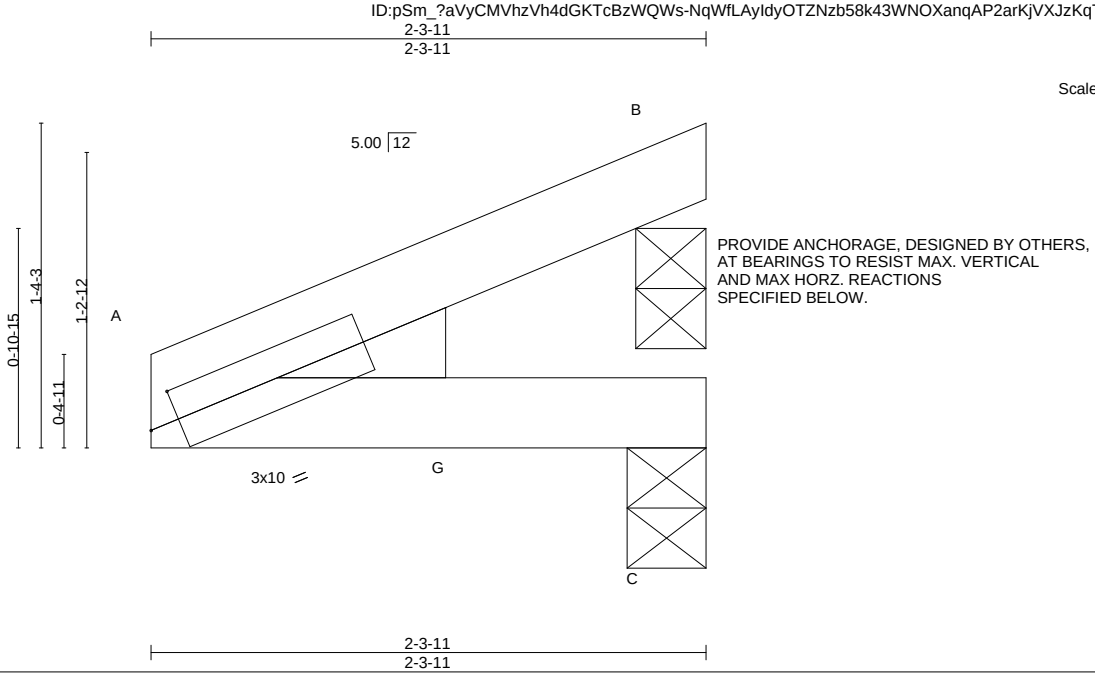

Plate Offsets (X,Y)-- [A:0-1-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	0.00	F	n/r	120	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.04	F	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MP								
BCDL	15.0										Weight: 7 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) B=0-3-8, C=0-3-15
Max Horz B=660(LC 17), C=-660(LC 17)
Max Uplift C=-117(LC 8)
Max Grav C=358(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-100/608
BOT CHORD A-C=-660/149

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) C=117.
7) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	BB1	GABLE	6	1	I73183848
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:23 2025 Page 1
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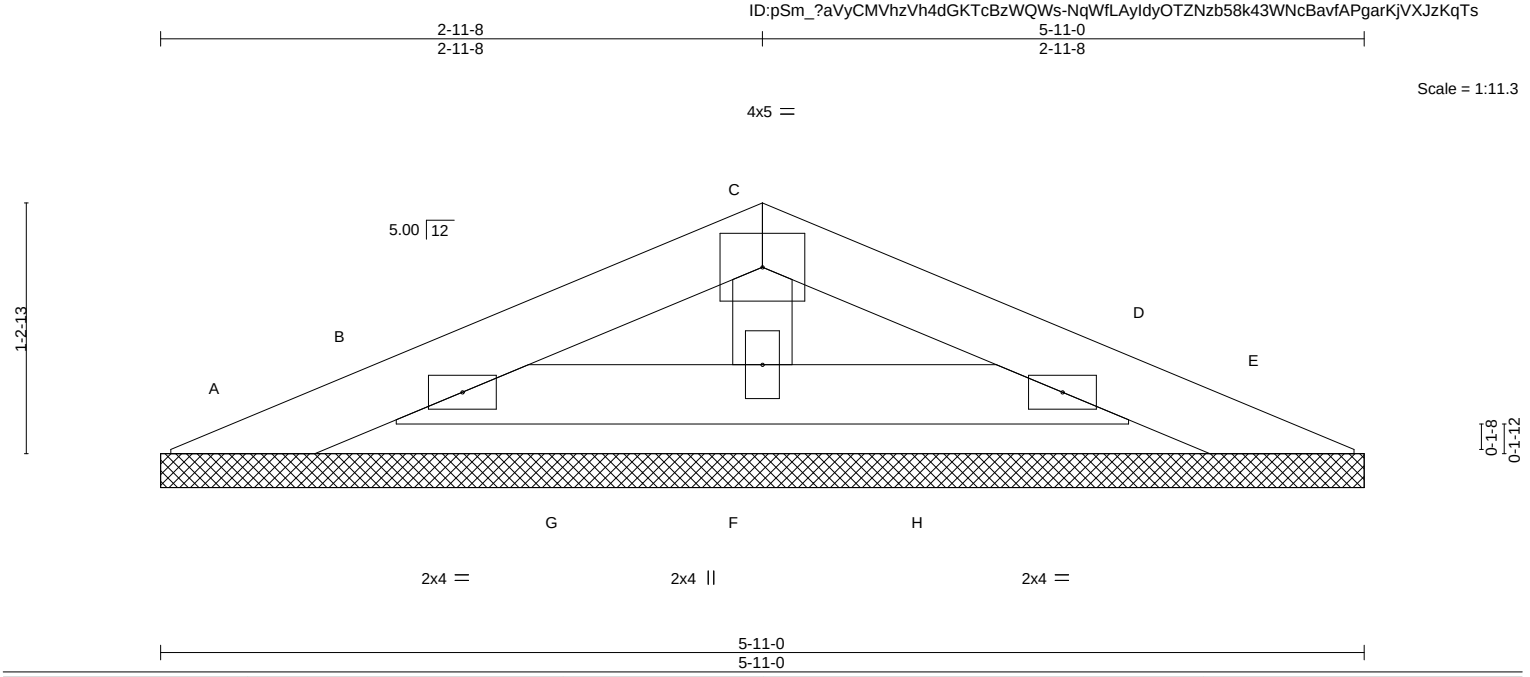

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-P							Weight: 12 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-0 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 5-11-0.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) B, D, F
Max Grav All reactions 250 lb or less at joint(s) A, E except B=322(LC 24), D=322(LC 26), F=344(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, D, F.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 2,2025

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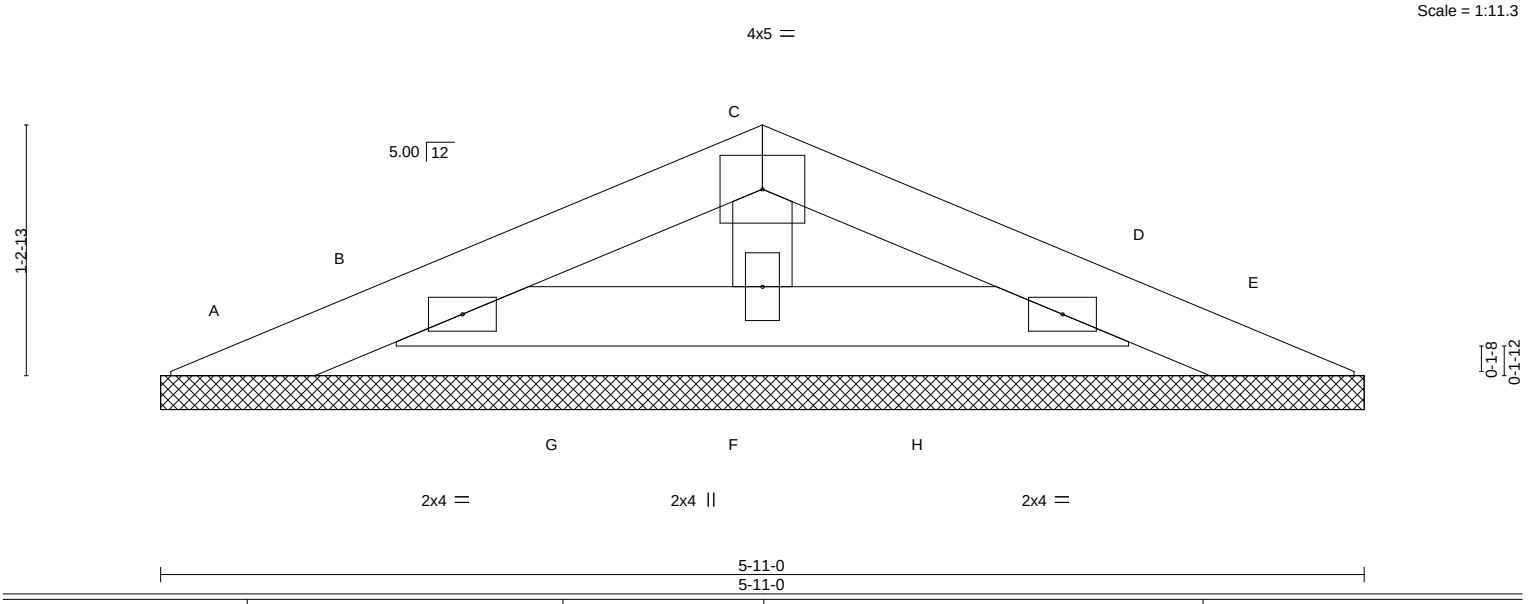
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	BB2	GABLE	1	1	I73183849
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:24 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-r041ZWzwOFWKBXYnfrFJcjvnx_Fuvswj3_T23mzKqTr

2-11-8 5-11-0
2-11-8 2-11-8

Scale = 1:11.3



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-P							Weight: 12 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-0 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 5-11-0.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) B, D, F
Max Grav All reactions 250 lb or less at joint(s) A, E except B=322(LC 24), D=322(LC 26), F=344(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, D, F.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 2,2025

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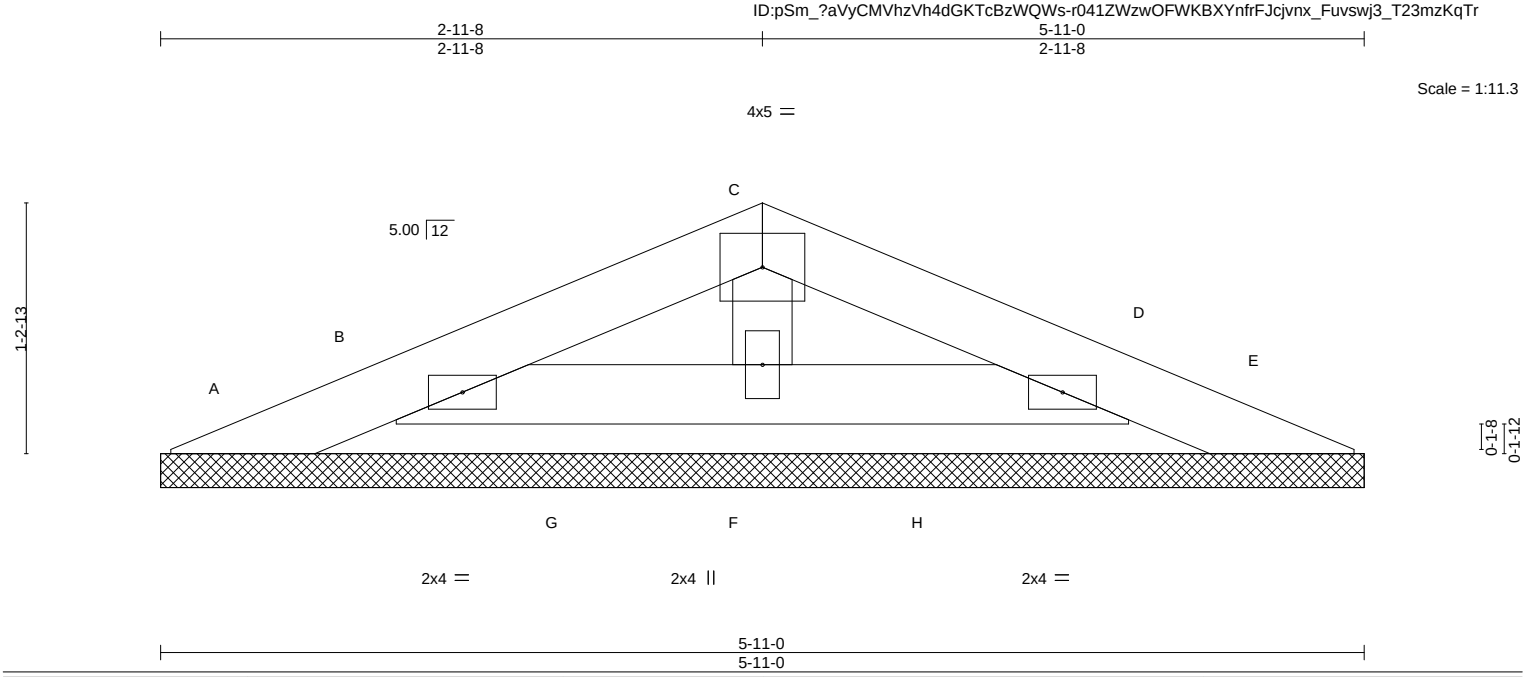
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	BB3	GABLE	109	1	I73183850
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:24 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-r041ZWzwOFWKBXYnfrFJcjvnx_Fuvswj3_T23mzKqTr



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-P							Weight: 12 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-0 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 5-11-0.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) B, D, F
Max Grav All reactions 250 lb or less at joint(s) A, E except B=322(LC 24), D=322(LC 26), F=344(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) B, D, F.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 2,2025

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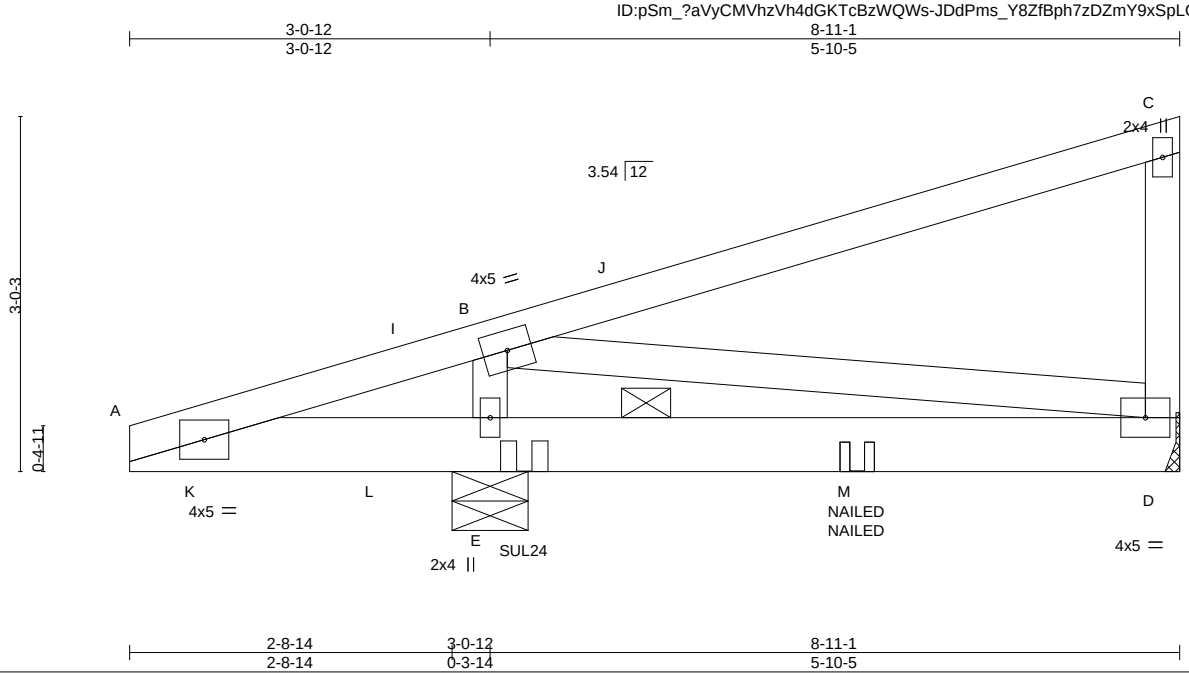
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	C	Diagonal Hip Girder	4	1	I73183851
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:25 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-JDdPms_Y8ZfBph7zDZmY9xSpLOYZeFbsIeCccCzKqTq



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.04	D-E	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.05	D-E	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.32	Horz(CT)	-0.00	D	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MP		Wind(LL)	-0.00	D-E	>999	240	Weight: 36 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) D=Mechanical, E=0-7-12
Max Horz E=-104(LC 9)
Max Uplift D=-56(LC 8), E=-356(LC 8)
Max Grav D=352(LC 27), E=937(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-165/823
BOT CHORD A-E=-771/159, D-E=-771/100
WEBS B-E=-589/346, B-D=-83/781

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3) 0-0-0 to 4-2-15, Exterior(2R) 4-2-15 to 8-9-5; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D except (jt=lb) E=356.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) Use Simpson Strong-Tie SUL24 (4-10dx1 1/2 Girder, 4-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 3-4-4 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

May 2,2025

Continued on page 2

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LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: A-C=-51, D-F=-30

Concentrated Loads (lb)

Vert: E=-155(F) M=-16(F=-8, B=-8)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	D	Common Supported Gable	1	1	I73183852
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:26 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-nPBo_B?Avtn2QriAnGHnh8?5OozfNlj0XIy98ezKqTp

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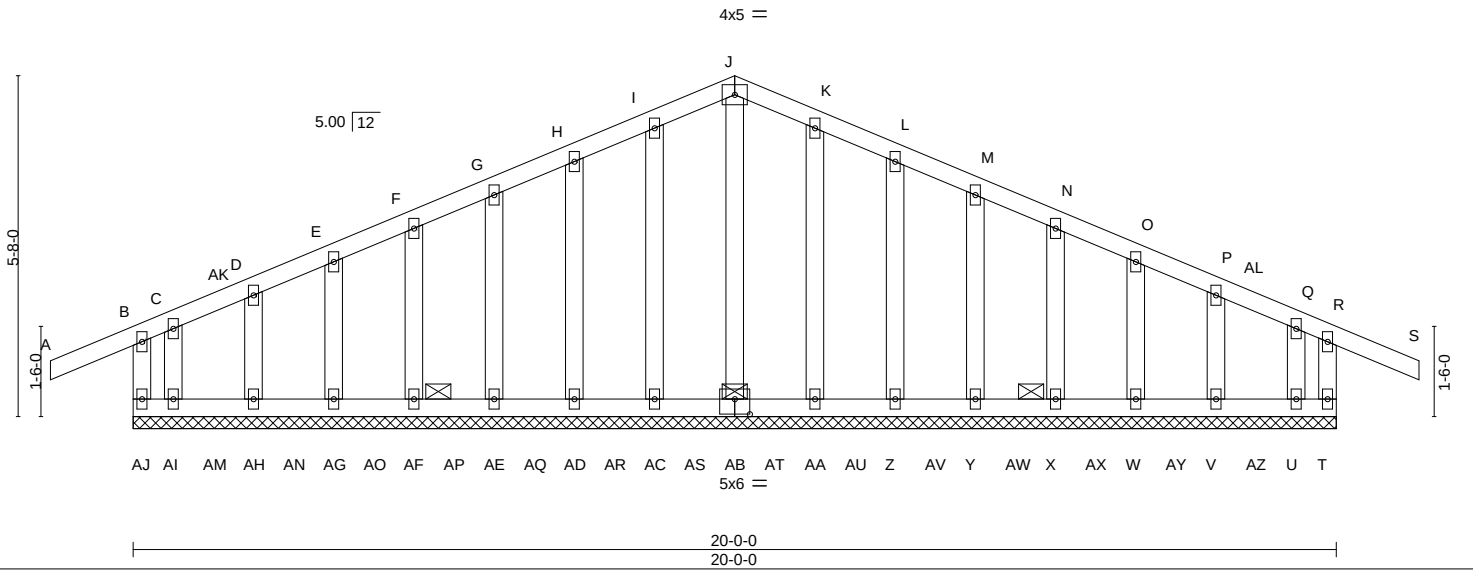
Scale = 1:38.3



20-0-0
20-0-0

Plate Offsets (X,Y)-- [AB:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.00	R	n/r	120	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	S	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	T	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-R							Weight: 106 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz AJ=-74(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) T, AC, AD, AE, AF, AG, AH, AI, AA, Z, Y, X, W, V, U except AJ=-181(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except AJ=313(LC 22), T=313(LC 54), AB=318(LC 46), AC=318(LC 45), AD=316(LC 44), AE=317(LC 43), AF=317(LC 42), AG=317(LC 41), AH=317(LC 40), AI=274(LC 39), AA=318(LC 47), Z=316(LC 48), Y=317(LC 49), X=317(LC 50), W=317(LC 51), V=317(LC 52), U=274(LC 37)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-AJ=-262/172, R-T=-262/136

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) -1-4-8 to 1-7-8, Exterior(2N) 1-7-8 to 7-0-0, Corner(3R) 7-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 18-4-8, Corner(3E) 18-4-8 to 21-4-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 1-4-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) T, AC, AD, AE, AF, AG, AH, AI, AA, Z, Y, X, W, V, U except (jt=lb) AJ=181.
14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
15) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	D2	Common	1	1	I73183853
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:27 2025 Page 1
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-1-4-8 | 5-1-12 | 10-0-0 | 14-10-4 | 20-0-0 | 21-4-8
1-4-8 | 5-1-12 | 4-10-4 | 4-10-4 | 5-1-12 | 1-4-8

Scale = 1:38.1

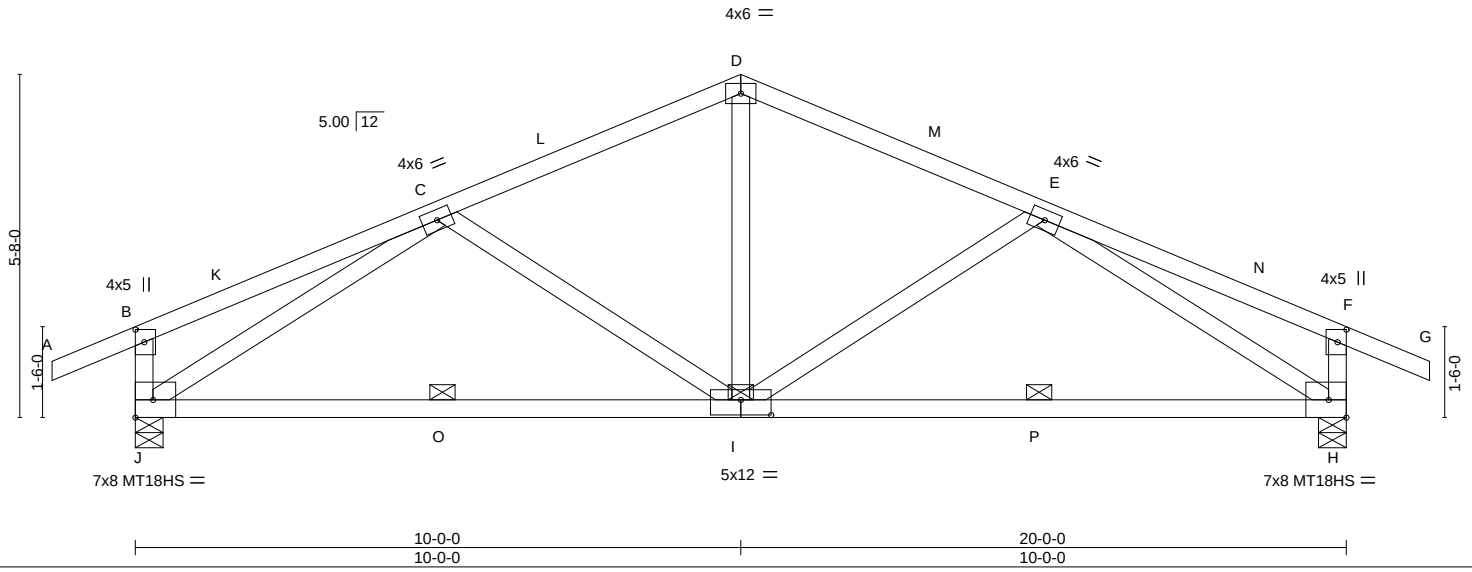

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [F:0-2-8,0-1-12], [I:0-6-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.44	H-I	>541	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.64	H-I	>369	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.03	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	I	>999	240	Weight: 85 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
B-J,F-H: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) J=0-5-8, H=0-5-8
Max Horz J=-65(LC 8)
Max Uplift J=-137(LC 8), H=-132(LC 8)
Max Grav J=1206(LC 2), H=1206(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-406/7, C-D=-1220/128, D-E=-1220/128, E-F=-406/42, B-J=-404/102, F-H=-404/115
BOT CHORD I-J=-23/1181, H-I=-29/1181
WEBS D-I=0/510, C-J=-1188/156, E-H=-1188/125

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0, Interior(1) 13-0-0 to 18-4-8, Exterior(2E) 18-4-8 to 21-4-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) J=137, H=132.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	D3	COMMON	1	1	I73183854
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:27 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-FblABX0pgAvv2?HMK_o0EMX7pB6v60W9myhig4zKqTo

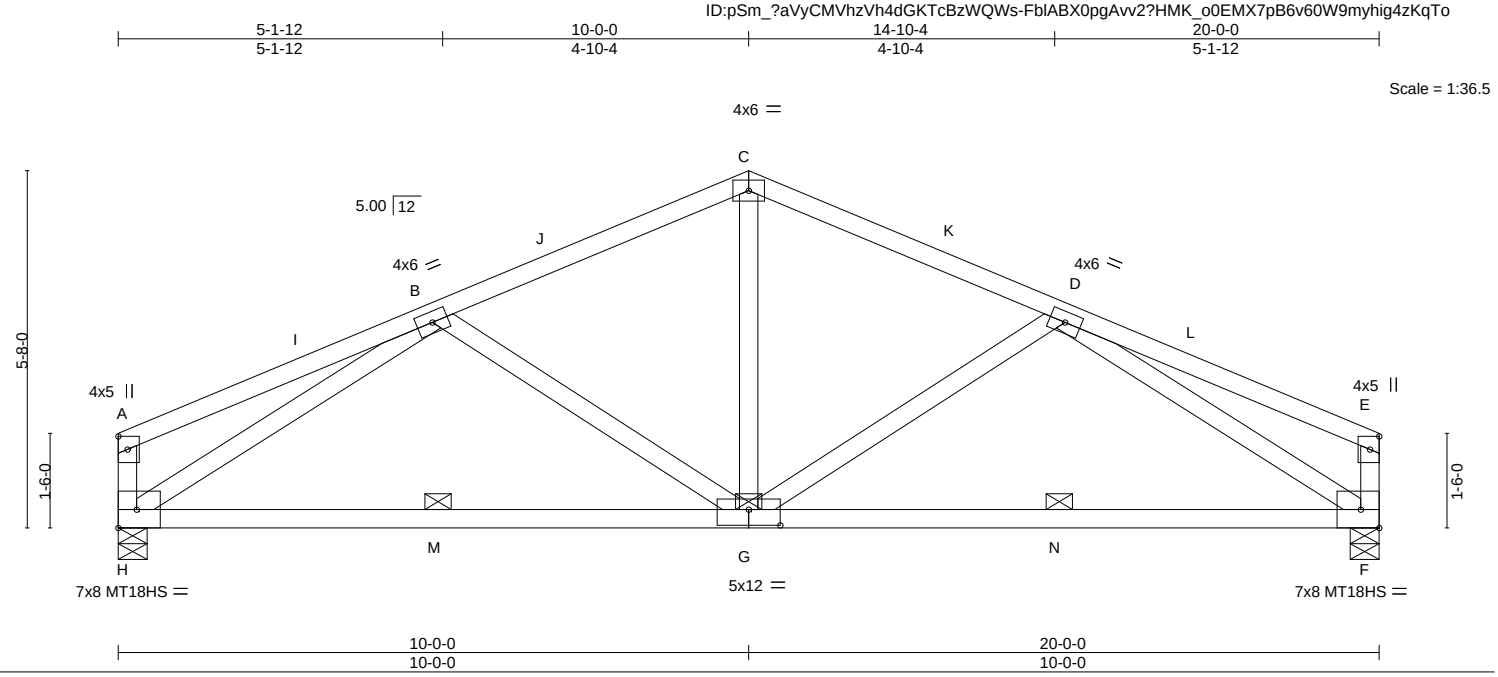

Plate Offsets (X,Y)-- [G:0-6-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.44	F-G	>541	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.64	F-G	>369	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.03	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	G	>999	240	Weight: 82 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
A-H,E-F: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) H=0-5-8, F=0-5-8
Max Horz H=-65(LC 9)
Max Uplift H=-82(LC 8), F=-78(LC 8)
Max Grav H=1084(LC 2), F=1084(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-403/4, B-C=-1239/134, C-D=-1239/134, D-E=-403/39, A-H=-277/40, E-F=-277/53
BOT CHORD G-H=-65/1214, F-G=-71/1214
WEBS C-G=0/517, D-G=-251/113, B-G=-251/106, B-H=-1197/169, D-F=-1197/139

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-0-0, Exterior(2R) 7-0-0 to 13-0-0, Interior(1) 13-0-0 to 16-10-4, Exterior(2E) 16-10-4 to 19-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, F.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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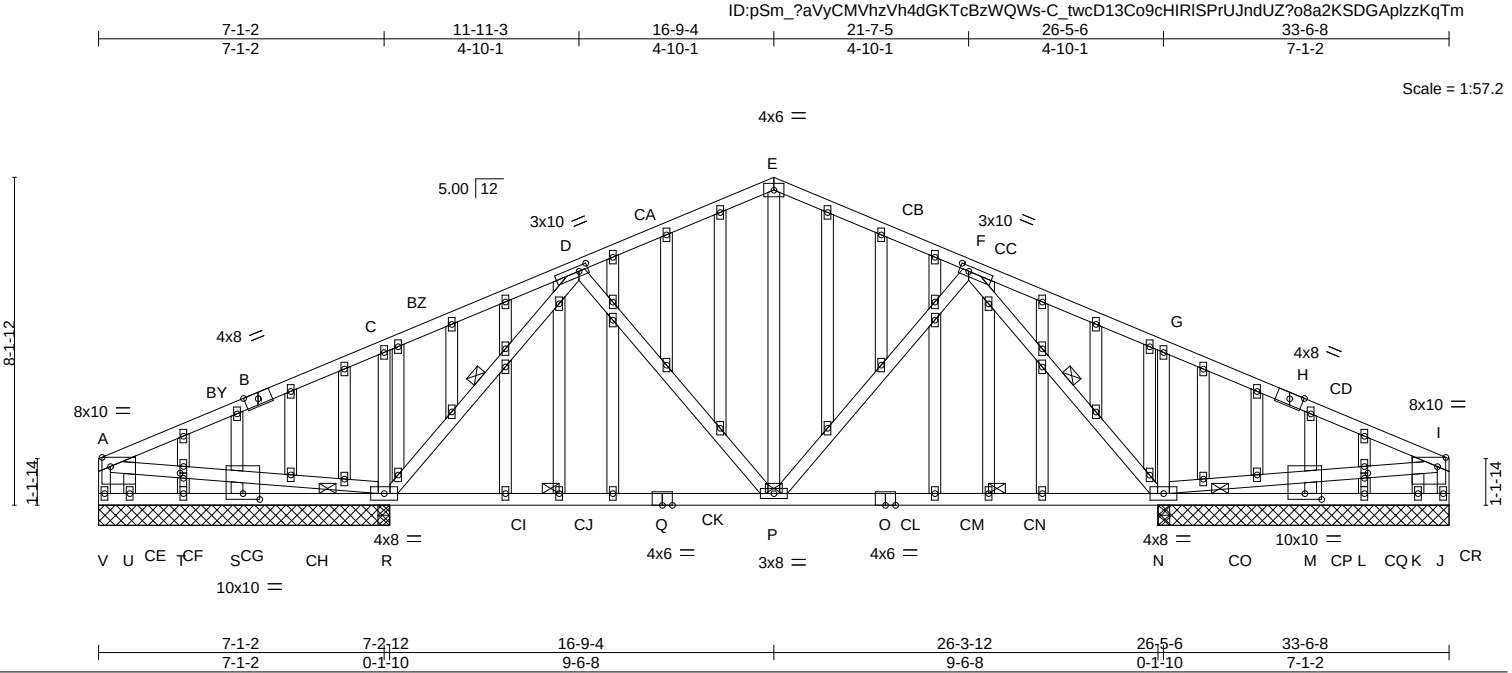
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E	Common Structural Gable	1	1	I73183855
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:29 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-C_twcD13Co9cHIRlSPrUJndUZ?o8a2KSDGAplzzKqTm



7-1-2	7-2-12	16-9-4	26-3-12	26-5-6	33-6-8
7-1-2	0-1-10	9-6-8	9-6-8	0-1-10	7-1-2

Plate Offsets (X,Y)-- [A:0-2-8,Edge], [D:0-2-12,0-1-8], [F:0-2-12,0-1-8], [G:0-0-0,0-0-0], [I:0-2-8,Edge], [M:0-5-0,0-1-12], [AR:0-5-0,0-1-12], [AT:0-1-8,0-1-0], [AX:0-0-0,0-0-0], [AZ:0-0-0,0-0-0], [BD:0-0-0,0-0-0], [BD:0-0-0,0-0-0], [BG:0-0-0,0-0-0], [BJ:0-0-0,0-0-0], [BJ:0-0-0,0-0-0], [BK:0-0-0,0-0-0], [BM:0-0-0,0-0-0], [BO:0-0-0,0-0-0], [BQ:0-0-0,0-0-0], [BU:0-0-0,0-0-0], [BV:0-1-8,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.36	P-R	>633	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.52	P-R	>444	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.02	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	P	>999	240	Weight: 236 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt D-R, F-N

REACTIONS. All bearings 7-2-12 except (jt=length) R=0-3-8.
(lb) - Max Horz V=-47(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) V, N, J, T, U, L, K, R except S=-211(LC 25), M=-211(LC 26)
Max Grav All reactions 250 lb or less at joint(s) except V=327(LC 31), N=1657(LC 14), N=1081(LC 1), J=327(LC 41), S=255(LC 24), T=330(LC 33), U=262(LC 32), M=255(LC 27), L=330(LC 39), K=262(LC 40), R=1656(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD D-E=-878/118, E-F=-878/118, A-V=-264/47, I-J=-264/47
BOT CHORD P-R=0/622, N-P=0/620
WEBS C-R=-517/107, D-R=-948/28, E-P=0/282, F-N=-951/24, G-N=-517/107

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-9-4, Exterior(2R) 13-9-4 to 19-9-4, Interior(1) 19-9-4 to 30-4-12, Exterior(2E) 30-4-12 to 33-4-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) V, N, J, T, U, L, K, R except (jt=lb) S=211, M=211.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E	Common Structural Gable	1	1	I73183855 Job Reference (optional)

NOTES-

13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E2	Roof Special	1	1	I73183856
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:37 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-zWMyHy74KF9UFX2Hw4_MeTymPDXTSaEe3W6E1VzKqTe

7-3-3	11-9-2	16-3-2	20-9-1	25-3-0	32-6-3
7-3-3	4-5-15	4-5-15	4-5-15	4-5-15	7-3-3

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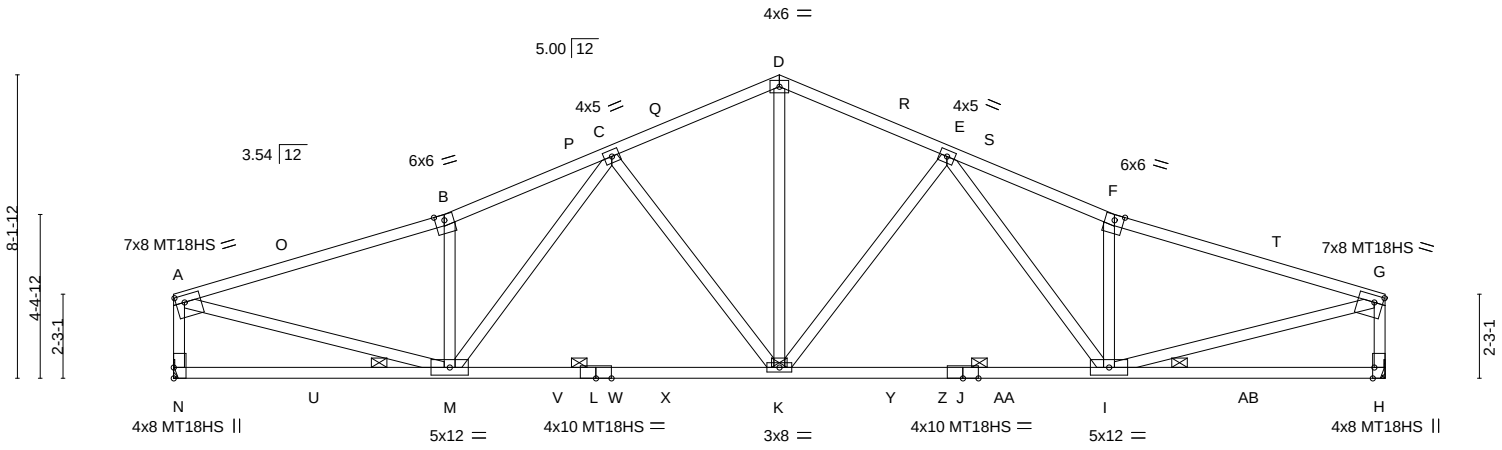

7-3-3	16-3-2	25-3-0	32-6-3
7-3-3	8-11-15	8-11-15	7-3-3

Plate Offsets (X,Y)-- [A:0-2-12,0-2-4], [G:0-2-12,0-2-4], [H:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.36	K-M	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.57	K-M	>678	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.05	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.05	K-M	>999	240	Weight: 147 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
A-M,G-I: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) N=Mechanical, H=Mechanical
Max Horz N=-104(LC 9)
Max Uplift N=-130(LC 8), H=-124(LC 8)
Max Grav N=1956(LC 14), H=1961(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-2985/188, B-C=-3079/253, C-D=-2353/238, D-E=-2353/238, E-F=-3068/267, F-G=-2974/203, A-N=-1808/165, G-H=-1812/159
BOT CHORD K-M=-58/2475, I-K=-63/2472
WEBS D-K=-68/1434, E-K=-627/113, E-I=-26/558, F-I=-764/151, C-K=-627/105, C-M=-11/558, B-M=-764/150, A-M=-134/2676, G-I=-95/2705

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-3-2, Exterior(2R) 13-3-2 to 19-3-2, Interior(1) 19-3-2 to 29-4-7, Exterior(2E) 29-4-7 to 32-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) N=130, H=124.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E3	Roof Special	1	1	I73183857
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:38 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-RjwKVI8i5ZHLshdTToVbAgU0sdsjBycnHAsoZyzKqTd

6-2-5	12-1-2	16-3-2	20-5-1	26-3-14	32-6-3
6-2-5	5-10-13	4-2-0	4-2-0	5-10-13	6-2-5

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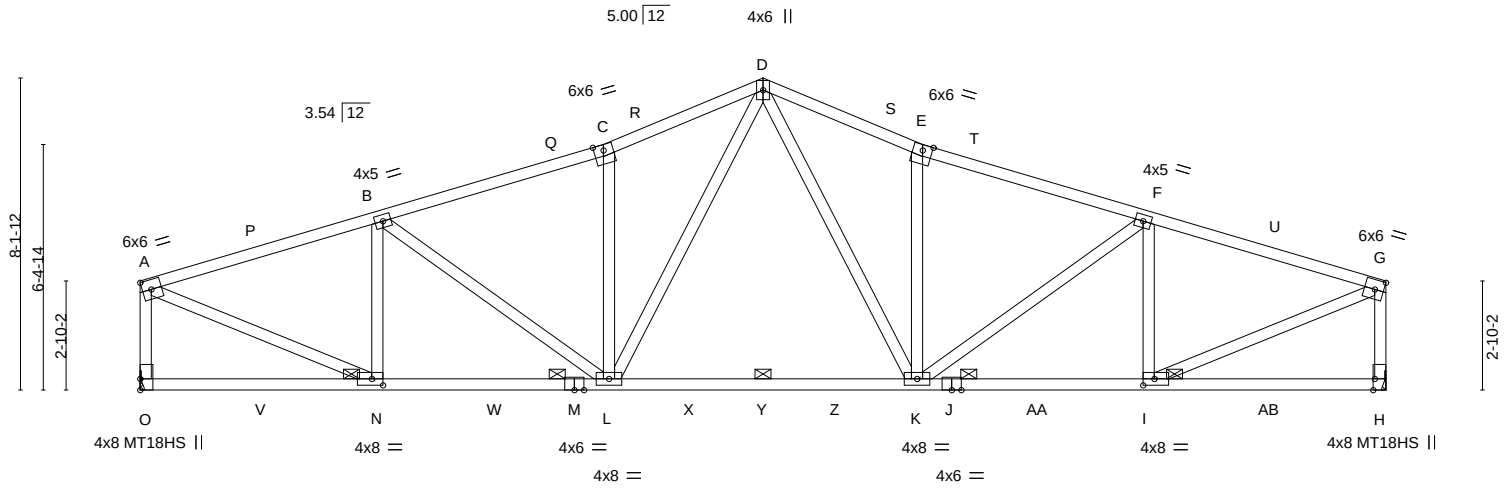

6-2-5	12-1-2	20-5-1	26-3-14	32-6-3
6-2-5	5-10-13	8-4-0	5-10-13	6-2-5

Plate Offsets (X,Y)-- [H:0-3-8,Edge], [I:0-3-8,0-2-0], [N:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.27	K-L	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.47	K-L	>824	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.06	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.05	K-L	>999	240	Weight: 154 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
J-M: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) O=Mechanical, H=Mechanical
Max Horz O=-134(LC 9)
Max Uplift O=-132(LC 8), H=-122(LC 8)
Max Grav O=1940(LC 14), H=1948(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-2436/164, B-C=-2653/218, C-D=-2743/277, D-E=-2737/285, E-F=-2647/225, F-G=-2416/191, A-O=-1804/163, G-H=-1810/155
BOT CHORD L-N=-37/2325, K-L=-5/2039, I-K=-62/2307
WEBS D-K=-67/979, E-K=-643/130, F-K=-58/290, F-I=-692/113, D-L=-52/990, C-L=-644/129, B-L=-58/290, B-N=-684/134, A-N=-149/2352, G-I=-104/2386

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-3-2, Exterior(2R) 13-3-2 to 19-3-2, Interior(1) 19-3-2 to 29-4-7, Exterior(2E) 29-4-7 to 32-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) O=132, H=122.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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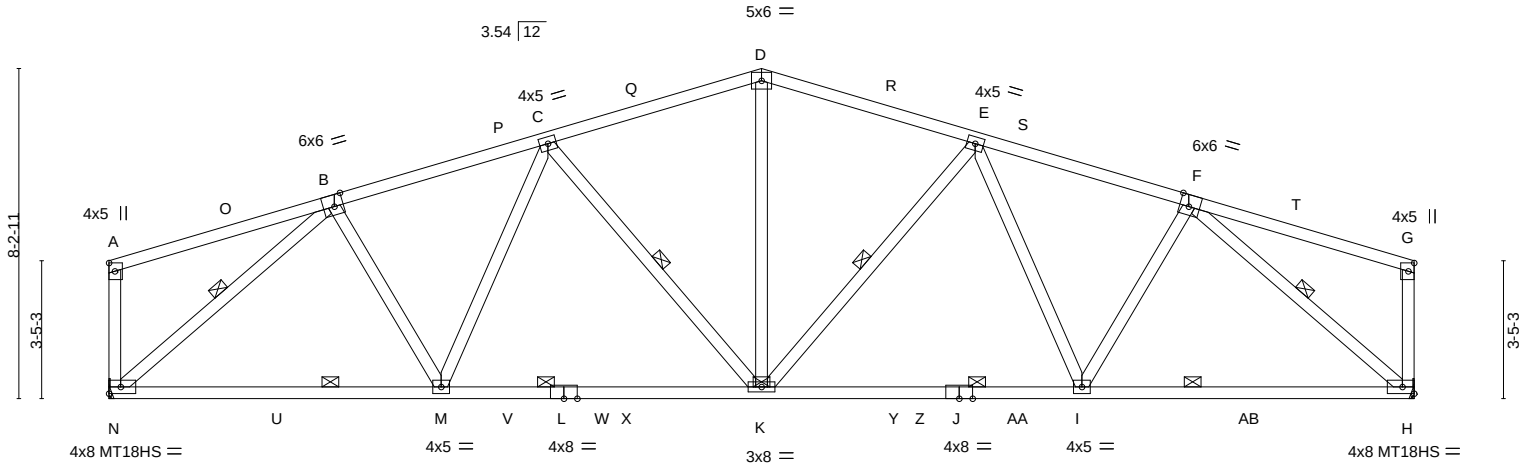
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E4	Common	1	1	I73183858
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:38 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-RjwKVI8i5ZHLshdTToVbAgUzYdueB?XnHAsoZyzKqTd

5-7-6	10-11-4	16-3-2	21-6-15	26-10-13	32-6-3
5-7-6	5-3-14	5-3-14	5-3-14	5-3-14	5-7-6

Scale = 1:57.4



8-3-5	16-3-2	24-2-14	32-6-3
8-3-5	7-11-13	7-11-12	8-3-5

Plate Offsets (X,Y)-- [B:0-2-12,Edge], [F:0-2-12,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.28	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.42	H-I	>922	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.08	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	K	>999	240	Weight: 152 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt E-K, C-K, B-N, F-H

REACTIONS. (size) N=Mechanical, H=Mechanical
Max Horz N=-165(LC 9)
Max Uplift N=-135(LC 8), H=-119(LC 8)
Max Grav N=1954(LC 14), H=1966(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-2359/180, C-D=-2224/227, D-E=-2224/227, E-F=-2340/205
BOT CHORD M-N=-7/1951, K-M=-17/2300, I-K=-31/2290, H-I=-42/1925
WEBS D-K=-2/849, E-K=-427/72, F-I=0/629, C-K=-427/49, B-M=0/612, B-N=-2370/186, F-H=-2418/122

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-3-2, Exterior(2R) 13-3-2 to 19-3-2, Interior(1) 19-3-2 to 29-4-7, Exterior(2E) 29-4-7 to 32-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) N=135, H=119.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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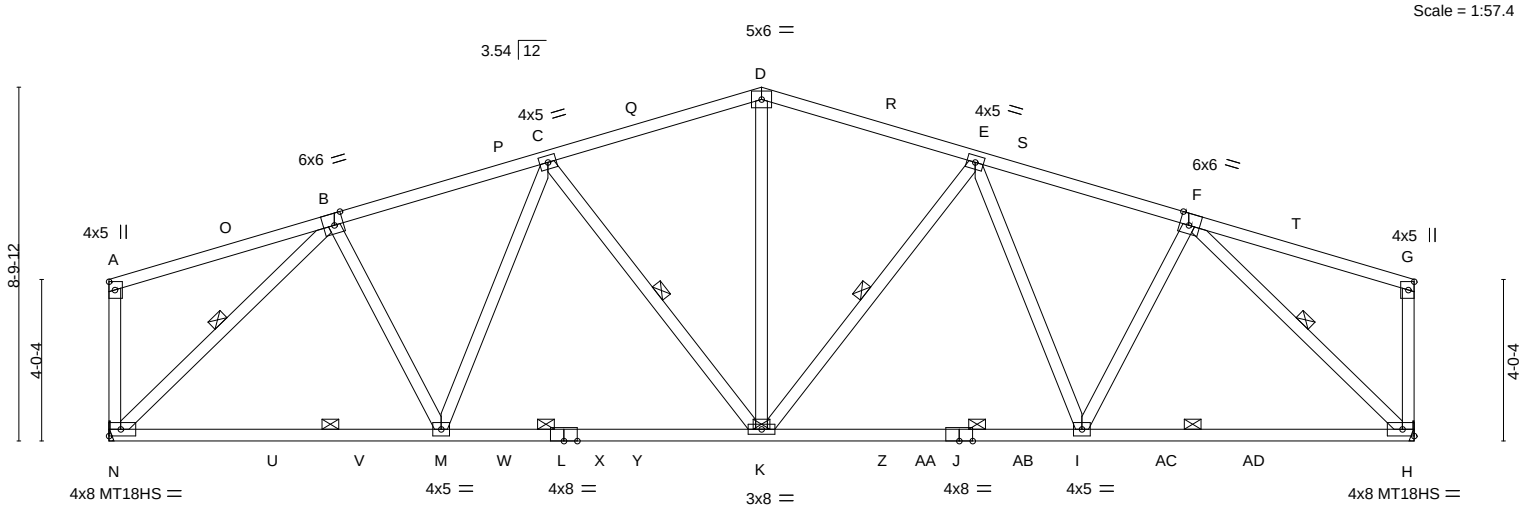
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E5	Common	1	1	I73183859
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:39 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-vvUiie9KrsPCUrBg1V0qju18f1EswSHwWqbL5OzKqTc

5-7-6	10-11-4	16-3-2	21-6-15	26-10-13	32-6-3
5-7-6	5-3-14	5-3-14	5-3-14	5-3-14	5-7-6

Scale = 1:57.4



8-3-5	16-3-2	24-2-14	32-6-3
8-3-5	7-11-13	7-11-12	8-3-5

Plate Offsets (X,Y)-- [B:0-2-12,Edge], [F:0-2-12,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.28	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.42	H-I	>917	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.07	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	K-M	>999	240	Weight: 159 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt E-K, C-K, B-N, F-H

REACTIONS. (size) N=Mechanical, H=Mechanical
Max Horz N=-195(LC 9)
Max Uplift N=-138(LC 8), H=-116(LC 8)
Max Grav N=1990(LC 14), H=2007(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-2187/169, C-D=-2105/222, D-E=-2105/223, E-F=-2163/200
BOT CHORD M-N=0/1791, K-M=0/2157, I-K=-5/2144, H-I=-16/1758
WEBS D-K=0/782, E-K=-379/72, F-I=0/703, C-K=-379/68, B-M=0/681, B-N=-2271/183, F-H=-2329/106

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-3-2, Exterior(2R) 13-3-2 to 19-3-2, Interior(1) 19-3-2 to 29-4-7, Exterior(2E) 29-4-7 to 32-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) N=138, H=116.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E6	COMMON	1	1	I73183860
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:40 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-N514w_AycAX36_msbCX3F5aIXRYBfvb4lULueqzKqTb

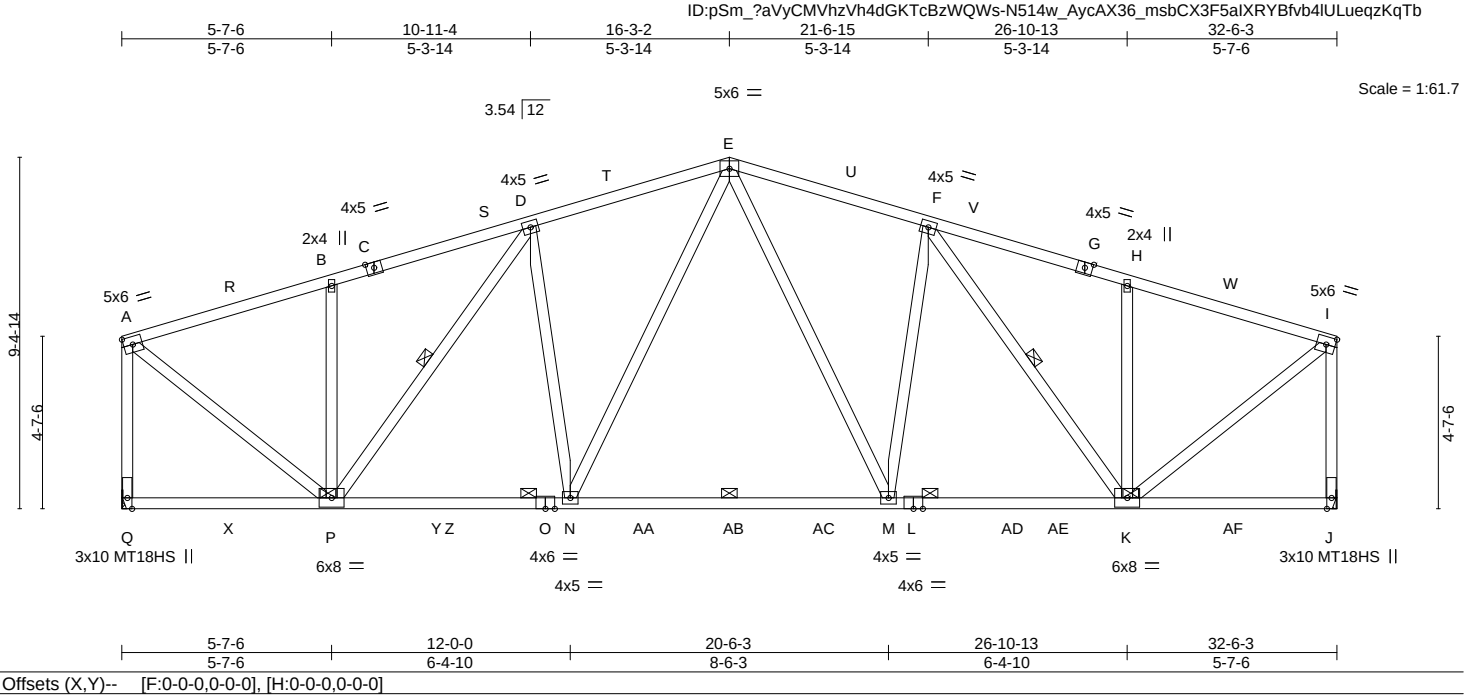

Plate Offsets (X,Y)-- [F:0-0-0,0-0-0], [H:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.31	M-N	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.49	M-N	>791	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.06	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	N	>999	240	Weight: 173 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
L-O: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt D-P, F-K

REACTIONS. (size) Q=Mechanical, J=Mechanical
Max Horz Q=-226(LC 9)
Max Uplift Q=-142(LC 8), J=-112(LC 8)
Max Grav Q=1983(LC 14), J=2006(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1725/105, B-D=-1743/159, D-E=-2146/223, E-F=-2133/240, F-H=-1702/214, H-I=-1680/164, A-Q=-1873/166, I-J=-1889/144
BOT CHORD N-P=0/2047, M-N=0/1855, K-M=0/2030
WEBS B-P=-459/126, D-P=-640/45, D-N=-211/254, E-N=0/534, E-M=-22/534, F-M=-211/254, F-K=-683/0, H-K=-459/114, A-P=-136/1944, I-K=-61/2001

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-3-2, Exterior(2R) 13-3-2 to 19-3-2, Interior(1) 19-3-2 to 29-4-7, Exterior(2E) 29-4-7 to 32-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) Q=142, J=112.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E7	COMMON	1	1	I73183861
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:41 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-rIbT7KAbNUgvj8L29w2IoJ6V9rwMOKPD_84SAGzKqTa

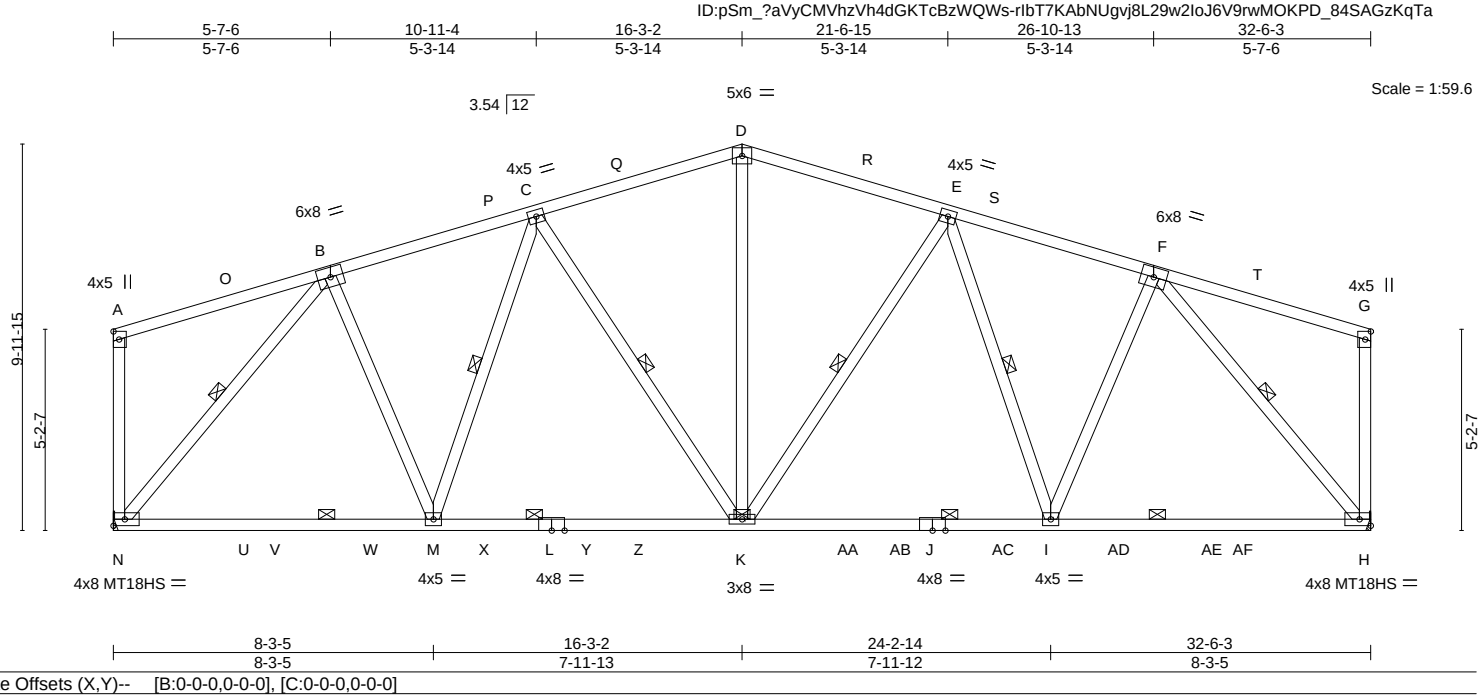

Plate Offsets (X,Y)-- [B:0-0-0,0-0-0], [C:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.29	M-N	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.43	H-I	>903	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.06	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	K-M	>999	240	Weight: 172 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt E-K, E-I, C-K, C-M, B-N, F-H

REACTIONS. (size) N=Mechanical, H=Mechanical
Max Horz N=-256(LC 9)
Max Uplift N=-147(LC 8), H=-107(LC 8)
Max Grav N=2009(LC 14), H=2039(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1881/151, C-D=-1881/215, D-E=-1881/215, E-F=-1847/196
BOT CHORD M-N=0/1529, K-M=0/1901, I-K=0/1880, H-I=0/1484
WEBS D-K=0/655, E-K=-307/118, E-I=-330/55, F-I=0/804, C-K=-307/118, C-M=-330/95, B-M=0/770, B-N=-2100/185, F-H=-2180/77

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-3-2, Exterior(2R) 13-3-2 to 19-3-2, Interior(1) 19-3-2 to 29-4-7, Exterior(2E) 29-4-7 to 32-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) N=147, H=107.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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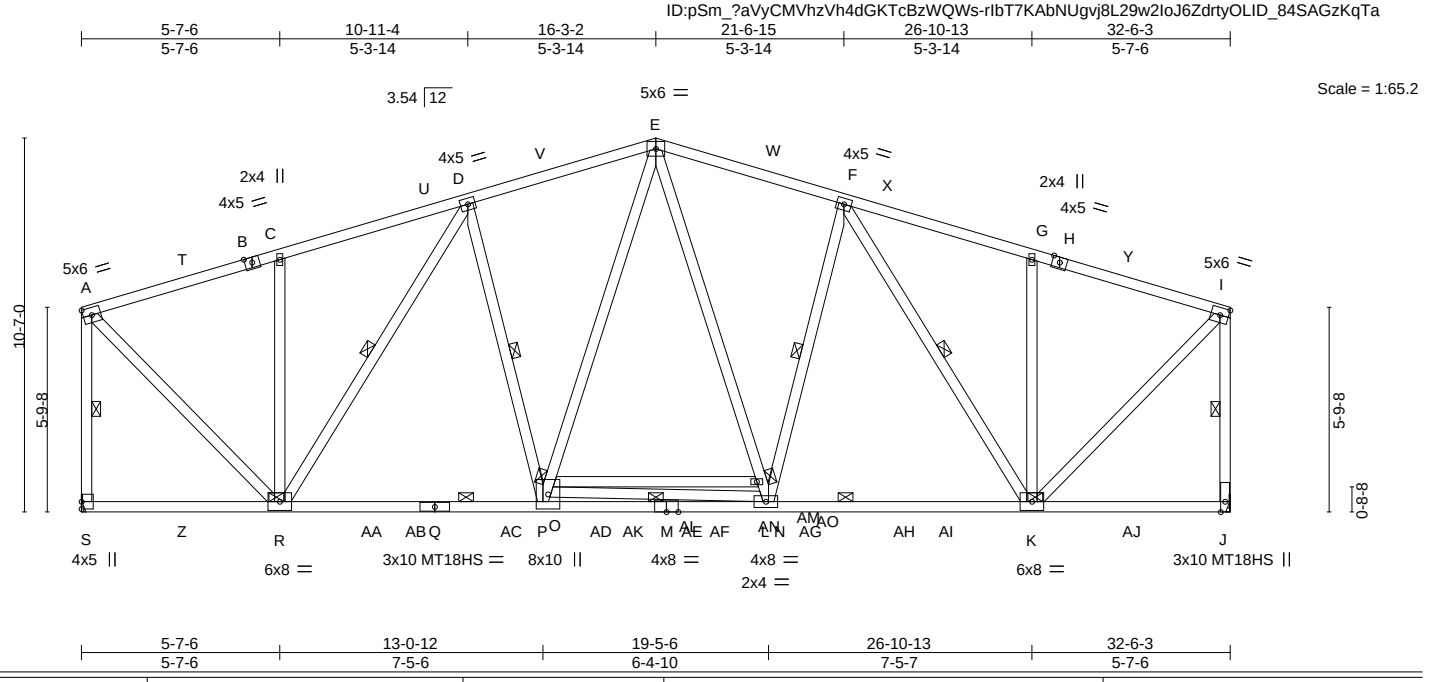
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E8	COMMON	1	1	I73183862
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:41 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-rIbT7KAbNUgvj8L29w2IoJ6ZdrtyOLID_84SAGzKqTa



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.22	P-R	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.36	N-O	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.05	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	P-R	>999	240	Weight: 201 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	Q-S,J-M: 2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except*
	E-P,E-L: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt D-R, D-P, F-L, F-K, A-S, I-J
JOINTS	1 Brace at Jt(s): O, N

REACTIONS. (size) S=Mechanical, J=Mechanical
Max Horz S=-284(LC 9)
Max Uplift S=-116(LC 8), J=-67(LC 8)
Max Grav S=2139(LC 14), J=2176(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-C=-1605/53, C-D=-1624/108, D-E=-2087/161, E-F=-2077/177, F-G=-1569/182, G-I=-1545/133, A-S=-2052/132, I-J=-2076/101
BOT CHORD	P-R=0/1980, L-P=0/1857, K-L=0/1959
WEBS	C-R=-462/130, D-R=-764/43, D-P=-129/353, O-P=-56/374, E-O=0/508, E-N=-10/497, L-N=-65/333, F-L=-128/354, F-K=-827/0, G-K=-462/109, A-R=-97/2003, I-K=0/2077

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-3-2, Exterior(2R) 13-3-2 to 19-3-2, Interior(1) 19-3-2 to 29-4-7, Exterior(2E) 29-4-7 to 32-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) J except (jt=lb) S=116.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

May 2,2025

Continued on page 2

LOAD CASE(S) Standard Except:

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E8	COMMON	1	1	I73183862 Job Reference (optional)

LOAD CASE(S) Standard Except:

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-E=-51, E-I=-51, J-S=-30, O-AL=-30, AL-AN=-110(F=-80), N-AN=-30

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E9	COMMON	1	1	I73183863
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:42 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-JU9rKgBD8nomLIwEidaXLWfjNEGC7oNNCoq?ijzKqTZ

5-7-6	11-4-0	16-3-2	21-2-3	26-10-13	32-6-3
5-7-6	5-8-10	4-11-2	4-11-1	5-8-10	5-7-6

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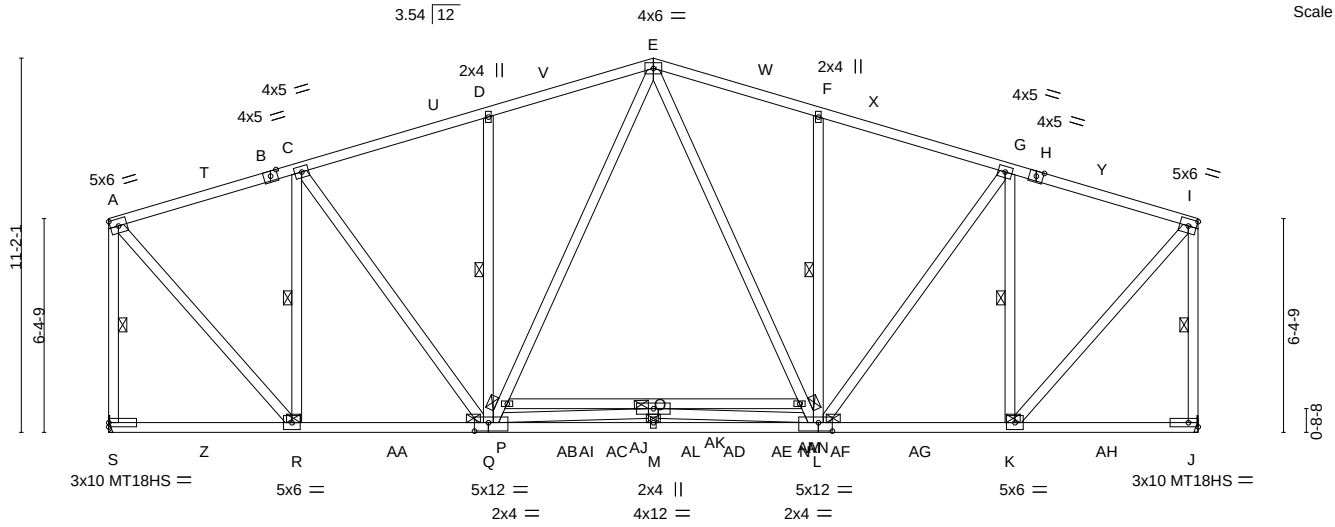

5-7-6	11-4-0	16-3-2	21-2-3	26-10-13	32-6-3
5-7-6	5-8-10	4-11-2	4-11-1	5-8-10	5-7-6

Plate Offsets (X,Y)-- [C:0-0-0,0-0-0], [L:0-5-0,0-3-0], [Q:0-5-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.20	M	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.39	M	>993	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.06	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	M	>999	240	Weight: 214 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	L-Q: 2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except*
	E-L,E-Q: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt F-L, G-K, D-Q, C-R, A-S, I-J
JOINTS	1 Brace at Jt(s): P, N, O

REACTIONS. (size) S=Mechanical, J=Mechanical
Max Horz S=-312(LC 9)
Max Uplift S=-102(LC 8), J=-43(LC 8)
Max Grav S=2221(LC 14), J=2265(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-C=-1547/35, C-D=-2066/99, D-E=-2075/146, E-F=-2051/178, F-G=-2043/130, G-I=-1479/126, A-S=-2116/122, I-J=-2145/83
BOT CHORD Q-R=0/1536, M-Q=0/3201, L-M=0/3201, K-L=0/1475
WEBS E-N=-25/551, L-N=-52/468, F-L=-443/114, G-L=0/861, G-K=-1306/38, P-Q=-43/468, E-P=0/551, D-Q=-442/108, C-Q=-8/798, C-R=-1224/147, A-R=-90/2021, I-K=0/2105, M-O=0/284, O-Q=-1726/0, L-O=-1726/0

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-3-2, Exterior(2R) 13-3-2 to 19-3-2, Interior(1) 19-3-2 to 29-4-7, Exterior(2E) 29-4-7 to 32-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) J except (jt=lb) S=102.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

Continued on page 2

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314.434.1200 / MiTek-US.com

NOTES-

14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard Except:

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: A-E=-51, E-I=-51, J-S=-30, P-AK=-30, AK-AL=-110(F=-80), N-AL=-30

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E10	Roof Special	1	1	I73183864
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:30 2025 Page 1

ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-gARIpZ2hz5HTvS?x?6Mjr_9fhPA?JQqcSwwMHPzKqTl

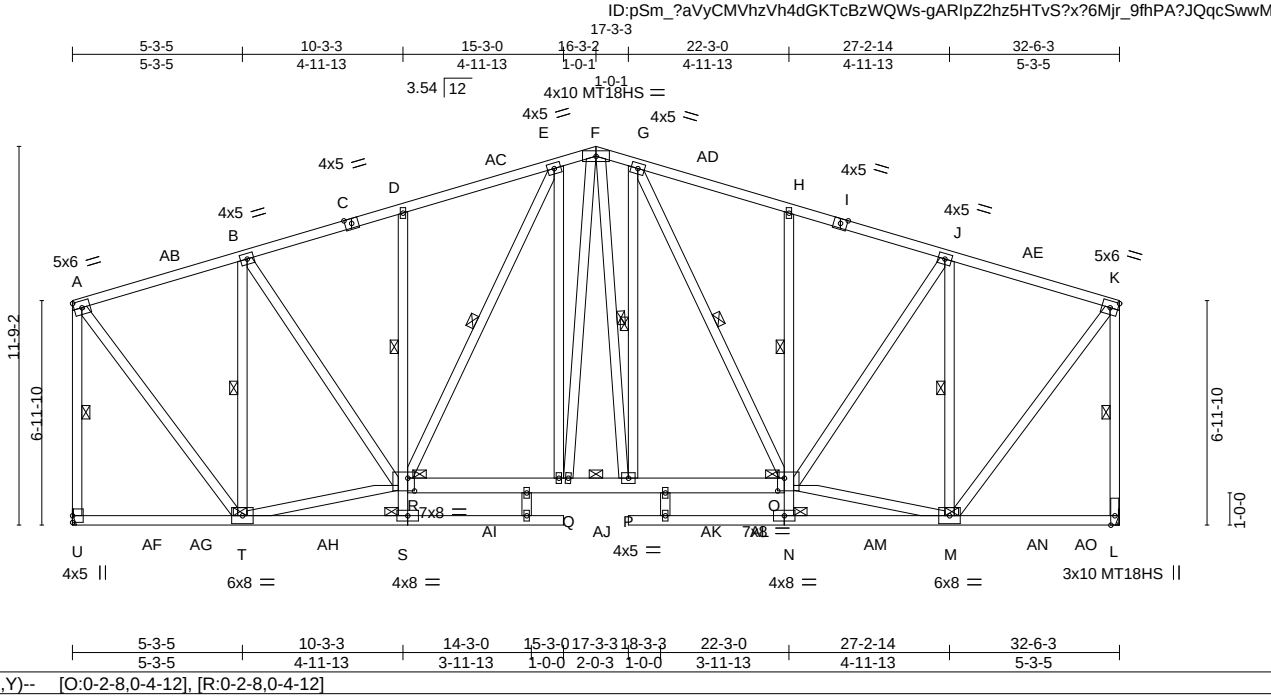

Plate Offsets (X,Y)-- [O:0-2-8,0-4-12], [R:0-2-8,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.13	S-T	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.21	S-T	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.06	L	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	R	>999	240	Weight: 269 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* O-R: 2x6 SPF No.2
WEBS	2x4 SPF No.3 *Except* F-Q,E-R,G-O,F-P: 2x4 SPF No.2
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt G-P, H-O, J-M, D-R, B-T, A-U, K-L, E-R, G-O, F-P
JOINTS	1 Brace at Jt(s): S, R, O, N

REACTIONS. (size) U=Mechanical, L=Mechanical
Max Horz U=-337(LC 9)
Max Uplift U=-164(LC 8), L=-94(LC 8)
Max Grav U=1934(LC 14), L=1994(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-1192/61, B-D=-1756/139, D-E=-1779/181, E-F=-1628/200, F-G=-1654/213, G-H=-1736/231, H-J=-1727/187, J-K=-1109/166, A-U=-1819/177, K-L=-1859/134
BOT CHORD	T-U=0/270, Q-R=0/1686, P-Q=0/1666, O-P=0/1690
WEBS	G-P=-491/342, H-O=-400/104, J-O=0/962, J-M=-1363/60, F-Q=0/362, R-S=0/312, D-R=-469/102, B-R=-41/906, B-T=-1272/170, A-T=-150/1653, K-M=-26/1756, R-T=0/1198, M-O=0/1131, E-R=-178/256, F-P=-292/594

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-3-2, Exterior(2R) 13-3-2 to 19-3-2, Interior(1) 19-3-2 to 29-4-7, Exterior(2E) 29-4-7 to 32-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) L except (jt=lb) U=164.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E11	Roof Special	1	1	I73183865

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:31 2025 Page 1

ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-8M?h1v3JkPPKXca7ZptyOCimapVK2rSlgafwpszKqTk

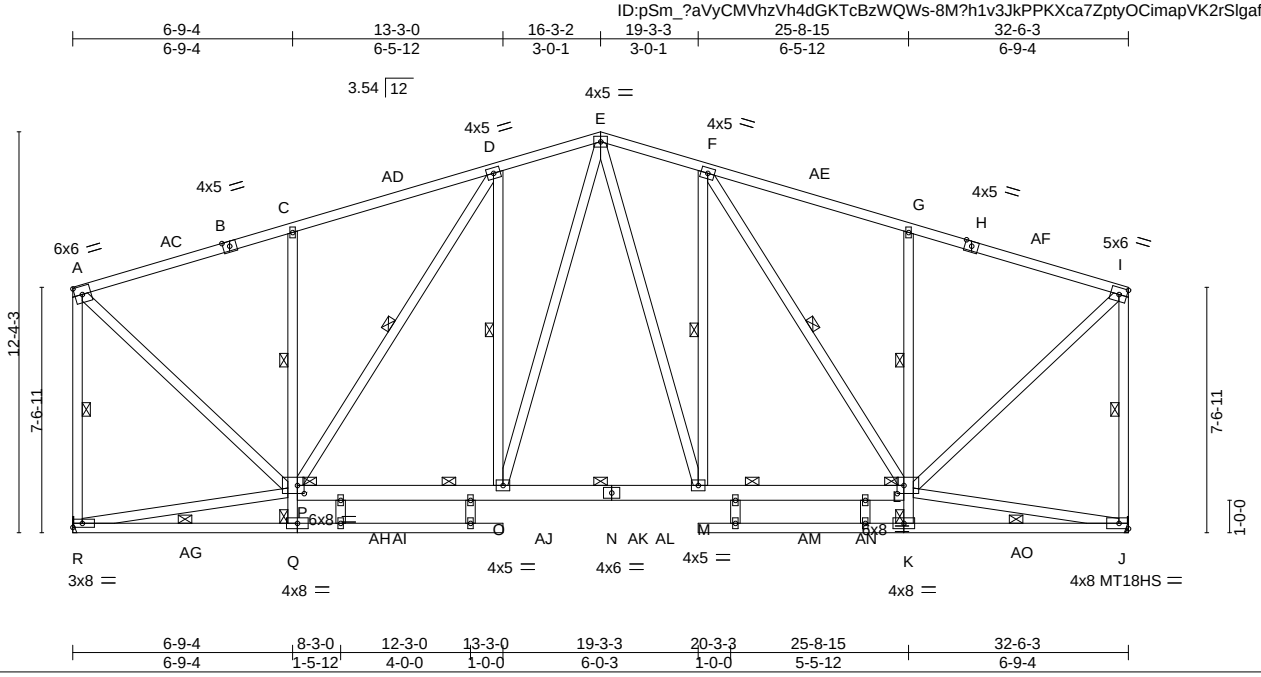

Plate Offsets (X,Y)-- [L:0-2-8,0-3-0], [P:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.23	Q-R	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.36	Q-R	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.06	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	J-K	>999	240	Weight: 255 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	N-P,L-N: 2x6 SPF No.2
WEBS	2x4 SPF No.3 *Except*
	E-M,E-O,D-P,F-L: 2x4 SPF No.2
OTHERS	2x4 SPF No.3 *Except*
	S-T,K-V: 2x4 SP 2400F 2.0E

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt D-O, F-M, G-L, C-P, A-R, I-J, D-P, F-L
JOINTS	1 Brace at Jt(s): Q, K, L, P

REACTIONS. (size) R=Mechanical, J=Mechanical
Max Horz R=-362(LC 9)
Max Uplift R=-171(LC 8), J=-89(LC 8)
Max Grav R=1963(LC 14), J=2025(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-C=-1531/69, C-D=-1551/133, D-E=-1782/202, E-F=-1776/231, F-G=-1482/224, G-I=-1462/168, A-R=-1837/160, I-J=-1863/125
BOT CHORD	O-P=0/1750, M-O=0/1620, L-M=0/1730
WEBS	D-O=-279/244, F-M=-279/244, E-M=-79/657, G-L=-580/132, E-O=0/510, P-Q=0/344, C-P=-580/163, I-L=-5/1864, D-P=-678/53, F-L=-602/0, P-R=-38/285, A-P=-130/1770

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-1-4, Exterior(2R) 13-1-4 to 19-4-15, Interior(1) 19-4-15 to 29-4-7, Exterior(2E) 29-4-7 to 32-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) J except (jt=lb) R=171.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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314.434.1200 / MiTek-US.com

NOTES-

13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard Except:

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: A-E=-51, E-I=-51, Q-R=-30, O-P=-30, L-O=-110(F=-80), J-K=-30

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF	I73183866
241087-G	E12	Piggyback Base	1	1	Job Reference (optional)	

Mattingly Lumber & Millwork, Inc., Madison, IL 62040 — 8.830 s Jan 17 2025 MiTek Industries, Inc. Fri May 2 10:45:42 2025 Page 1

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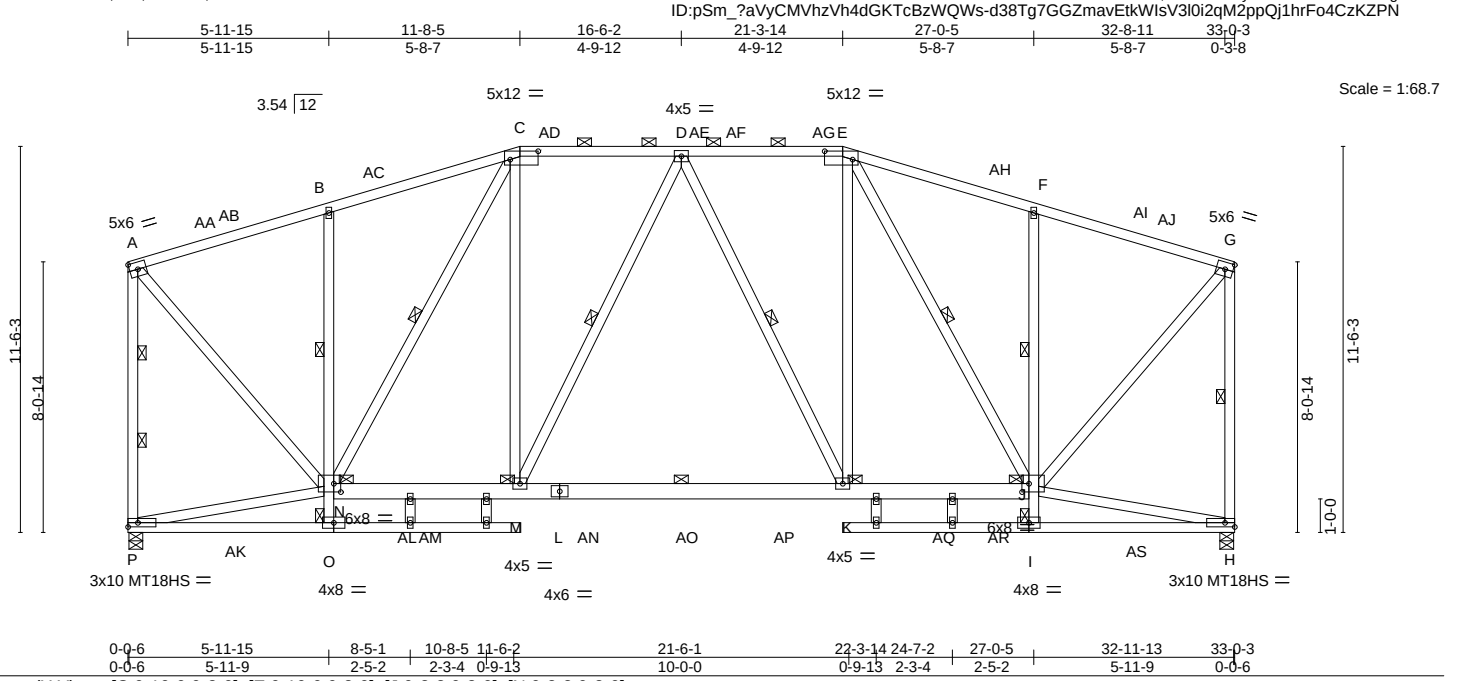

Plate Offsets (X,Y)-- [C:0-10-0,0-3-0], [E:0-10-0,0-3-0], [J:0-2-8,0-3-0], [N:0-2-8,0-3-0]

LOADING (psf)			SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0		Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.16	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4		Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.29	K-M	>999	360	MT18HS	197/144
TCDL	10.0		Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.06	H	n/a	n/a		
BCLL	0.0	*	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	H-I	>999	240	Weight: 249 lb	FT = 20%
BCDL	15.0												

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	L-N,J-L: 2x6 SPF No.2
WEBS	2x4 SPF No.3 *Except*
	D-M,D-K,C-N,E-J: 2x4 SPF No.2
OTHERS	2x4 SPF No.2 *Except*
	S-T,U-V: 2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-7 max.): C-E.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt B-N, D-M, D-K, F-J, G-H, C-N, E-J
	2 Rows at 1/3 pts A-P
JOINTS	1 Brace at Jt(s): O, I, N, J

REACTIONS. (lb/size) P=1318/0-4-15, H=1318/0-4-15
Max Horz P=-383(LC 9)
Max Uplift P=-216(LC 8), H=-125(LC 8)
Max Grav P=1998(LC 14), H=2067(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-AA=-1388/62, AA-AB=-1338/63, B-AB=-1333/75, B-AC=-1407/121, C-AC=-1349/139, C-AD=-1633/192, AD-AE=-1633/192, D-AE=-1633/192, D-AF=-1598/237, AF-AG=-1598/237, E-AG=-1598/237, E-AH=-1266/248, F-AH=-1325/231, F-AI=-1243/195, AI-AJ=-1254/185, G-AJ=-1287/177, A-P=-1900/189, G-H=-1924/157
BOT CHORD	N-AL=0/1736, AL-AM=0/1736, M-AM=0/1736, L-M=0/1799, L-AN=0/1799, AN-AO=0/1799, AO-AP=0/1799, K-AP=0/1799, K-AQ=0/1703, AQ-AR=0/1703, J-AR=0/1703
WEBS	C-M=0/756, E-K=0/756, N-O=0/334, B-N=-531/167, D-M=-373/114, D-K=-373/42, F-J=-531/127, C-N=-788/84, N-P=-42/305, A-N=-168/1770, E-J=-808/0, G-J=-41/1866

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-5-7, Exterior(2R) 7-5-7 to 15-11-4, Interior(1) 15-11-4 to 17-0-15, Exterior(2R) 17-0-15 to 25-6-13, Interior(1) 25-6-13 to 29-10-7, Exterior(2E) 29-10-7 to 32-10-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 216 lb uplift at joint P and 125 lb uplift at joint H.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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NOTES-

12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E13	Piggyback Base	1	1	I73183867
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:33 2025 Page 1
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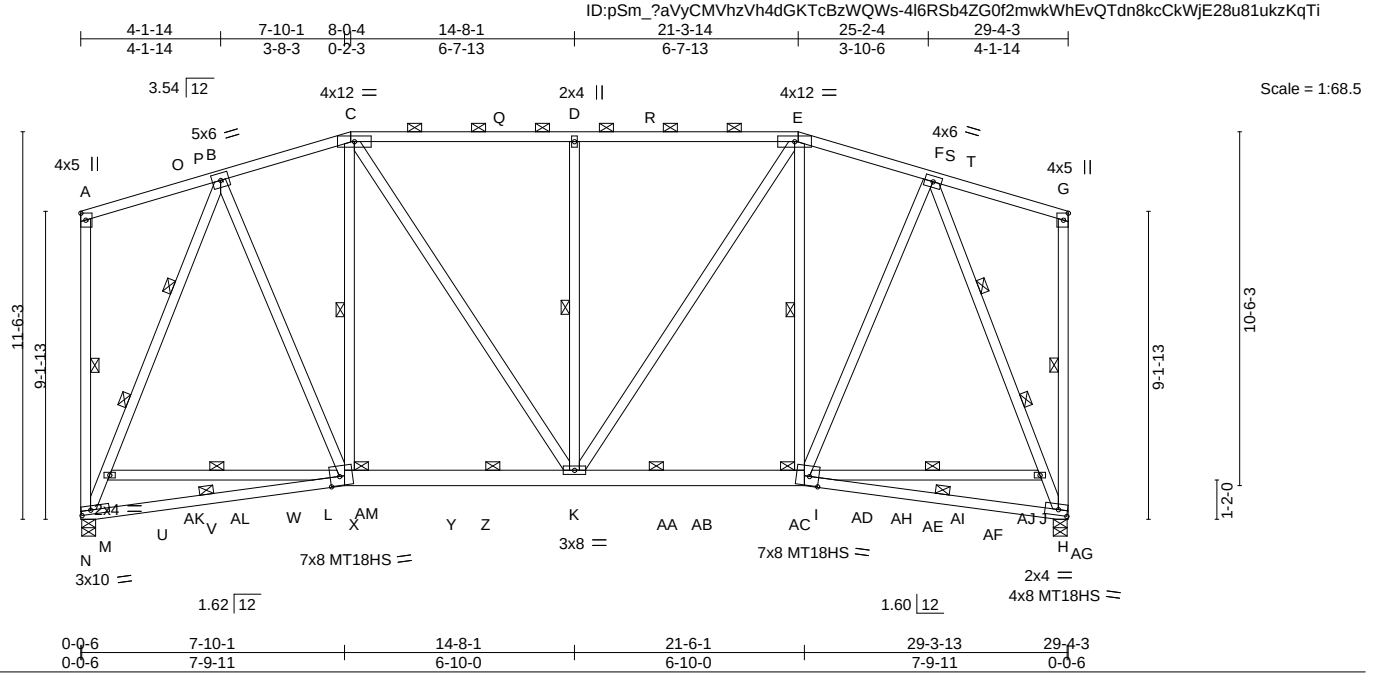

Plate Offsets (X,Y)-- [H:0-3-4,0-2-0], [I:0-3-5,0-3-4], [L:0-3-6,0-3-4], [N:0-3-5,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.21	L-N	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.34	L-N	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.06	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.04	H-I	>999	240	Weight: 218 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* L-N,H-I: 2x4 SPF 2100F 1.8E, I-L: 2x6 SPF No.2
WEBS	2x4 SPF No.3 *Except* C-K,E-K,F-H,B-N: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-2-4 max.): C-E.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt D-K, E-I, A-N, G-H, C-L 2 Rows at 1/3 pts F-H, B-N

REACTIONS. (size) H=0-4-15, N=0-4-15
Max Horz N=-430(LC 9)
Max Uplift H=-14(LC 8), N=-147(LC 8)
Max Grav H=2254(LC 14), N=2153(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1335/59, C-D=-1546/148, D-E=-1546/148, E-F=-1261/158
BOT CHORD L-N=0/1162, K-L=0/1404, I-K=0/1336, H-I=0/1048
WEBS C-K=-119/566, D-K=-604/150, E-K=0/607, E-I=-534/49, F-I=0/1360, F-J=-2099/0, H-J=-2298/0, C-L=-533/198, M-N=-2129/156, B-M=-1929/188, B-L=-9/1281

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-9-6, Exterior(2R) 3-9-6 to 12-3-3, Interior(1) 12-3-3 to 17-0-15, Exterior(2R) 17-0-15 to 25-6-13, Interior(1) 25-6-13 to 26-2-7, Exterior(2E) 26-2-7 to 29-2-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Bearing at joint(s) H, N considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H except (jt=lb) N=147.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E14	Piggyback Base	1	1	I73183868
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:34 2025 Page 1

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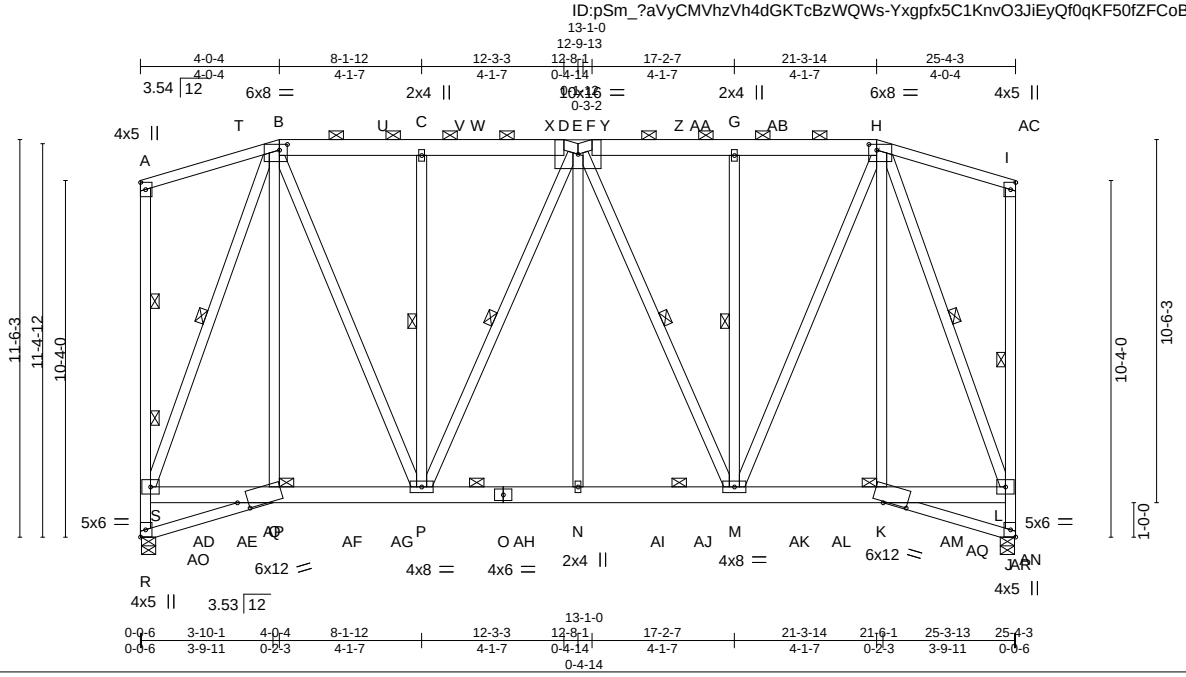

Plate Offsets (X,Y)-- [B:0-2-12,0-2-0], [H:0-2-12,0-2-0], [K:0-8-3,0-0-8], [Q:0-3-11,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.04	N	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07	N	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.04	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	N	>999	240	Weight: 243 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* B-D,F-H: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* O-S,L-O: 2x6 SPF No.2
WEBS	2x4 SPF No.3 *Except* B-P,H-M,E-P,E-M,B-S,H-L: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): B-D, F-H.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt I-J, C-P, G-M, E-P, E-M, B-S, H-L 2 Rows at 1/3 pts A-R

REACTIONS. (size) R=0-4-15, J=0-4-15
Max Horz R=-480(LC 9)
Max Uplift R=-237(LC 8), J=-37(LC 8)
Max Grav R=1616(LC 14), J=1762(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-C=-978/61, C-D=-978/61, D-E=-979/71, E-F=-915/155, F-G=-912/148, G-H=-911/148, R-S=-1662/98, J-L=-1675/75
BOT CHORD	Q-S=-179/463, P-Q=0/795, N-P=0/1214, M-N=0/1214, K-M=0/672, K-L=0/665, Q-R=0/602
WEBS	B-P=-165/900, C-P=-388/88, G-M=-388/104, H-M=0/1015, E-N=0/360, E-P=-300/138, E-M=-387/0, B-Q=0/423, B-S=-1560/72, H-K=-21/343, H-L=-1609/9

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Exterior(2R) 3-1-12 to 7-0-4, Interior(1) 7-0-4 to 9-3-3, Exterior(2R) 9-3-3 to 12-3-3, Exterior(2E) 12-3-3 to 12-8-1, Exterior(2R) 12-8-1 to 16-1-0, Interior(1) 16-1-0 to 18-3-14, Exterior(2R) 18-3-14 to 24-3-14, Interior(1) 24-3-14 to 25-2-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Bearing at joint(s) R, J considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) J except (jt=lb) R=237.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E14	Piggyback Base	1	1	I73183868 Job Reference (optional)

NOTES-

13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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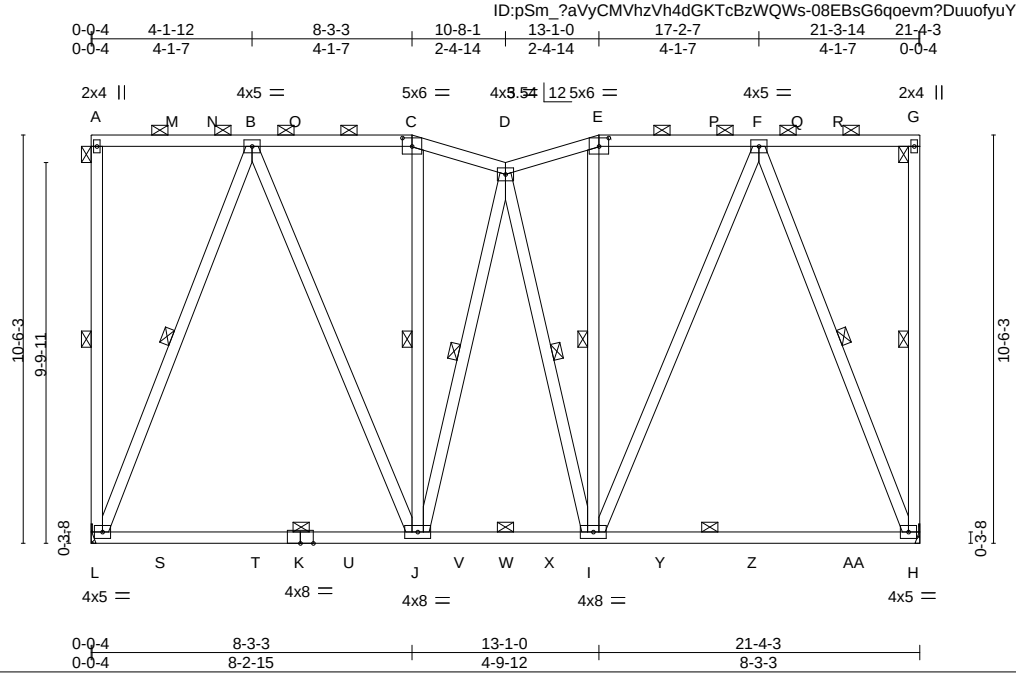
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E15	Piggyback Base	1	1	I73183869
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:35 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-08EBsG6qoevm?DuuofyuY2tbbQqQ_iLLbCd7ydzKqTg



Scale = 1:59.4

Plate Offsets (X,Y)-- [C:0-3-0,0-2-10], [E:0-3-0,0-2-10]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.34	H-I	>753	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.55	H-I	>460	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.01	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	J	>999	240	Weight: 165 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
B-L,B-J,F-I,F-H: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): A-C, E-G.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt B-L, C-J, D-J, D-I, E-I, A-L, G-H, F-H

REACTIONS. (size) L=Mechanical, H=Mechanical
Max Uplift L=-137(LC 8), H=-137(LC 8)
Max Grav L=1342(LC 14), H=1342(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-694/65, C-D=-738/56, D-E=-738/56, E-F=-694/65
BOT CHORD J-L=-54/407, I-J=-75/760, H-I=-54/407
WEBS B-L=-1119/148, B-J=-30/745, D-J=-285/45, D-I=-284/45, F-I=-30/745, F-H=-1119/148

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-3-3, Exterior(2R) 5-3-3 to 8-3-3, Exterior(2E) 8-3-3 to 10-8-1, Exterior(2R) 10-8-1 to 16-1-0, Interior(1) 16-1-0 to 18-2-7, Exterior(2E) 18-2-7 to 21-2-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) L=137, H=137.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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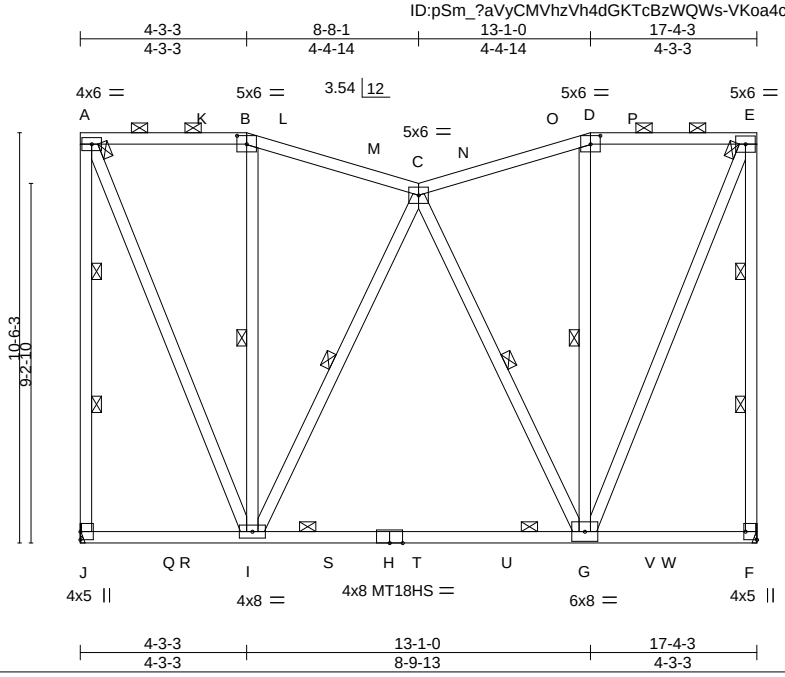
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	E16	Piggyback Base	1	1	I73183870
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:36 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-VKoa4c7SZx1ddNT5MNT75FPcjq9gjAaUqsNhV3zKqTf



Scale = 1:59.1

Plate Offsets (X,Y)-- [B:0-3-0,0-2-10], [D:0-3-0,0-2-10], [F:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.28	G-I	>725	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.44	G-I	>467	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.01	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	F-G	>999	240	Weight: 132 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
F-H: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
A-I,E-G: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): A-B, D-E.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt B-I, C-I, C-G, D-G
2 Rows at 1/3 pts A-J, E-F

REACTIONS. (size) J=Mechanical, F=Mechanical
Max Horz J=-481(LC 8)
Max Uplift J=-286(LC 8)
Max Grav J=1011(LC 3), F=1194(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-J=-947/265, A-B=-431/10, B-C=-483/0, C-D=-404/115, D-E=-351/131, E-F=-1107/59
BOT CHORD I-J=-1/388, G-I=0/671
WEBS A-I=-258/895, B-I=-266/176, C-I=-300/215, C-G=-409/0, D-G=-266/52, E-G=0/1079

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Exterior(2R) 3-1-12 to 7-3-3, Interior(1) 7-3-3 to 10-1-0, Exterior(2R) 10-1-0 to 14-2-7, Exterior(2E) 14-2-7 to 17-2-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) J=286.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	F	Roof Special Girder	1	3	I73183871

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:43 2025 Page 1

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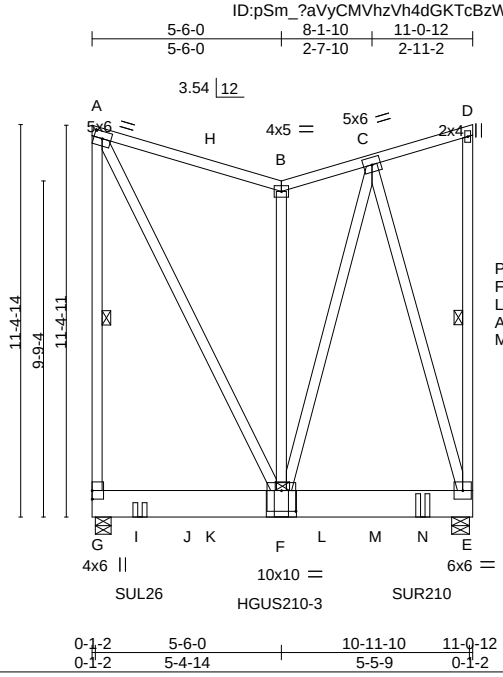

PLY-TO-PLY CONNECTION REQUIRES THAT AN APPROVED FACE MOUNT HANGER (SPECIFIED BY OTHERS) IS REQUIRED FOR LOADS REPORTED IN NOTES. FACE MOUNT HANGER SHALL BE ATTACHED WITH A MINIMUM OF 0.148"x 3" NAILS PER HANGER MANUFACTURER SPECIFICATIONS.

Plate Offsets (X,Y)-- [A:0-2-15,0-2-8], [F:0-5-0,0-7-4]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.04	F	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.06	F	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.02	F	>999	240	Weight: 377 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x10 SP No.1
WEBS 2x4 SPF No.2 *Except*
B-F,C-F,C-E: 2x4 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt A-G, D-E

REACTIONS. (size) G=0-5-8, E=0-6-3
Max Horz G=-502(LC 8)
Max Uplift G=-1161(LC 8), E=-253(LC 8)
Max Grav G=4118(LC 3), E=4087(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-G=-3527/774, A-B=-2072/283, B-C=-2052/262
BOT CHORD F-G=0/402, E-F=0/958
WEBS A-F=-863/4374, B-F=-1426/307, C-F=-291/3906, C-E=-3557/261

NOTES-

1) N/A
2) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x10 - 5 rows staggered at 0-4-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
3) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-11-0, Exterior(2E) 7-11-0 to 10-11-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
6) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
7) Unbalanced snow loads have been considered for this design.
8) Provide adequate drainage to prevent water ponding.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) G=1161, E=253.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

Continued on page 2

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NOTES-

14) Use Simpson Strong-Tie SUL26 (6-10d Girder, 6-10dx1 1/2 Truss) or equivalent at 1-4-11 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
15) Use Simpson Strong-Tie HGUS210-3 (46-10d Girder, 16-10d Truss) or equivalent at 5-6-0 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
16) Use Simpson Strong-Tie SUR210 (10-10d Girder, 10-10dx1 1/2 Truss) or equivalent at 9-7-6 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
17) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-B=-51, B-D=-51, E-G=-30
   Concentrated Loads (lb)
   Vert: F=-5207(B) I=-234(B) N=-234(B)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	G	Jack-Closed	10	1	I73183872
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:43 2025 Page 1
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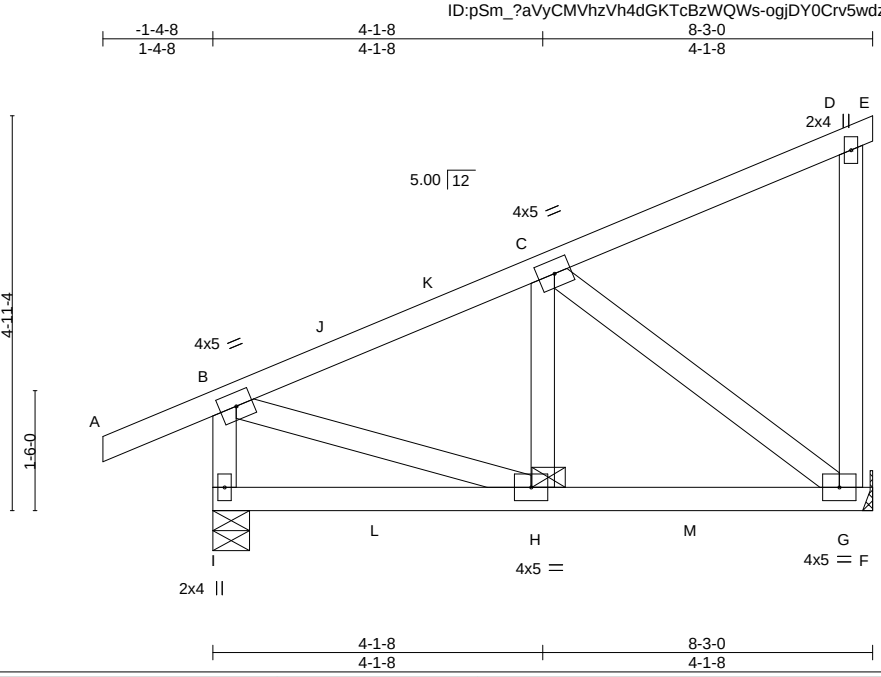

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.06	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.07	H-I	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.00	H	>999	240	Weight: 40 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) I=0-5-8, G=Mechanical
Max Horz I=-190(LC 9)
Max Uplift I=-132(LC 8), G=-79(LC 8)
Max Grav I=564(LC 2), G=471(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-I=-517/150, B-C=-419/64
BOT CHORD G-H=-12/402
WEBS B-H=0/349, C-H=0/291, C-G=-455/104

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 4-0-1, Exterior(2R) 4-0-1 to 8-3-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) G except (jt=lb) I=132.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	G2	Half Hip	4	1	I73183873
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:44 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-GtHblLDTgP2Uac4dq2c?Qxk8E2_absyfg6J6nbzKqTX

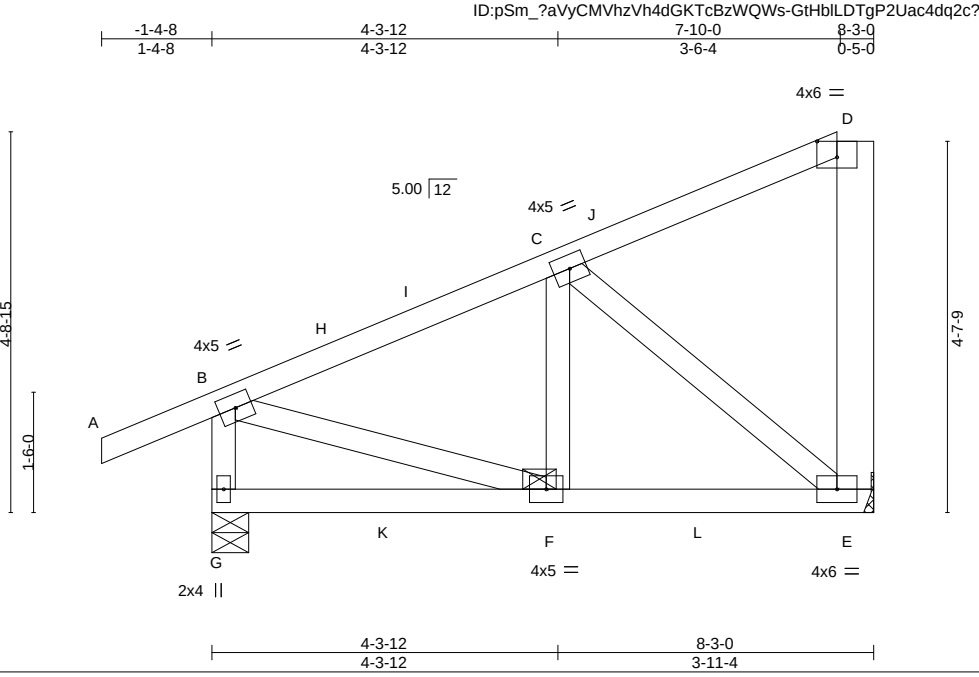

Plate Offsets (X,Y)-- [D:0-3-0,0-2-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.06	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.08	F-G	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MP		Wind(LL)	0.00	F	>999	240	Weight: 42 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
D-E: 2x6 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) E=Mechanical, G=0-5-8
Max Horz G=-190(LC 9)
Max Uplift E=-77(LC 8), G=-129(LC 8)
Max Grav E=460(LC 15), G=567(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-417/58, B-G=-516/148
BOT CHORD E-F=0/396
WEBS C-E=-459/92, C-F=0/299, B-F=0/343

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 5-0-4, Exterior(2E) 5-0-4 to 8-0-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=129.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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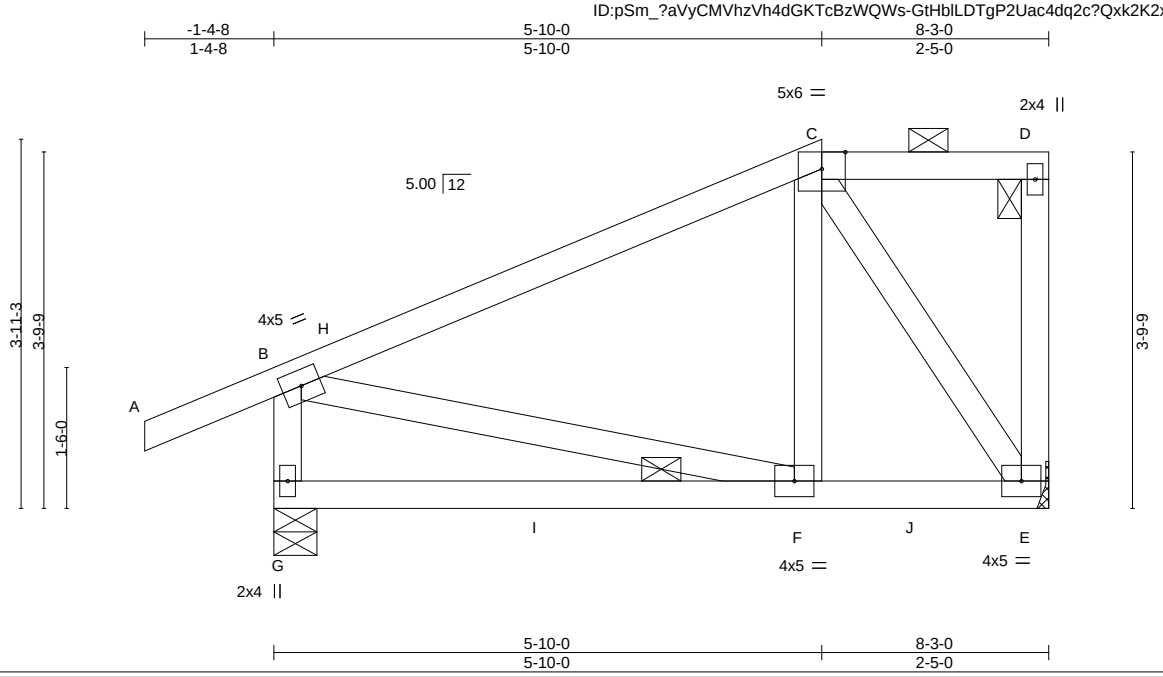
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	G3	Half Hip	2	1	I73183874
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:44 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-GtHblLDTgP2Uac4dq2c?Qxk2K2xxbtjfg6J6nbzKqTX



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.13	F-G	>743	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.18	F-G	>534	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.00	F	>999	240	Weight: 40 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins: C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-148(LC 9)
Max Uplift G=-159(LC 8), E=-94(LC 8)
Max Grav G=586(LC 20), E=448(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-325/53, B-G=-517/186
BOT CHORD E-F=0/257
WEBS C-F=0/363, C-E=-423/63

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Exterior(2R) 1-7-8 to 5-10-0, Exterior(2E) 5-10-0 to 8-1-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=159.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	G4	Half Hip Girder	2	1	I73183875
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:45 2025 Page 1
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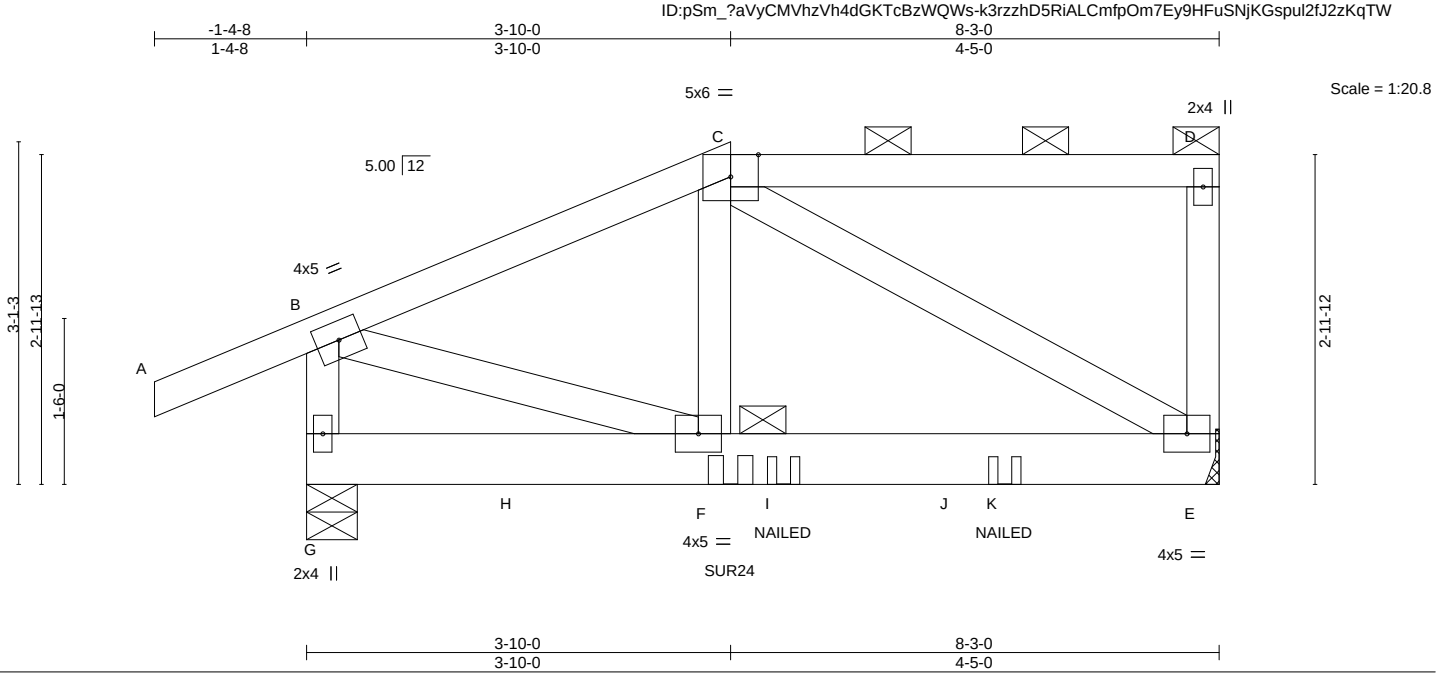

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.02	E-F	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.04	E-F	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.42	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MP		Wind(LL)	0.01	E-F	>999	240	Weight: 42 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-111(LC 9)
Max Uplift G=-212(LC 8), E=-150(LC 8)
Max Grav G=789(LC 2), E=748(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-776/156, B-G=-765/230
BOT CHORD E-F=-82/705
WEBS C-F=-38/430, C-E=-803/145, B-F=-76/691

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Exterior(2R) 1-7-8 to 5-1-4, Exterior(2E) 5-1-4 to 8-1-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) G=212, E=150.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use Simpson Strong-Tie SUR24 (4-10dx1 1/2 Girder, 4-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 3-10-0 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
15) Fill all nail holes where hanger is in contact with lumber.
16) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
17) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

May 2,2025

Continued on page 2

LOAD CASE(S) Standard

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-B=-51, B-C=-51, C-D=-51, E-G=-30
   Concentrated Loads (lb)
   Vert: F=-235(B) I=-160(B) K=-160(B)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	G5	Jack-Closed	2	1	I73183876
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:45 2025 Page 1
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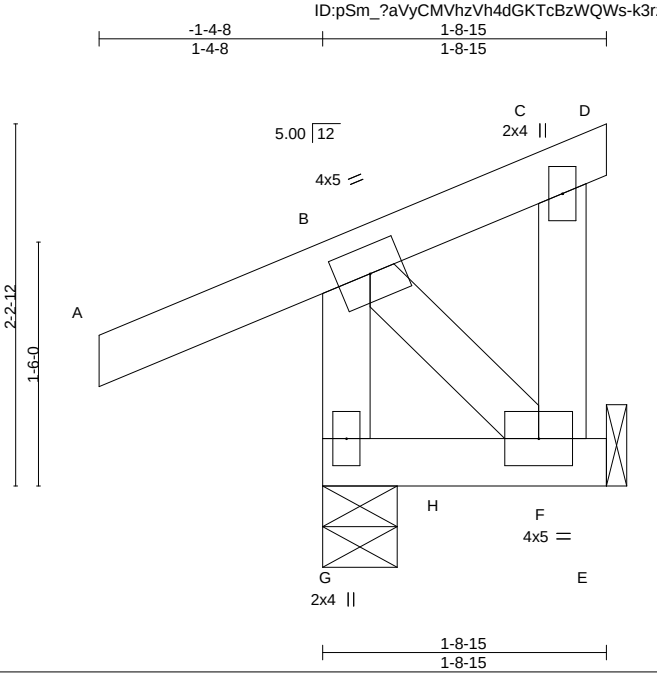

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.01	F-G	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MP		Wind(LL)	-0.00	G	>999	240	Weight: 11 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-8-15 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-79(LC 9)
Max Uplift G=-125(LC 8), E=-20(LC 10)
Max Grav G=335(LC 24), E=235(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=125.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	G6	Jack-Closed	4	1	I73183877
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:46 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-CFPMA1EjC0ICqvE0xTeTVMqVLsg13pMy7PoDrUzKqTV

-1-4-8 3-10-0
1-4-8 3-10-0

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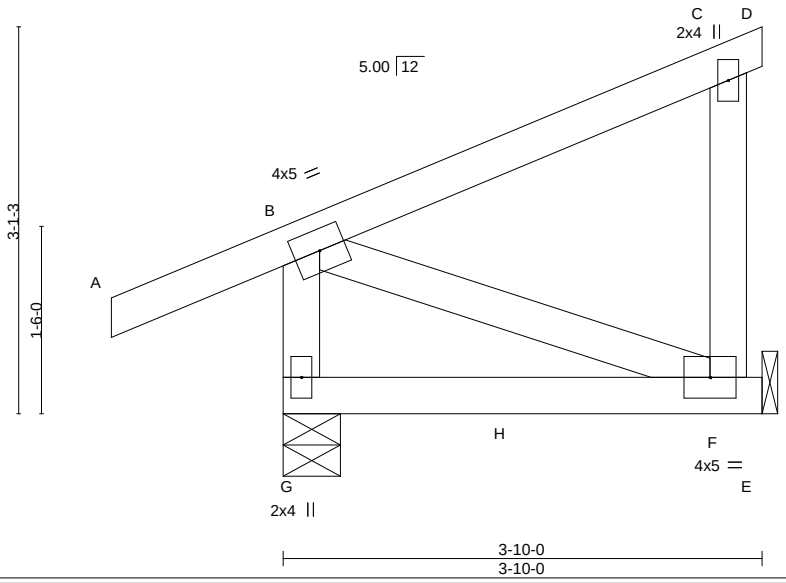

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.05	F-G	>857	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.06	F-G	>684	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-MP		Wind(LL)	0.00	G	****	240	Weight: 19 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-0 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, F=Mechanical
Max Horz G=-117(LC 9)
Max Uplift G=-126(LC 8), F=-44(LC 8)
Max Grav G=372(LC 24), F=343(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-285/147

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F except (jt=lb) G=126.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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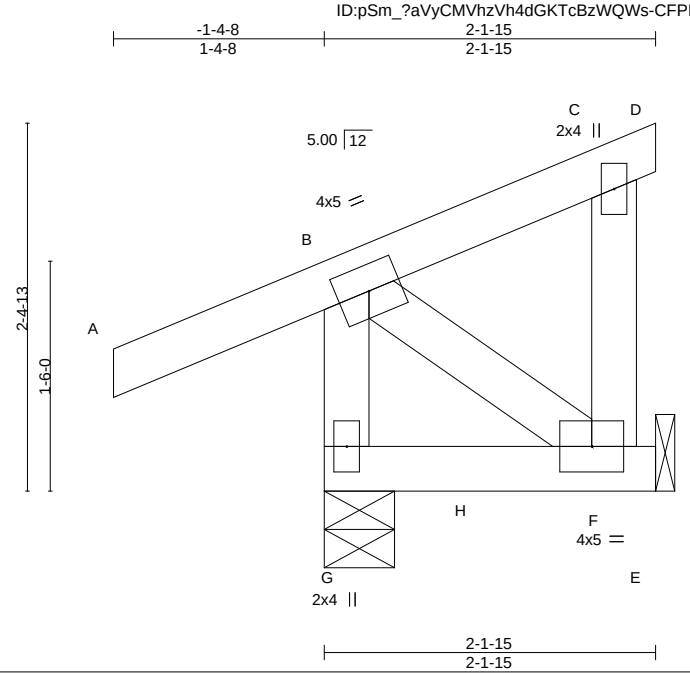
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	G7	Jack-Closed	2	1	I73183878
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:46 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-CFPMA1EjC0ICqvE0xTeTVMqVLsmK3pUy7PoDrUzKqTV



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.01	F-G	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-MP		Wind(LL)	0.00	G	****	240	Weight: 12 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-1-15 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, F=Mechanical
Max Horz G=-86(LC 9)
Max Uplift G=-122(LC 8)
Max Grav G=336(LC 24), F=295(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) G=122.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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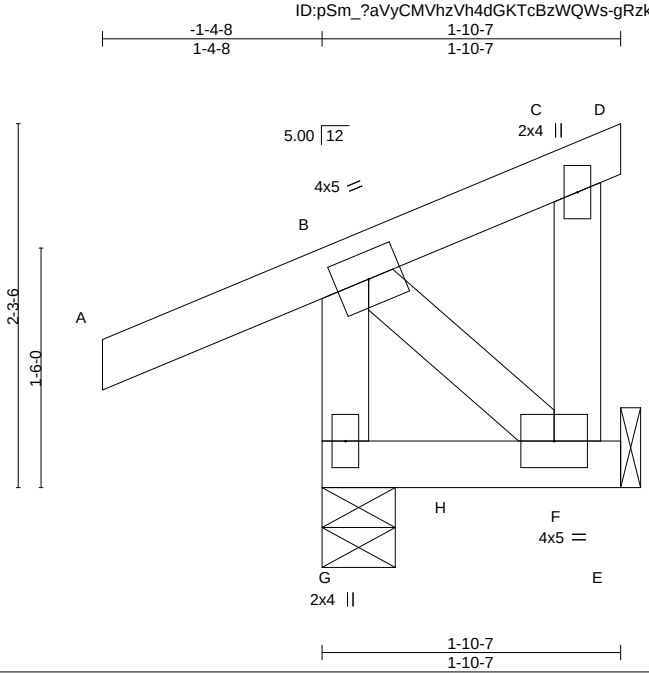
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	G8	Jack-Closed	2	1	I73183879

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:47 2025 Page 1

ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-gRzkONFLzKQ3R3pCVB9i2aMg5F6poGm6M3XmNwzKqTU



LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.01	F-G	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-MP		Wind(LL)	-0.00	G	>999	240	Weight: 11 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-10-7 oc purlins, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-81(LC 9)
Max Uplift G=-124(LC 8), E=-12(LC 10)
Max Grav G=337(LC 24), E=242(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=124.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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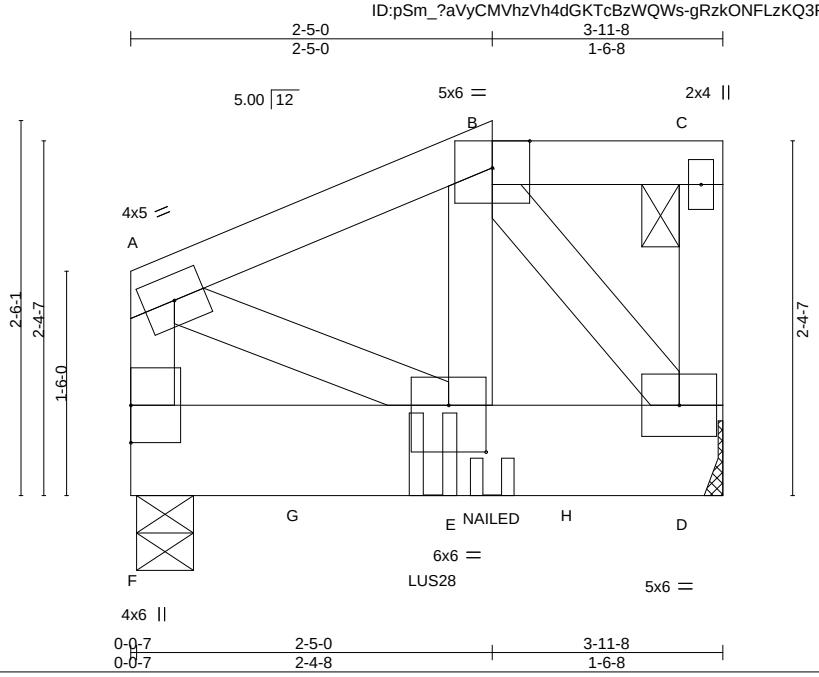
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	G9	Half Hip Girder	1	2	I73183880

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:47 2025 Page 1

ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-gRzkONFLzKQ3R3pCVB9i2aMixF8woEZ6M3XmNwzKqTU



Scale = 1:15.4

Plate Offsets (X,Y)-- [E:0-3-0,0-3-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	E	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.00	E	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MP		Wind(LL)	0.00	F	>999	240	Weight: 52 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x8 SP No.1
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins: B-C.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. (size) F=0-4-9, D=Mechanical
Max Horz F=-93(LC 9)
Max Uplift F=-57(LC 8), D=-55(LC 8)
Max Grav F=704(LC 2), D=924(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-554/32, A-F=-536/64
BOT CHORD	D-E=0/478
WEBS	B-E=0/704, B-D=-801/33, A-E=-15/554

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
6) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F, D.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss) or equivalent at 2-0-4 from the left end to connect truss(es) to front face of bottom chord.
16) Fill all nail holes where hanger is in contact with lumber.

May 2,2025

Continued on page 2

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NOTES-

17) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-B=-51, B-C=-51, D-F=-30
   Concentrated Loads (lb)
   Vert: E=-1102(F=-1011, B=-91)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	H	Diagonal Hip Girder	2	1	I73183881
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:47 2025 Page 1
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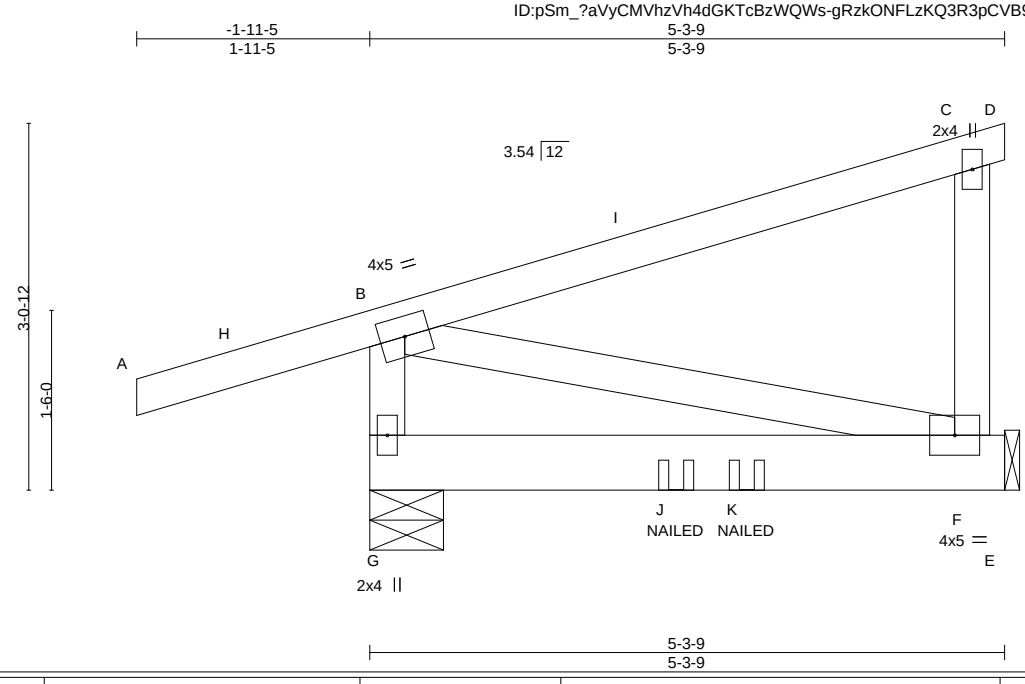

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.04	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.05	F-G	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.04	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MP		Wind(LL)	-0.01	F-G	>999	240	Weight: 27 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-9 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-7-6, F=Mechanical
Max Horz G=-113(LC 9)
Max Uplift G=-258(LC 8), F=-73(LC 8)
Max Grav G=473(LC 2), F=379(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-398/288

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3) -1-11-5 to 2-3-9, Exterior(2R) 2-3-9 to 5-3-9; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F except (jt=lb) G=258.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: A-B=-51, B-C=-51, C-D=-51, E-G=-30

May 2,2025

Continued on page 2

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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: J=-4(F) K=-30(B)

May 2,2025

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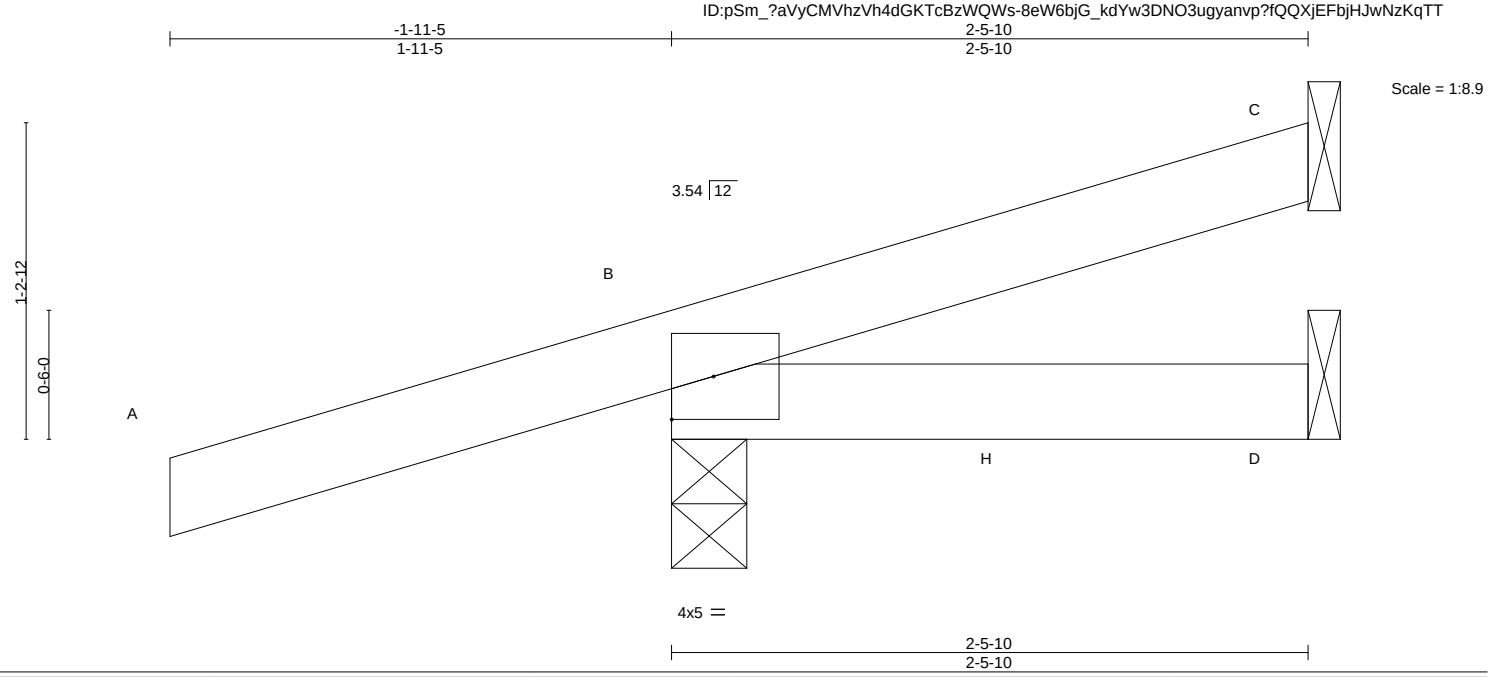
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	H2	Jack-Open	2	1	I73183882
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:48 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-8eW6bjG_kdYw3DNO3ugyanvp?fQQXjEFbjHJwNzKqTT



LOADING (psf)			SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0		Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.01	D-G	>999	480	MT20	197/144
Snow (Pf)	15.4		Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.01	D-G	>999	360		
TCDL	10.0		Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	D	n/a	n/a		
BCLL	0.0	*	Code IBC2018/TPI2014		Matrix-MP		Wind(LL)	-0.00	D-G	>999	240	Weight: 8 lb	FT = 20%
BCDL	15.0												

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-10 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) C=Mechanical, B=0-3-8, D=Mechanical
Max Horz C=93(LC 8)
Max Uplift C=-5(LC 10), B=-274(LC 8)
Max Grav C=68(LC 15), B=365(LC 18), D=276(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
2) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) C except (jt=lb) B=274.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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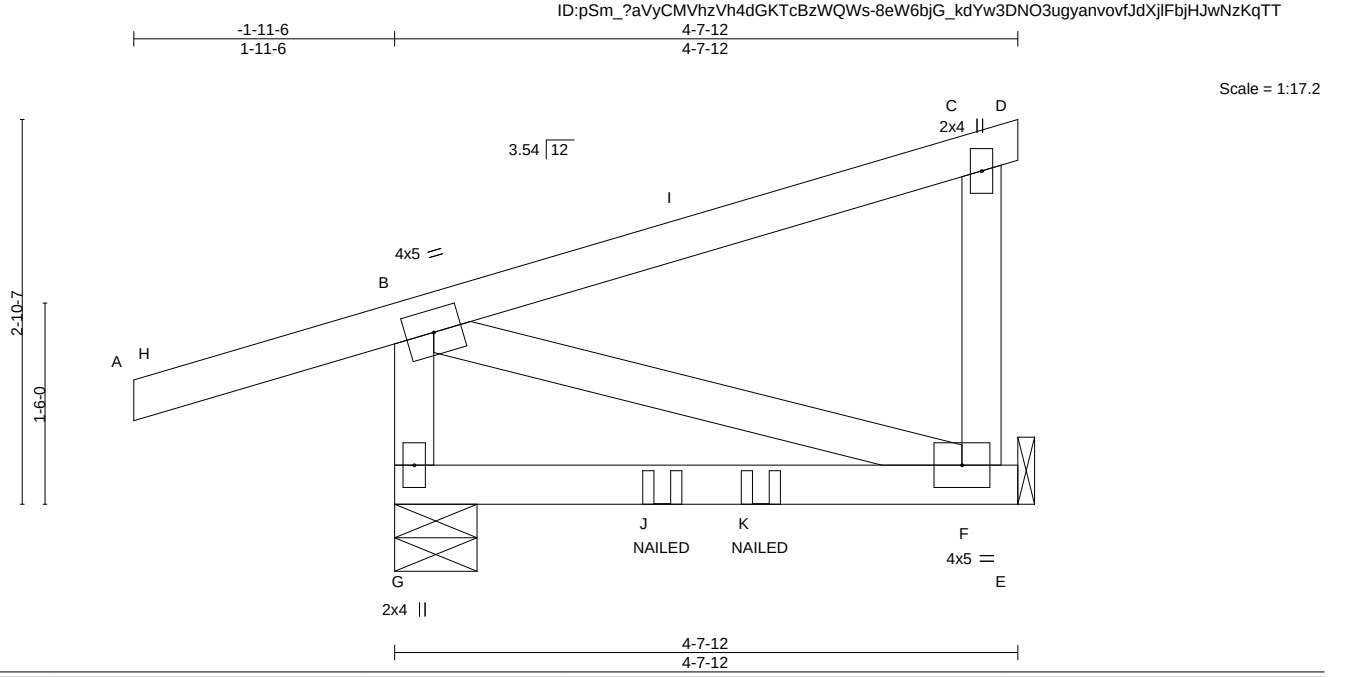
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	H3	Diagonal Hip Girder	1	1	I73183883
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:48 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-8eW6bjG_kdYw3DNO3ugyanvovfJdXjlFbjHJwNzKqTT



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.09	F-G	>571	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.12	F-G	>432	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MP		Wind(LL)	-0.03	F-G	>999	240	Weight: 22 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-12 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-7-6, F=Mechanical
Max Horz G=-109(LC 9)
Max Uplift G=-254(LC 8), F=-58(LC 8)
Max Grav G=440(LC 2), F=359(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-378/279

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3) -1-11-5 to 2-3-9, Exterior(2R) 2-3-9 to 4-7-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F except (jt=lb) G=254.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: A-B=-51, B-C=-51, C-D=-51, E-G=-30

May 2,2025

Continued on page 2

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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: J=3(F) K=-10(B)

May 2,2025

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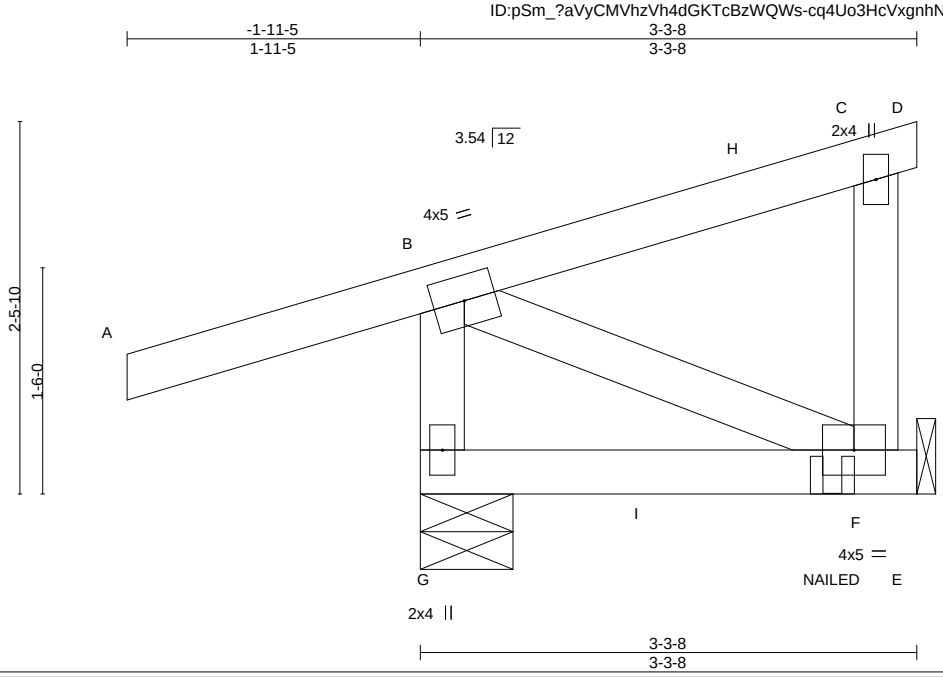
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	H4	Jack-Closed	1	1	I73183884

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:49 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-cq4Uo3HcVxgnhNybdbCB7?Sz_3jbGA5PpN0tSpzKqTS



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.03	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.03	F-G	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-MP		Wind(LL)	0.00	G	****	240	Weight: 16 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-8 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-7-6, F=Mechanical
Max Horz G=-91(LC 9)
Max Uplift G=-246(LC 8), F=-12(LC 8)
Max Grav G=386(LC 2), F=321(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-343/264

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3) -1-11-5 to 2-3-9, Exterior(2R) 2-3-9 to 3-3-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F except (jt=lb) G=246.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: A-B=-51, B-C=-51, C-D=-51, E-G=-30

May 2,2025

Continued on page 2

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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: F=-10(B)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	I	Roof Special	1	1	I73183885
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:49 2025 Page 1
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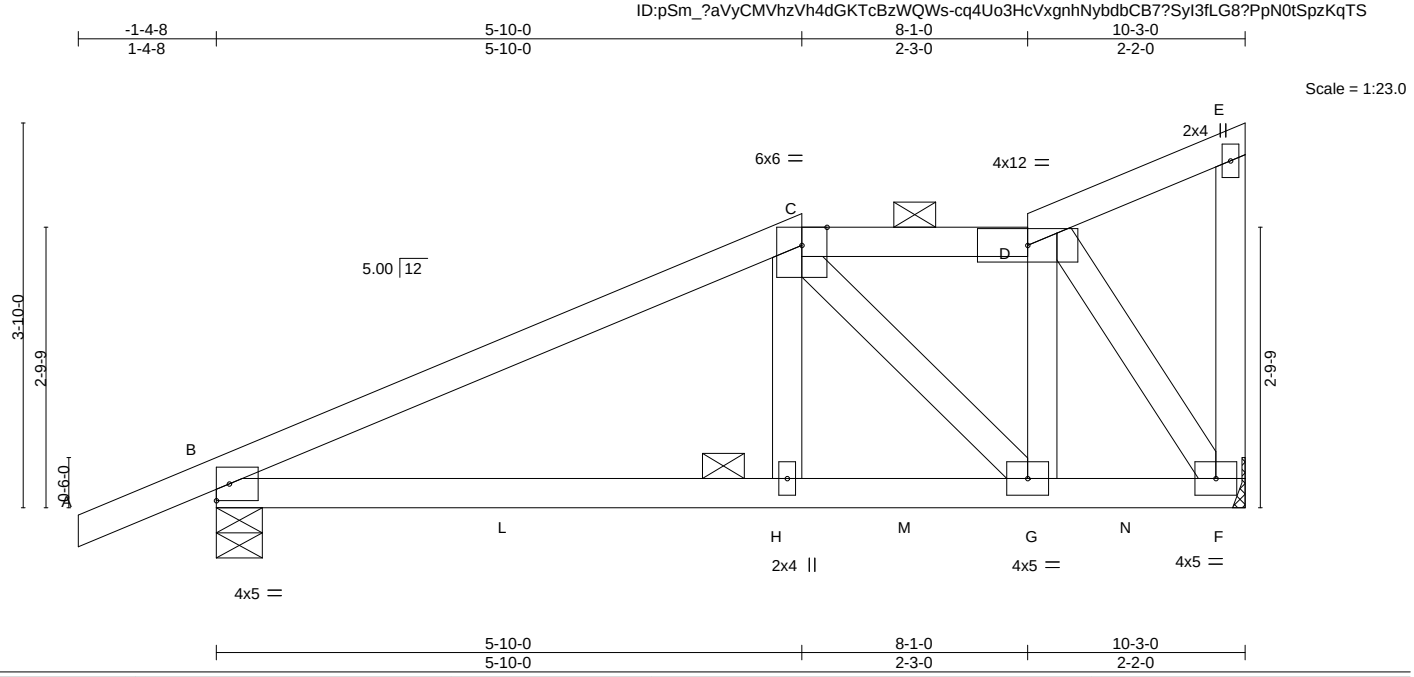

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.09	H-K	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.13	H-K	>922	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	B	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	H-K	>999	240	Weight: 42 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) B=0-5-8, F=Mechanical
Max Horz B=-125(LC 9)
Max Uplift B=-157(LC 8), F=-101(LC 8)
Max Grav B=673(LC 2), F=554(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-747/116, C-D=-325/88
BOT CHORD B-H=-73/655, G-H=-76/644, F-G=-20/365
WEBS C-H=0/392, C-G=-435/85, D-G=-48/372, D-F=-539/118

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Exterior(2R) 1-7-8 to 5-10-0, Exterior(2E) 5-10-0 to 10-1-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) B=157, F=101.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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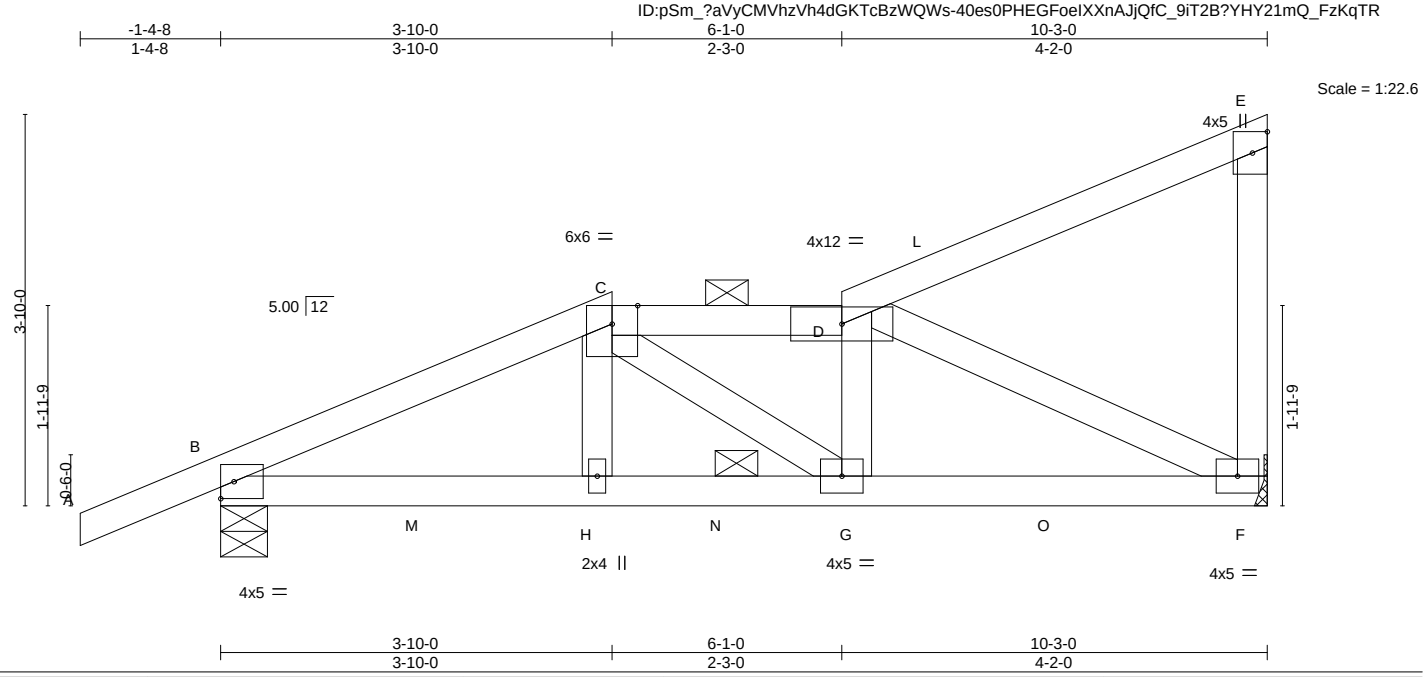
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	I2	Roof Special	1	1	I73183886
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:50 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-40es0PHEGFoeIXXnAJjQfC_9iT2B?YHY21mQ_FzKqTR



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.04	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.06	F-G	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.01	F	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.01	G	>999	240	Weight: 41 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) B=0-5-8, F=Mechanical
Max Horz B=-125(LC 9)
Max Uplift B=-153(LC 8), F=-91(LC 8)
Max Grav B=673(LC 2), F=554(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-878/123, C-D=-803/137
BOT CHORD B-H=-95/805, G-H=-98/799, F-G=-94/822
WEBS C-H=0/304, D-F=-851/155

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Exterior(2R) 1-7-8 to 3-10-0, Exterior(2E) 3-10-0 to 6-1-0, Interior(1) 6-1-0 to 7-1-4, Exterior(2E) 7-1-4 to 10-1-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F except (jt=lb) B=153.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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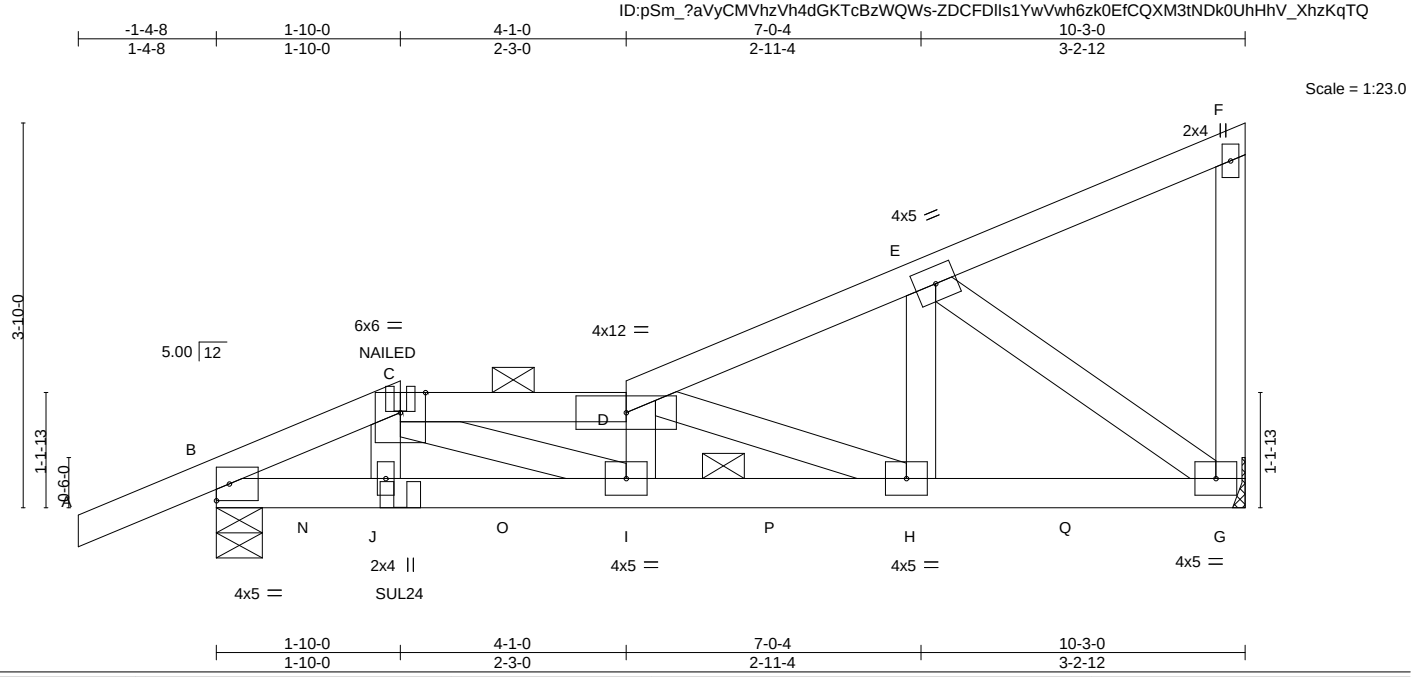
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	I3	Roof Special Girder	1	1	I73183887
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:51 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-ZDCFDIIs1YwVwh6zk0EfCQXM3tNDk0UhHhV_XhzKqTQ



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.04	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.07	I	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.01	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.02	I	>999	240	Weight: 43 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-11 max.): C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=Mechanical, B=0-5-8
Max Horz B=-125(LC 9)
Max Uplift G=-78(LC 8), B=-143(LC 8)
Max Grav G=555(LC 50), B=666(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-910/86, C-D=-1428/156, D-E=-663/83
BOT CHORD B-J=-72/898, I-J=-79/898, H-I=-132/1415, G-H=-39/609
WEBS C-I=-108/655, D-H=-921/98, E-H=0/503, E-G=-706/112

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 4-1-0, Interior(1) 4-1-0 to 7-0-4, Exterior(2E) 7-0-4 to 10-1-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) G except (jt=lb) B=143.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use Simpson Strong-Tie SUL24 (4-10dx1 1/2 Girder, 4-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 1-10-0 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
15) Fill all nail holes where hanger is in contact with lumber.
16) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
17) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

May 2,2025

Continued on page 2

LOAD CASE(S) Standard

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-C=-51, C-D=-51, D-F=-51, G-K=-30
   Concentrated Loads (lb)
   Vert: J=1(F)

May 2,2025

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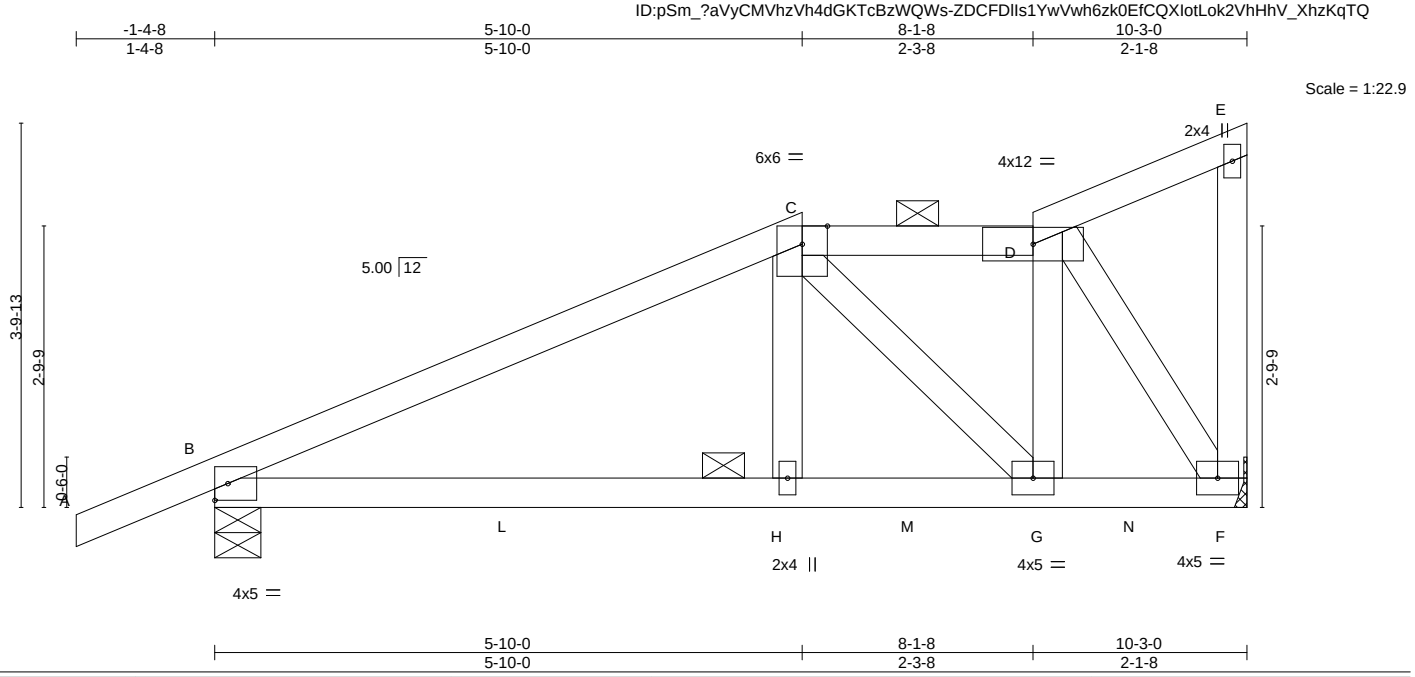
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	I4	Roof Special	1	1	I73183888
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:51 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-ZDCFDIIs1YwVwh6zk0EfCQXIotLok2VhHhV_XhzKqTQ



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.09	H-K	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.13	H-K	>921	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	B	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.01	H-K	>999	240	Weight: 42 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) B=0-5-8, F=Mechanical
Max Horz B=-125(LC 9)
Max Uplift B=-157(LC 8), F=-101(LC 8)
Max Grav B=673(LC 2), F=554(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-747/116, C-D=-319/87
BOT CHORD B-H=-73/654, G-H=-75/644, F-G=-19/359
WEBS C-H=0/393, C-G=-439/85, D-G=-48/375, D-F=-537/118

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Exterior(2R) 1-7-8 to 5-10-0, Exterior(2E) 5-10-0 to 10-1-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) B=157, F=101.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	I5	Roof Special	1	1	I73183889
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:52 2025 Page 1
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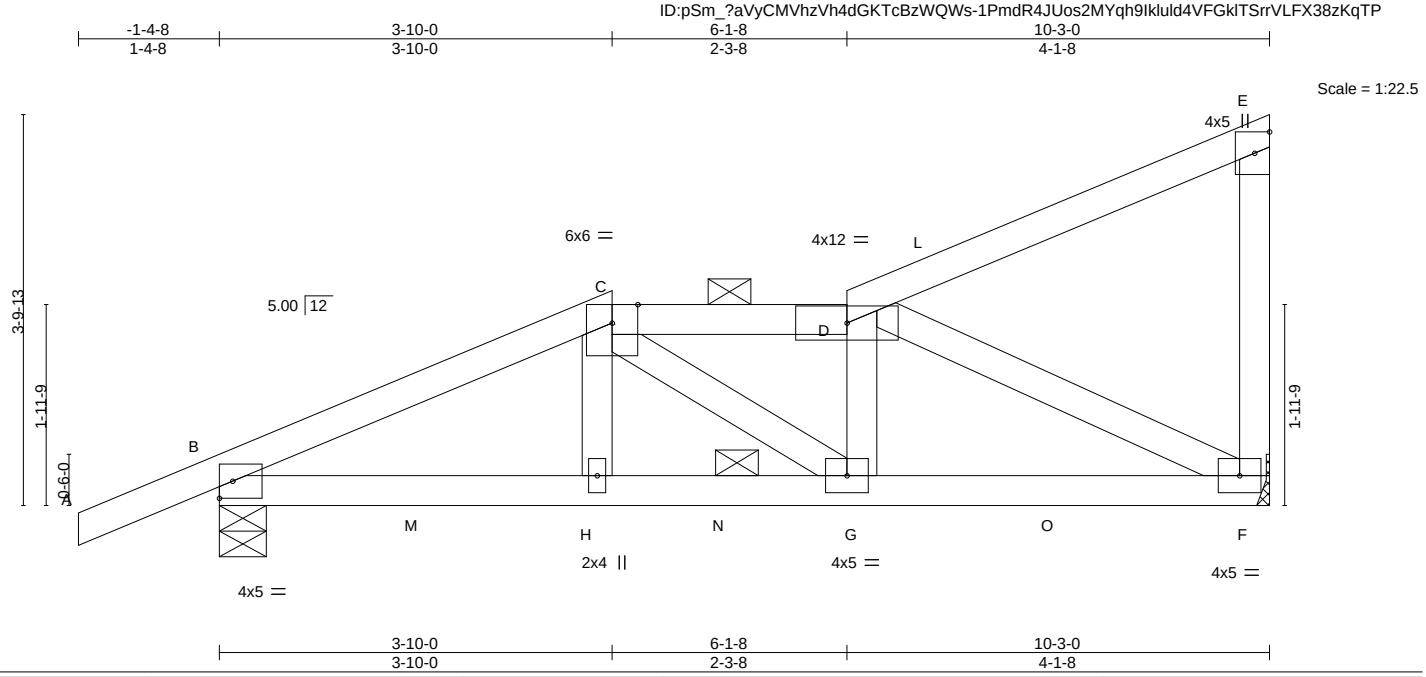

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.04	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.06	F-G	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.01	F	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.01	G	>999	240	Weight: 41 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) B=0-5-8, F=Mechanical
Max Horz B=-125(LC 9)
Max Uplift B=-154(LC 8), F=-91(LC 8)
Max Grav B=673(LC 2), F=554(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-879/124, C-D=-800/137
BOT CHORD B-H=-96/806, G-H=-99/799, F-G=-94/819
WEBS C-H=0/305, D-F=-849/155

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Exterior(2R) 1-7-8 to 3-10-0, Exterior(2E) 3-10-0 to 6-1-8, Interior(1) 6-1-8 to 7-1-4, Exterior(2E) 7-1-4 to 10-1-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F except (jt=lb) B=154.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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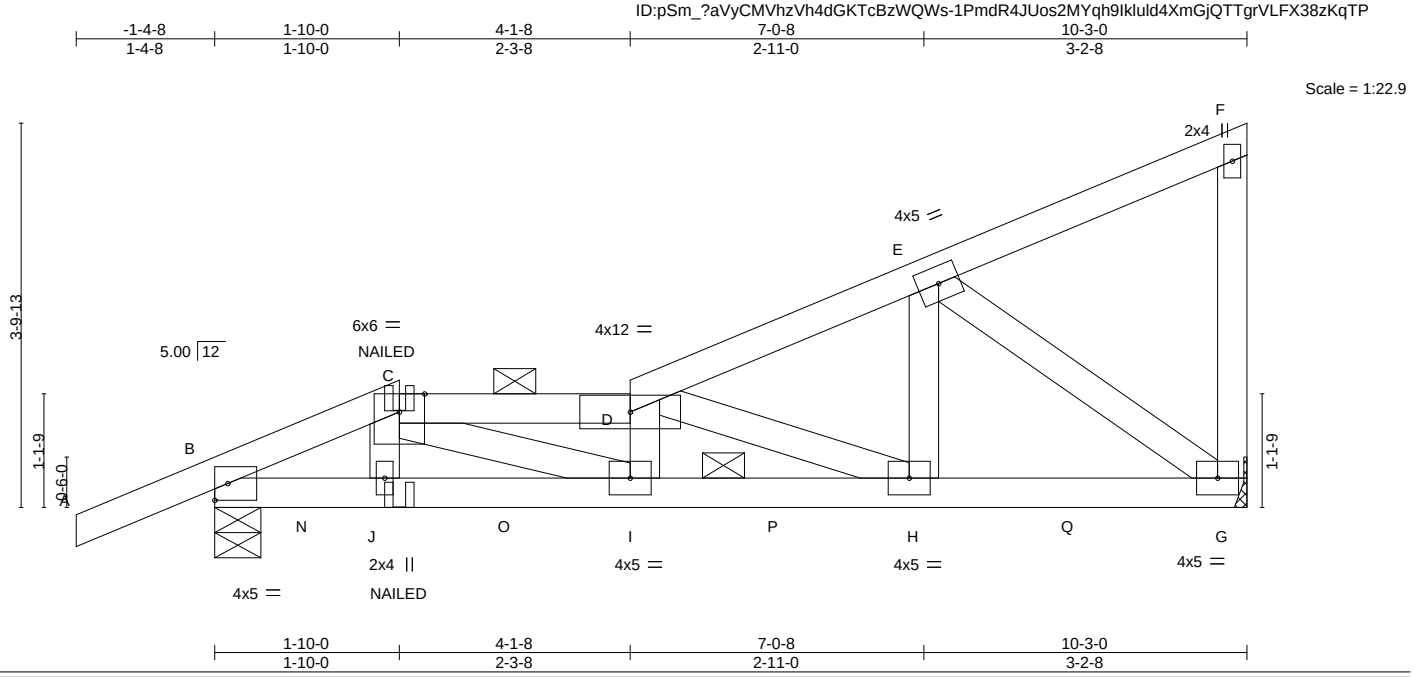
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	I6	Roof Special Girder	1	1	I73183890
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:52 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-1PmdR4JUos2MYqh9lkluld4XmGjQTTgrVLFX38zKqTP



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.04	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.07	I	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.01	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.02	I	>999	240	Weight: 43 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-9-4 max.): C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=Mechanical, B=0-5-8
Max Horz B=-125(LC 9)
Max Uplift G=-78(LC 8), B=-143(LC 8)
Max Grav G=555(LC 50), B=666(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-918/87, C-D=-1447/158, D-E=-663/83
BOT CHORD B-J=-73/907, I-J=-81/908, H-I=-135/1432, G-H=-39/608
WEBS C-I=-111/663, D-H=-938/100, E-H=0/506, E-G=-706/112

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 4-1-8, Interior(1) 4-1-8 to 7-0-8, Exterior(2E) 7-0-8 to 10-1-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) G except (jt=lb) B=143.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

May 2,2025

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-C=-51, C-D=-51, D-F=-51, G-K=-30
   Concentrated Loads (lb)
   Vert: J=1(B)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J	JACK-CLOSED	1	1	I73183891
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:53 2025 Page 1
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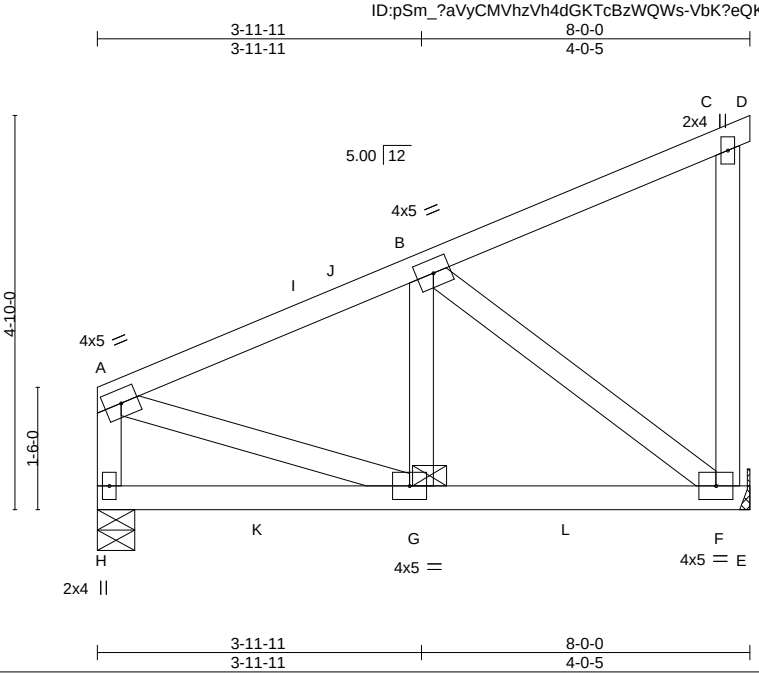

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.05	G-H	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.06	G-H	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.00	G	>999	240	Weight: 37 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) H=0-5-8, F=Mechanical
Max Horz H=-195(LC 9)
Max Uplift H=-71(LC 8), F=-89(LC 8)
Max Grav H=439(LC 24), F=467(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-H=-371/88, A-B=-403/73
BOT CHORD F-G=-35/403
WEBS A-G=-44/359, B-G=0/283, B-F=-459/131

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-9-1, Exterior(2R) 3-9-1 to 8-0-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, F.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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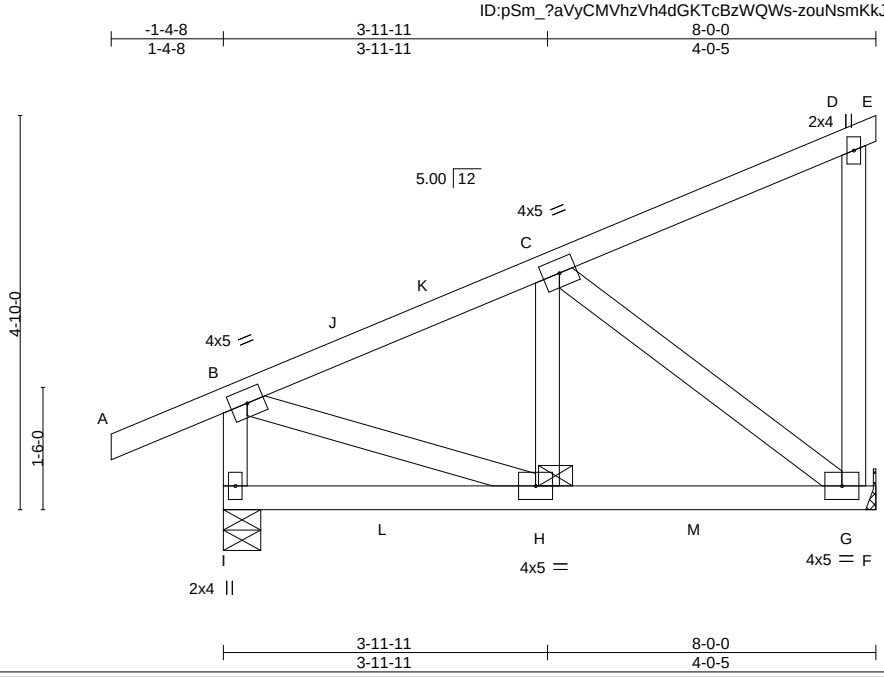
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J2	Jack-Closed	7	1	I73183892

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:54 2025 Page 1

ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-zouNsmKkJTI3n8rYP9nMq29rZ4PfxOZ8zfke70zKqTN



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.05	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.06	H-I	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.00	G	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.00	H	>999	240	Weight: 39 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) I=0-5-8, G=Mechanical
Max Horz I=-186(LC 9)
Max Uplift I=-133(LC 8), G=-78(LC 8)
Max Grav I=551(LC 2), G=458(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-I=-505/150, B-C=-400/63
BOT CHORD G-H=-12/386
WEBS B-H=0/334, C-H=0/285, C-G=-437/103

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 3-9-1, Exterior(2R) 3-9-1 to 8-0-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) G except (jt=lb) I=133.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J3	Jack-Closed	1	1	I73183893
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:55 2025 Page 1
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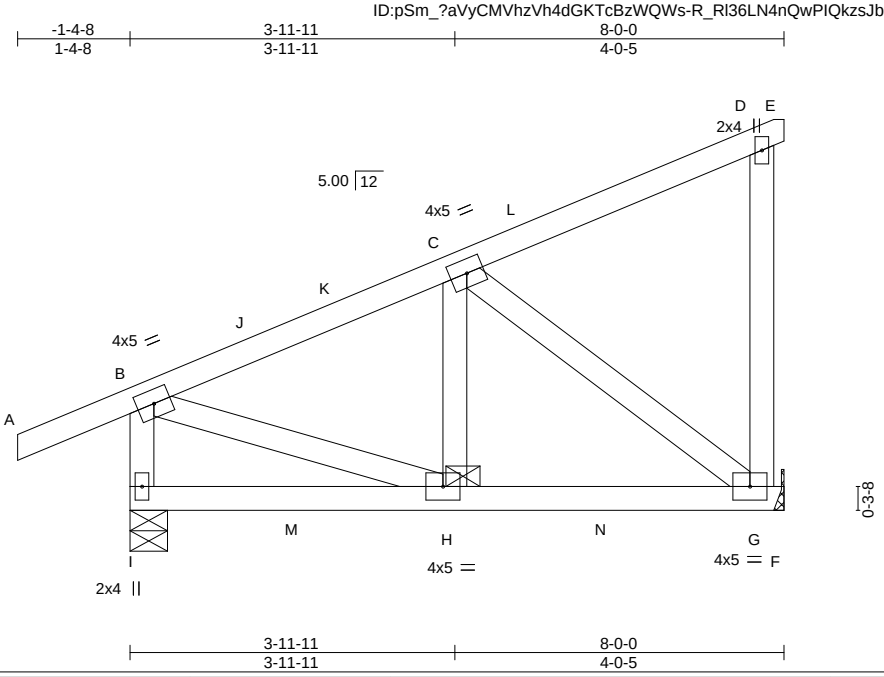

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.05	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.06	H-I	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.00	G	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.00	H	>999	240	Weight: 39 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) I=0-5-8, G=Mechanical
Max Horz I=-186(LC 9)
Max Uplift I=-129(LC 8), G=-70(LC 8)
Max Grav I=551(LC 2), G=457(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-I=-505/146, B-C=-400/57
BOT CHORD G-H=-1/386
WEBS B-H=0/334, C-H=0/285, C-G=-438/89

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 4-11-4, Exterior(2E) 4-11-4 to 7-11-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) G except (jt=lb) I=129.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J4	Common	3	1	I73183894
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:55 2025 Page 1

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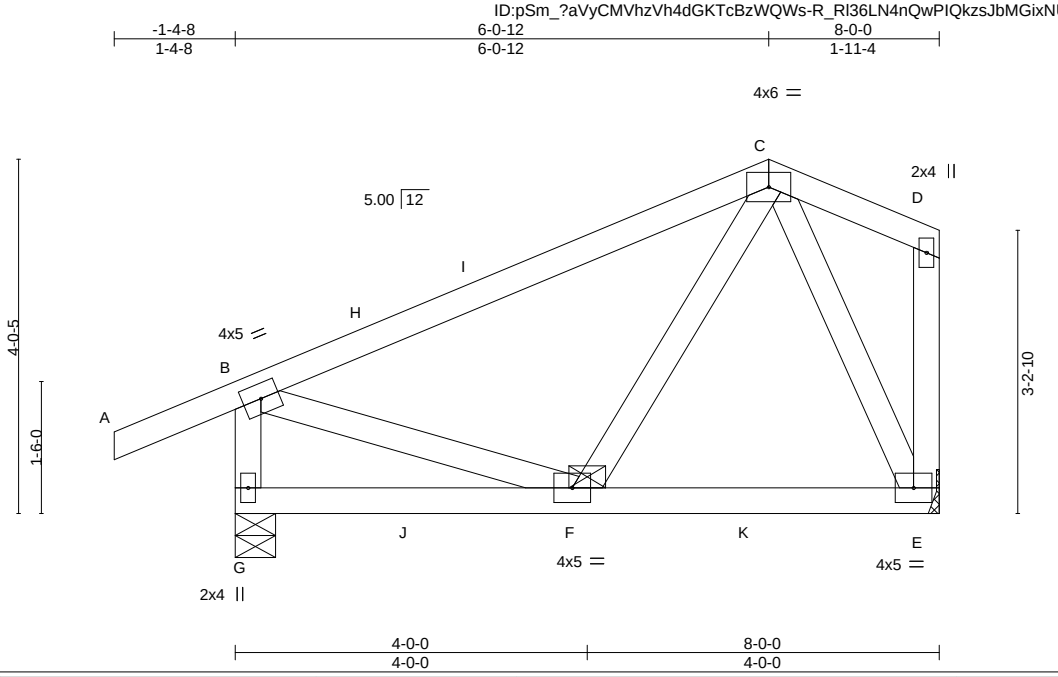

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.05	E-F	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.07	E-F	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.00	F	>999	240	Weight: 38 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-127(LC 9)
Max Uplift G=-165(LC 8), E=-109(LC 8)
Max Grav G=558(LC 2), E=440(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-337/44, B-G=-515/181
WEBS C-F=0/340, B-F=0/305, C-E=-356/76

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 3-0-12, Exterior(2R) 3-0-12 to 6-0-12, Exterior(2E) 6-0-12 to 7-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) G=165, E=109.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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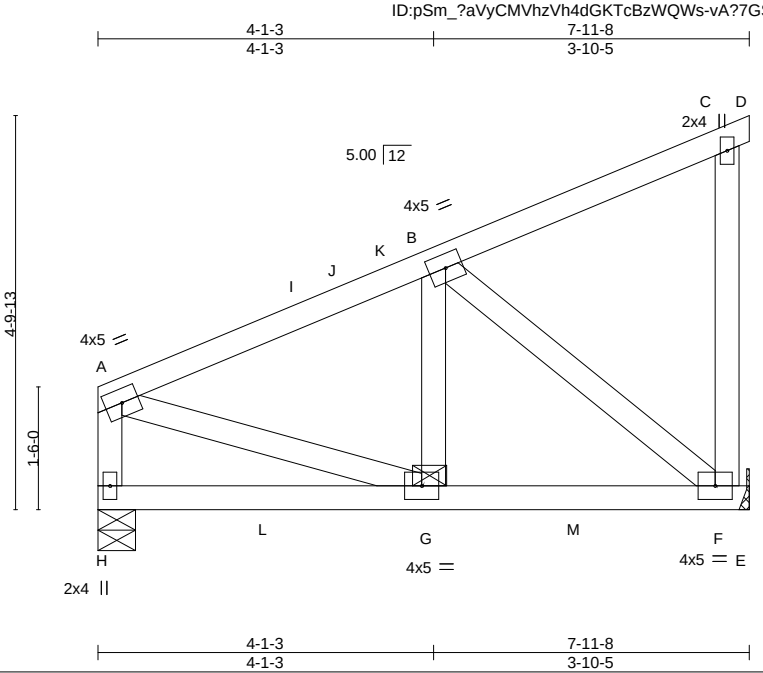
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J5	Jack-Closed	1	1	I73183895
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:56 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-vA?7GSM?r5Yn1S?xXaqqvTEB9u5_PI2RQzDlCvzKqTL



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.05	G-H	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.07	G-H	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.00	G	>999	240	Weight: 37 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) H=0-5-8, F=Mechanical
Max Horz H=-194(LC 9)
Max Uplift H=-72(LC 8), F=-91(LC 8)
Max Grav H=438(LC 24), F=465(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-H=-367/90, A-B=-394/73
BOT CHORD F-G=-35/392
WEBS A-G=-42/347, B-G=0/289, B-F=-456/134

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-8-9, Exterior(2R) 3-8-9 to 7-11-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, F.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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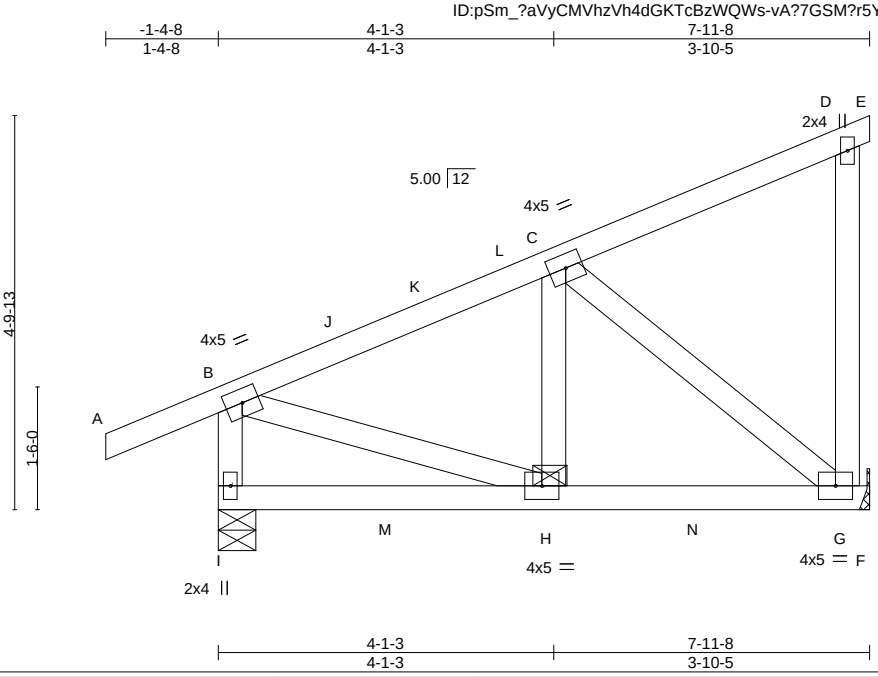
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J6	Jack-Closed	7	1	I73183896
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:56 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-vA?7GSM?r5Yn1S?xXaqqvTEB7u5_PICRQzDlCvzKqTL



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.05	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.07	H-I	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	G	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.00	H	>999	240	Weight: 39 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) I=0-5-8, G=Mechanical
Max Horz I=-185(LC 9)
Max Uplift I=-134(LC 8), G=-80(LC 8)
Max Grav I=548(LC 2), G=456(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-I=-501/152, B-C=-392/63
BOT CHORD G-H=-13/375
WEBS B-H=0/323, C-H=0/290, C-G=-435/105

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 3-8-9, Exterior(2R) 3-8-9 to 7-11-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) G except (jt=lb) I=134.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J7	Half Hip	1	1	I73183897
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:57 2025 Page 1
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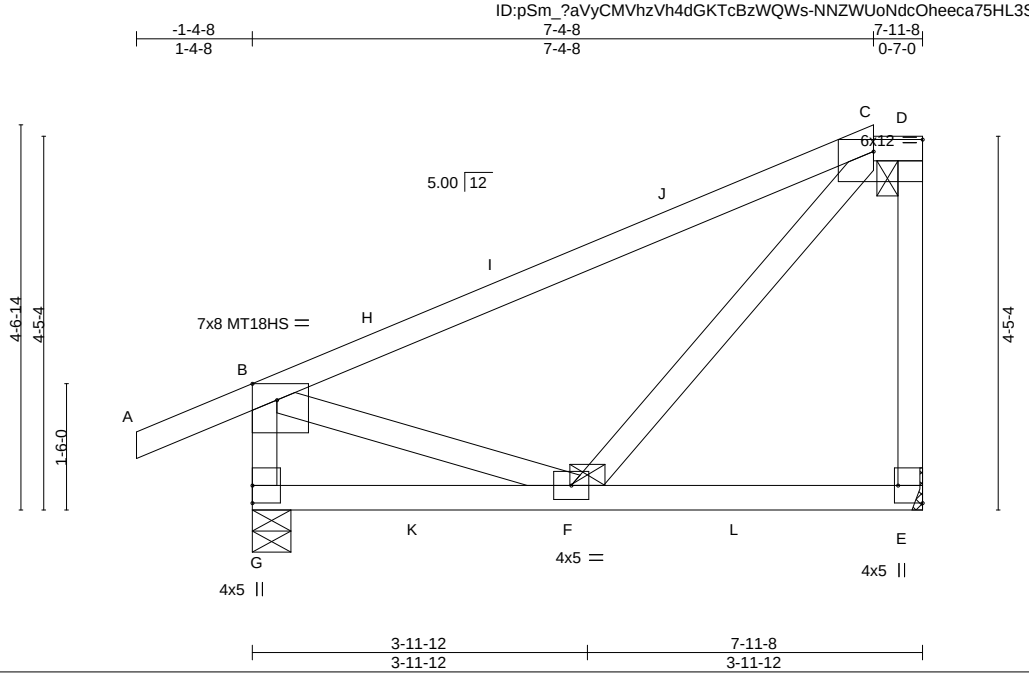

Plate Offsets (X,Y)-- [B:0-3-8,Edge], [D:Edge,0-1-11], [E:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.05	E-F	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.06	E-F	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	F	>999	240	Weight: 37 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
B-G: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) E=Mechanical, G=0-5-8
Max Horz G=-175(LC 9)
Max Uplift E=-91(LC 8), G=-141(LC 8)
Max Grav E=444(LC 15), G=587(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-335/45, D-E=-359/109, B-G=-515/154
BOT CHORD F-G=-122/448
WEBS C-F=0/384

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 3-1-10, Exterior(2R) 3-1-10 to 7-4-8, Exterior(2E) 7-4-8 to 7-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=141.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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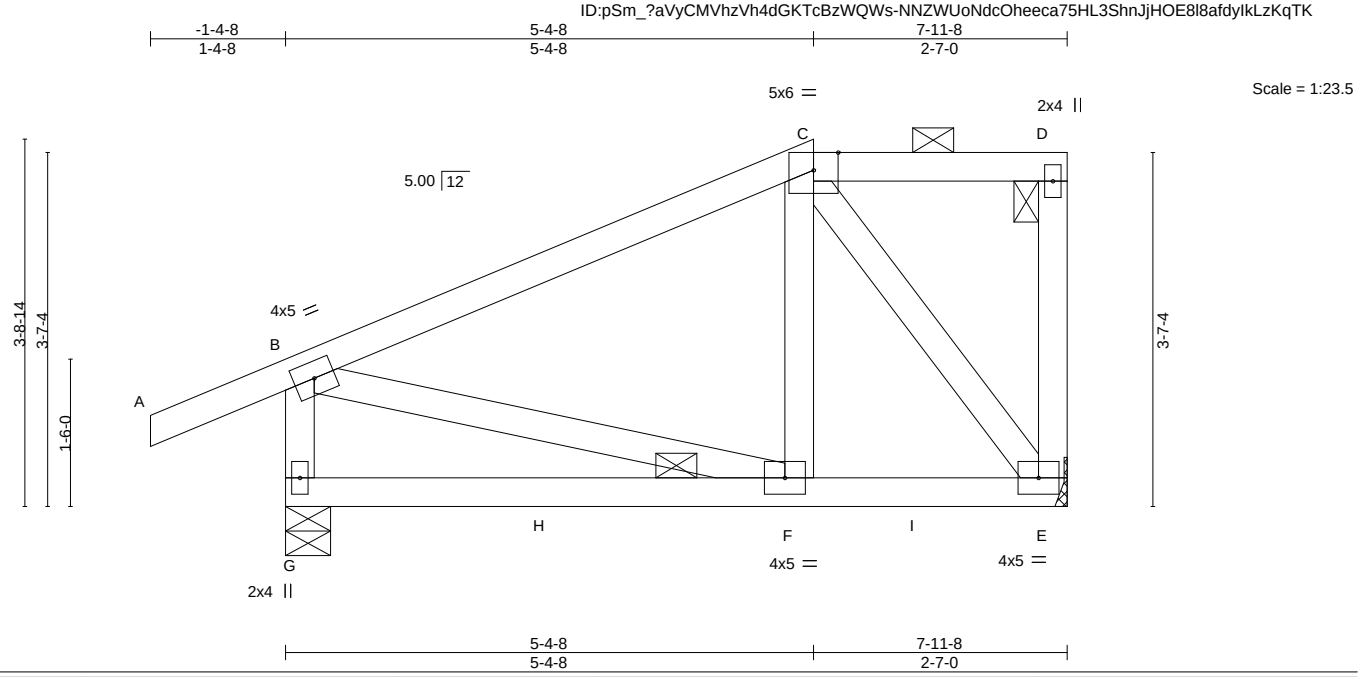
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J8	Half Hip	1	1	I73183898
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:57 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-NNZWUoNdcOheeca75HL3ShnJjHOE8l8afdyIkLzKqTK



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.10	F-G	>898	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.14	F-G	>663	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.00	F	>999	240	Weight: 39 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins: C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-141(LC 9)
Max Uplift G=-159(LC 8), E=-92(LC 8)
Max Grav G=566(LC 20), E=439(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-323/57, B-G=-503/184
BOT CHORD E-F=0/262
WEBS C-F=0/343, C-E=-398/64, B-F=0/251

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Exterior(2R) 1-7-8 to 5-4-8, Exterior(2E) 5-4-8 to 7-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=159.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J9	Half Hip Girder	1	1	I73183899

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:58 2025 Page 1
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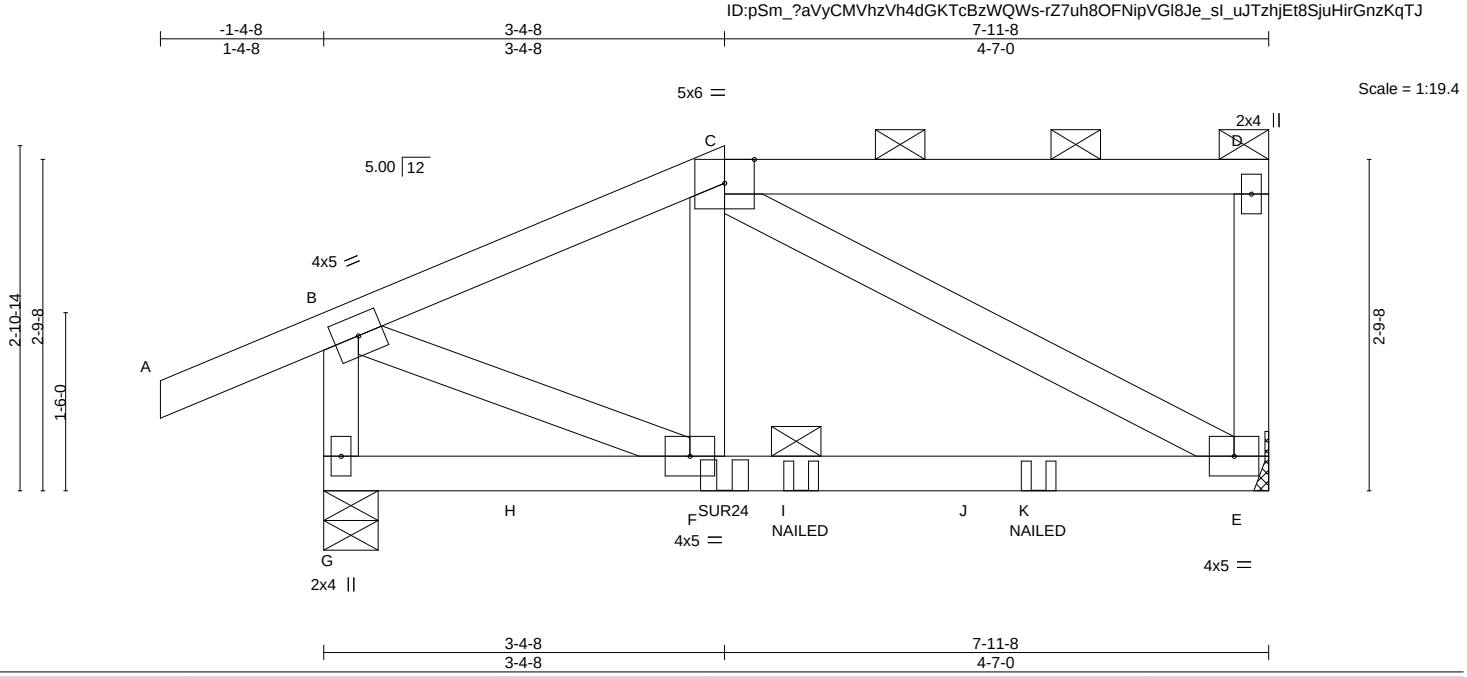

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.08	E-F	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.13	E-F	>719	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.40	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MP		Wind(LL)	-0.03	E-F	>999	240	Weight: 35 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-107(LC 9)
Max Uplift G=-207(LC 8), E=-135(LC 8)
Max Grav G=736(LC 2), E=671(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-707/143, B-G=-735/223
BOT CHORD E-F=-70/646
WEBS C-F=-41/359, C-E=-721/126, B-F=-71/646

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Exterior(2R) 1-7-8 to 4-9-12, Exterior(2E) 4-9-12 to 7-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) G=207, E=135.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use Simpson Strong-Tie SUR24 (4-10dx1 1/2 Girder, 4-10dx1 1/2 Truss, Single Ply Girder) or equivalent at 3-4-8 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
15) Fill all nail holes where hanger is in contact with lumber.
16) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
17) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

May 2,2025

Continued on page 2

LOAD CASE(S) Standard

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-B=-51, B-C=-51, C-D=-51, E-G=-30
   Concentrated Loads (lb)
   Vert: F=-177(B) I=-130(B) K=-130(B)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J10	Jack-Closed	1	1	I73183900

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:53 2025 Page 1

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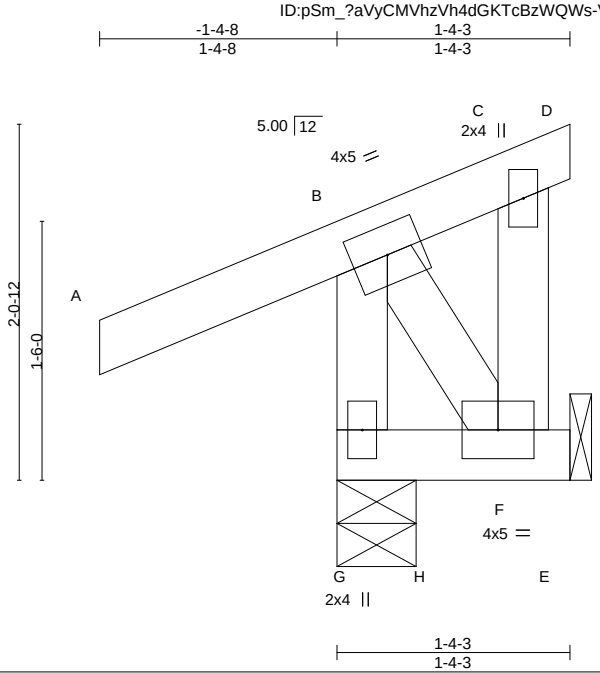

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00	F	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.00	F	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-MP		Wind(LL)	-0.00	G	>999	240	Weight: 9 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-4-3 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-71(LC 9)
Max Uplift G=-133(LC 8), E=-49(LC 10)
Max Grav G=330(LC 24), E=206(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-257/148

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=133.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	J11	Jack-Closed	2	1	I73183901
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:54 2025 Page 1
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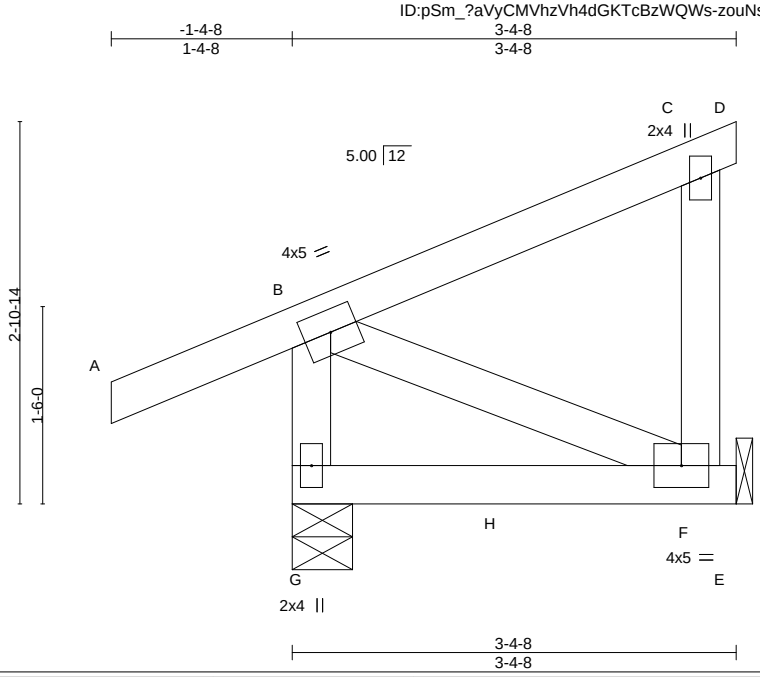

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.03	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.04	F-G	>939	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-MP		Wind(LL)	0.00	G	****	240	Weight: 17 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-8 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, F=Mechanical
Max Horz G=-109(LC 9)
Max Uplift G=-123(LC 8), F=-34(LC 8)
Max Grav G=362(LC 24), F=330(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-271/141

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F except (jt=lb) G=123.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	K	Common Supported Gable	7	1	I73183902

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:58 2025 Page 1

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1-4-8 6-0-12 6-0-12 1-4-8

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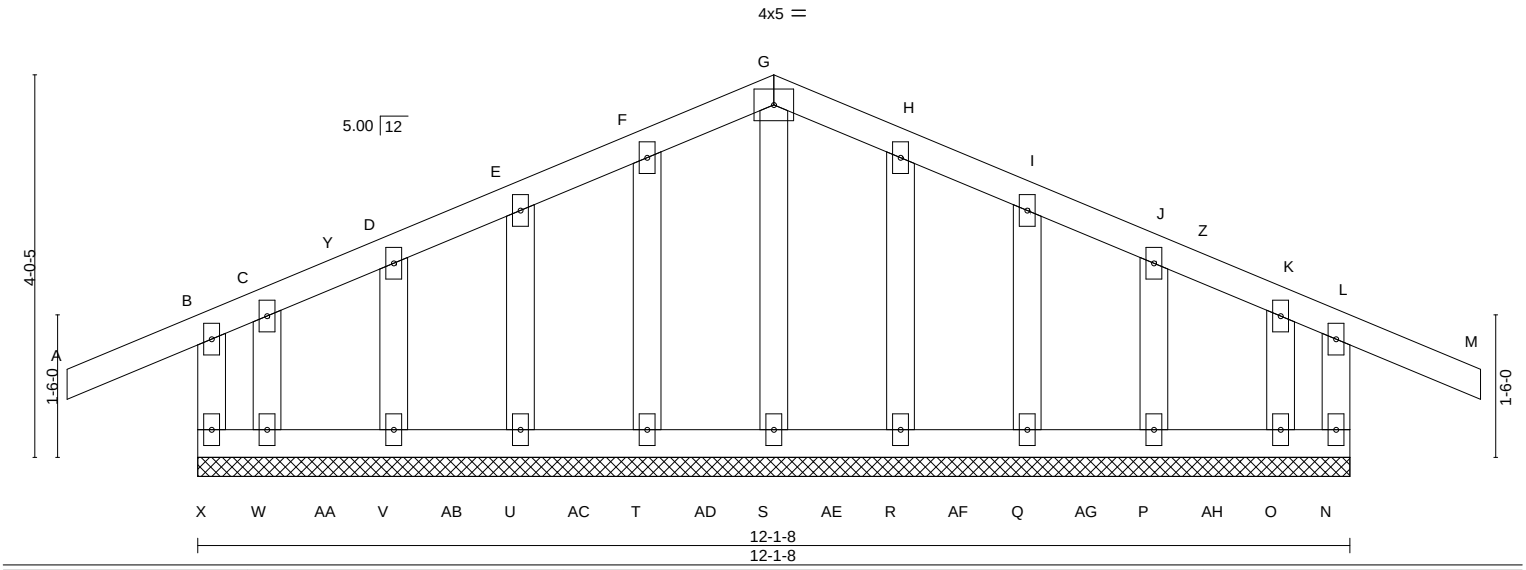

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.00	L	n/r	120	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	M	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	N	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-R							Weight: 58 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Structural wood sheathing directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 12-1-8.

(lb) - Max Horz X=-74(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) N, T, U, V, W, R, Q, P, O except X=-188(LC 8)

Max Grav All reactions 250 lb or less at joint(s) except X=312(LC 22), N=312(LC 42), S=318(LC 37), T=318(LC 36), U=316(LC 35), V=318(LC 34), W=278(LC 33), R=318(LC 38), Q=316(LC 39), P=318(LC 40), O=278(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD B-X=-254/176, L-N=-254/142

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) -1-4-8 to 1-7-8, Exterior(2N) 1-7-8 to 3-0-12, Corner(3R) 3-0-12 to 9-0-12, Exterior(2N) 9-0-12 to 10-6-0, Corner(3E) 10-6-0 to 13-6-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 1-4-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N, T, U, V, W, R, Q, P, O except (jt=lb) X=188.
14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
15) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	K2	COMMON GIRDER	1	2	I73183903
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:20:59 2025 Page 1
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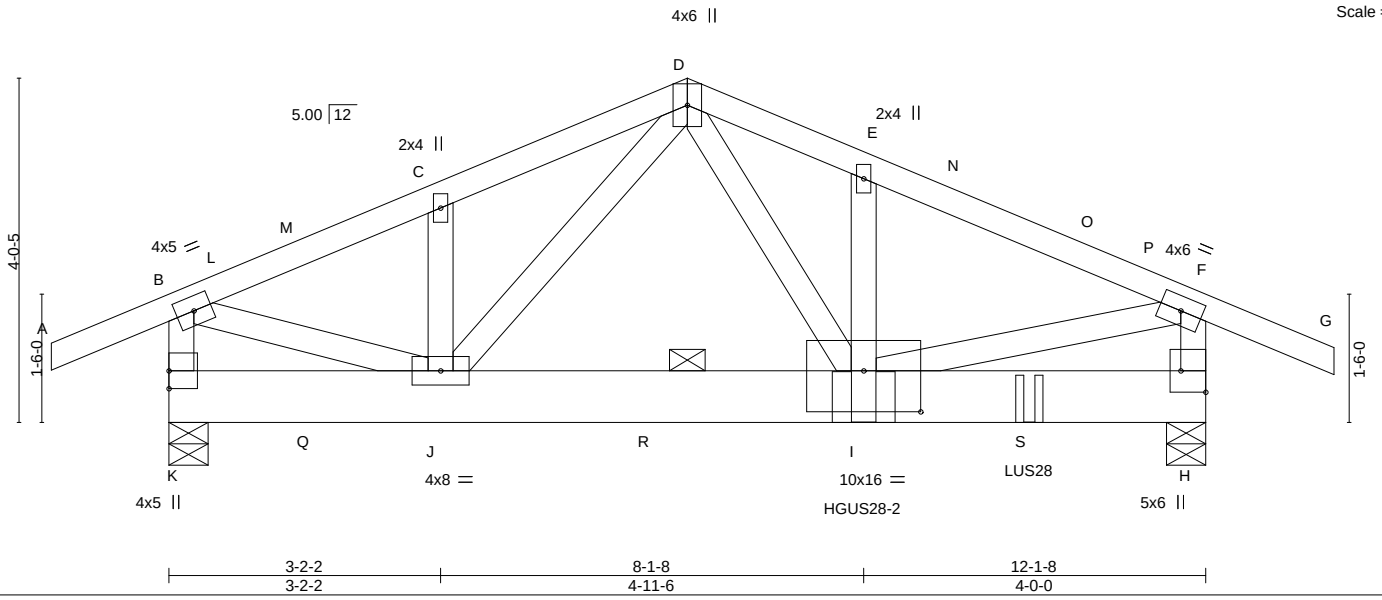

3-2-2	8-1-8	12-1-8
3-2-2	4-11-6	4-0-0

Plate Offsets (X,Y)-- [H:Edge,0-3-8], [I:0-8-0,0-5-12]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.03	I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.06	I	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.00	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.02	I	>999	240	Weight: 158 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-9-11 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) K=0-5-8, H=0-5-8
Max Horz K=-60(LC 8)
Max Uplift K=-235(LC 8), H=-272(LC 8)
Max Grav K=1955(LC 2), H=3834(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-2316/207, C-D=-2284/261, D-E=-4291/354, E-F=-4381/304, B-K=-1867/243, F-H=-3040/301
BOT CHORD I-J=-82/2423, H-I=0/374
WEBS D-I=-166/3112, D-J=-646/162, B-J=-157/2109, F-I=-196/3730

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-3-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 3-0-12, Exterior(2R) 3-0-12 to 9-0-12, Interior(1) 9-0-12 to 10-7-8, Exterior(2E) 10-7-8 to 13-7-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) K=235, H=272.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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NOTES-

13) Use Simpson Strong-Tie HGUS28-2 (36-10d Girder, 6-10d Truss) or equivalent at 8-1-8 from the left end to connect truss(es) to back face of bottom chord.
14) Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss) or equivalent at 10-0-12 from the left end to connect truss(es) to back face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-B=-51, B-D=-51, D-F=-51, F-G=-51, H-K=-30
   Concentrated Loads (lb)
   Vert: I=-2614(B) S=-1070(B)

May 2,2025

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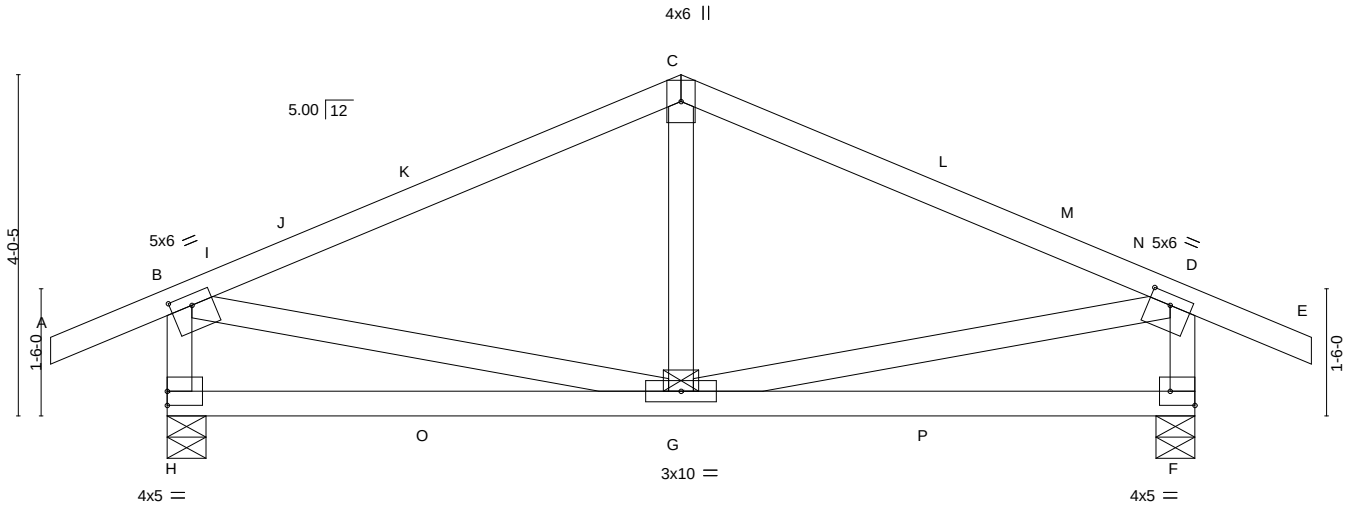
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	K3	Common	2	1	I73183904
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:00 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-oyFe6qPVvJ3DV3limPum3JPoxVQhL6P0LbByLgzKqTH

-1-4-8 6-0-12 12-1-8 13-6-0
1-4-8 6-0-12 6-0-12 1-4-8

Scale = 1:27.2



6-0-12 12-1-8
6-0-12 6-0-12

Plate Offsets (X,Y)-- [B:0-3-0,0-1-8], [D:0-3-0,0-1-8], [F:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.13	G-H	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.16	G-H	>863	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	G	>999	240	Weight: 52 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) H=0-5-8, F=0-5-8
Max Horz H=-65(LC 8)
Max Uplift H=-180(LC 8), F=-173(LC 8)
Max Grav H=772(LC 2), F=773(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-703/146, C-D=-703/146, B-H=-688/210, D-F=-688/203
WEBS C-G=0/278, B-G=-26/407, D-G=0/407

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 3-0-12, Exterior(2R) 3-0-12 to 9-0-12, Interior(1) 9-0-12 to 10-6-0, Exterior(2E) 10-6-0 to 13-6-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) H=180, F=173.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	K4	Common Girder	3	1	I73183905
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:00 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-oyFe6qPVvJ3DV3IimPum3JPjgVPKLwl0LbByLgzKqTH

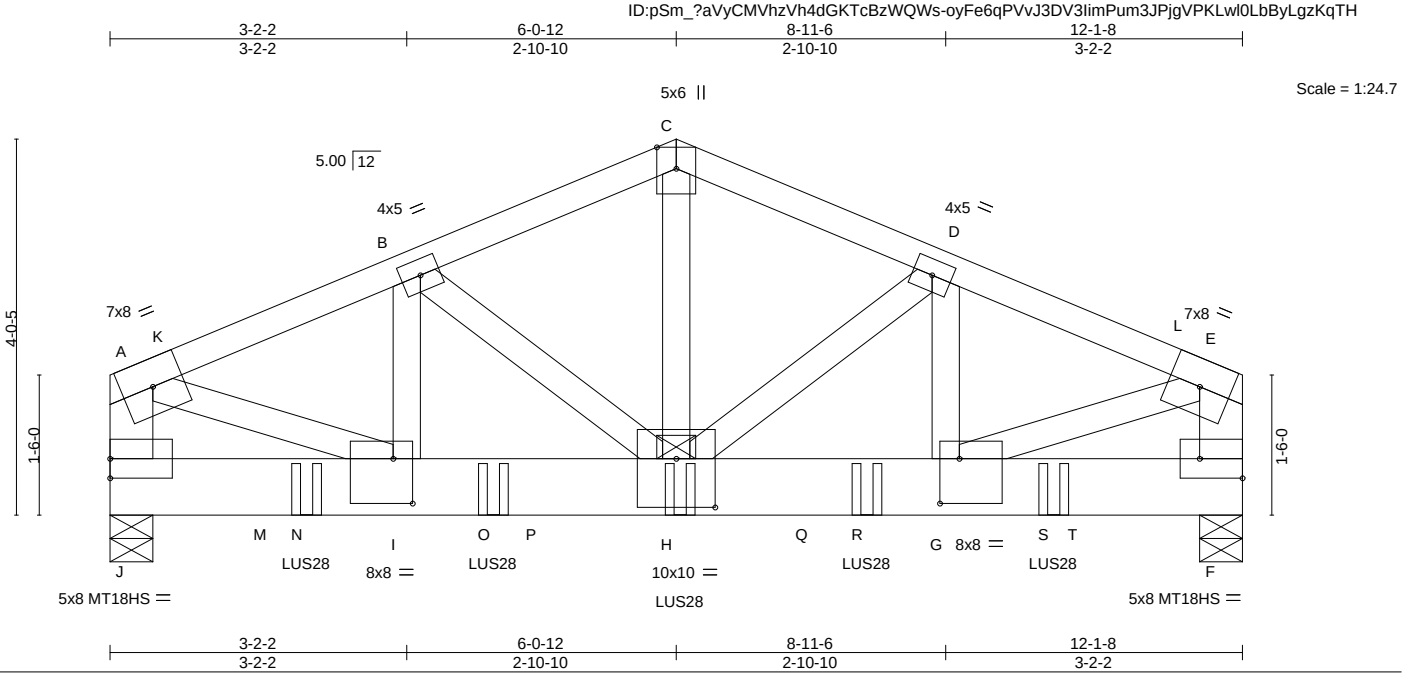

Plate Offsets (X,Y)-- [F:Edge,0-2-8], [G:0-2-8,0-5-12], [H:0-5-0,0-6-4], [I:0-2-8,0-5-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.06	H	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.12	H-I	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.93	Horz(CT)	0.02	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.02	H	>999	240	Weight: 77 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF No.3 *Except*
C-H,A-I,E-G: 2x4 SPF No.2, A-J,E-F: 2x6 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-1 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) J=0-5-8, F=0-5-8
Max Horz J=-59(LC 8)
Max Grav J=3808(LC 2), F=3845(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-4344/0, B-C=-4007/26, C-D=-4007/26, D-E=-4341/0, A-J=-3156/14, E-F=-3151/10
BOT CHORD I-J=0/438, H-I=0/3956, G-H=0/3953, F-G=0/443
WEBS C-H=0/2786, D-H=-415/39, D-G=-146/284, B-H=-418/29, B-I=-139/288, A-I=0/3772, E-G=0/3761

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-2-12 to 3-2-2, Exterior(2R) 3-2-2 to 8-11-6, Exterior(2E) 8-11-6 to 11-10-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
9) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
10) Use Simpson Strong-Tie LUS28 (6-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-1-4 from the left end to 10-1-4 to connect truss(es) to front face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: A-C=-51, C-E=-51, F-J=-30

May 2,2025

Continued on page 2

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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: H=-951(F) N=-951(F) O=-951(F) R=-951(F) S=-951(F)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	K5	Common Girder	1	1	I73183906
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:01 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-G8p0K9Q7gdB47DtuK7P?cXxtCvka4N1AaFwVt6zKqTG

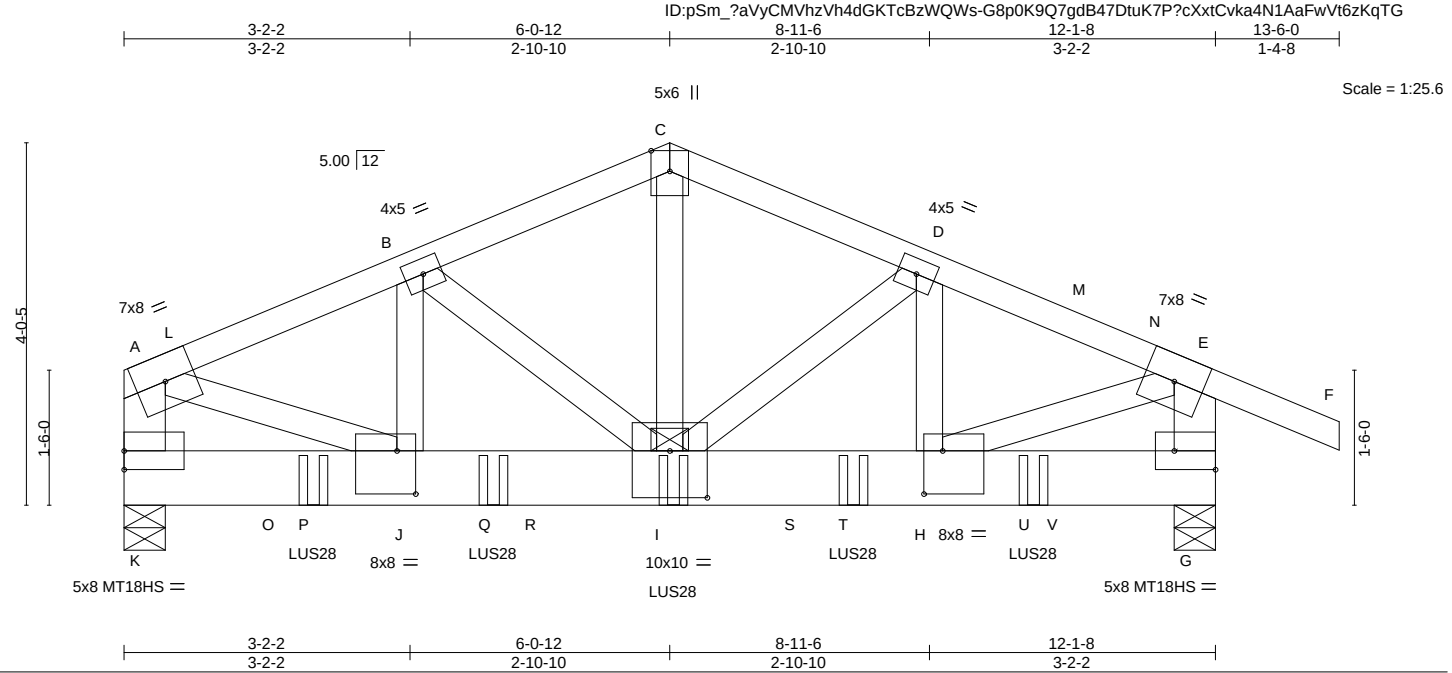

Plate Offsets (X,Y)-- [G:Edge,0-2-8], [H:0-2-8,0-5-12], [I:0-5-0,0-6-4], [J:0-2-8,0-5-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.06	I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.12	I-J	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.92	Horz(CT)	0.02	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.02	I	>999	240	Weight: 79 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF No.3 *Except*
C-I,A-J,E-H: 2x4 SPF No.2, A-K,E-G: 2x6 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-2 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) K=0-5-8, G=0-5-8
Max Horz K=-92(LC 8)
Max Uplift K=-54(LC 8), G=-115(LC 8)
Max Grav K=3800(LC 2), G=3982(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-4332/67, B-C=-3991/99, C-D=-3989/98, D-E=-4312/65, A-K=-3148/71, E-G=-3291/138
BOT CHORD J-K=0/443, I-J=0/3945, H-I=0/3914, G-H=0/428
WEBS C-I=0/2765, D-I=-382/28, D-H=-149/288, B-I=-473/37, B-J=-140/356, A-J=-34/3762, E-H=-16/3744

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-2-12 to 3-2-2, Exterior(2R) 3-2-2 to 8-11-6, Interior(1) 8-11-6 to 10-6-0, Exterior(2E) 10-6-0 to 13-6-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K except (jt=lb) G=115.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) Use Simpson Strong-Tie LUS28 (6-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-1-4 from the left end to 10-1-4 to connect truss(es) to front face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

May 2,2025

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-C=-51, C-E=-51, E-F=-51, G-K=-30
   Concentrated Loads (lb)
   Vert: I=-1176(F) P=-1251(F) Q=-1218(F) T=-1191(F) U=-1142(F)

May 2,2025

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	L	Common Supported Gable	2	1	I73183907
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:02 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-kKNPXVRmRxJxlNS4tqxE9kUDoIF3p1GJpvg3PZzKqTF

-1-6-0 | 12-0-0 | 24-0-0 | 25-6-0
1-6-0 | 12-0-0 | 12-0-0 | 1-6-0

Scale = 1:45.3

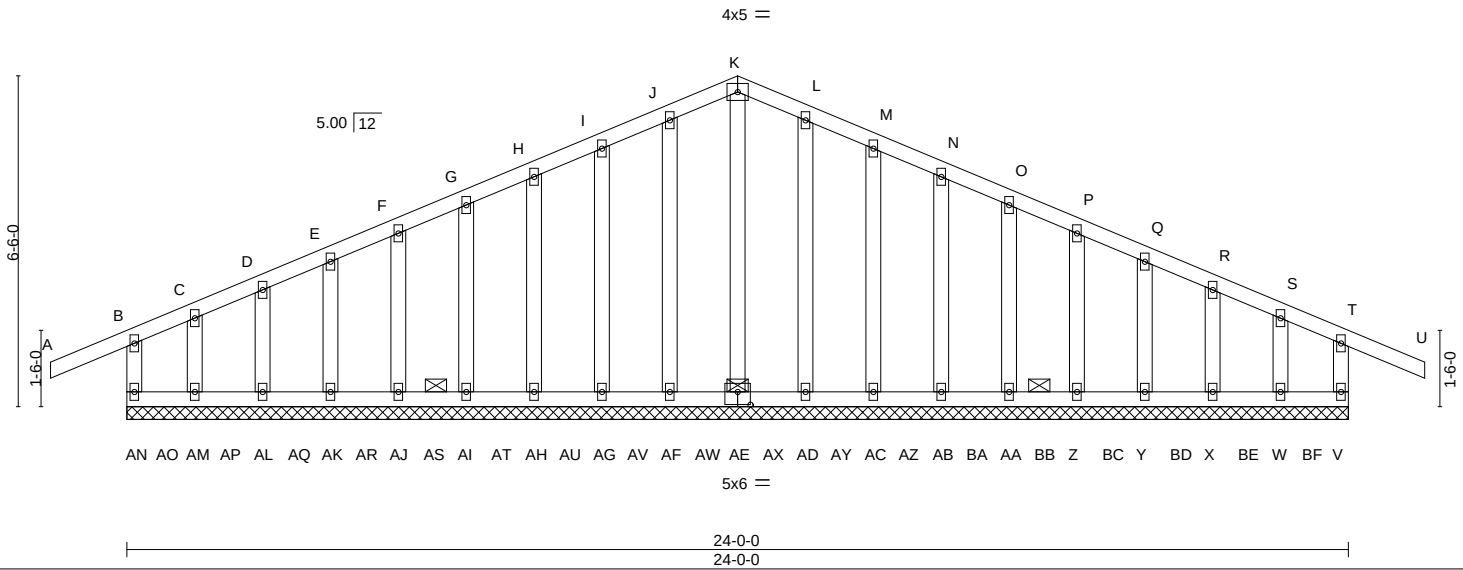

Plate Offsets (X,Y)-- [AE:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.00	T	n/r	120	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	U	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	V	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-R							Weight: 133 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz AN=-74(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) AF, AG, AH, AI, AJ, AK, AL, AM, AD, AC, AB, AA, Z, Y, X, W except AN=-155(LC 8), V=-107(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except AN=324(LC 40), V=324(LC 58), AE=319(LC 49), AF=318(LC 48), AG=316(LC 47), AH=317(LC 46), AI=317(LC 45), AJ=317(LC 44), AK=316(LC 43), AL=320(LC 42), AM=297(LC 41), AD=318(LC 50), AC=316(LC 51), AB=317(LC 52), AA=317(LC 53), Z=317(LC 54), Y=316(LC 55), X=320(LC 56), W=297(LC 57)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) -1-6-0 to 1-4-0, Exterior(2N) 1-4-0 to 9-0-0, Corner(3R) 9-0-0 to 15-0-0, Exterior(2N) 15-0-0 to 22-6-0, Corner(3E) 22-6-0 to 25-6-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 1-4-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) AF, AG, AH, AI, AJ, AK, AL, AM, AD, AC, AB, AA, Z, Y, X, W except (jt=lb) AN=155, V=107.
14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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NOTES-

15) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	L2	Monopitch Girder	9	2	I73183908

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:03 2025 Page 1

ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-CWwnlrROCERoMX1HRYSThy1IHiVsYI1S1ZPcy?zKqTE

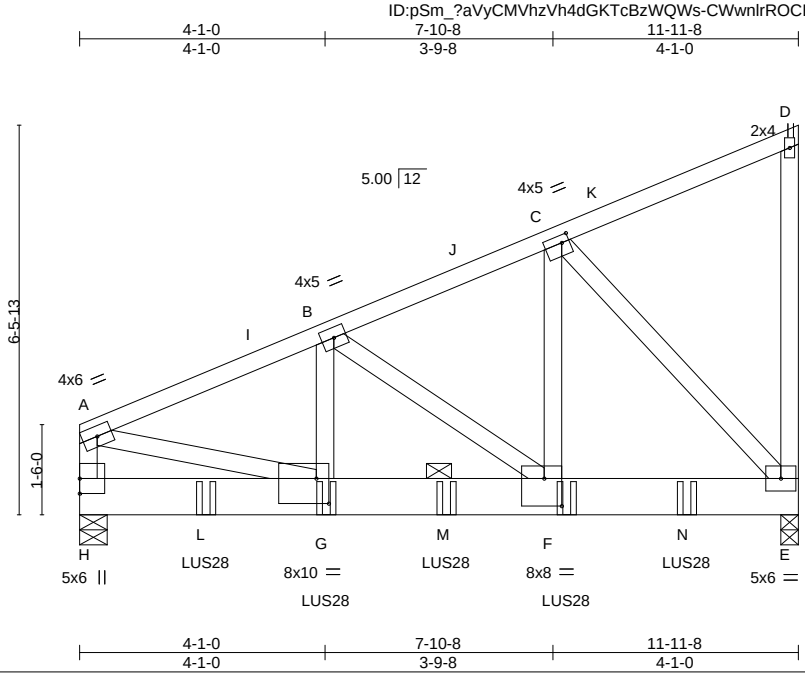

Plate Offsets (X,Y)-- [C:0-1-8,0-1-8], [F:0-3-8,0-5-8], [G:0-2-8,0-5-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.04	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.08	F-G	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.01	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.01	F-G	>999	240	Weight: 162 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x8 SP No.1
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-8-8 oc purlins, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. (size) H=0-5-8, E=0-3-8
Max Horz H=-237(LC 29)
Max Grav H=3785(LC 2), E=3868(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-4672/0, B-C=-3084/0, A-H=-3036/0
BOT CHORD	G-H=-2/502, F-G=0/4249, E-F=0/2802
WEBS	B-G=0/1501, B-F=-1786/3, C-F=0/3868, C-E=-4137/0, A-G=0/4035

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-9-12, Exterior(2E) 8-9-12 to 11-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-1-4 from the left end to 10-1-4 to connect truss(es) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

May 2,2025

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-D=-51, E-H=-30
   Concentrated Loads (lb)
   Vert: F=-951(F) G=-951(F) L=-951(F) M=-951(F) N=-951(F)

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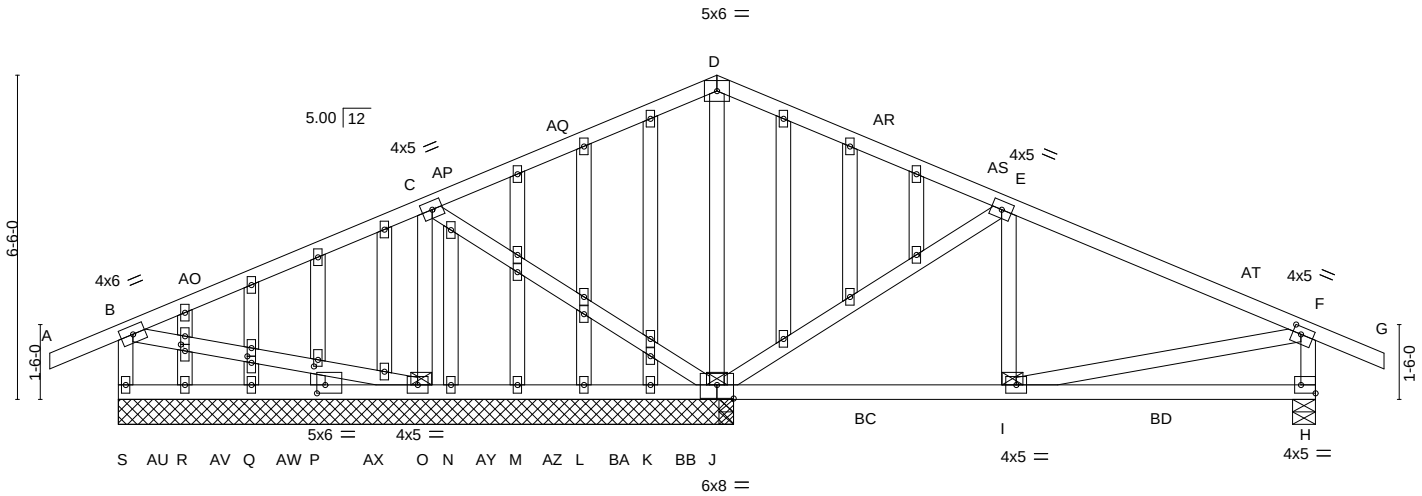
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	L3	Common Structural Gable	1	1	I73183909
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:04 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-gjU9yBS0zYZf_gcT?FziE9ZUs6nNHnCcGD9AURzKqTD

-1-4-8	6-1-12	12-0-0	17-10-4	24-0-0	25-4-8
1-4-8	6-1-12	5-10-4	5-10-4	6-1-12	1-4-8

Scale = 1:46.2



6-1-12	12-0-0	12-4-0	17-10-4	24-0-0
6-1-12	5-10-4	0-4-0	5-6-4	6-1-12

Plate Offsets (X,Y)-- [F:0-2-0,0-1-12], [H:Edge,0-2-0], [J:0-4-0,0-3-4], [P:0-2-0,0-2-0], [AB:0-1-9,0-1-0], [AE:0-1-9,0-1-0], [AG:0-1-9,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.13	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.17	H-I	>823	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.01	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.00	I	>999	240	Weight: 146 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 12-4-0 except (jt=length) H=0-5-8.
(lb) - Max Horz S=-65(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) J, O, H, Q except S=-110(LC 8), K=-271(LC 31), N=-140(LC 25)
Max Grav All reactions 250 lb or less at joint(s) K except S=387(LC 18), J=1219(LC 2), J=893(LC 1), O=466(LC 18), H=682(LC 19), L=311(LC 40), M=287(LC 39), N=262(LC 38), P=307(LC 36), Q=285(LC 35), R=288(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	C-D=-28/252, D-E=0/253, E-F=-564/57, B-S=-355/113, F-H=-596/113
BOT CHORD	I-J=0/439
WEBS	D-J=-562/67, E-J=-713/65, E-I=0/381, C-O=-401/76, F-I=0/310

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 9-0-0, Exterior(2R) 9-0-0 to 15-0-0, Interior(1) 15-0-0 to 22-4-8, Exterior(2E) 22-4-8 to 25-4-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) J, O, H, Q except (jt=lb) S=110, K=271, N=140.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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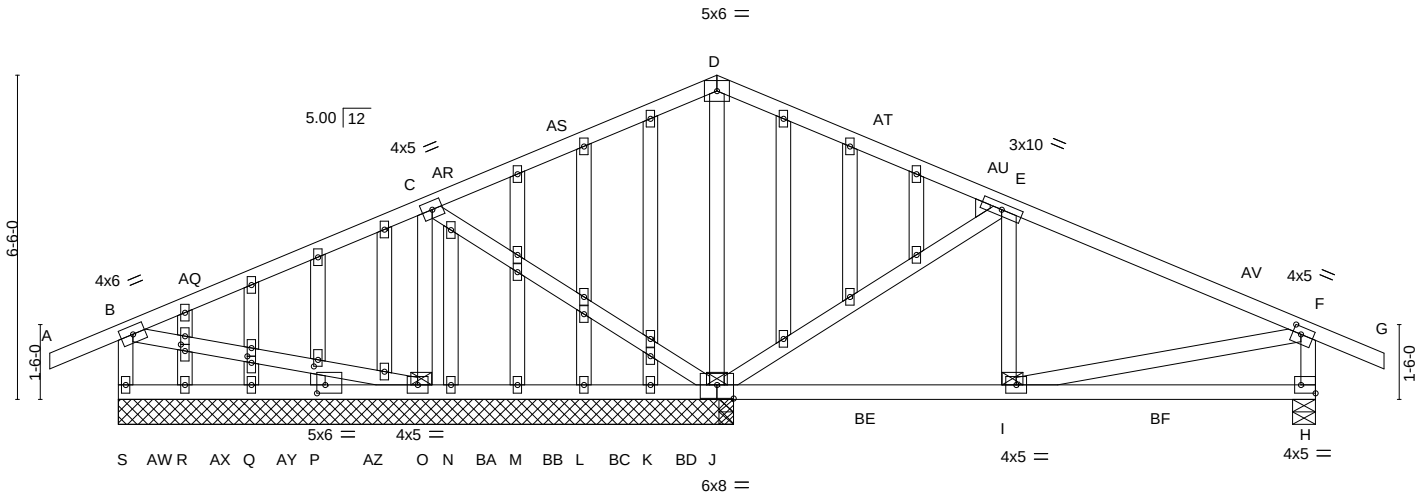
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	L4	Common Structural Gable	1	1	I73183910
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:05 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-8v2X9XTekshVcqBfZyUxmN6faW7c0ERlVtuj0tzKqTC

-1-4-8	6-1-12	12-0-0	17-10-4	24-0-0	25-4-8
1-4-8	6-1-12	5-10-4	5-10-4	6-1-12	1-4-8

Scale = 1:46.2



6-1-12	12-0-0	12-4-0	17-10-4	24-0-0
6-1-12	5-10-4	0-4-0	5-6-4	6-1-12

Plate Offsets (X,Y)-- [F:0-2-0,0-1-12], [H:Edge,0-2-0], [J:0-4-0,0-3-4], [P:0-2-0,0-2-0], [AB:0-1-9,0-1-0], [AE:0-1-9,0-1-0], [AG:0-1-9,0-1-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.13	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.17	H-I	>823	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.01	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.00	I	>999	240	Weight: 146 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 12-4-0 except (jt=length) H=0-5-8.
(lb) - Max Horz S=-65(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) J, O, H, Q except S=-110(LC 8), K=-271(LC 31), N=-140(LC 25)
Max Grav All reactions 250 lb or less at joint(s) K except S=387(LC 18), J=1219(LC 2), J=893(LC 1), O=466(LC 18), H=682(LC 19), L=311(LC 40), M=287(LC 39), N=262(LC 38), P=307(LC 36), Q=285(LC 35), R=288(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	C-D=-28/252, D-E=0/253, E-F=-564/57, B-S=-355/113, F-H=-596/113
BOT CHORD	I-J=0/439
WEBS	D-J=-562/67, E-J=-713/65, E-I=0/381, C-O=-401/76, F-I=0/310

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 9-0-0, Exterior(2R) 9-0-0 to 15-0-0, Interior(1) 15-0-0 to 22-4-8, Exterior(2E) 22-4-8 to 25-4-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) J, O, H, Q except (jt=lb) S=110, K=271, N=140.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	L5	Common Structural Gable	1	1	I73183911
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:06 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-c5cvNtUGU9pMD_ms6g?AJafqLwTrlijvkXeGYKzKqTB

-1-6-0	6-1-12	12-0-0	17-10-4	24-0-0	25-6-0
1-6-0	6-1-12	5-10-4	5-10-4	6-1-12	1-6-0

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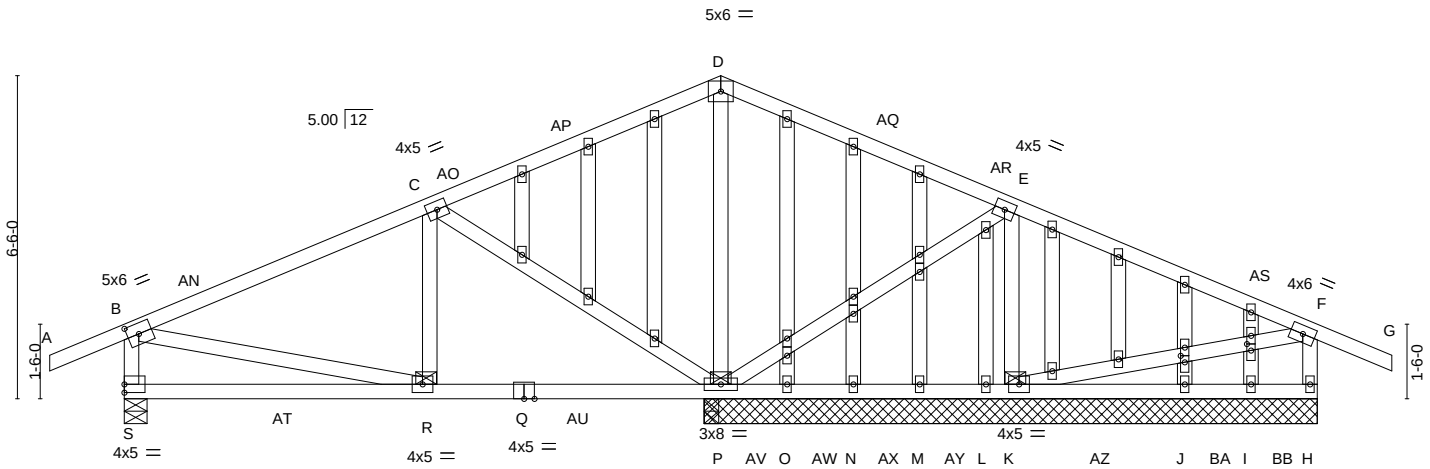

6-1-12	11-8-0	12-0-0	17-10-4	24-0-0
6-1-12	5-6-4	0-4-0	5-10-4	6-1-12

Plate Offsets (X,Y)-- [B:0-2-12,0-2-8], [AK:0-1-9,0-1-0], [AM:0-1-9,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.13	R-S	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.17	R-S	>823	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.01	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.00	R	>999	240	Weight: 146 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 12-4-0 except (jt=length) S=0-5-8.
(lb) - Max Horz S=-65(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) S, P, K, I except H=-104(LC 8), O=-271(LC 23), L=-287(LC 29)
Max Grav All reactions 250 lb or less at joint(s) O, L except S=693(LC 18), P=1218(LC 2), P=892(LC 1), K=558(LC 29), H=402(LC 19), N=310(LC 36), M=291(LC 37), J=340(LC 40), I=263(LC 41)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-C=-561/50, C-D=0/254, D-E=-27/253, B-S=-607/121, F-H=-367/116
BOT CHORD	P-R=0/436
WEBS	D-P=-564/68, E-K=-402/70, C-P=-711/57, C-R=0/381, B-R=0/316

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 9-0-0, Exterior(2R) 9-0-0 to 15-0-0, Interior(1) 15-0-0 to 22-6-0, Exterior(2E) 22-6-0 to 25-6-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) S, P, K, I except (jt=lb) H=104, O=271, L=287.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	M	Common Supported Gable	2	1	I73183912
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:07 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-5IAIaDVuFTxDr8K2gNWProB4XJxgUJB2yBNq5mzKqTA

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1-6-0 6-0-12 6-0-12 1-6-0

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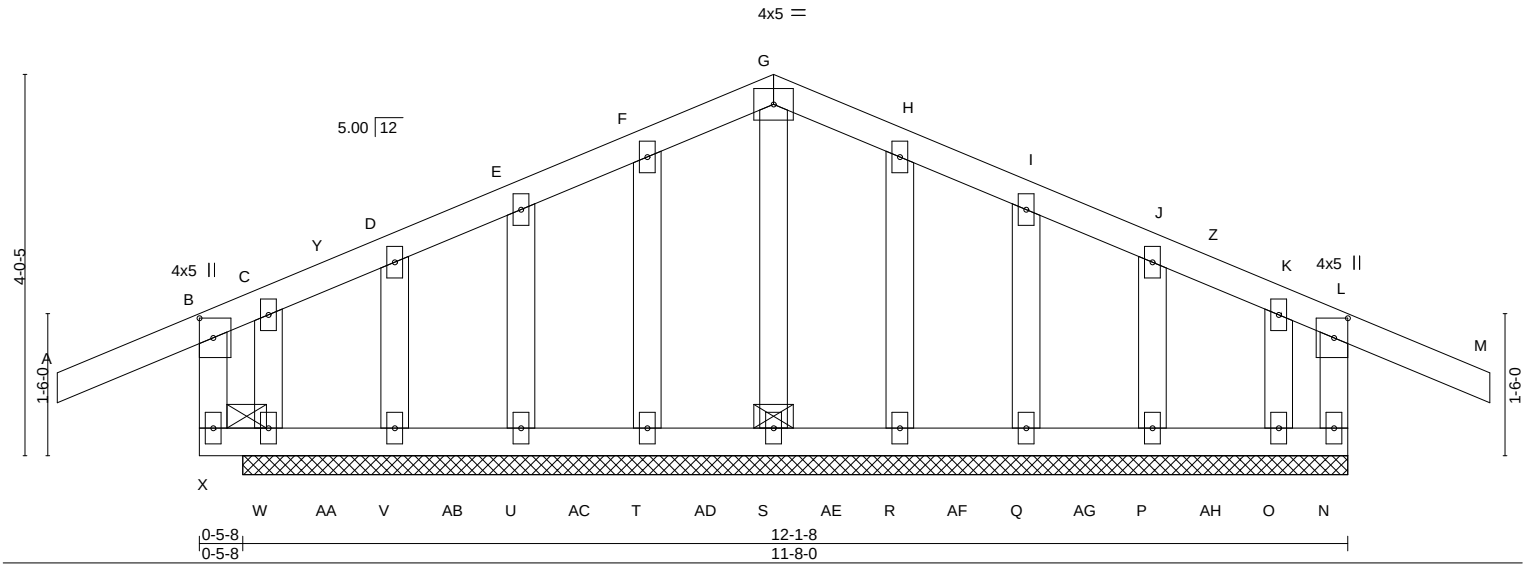

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [L:0-2-8,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.00	L	n/r	120	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	M	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	N	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-R							Weight: 58 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 11-8-0.
(lb) - Max Horz W=-74(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) N, T, U, V, R, Q, P, O except W=-207(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except N=295(LC 42), S=326(LC 37), T=317(LC 36), U=323(LC 35), V=287(LC 34), W=444(LC 22), R=319(LC 38), Q=316(LC 39), P=317(LC 40), O=293(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD L-N=-277/122

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 3-0-12, Corner(3R) 3-0-12 to 9-0-12, Exterior(2N) 9-0-12 to 10-7-8, Corner(3E) 10-7-8 to 13-7-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
9) Gable studs spaced at 1-4-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N, T, U, V, R, Q, P, O except (jt=lb) W=207.
13) Non Standard bearing condition. Review required.
14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
15) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	M2	Common	1	1	I73183913
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:08 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-ZUkgoZVX0n34TIvEE51eO?kAyj8ZDkMCBq7NdCzKqT9

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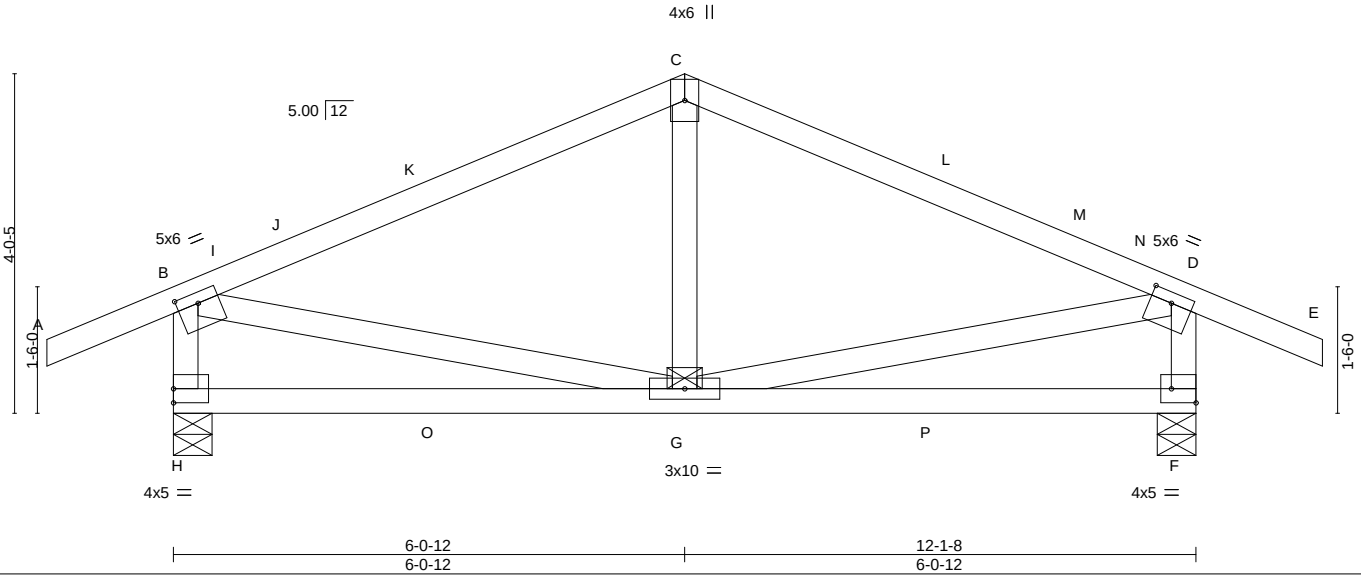
1-6-0 6-0-12 6-0-12 1-6-0

Scale = 1:27.3



6-0-12 12-1-8
6-0-12 6-0-12

Plate Offsets (X,Y)-- [B:0-3-0,0-1-8], [D:0-3-0,0-1-8], [F:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.13	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.16	F-G	>863	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	G	>999	240	Weight: 52 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) H=0-5-8, F=0-5-8
Max Horz H=-65(LC 8)
Max Uplift H=-185(LC 8), F=-178(LC 8)
Max Grav H=782(LC 2), F=783(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-698/144, C-D=-698/144, B-H=-698/215, D-F=-698/208
WEBS C-G=0/278, B-G=-28/412, D-G=0/412

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 3-0-12, Exterior(2R) 3-0-12 to 9-0-12, Interior(1) 9-0-12 to 10-7-8, Exterior(2E) 10-7-8 to 13-7-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) H=185, F=178.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	M3	Common Girder	1	1	I73183914
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:09 2025 Page 1
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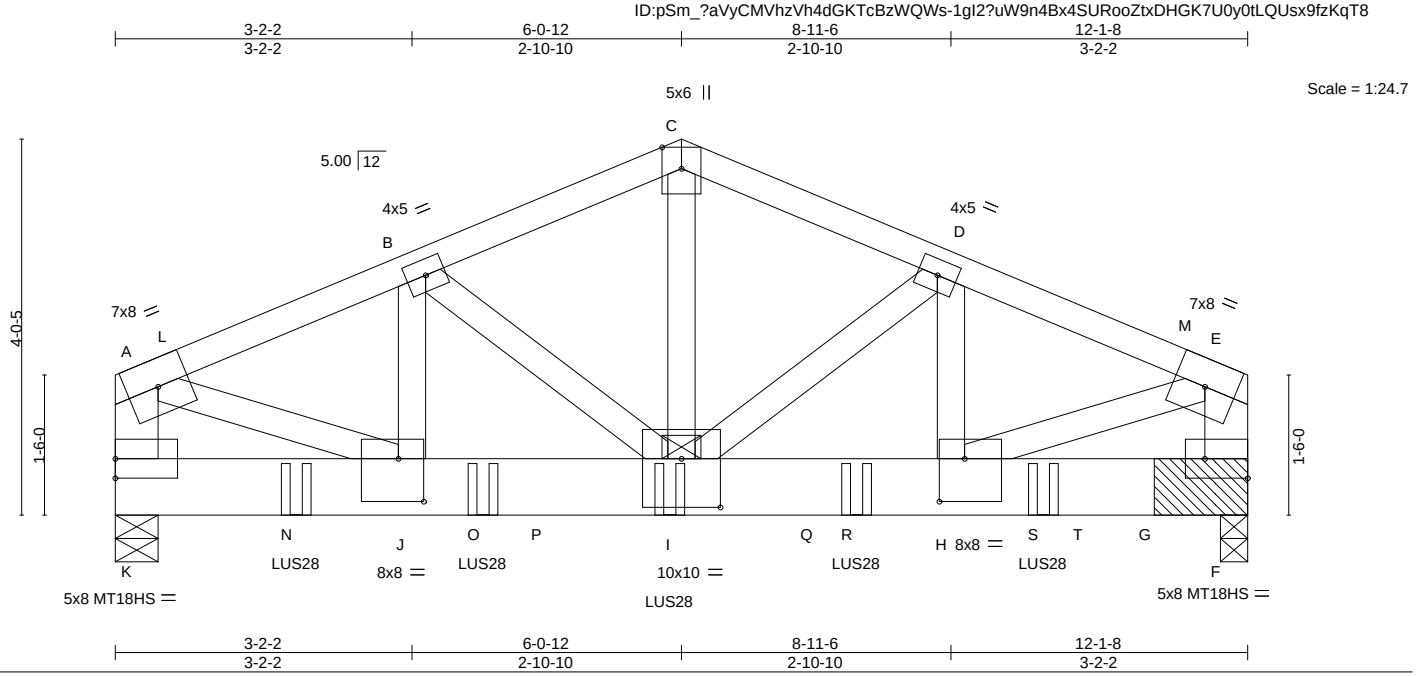

Plate Offsets (X,Y)-- [F:Edge,0-2-8], [H:0-3-4,0-5-8], [I:0-5-0,0-6-4], [J:0-3-4,0-5-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.06	I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.11	H-I	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.02	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.02	I	>999	240	Weight: 80 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF No.3 *Except*
C-I,A-J,E-H: 2x4 SPF No.2, A-K,E-F: 2x6 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-9 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) K=0-5-8, F=(0-3-8 + bearing block) (req. 0-4-3)
Max Horz K=-59(LC 9)
Max Grav K=3637(LC 2), F=3537(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-4061/0, B-C=-3752/0, C-D=-3752/0, D-E=-4069/0, A-K=-2949/0, E-F=-2963/0
BOT CHORD J-K=0/430, I-J=0/3696, H-I=0/3704, F-H=0/402
WEBS C-I=0/2621, D-I=-398/36, D-H=-145/267, B-I=-388/27, B-J=-139/260, A-J=0/3508, E-H=0/3538

NOTES-
1) 2x8 SP No.1 bearing block 12" long at jt. F attached to front face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners. Bearing is assumed to be SP No.1.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-2-12 to 3-2-2, Exterior(2R) 3-2-2 to 8-11-6, Exterior(2E) 8-11-6 to 11-10-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 9-11-4 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-C=-51, C-E=-51, F-K=-30
   Concentrated Loads (lb)
   Vert: I=-1000(B) N=-1000(B) O=-1000(B) R=-1000(B) S=-1000(B)

May 2,2025

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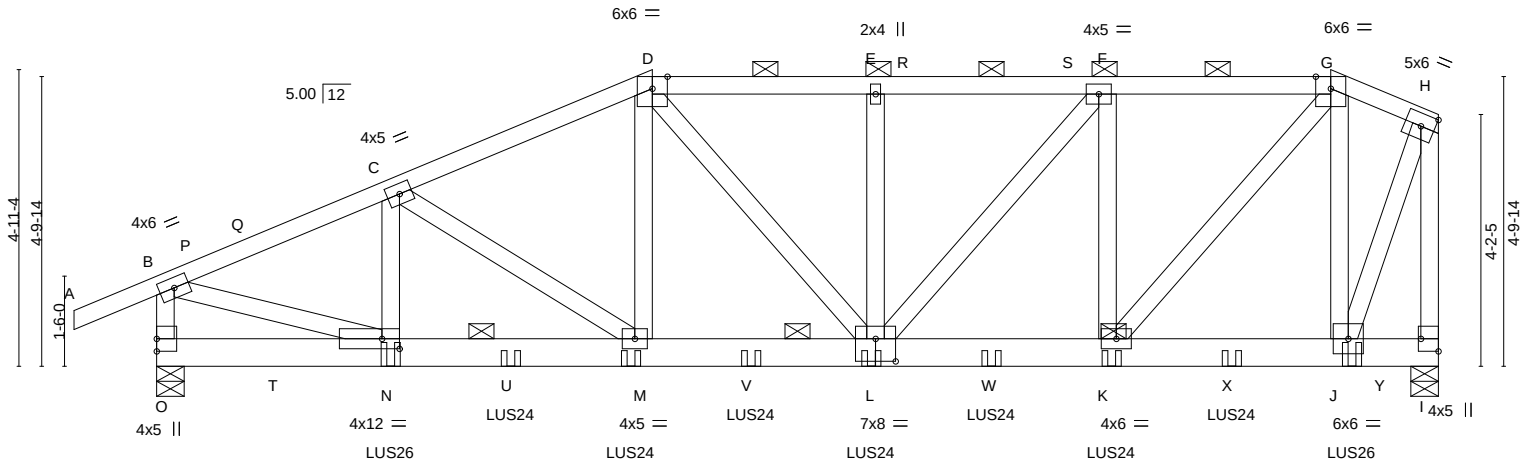
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	N	Hip Girder	1	2	I73183915
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:10 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-VtrQDEXnYOJoib3dLW46TQpaGXtlhTeUe8cUh5zKqT7

-1-4-8	3-10-12	8-3-0	11-11-9	15-9-15	19-6-8	21-4-0
1-4-8	3-10-12	4-4-4	3-8-9	3-10-5	3-8-9	1-9-8

Scale = 1:38.3



3-10-12	8-3-0	11-11-9	15-9-15	19-6-8	21-4-0
3-10-12	4-4-4	3-8-9	3-10-5	3-8-9	1-9-8

Plate Offsets (X,Y)-- [I:Edge,0-3-8], [L:0-4-0,0-4-8], [N:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.07	L-M	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.13	L-M	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.02	I	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.03	L-M	>999	240	Weight: 248 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): D-G.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) O=0-5-8, I=0-5-8
Max Horz O=-149(LC 9)
Max Uplift O=-333(LC 8), I=-264(LC 8)
Max Grav O=3097(LC 2), I=3209(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-4147/404, C-D=-4125/407, D-E=-3905/393, E-F=-3903/392, F-G=-3056/320, G-H=-1173/167, B-O=-2996/348, H-I=-3173/283
BOT CHORD N-O=0/252, M-N=-297/3766, L-M=-251/3731, K-L=-178/3054, J-K=-23/1137
WEBS C-N=-295/127, D-M=-76/1037, D-L=-40/435, E-L=-378/65, F-L=-112/1300, F-K=-1347/157, G-K=-244/3012, G-J=-2058/166, B-N=-348/3784, H-J=-215/2883

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 3-10-12, Exterior(2R) 3-10-12 to 12-5-15, Interior(1) 12-5-15 to 15-3-9, Exterior(2R) 15-3-9 to 19-6-8, Exterior(2E) 19-6-8 to 21-2-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) O=333, I=264.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI

Continued on page 2

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

May 2,2025

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NOTES-

13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 16-0-0 oc max. starting at 3-10-12 from the left end to 19-10-12 to connect truss(es) to front face of bottom chord.
16) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 5-10-12 from the left end to 17-10-12 to connect truss(es) to front face of bottom chord.
17) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-B=-51, B-D=-51, D-G=-51, G-H=-51, I-O=-30
   Concentrated Loads (lb)
   Vert: N=-691(F) M=-379(F) L=-404(F) K=-404(F) J=-379(F) U=-312(F) V=-404(F) W=-404(F) X=-404(F)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	N2	Hip	1	1	I73183916
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:10 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-VtrQDEXnYOJoib3dLW46TQpQ0XnthY2Ue8cUh5zKqT7

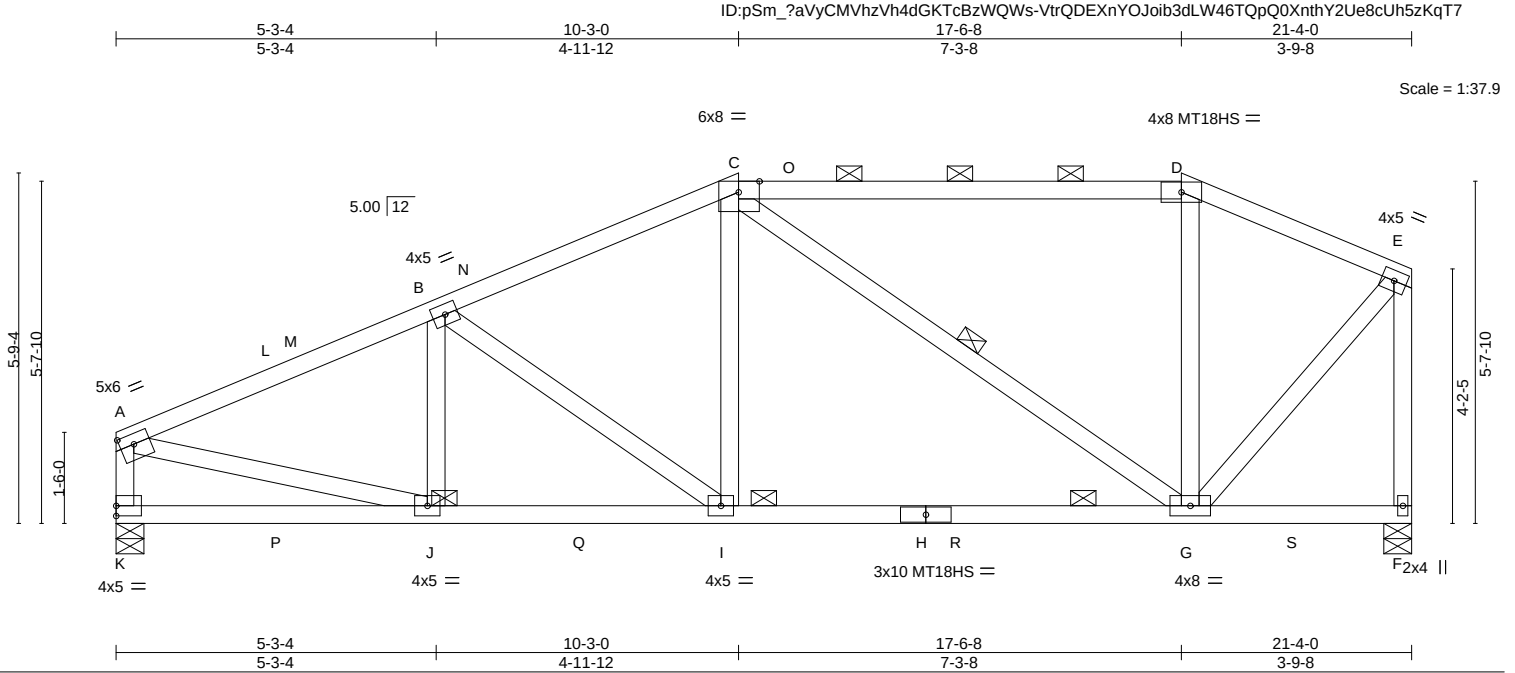

Plate Offsets (X,Y)-- [A:0-2-12,0-2-0], [C:0-4-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.20	G-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.32	G-I	>790	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.03	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	I-J	>999	240	Weight: 99 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
F-H: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): C-D.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt C-G

REACTIONS. (size) K=0-5-8, F=0-5-8
Max Horz K=-158(LC 9)
Max Uplift K=-64(LC 8), F=-70(LC 8)
Max Grav K=1157(LC 2), F=1157(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1567/106, B-C=-1357/135, C-D=-699/125, D-E=-766/113, A-K=-1072/93, E-F=-1136/83
BOT CHORD J-K=0/254, I-J=-7/1375, G-I=0/1187
WEBS B-I=-339/37, C-I=0/468, C-G=-640/29, D-G=-269/73, A-J=-59/1252, E-G=-21/1038

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-0-1, Exterior(2R) 6-0-1 to 18-2-4, Exterior(2E) 18-2-4 to 21-2-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K, F.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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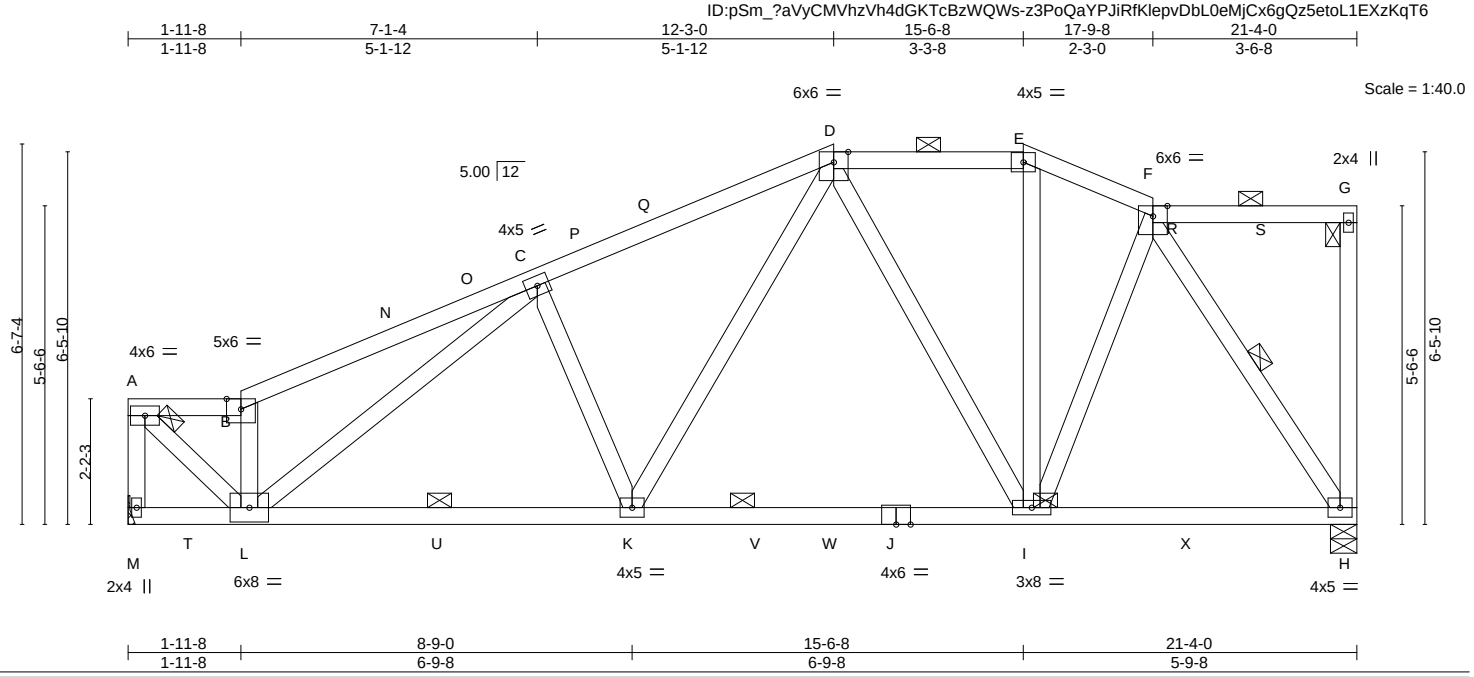
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	N3	Roof Special	1	1	I73183917
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:11 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-z3PoQaYPJiRfKlepvDbL0eMjCx6gQz5etoL1EXzKqT6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.21	I-K	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.29	I-K	>877	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.03	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	K-L	>999	240	Weight: 110 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-2-12 max.): A-B, D-E, F-G.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt F-H

REACTIONS. (size) M=Mechanical, H=0-5-8
Max Horz M=-213(LC 9)
Max Uplift M=-74(LC 8), H=-76(LC 8)
Max Grav M=1248(LC 14), H=1289(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-M=-1244/63, A-B=-1244/45, B-C=-1360/86, C-D=-1554/162, D-E=-856/144, E-F=-957/144
BOT CHORD K-L=-14/1565, I-K=0/1129, H-I=0/745
WEBS A-L=-83/1668, B-L=-728/95, C-L=-348/54, C-K=-340/102, D-K=-9/720, D-I=-425/49, F-I=0/528, F-H=-1272/74

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 1-11-8, Interior(1) 1-11-8 to 9-3-0, Exterior(2R) 9-3-0 to 15-6-8, Exterior(2E) 15-6-8 to 17-9-8, Interior(1) 17-9-8 to 18-2-4, Exterior(2E) 18-2-4 to 21-2-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) M, H.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O	Roof Special Girder	1	1	I73183918
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:12 2025 Page 1
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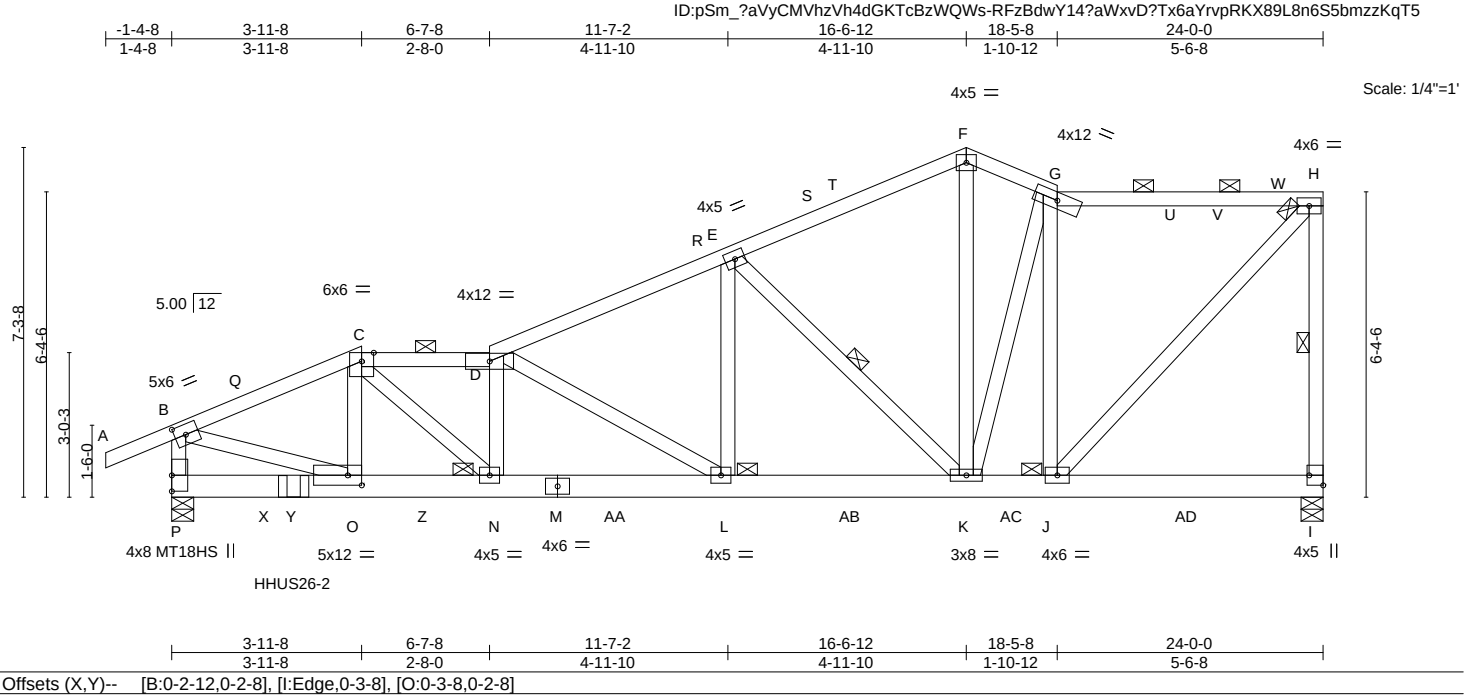

Plate Offsets (X,Y)-- [B:0-2-12,0-2-8], [I:Edge,0-3-8], [O:0-3-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.10	L-N	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.19	L-N	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.03	I	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.04	L-N	>999	240	Weight: 143 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-10 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-13 max.): C-D, G-H.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt H-I, E-K

REACTIONS. (size) I=0-5-8, P=0-5-8
Max Horz P=-220(LC 9)
Max Uplift I=-63(LC 8), P=-162(LC 8)
Max Grav I=1387(LC 2), P=2206(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-2506/130, C-D=-2821/161, D-E=-2098/146, E-F=-1225/145, F-G=-1190/159, G-H=-1025/140, H-I=-1309/104, B-P=-1876/169
BOT CHORD O-P=0/333, N-O=-46/2255, L-N=-66/2790, K-L=-7/1867, J-K=0/1010
WEBS C-O=-324/386, C-N=-228/974, D-N=-589/124, D-L=-1050/67, E-L=0/700, E-K=-1139/92, F-K=-49/682, G-K=-100/292, G-J=-934/83, H-J=-69/1481, B-O=-74/2180

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Exterior(2R) 1-7-8 to 3-11-8, Exterior(2E) 3-11-8 to 6-7-8, Interior(1) 6-7-8 to 13-6-12, Exterior(2R) 13-6-12 to 16-6-12, Exterior(2E) 16-6-12 to 18-5-8, Interior(1) 18-5-8 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) I except (jt=lb) P=162.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 2-6-8 from the left end to connect truss(es) to front face of bottom chord.

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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NOTES-

15) Fill all nail holes where hanger is in contact with lumber.
16) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-B=-51, B-C=-51, C-D=-51, D-F=-51, F-G=-51, G-H=-51, I-P=-30
   Concentrated Loads (lb)
   Vert: Y=-781(F)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O2	Roof Special	1	1	I73183919
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:20 2025 Page 1
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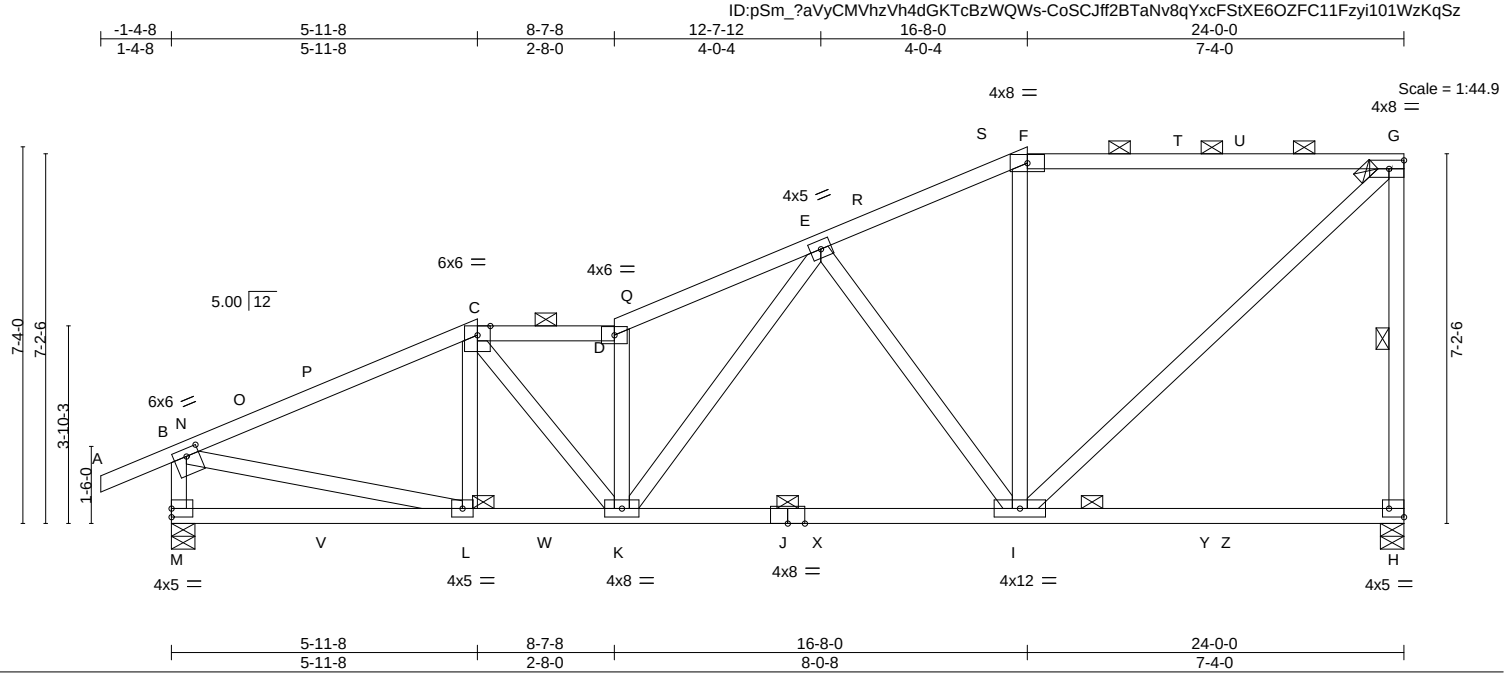

Plate Offsets (X,Y)-- [B:0-3-0,0-1-12], [H:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.22	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.35	I-K	>808	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.02	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	K	>999	240	Weight: 119 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): C-D, F-G.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt G-H

REACTIONS. (size) H=0-5-8, M=0-5-8
Max Horz M=-249(LC 9)
Max Uplift H=-75(LC 8), M=-133(LC 8)
Max Grav H=1477(LC 15), M=1480(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1919/124, C-D=-2137/148, D-E=-2323/189, E-F=-1188/153, F-G=-1078/163, G-H=-1290/122, B-M=-1341/166
BOT CHORD L-M=0/415, K-L=-27/1864, I-K=-8/1639
WEBS C-K=-11/676, D-K=-1107/109, E-K=-36/1015, E-I=-779/101, G-I=-73/1502, B-L=-46/1482

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 2-11-8, Exterior(2R) 2-11-8 to 5-11-8, Exterior(2E) 5-11-8 to 8-7-8, Interior(1) 8-7-8 to 13-8-0, Exterior(2R) 13-8-0 to 19-8-0, Interior(1) 19-8-0 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint H and 133 lb uplift at joint M.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O3	Roof Special	1	1	I73183920
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:30 2025 Page 1
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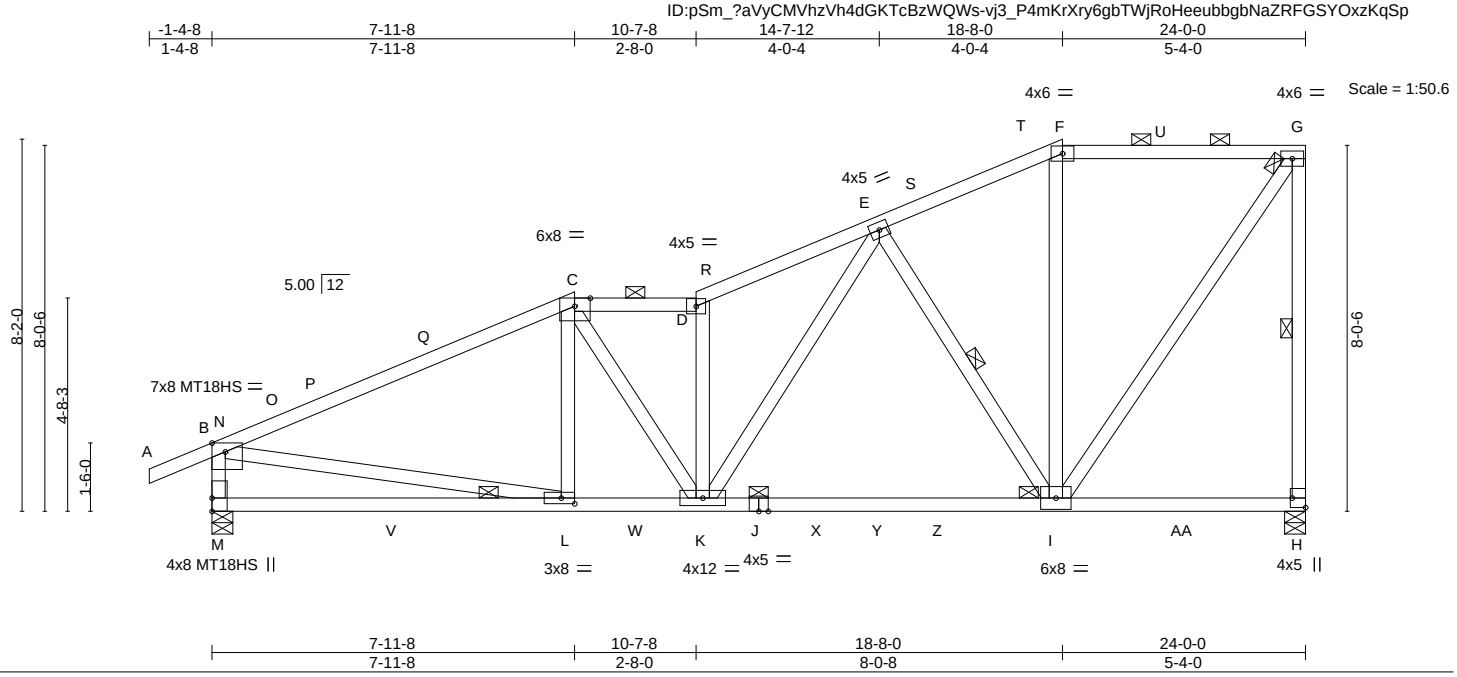

Plate Offsets (X,Y)-- [B:0-3-8,Edge], [C:0-4-2,Edge], [H:Edge,0-3-8], [L:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.21	I-K	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.35	I-K	>810	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	0.02	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	K	>999	240	Weight: 126 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
B-M: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-0-0 max.): C-D, F-G.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt G-H, E-I

REACTIONS. (size) H=0-5-8, M=0-5-8
Max Horz M=-274(LC 9)
Max Uplift H=-76(LC 8), M=-127(LC 8)
Max Grav H=1500(LC 15), M=1489(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1949/125, C-D=-1879/144, D-E=-2052/185, E-F=-876/150, F-G=-778/156, G-H=-1375/119, B-M=-1308/171
BOT CHORD L-M=-0/648, K-L=-12/1872, I-K=0/1397
WEBS C-L=-45/268, C-K=-2/350, D-K=-952/93, E-K=-40/1139, E-I=-937/117, G-I=-65/1452, B-L=-10/1255

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 4-11-8, Exterior(2R) 4-11-8 to 7-11-8, Exterior(2E) 7-11-8 to 10-7-8, Interior(1) 10-7-8 to 15-8-0, Exterior(2R) 15-8-0 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H except (jt=lb) M=127.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O4	Roof Special	1	1	I73183921
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:33 2025 Page 1

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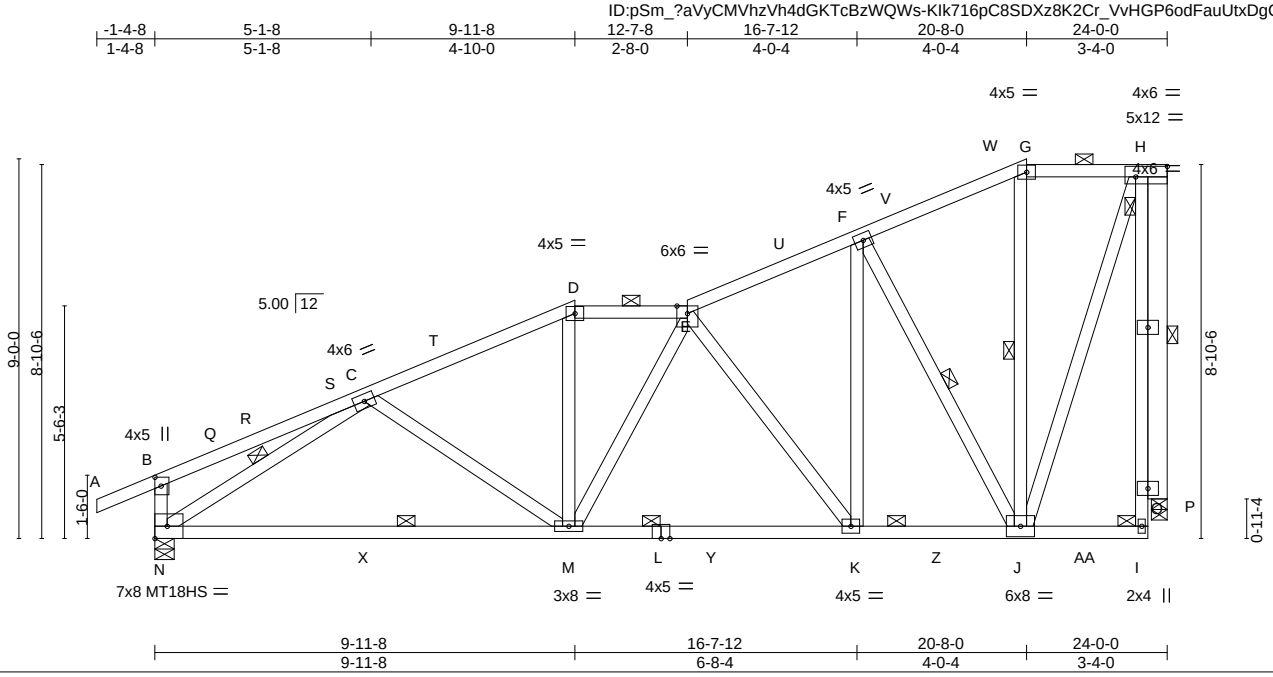

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [H:Edge,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.40	M-N	>719	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.64	M-N	>446	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.04	P	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	K-M	>999	240	Weight: 150 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* L-N: 2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except* B-N: 2x4 SPF No.2
OTHERS	2x6 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-8-15 max.): D-E, G-H.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt F-J, G-J, C-N, H-P

REACTIONS. (size) N=0-5-8, P=0-4-8
Max Horz N=198(LC 8)
Max Uplift N=-74(LC 8), P=-112(LC 8)
Max Grav N=1427(LC 2), P=1252(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-C=-412/0, C-D=-1660/30, D-E=-1459/51, E-F=-1087/24, F-G=-535/28, G-H=-437/43, I-O=0/293, H-O=0/293, B-N=-433/86
BOT CHORD	M-N=-210/1505, K-M=-115/1447, J-K=-66/949
WEBS	D-M=0/307, E-K=-822/81, F-K=-7/801, F-J=-1065/100, C-N=-1555/76, H-J=-111/1146, H-P=-1254/112

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 6-11-8, Exterior(2R) 6-11-8 to 9-11-8, Exterior(2E) 9-11-8 to 12-7-8, Interior(1) 12-7-8 to 17-8-0, Exterior(2R) 17-8-0 to 20-8-0, Exterior(2E) 20-8-0 to 23-4-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Bearing at joint(s) P considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N except (jt=lb) P=112.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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NOTES-

13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O5	Roof Special	1	1	I73183922
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:34 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-oUIVFSpqumLOaIvElYVkSUpWOC_ZJMI0AtQlXizKqSl

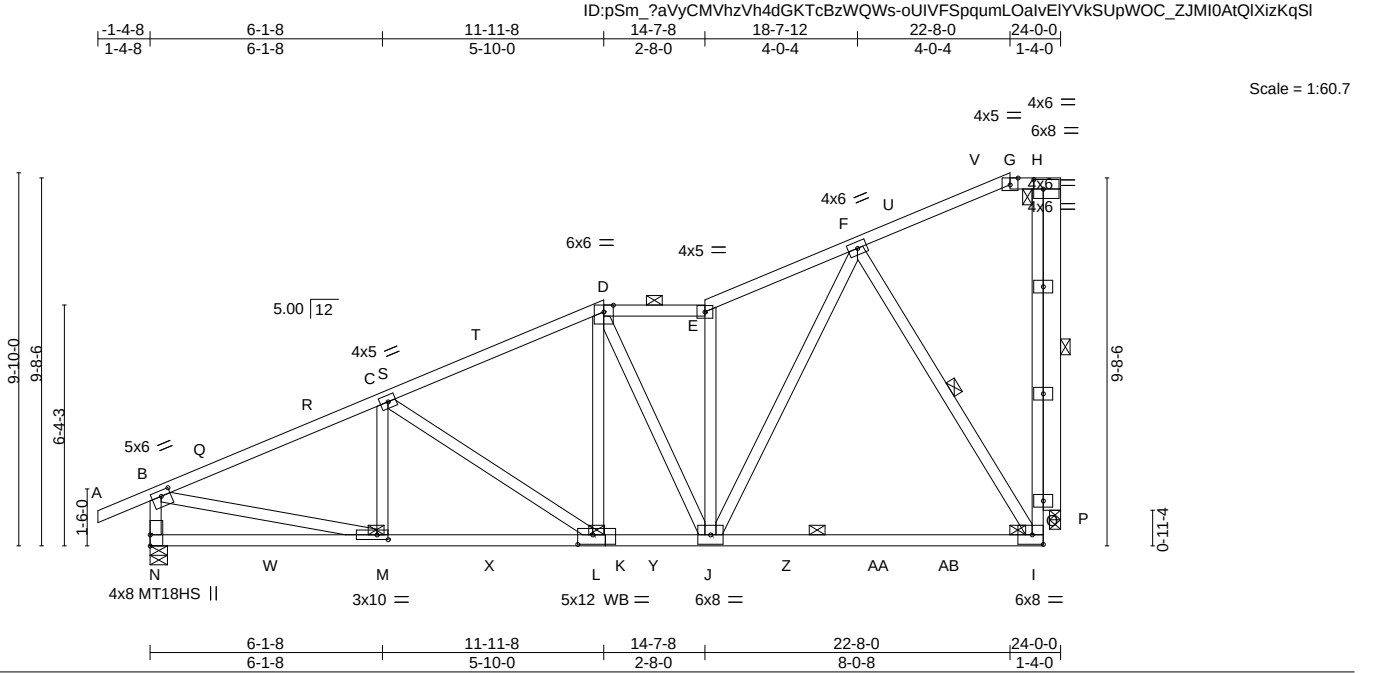

Plate Offsets (X,Y)-- [B:0-3-0,0-1-12], [G:0-2-8,Edge], [H:0-3-0,0-3-0], [K:0-4-12,0-3-0], [M:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.30	I-J	>940	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.51	I-J	>556	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	-0.06	P	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	L	>999	240	Weight: 143 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
I-K: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3
OTHERS 2x6 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-10-13 max.): D-E, G-H.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt F-I, H-P

REACTIONS. (size) N=0-5-8, P=0-3-8
Max Horz N=220(LC 8)
Max Uplift N=-60(LC 8), P=-119(LC 8)
Max Grav N=1505(LC 36), P=1418(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1984/9, C-D=-1594/24, D-E=-1360/2, E-F=-1499/32, I-O=-70/1281, H-O=-70/1281, B-N=-1375/92
BOT CHORD M-N=-211/302, L-M=-177/1836, J-L=-119/1449, I-J=-53/759
WEBS C-L=-493/69, D-L=-12/408, E-J=-761/43, F-J=-48/1411, F-I=-1256/135, B-M=0/1570, H-P=-1421/120

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 8-11-8, Exterior(2R) 8-11-8 to 11-11-8, Exterior(2E) 11-11-8 to 14-7-8, Interior(1) 14-7-8 to 19-8-0, Exterior(2R) 19-8-0 to 22-8-0, Exterior(2E) 22-8-0 to 23-4-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Bearing at joint(s) P considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N except (jt=lb) P=119.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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NOTES-

13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O6	Roof Special	2	1	I73183923
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:35 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-GgstSnqSf3TFCRTQJG0z_iMigcII2lVAOX9J38zKqSk

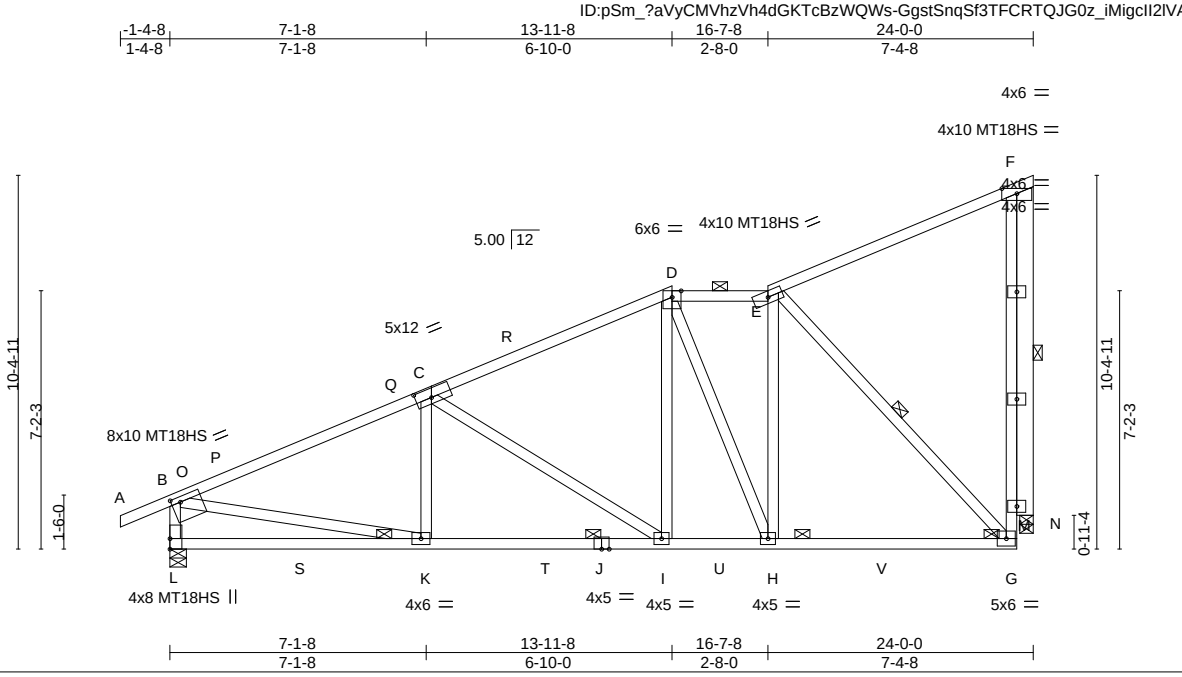

Plate Offsets (X,Y)-- [B:0-3-0,0-1-12], [C:0-5-4,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.18	G-H	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.29	G-H	>968	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	-0.03	N	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	I-K	>999	240	Weight: 142 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	J-L: 2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3
OTHERS	2x6 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-4-7 max.): D-E.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt E-G, F-N

REACTIONS. (size) L=0-5-8, N=0-4-8
Max Horz L=202(LC 8)
Max Uplift L=-33(LC 8), N=-71(LC 8)
Max Grav L=1492(LC 15), N=1408(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1992/0, C-D=-1393/0, D-E=-1060/0, G-M=-18/1186, F-M=-18/1186, B-L=-1340/71
BOT CHORD K-L=-194/412, I-K=-118/1832, H-I=-63/1242, G-H=-36/1111
WEBS C-K=-33/307, C-I=-732/65, D-I=0/575, D-H=-387/73, E-H=-0/637, E-G=-1442/75, B-K=0/1467, F-N=-1410/72

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 9-8-9, Exterior(2R) 9-8-9 to 13-11-8, Exterior(2E) 13-11-8 to 16-7-8, Interior(1) 16-7-8 to 23-4-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Bearing at joint(s) N considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) L, N.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O7	Roof Special	2	1	I73183924
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:35 2025 Page 1

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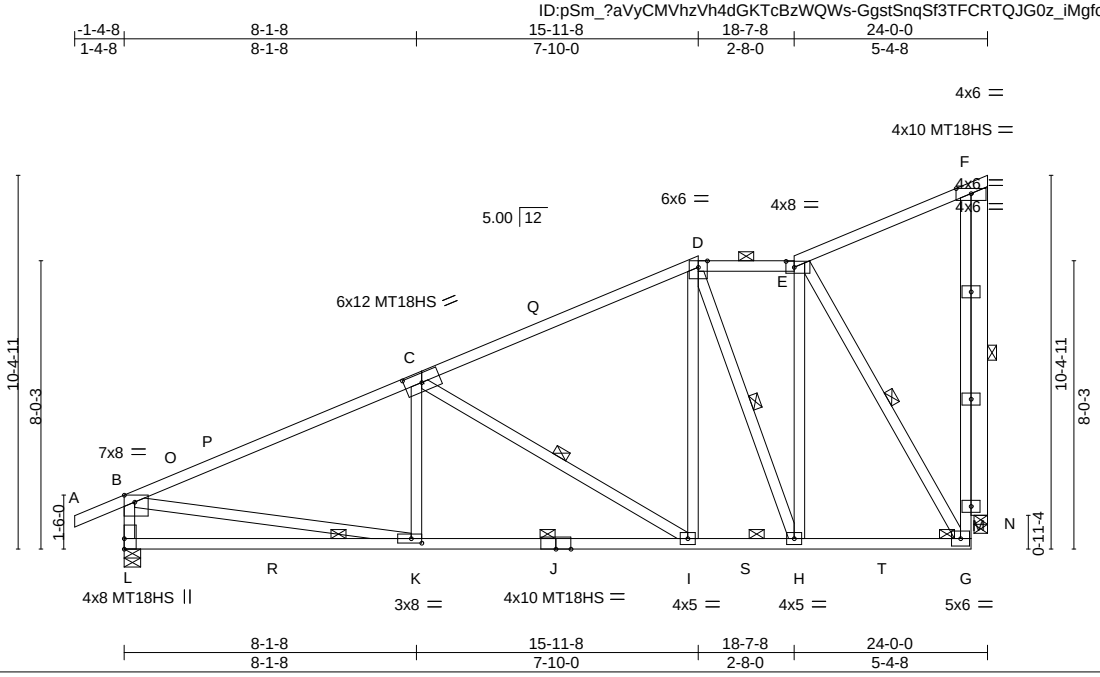

Plate Offsets (X,Y)-- [B:0-3-8,Edge], [C:0-5-12,0-3-0], [E:0-2-12,0-2-0], [K:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.24	K-L	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.35	K-L	>801	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.02	N	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	I-K	>999	240	Weight: 147 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3
OTHERS	2x6 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): D-E.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt C-I, D-H, E-G, F-N

REACTIONS. (size) L=0-5-8, N=0-4-8
Max Horz L=202(LC 8)
Max Uplift L=-30(LC 8), N=-75(LC 8)
Max Grav L=1487(LC 15), N=1403(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1979/0, C-D=-1180/0, D-E=-736/0, G-M=-37/1248, F-M=-37/1248, B-L=-1315/73
BOT CHORD K-L=-197/476, I-K=-107/1806, H-I=-46/1023, G-H=-21/783
WEBS C-K=0/364, C-I=-938/72, D-I=0/750, D-H=-756/75, E-H=-32/870, E-G=-1325/73, B-K=0/1357, F-N=-1404/75

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 11-8-9, Exterior(2R) 11-8-9 to 15-11-8, Exterior(2E) 15-11-8 to 18-7-8, Interior(1) 18-7-8 to 23-4-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Bearing at joint(s) N considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) L, N.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O8	Roof Special	1	1	I73183925
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:36 2025 Page 1
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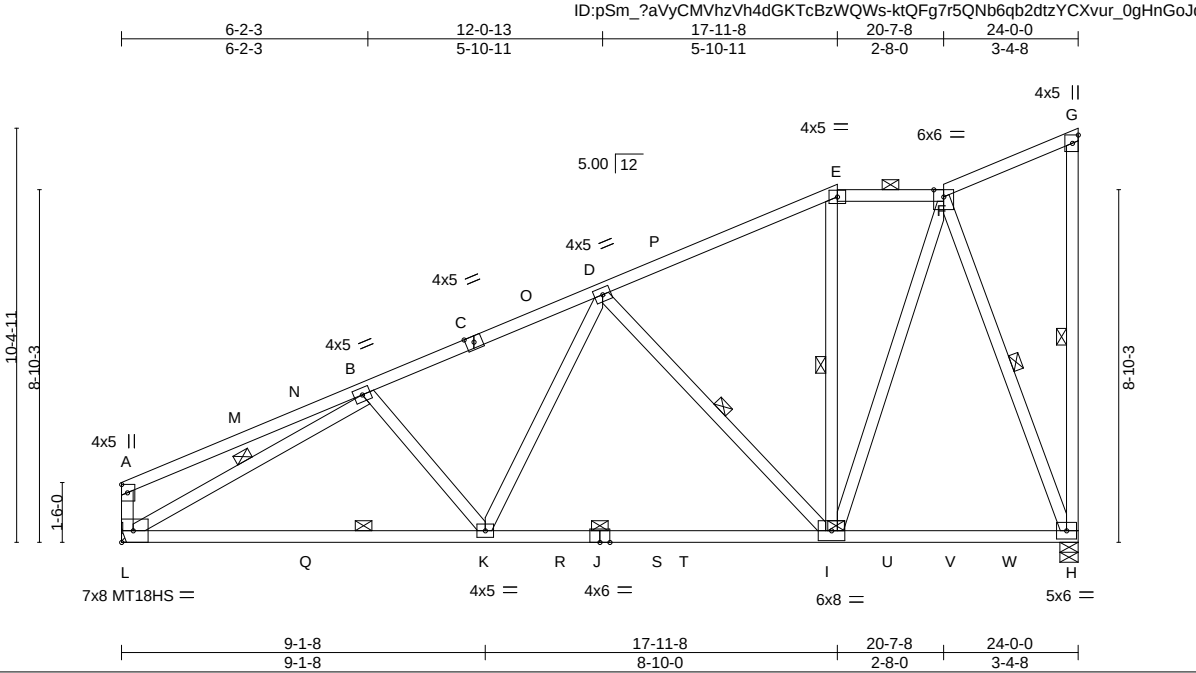

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.34	K-L	>845	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.50	K-L	>565	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.04	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.04	H-I	>999	240	Weight: 129 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): E-F.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt G-H, D-I, E-I, F-H, B-L

REACTIONS. (size) H=0-5-8, L=Mechanical
Max Horz L=-344(LC 9)
Max Uplift H=-39(LC 8), L=-34(LC 8)
Max Grav H=1525(LC 14), L=1386(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-418/27, B-D=-1807/87, D-E=-896/131, E-F=-756/143, A-L=-346/49
BOT CHORD K-L=0/1898, I-K=0/1529, H-I=0/560
WEBS D-K=0/633, D-I=-939/68, F-I=-43/1125, F-H=-1362/67, B-L=-1605/60

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-8-9, Exterior(2R) 13-8-9 to 17-11-8, Exterior(2E) 17-11-8 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, L.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O9	Roof Special	1	1	I73183926
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:37 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-C3_dtTsjBhjzRldpRh3R37R2DP?JWieTsreP81zKqSi

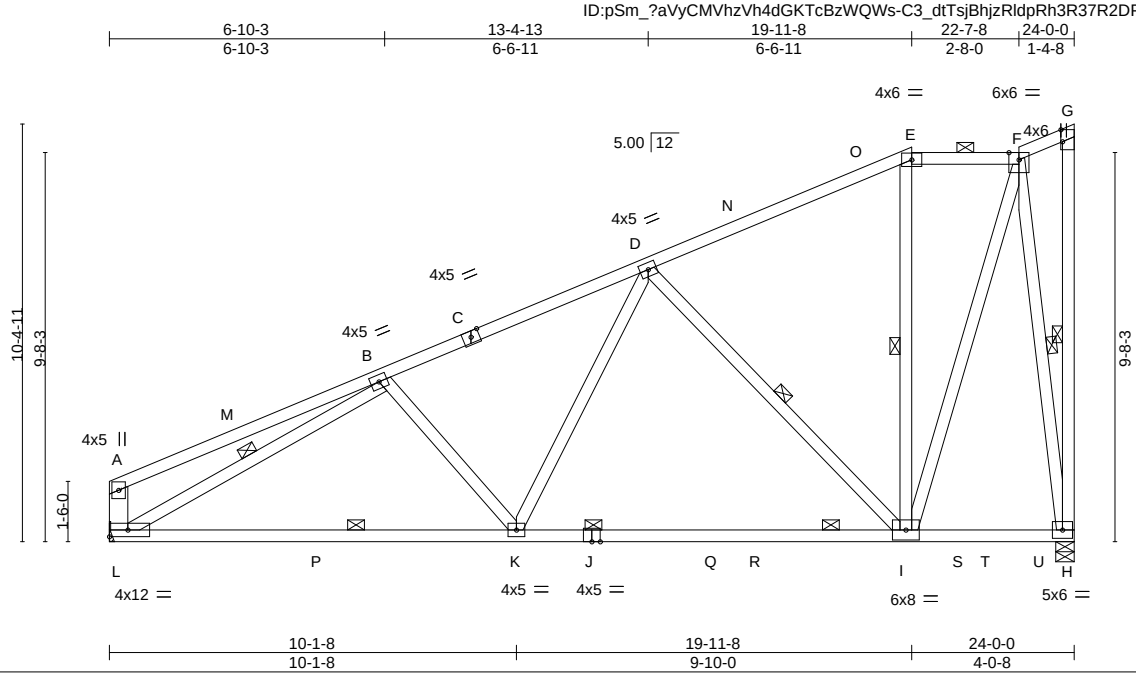

Plate Offsets (X,Y)-- [G:0-3-9,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.42	K-L	>677	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.63	K-L	>450	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.04	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	H-I	>999	240	Weight: 135 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except*
	A-L: 2x6 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): E-F.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt G-H, D-I, E-I, F-H, B-L

REACTIONS. (size) H=0-5-8, L=Mechanical
Max Horz L=-345(LC 9)
Max Uplift H=-31(LC 8), L=-31(LC 8)
Max Grav H=1520(LC 14), L=1380(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-499/29, B-D=-1737/86, D-E=-656/133, E-F=-527/147, A-L=-396/55
BOT CHORD K-L=0/1876, I-K=0/1389, H-I=0/265
WEBS B-K=-270/100, D-K=0/769, D-I=-1077/76, F-I=-65/1380, F-H=-1449/0, B-L=-1490/58

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 15-8-9, Exterior(2R) 15-8-9 to 19-11-8, Exterior(2E) 19-11-8 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, L.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O10	Half Hip	1	1	I73183927
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:13 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-vSXZrGZfrJiNZ3oC1edp53Ry?ktFurOxL6q8lQzKqT4

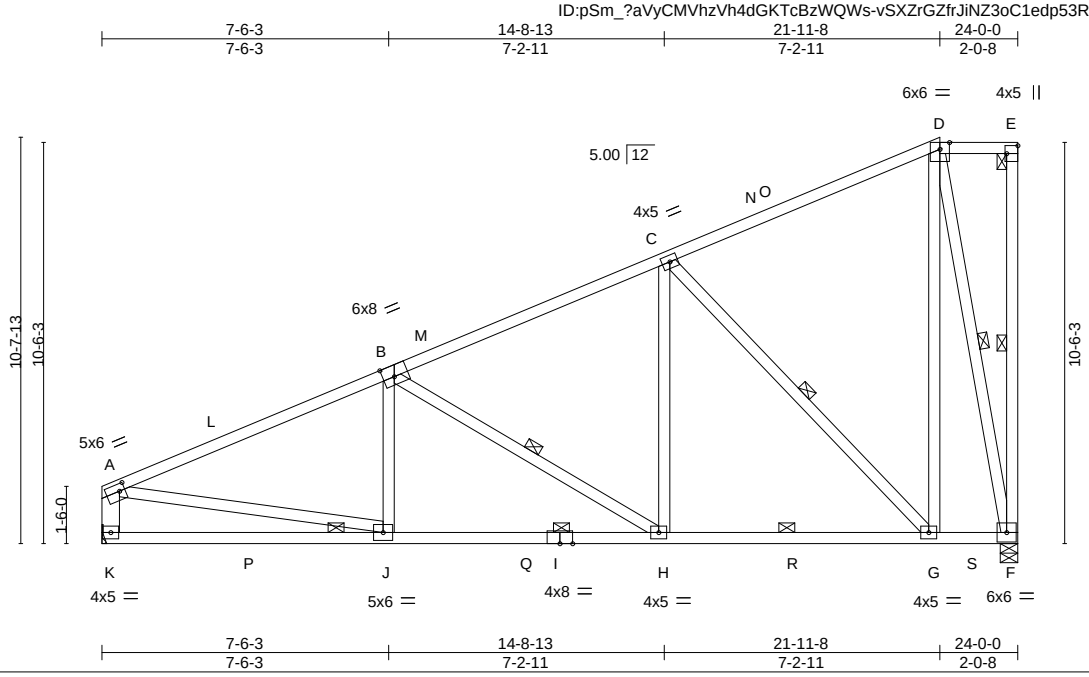

Plate Offsets (X,Y)-- [A:0-1-12,0-2-4], [B:0-3-8,Edge], [E:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.20	H-J	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.29	H-J	>968	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.03	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	H-J	>999	240	Weight: 134 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except*
	D-G,D-F: 2x4 SPF No.2, A-K: 2x6 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): D-E.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt E-F, B-H, C-G, D-F

REACTIONS. (size) F=0-5-8, K=Mechanical
Max Horz K=-351(LC 9)
Max Uplift F=-22(LC 8), K=-29(LC 8)
Max Grav F=1493(LC 14), K=1366(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1916/59, B-C=-1275/104, C-D=-400/141, A-K=-1203/70
BOT CHORD J-K=0/580, H-J=0/1905, G-H=0/1291, F-G=0/361
WEBS B-J=-19/312, B-H=-722/42, C-H=0/764, C-G=-1316/61, D-G=-81/1149, D-F=-1543/21, A-J=0/1348

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 17-8-9, Exterior(2R) 17-8-9 to 21-11-8, Exterior(2E) 21-11-8 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F, K.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O11	Jack-Closed	1	1	I73183928
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:13 2025 Page 1

ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-vSXZrGZfrJiNZ3oC1edp53RyOkr4uqwxL6q8lQzKqT4

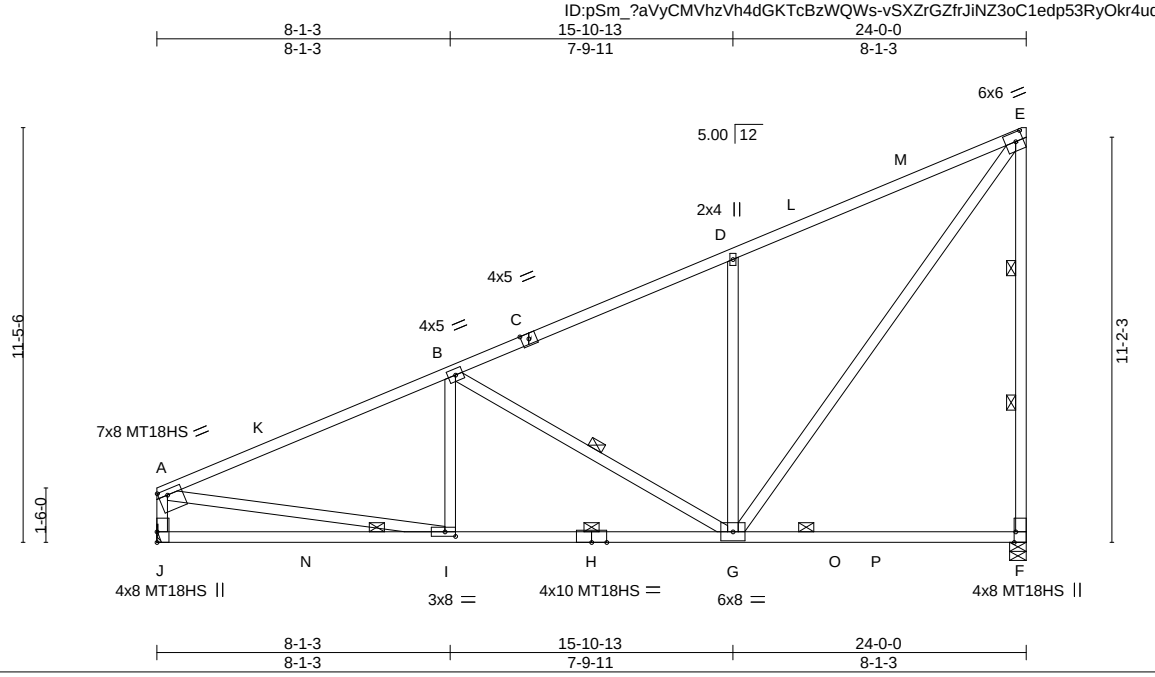

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [E:0-2-9,0-3-0], [F:0-3-8,Edge], [I:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.29	F-G	>981	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.43	F-G	>656	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.02	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.07	F-G	>999	240	Weight: 118 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except*
	E-F,E-G: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.	
BOT CHORD	6-0-0 oc bracing.	
WEBS	1 Row at midpt	B-G
	2 Rows at 1/3 pts	E-F

REACTIONS. (size) J=Mechanical, F=0-5-8
Max Horz J=-376(LC 9)
Max Uplift J=-28(LC 8), F=-7(LC 8)
Max Grav J=1355(LC 14), F=1541(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-J=-1184/69, A-B=-1907/59, B-D=-1161/108, D-E=-1188/187, E-F=-1316/76
BOT CHORD I-J=0/617, G-I=0/1915
WEBS A-I=0/1330, B-I=0/349, B-G=-865/46, D-G=-680/108, E-G=-79/1827

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) J, F.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O12	Jack-Closed	26	1	I73183929
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:14 2025 Page 1
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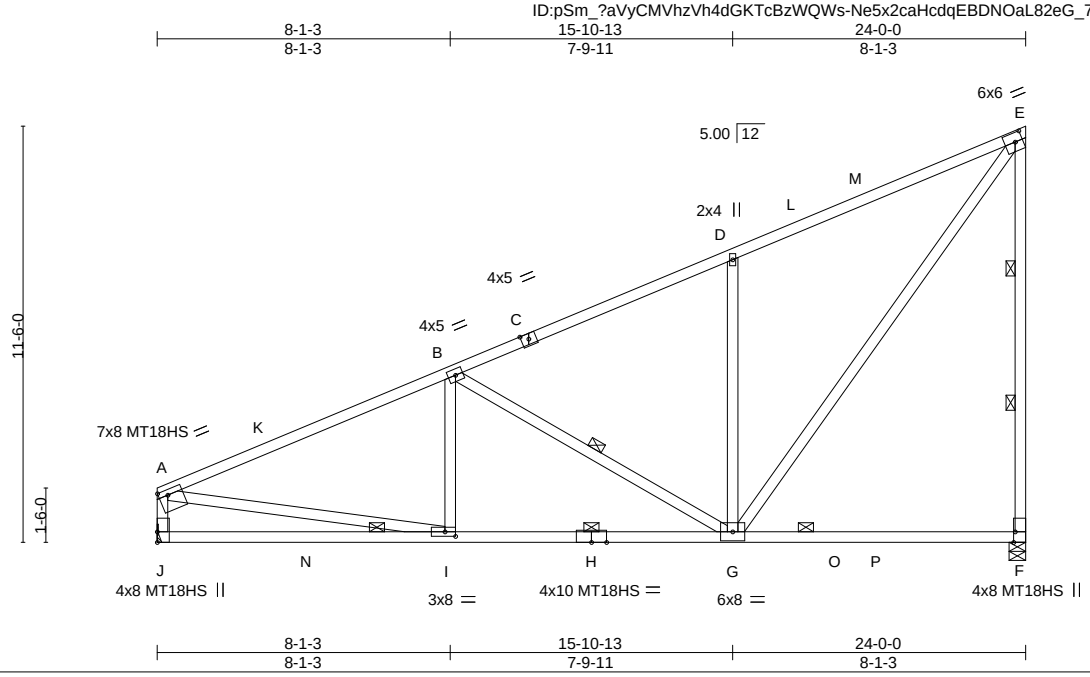

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [E:0-2-9,0-3-0], [F:0-3-8,Edge], [I:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.29	F-G	>981	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.43	F-G	>656	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.02	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.07	F-G	>999	240	Weight: 118 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except*
	E-F,E-G: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.	
BOT CHORD	6-0-0 oc bracing.	
WEBS	1 Row at midpt	B-G
	2 Rows at 1/3 pts	E-F

REACTIONS. (size) J=Mechanical, F=0-5-8
Max Horz J=-376(LC 9)
Max Uplift J=-28(LC 8), F=-14(LC 8)
Max Grav J=1355(LC 14), F=1541(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-J=-1184/69, A-B=-1907/59, B-D=-1161/108, D-E=-1188/188, E-F=-1316/82
BOT CHORD I-J=0/617, G-I=0/1915
WEBS A-I=0/1330, B-I=0/349, B-G=-865/45, D-G=-680/113, E-G=-84/1827

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 19-7-5, Exterior(2R) 19-7-5 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) J, F.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O13	Monopitch	5	1	I73183930
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:15 2025 Page 1

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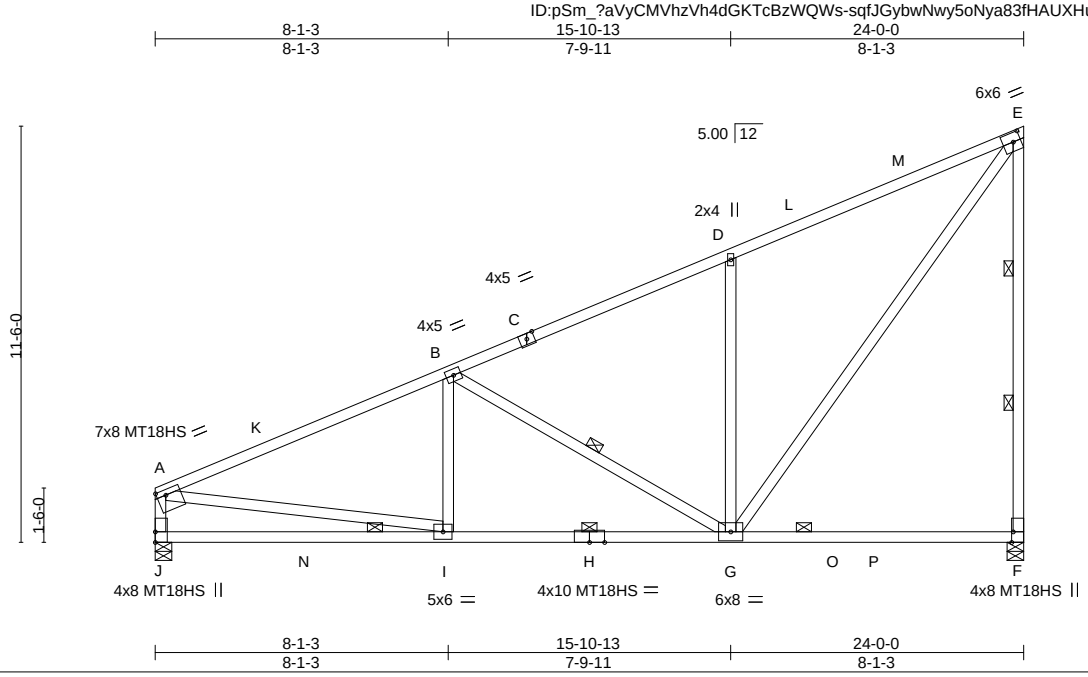

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [E:0-2-9,0-3-0], [F:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.29	F-G	>981	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.43	F-G	>656	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.02	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.08	F-G	>999	240	Weight: 118 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except*
	E-F,E-G: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.	
BOT CHORD	6-0-0 oc bracing.	
WEBS	1 Row at midpt	B-G
	2 Rows at 1/3 pts	E-F

REACTIONS. (size) F=0-5-8, J=0-5-8
Max Horz J=-376(LC 9)
Max Uplift F=-38(LC 8), J=-48(LC 8)
Max Grav F=1541(LC 14), J=1355(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1907/92, B-D=-1161/127, D-E=-1189/216, E-F=-1316/106, A-J=-1184/89
BOT CHORD I-J=0/617, G-I=0/1915
WEBS B-I=0/349, B-G=-865/71, D-G=-680/134, E-G=-127/1827, A-I=-14/1330

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F, J.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O14	Monopitch	15	1	I73183931
					Job Reference (optional)

Mattingly Lumber & Millwork, Inc., Madison, IL 62040 — 8.830 s Jan 17 2025 MiTek Industries, Inc. Fri May 2 09:13:18 2025 Page 1

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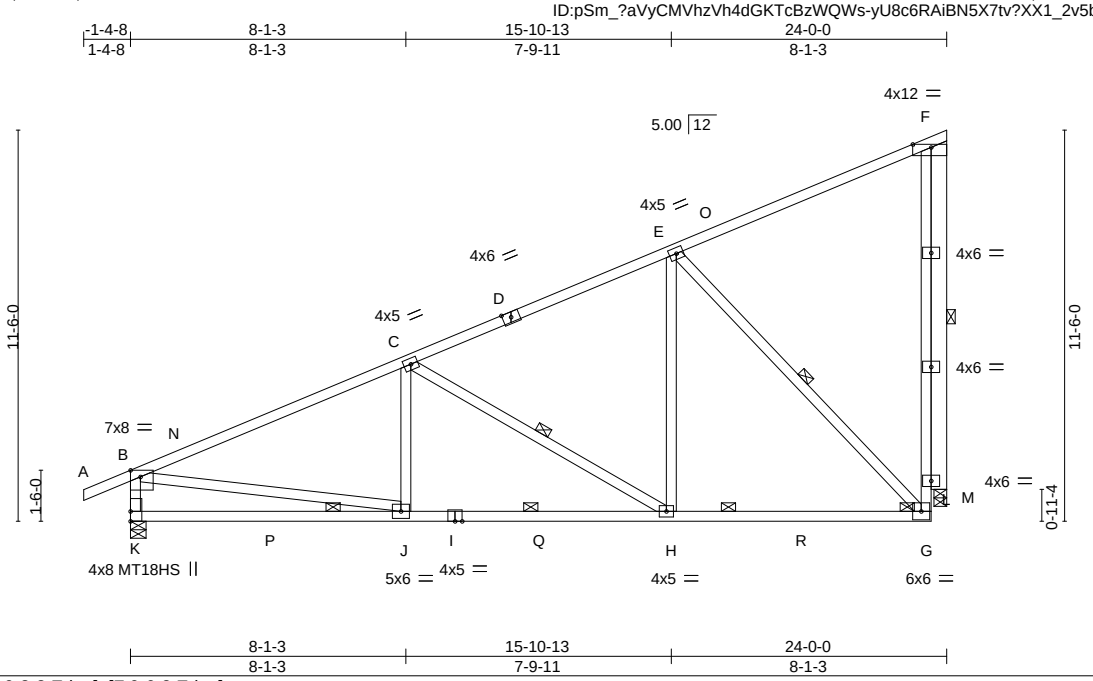

Plate Offsets (X,Y)-- [B:0-3-8,Edge], [F:0-6-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.26	H-J	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.36	J-K	>791	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	-0.05	M	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	H-J	>999	240	Weight: 134 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except* F-G,E-G: 2x4 SPF No.2
OTHERS	2x6 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt C-H, E-G, F-M

REACTIONS. (lb/size) K=1036/0-5-8, M=920/0-4-8
Max Horz K=246(LC 8)
Max Uplift K=-30(LC 8), M=-100(LC 8)
Max Grav K=1491(LC 15), M=1420(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-N=-1979/0, C-N=-1880/0, C-D=-1215/0, D-E=-1039/0, G-L=-38/1201, F-L=-38/1201, B-K=-1316/74
BOT CHORD	K-P=-251/494, J-P=-251/494, I-J=-136/1819, I-Q=-136/1819, H-Q=-136/1819, H-R=-57/1087, G-R=-57/1087
WEBS	C-J=0/354, C-H=-848/91, E-H=0/841, E-G=-1435/105, B-J=0/1341, F-M=-1422/100

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 23-4-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Bearing at joint(s) M considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint K and 100 lb uplift at joint M.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O15	Monopitch	37	1	I73183932
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:16 2025 Page 1

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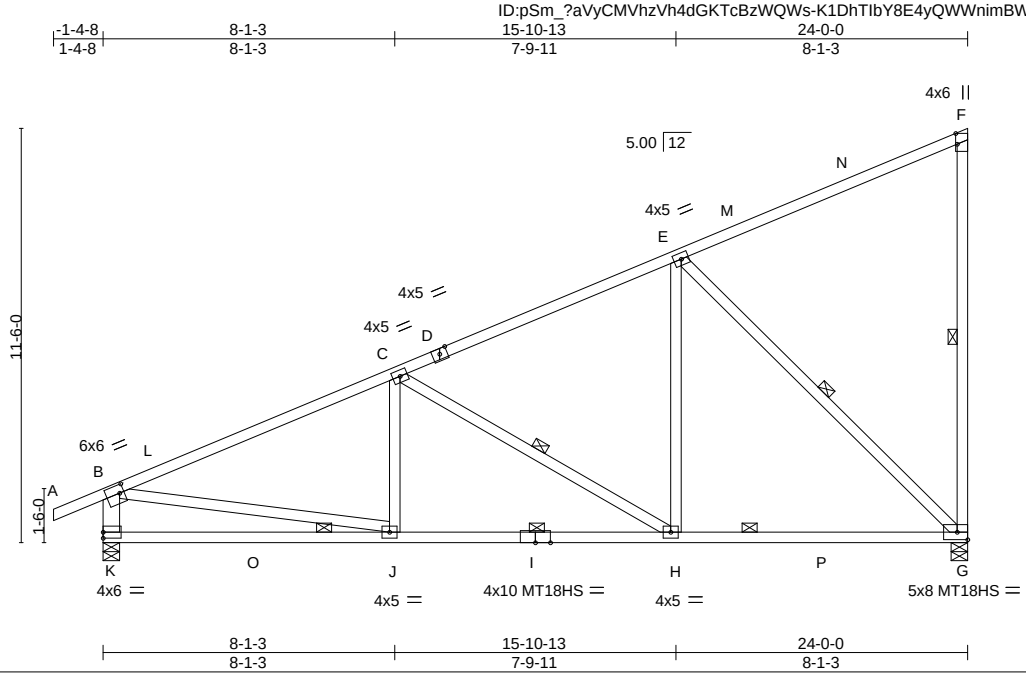

Plate Offsets (X,Y)-- [B:0-1-8,0-2-12], [F:0-3-9,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.29	G-H	>980	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.43	G-H	>666	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.03	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.07	G-H	>999	240	Weight: 118 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except*
	F-G,E-G: 2x4 SPF No.2, B-K: 2x6 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt F-G, C-H, E-G

REACTIONS. (size) G=0-5-8, K=0-5-8
Max Horz K=-371(LC 9)
Max Uplift G=-36(LC 8), K=-105(LC 8)
Max Grav G=1509(LC 15), K=1455(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-C=-1884/87, C-E=-1168/126, F-G=-282/33, B-K=-1313/147
BOT CHORD	J-K=0/677, H-J=0/1885, G-H=0/1178
WEBS	C-J=0/345, C-H=-819/63, E-H=0/832, E-G=-1506/103, B-J=0/1257

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) G except (jt=lb) K=105.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O16	Monopitch	5	1	I73183933
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:16 2025 Page 1

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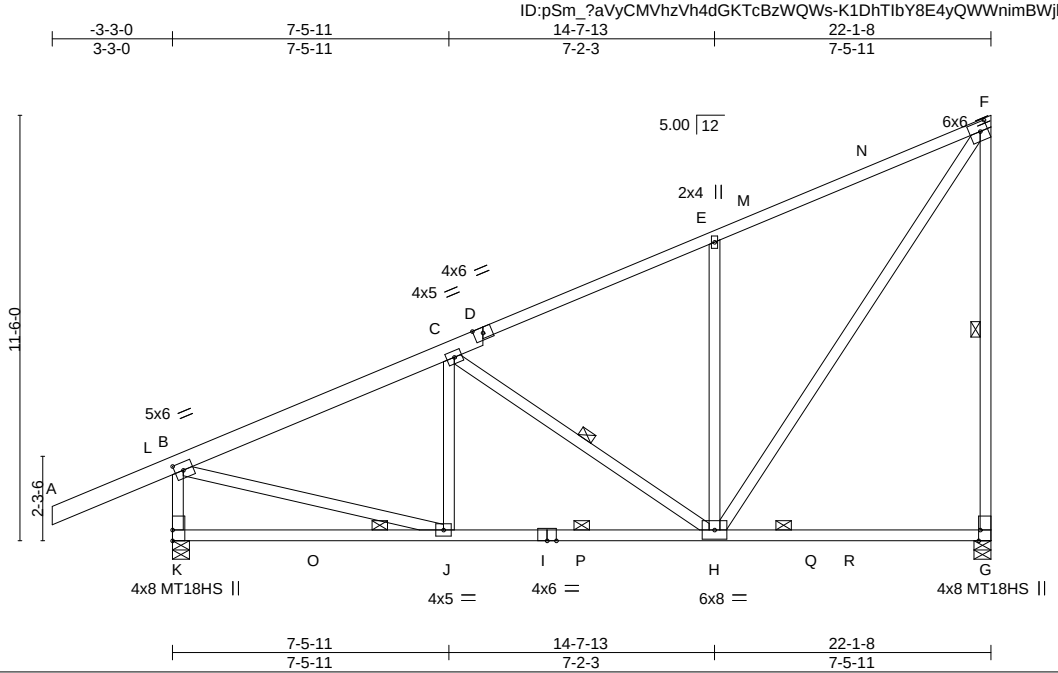

Plate Offsets (X,Y)-- [B:0-2-12,0-2-8], [F:0-2-9,0-3-0], [G:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.23	G-H	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.33	G-H	>786	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.01	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.07	G-H	>999	240	Weight: 126 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* A-D: 2x6 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except* F-G,F-H: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt F-G, C-H

REACTIONS. (size) G=0-5-8, K=0-5-8
Max Horz K=-377(LC 9)
Max Uplift G=-41(LC 8), K=-183(LC 8)
Max Grav G=1414(LC 15), K=1494(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1435/74, C-E=-961/124, E-F=-963/207, F-G=-1204/109, B-K=-1389/222
BOT CHORD J-K=-17/422, H-J=0/1469
WEBS C-J=-80/276, C-H=-613/48, E-H=-625/129, F-H=-121/1571, B-J=-10/1177

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -3-3-0 to -0-3-0, Interior(1) -0-3-0 to 18-11-12, Exterior(2E) 18-11-12 to 21-11-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) G except (jt=lb) K=183.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O17	Half Hip	14	1	I73183934
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:17 2025 Page 1

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1-4-8 | 8-2-3 | 7-10-11 | 7-10-11 | 0-0-8

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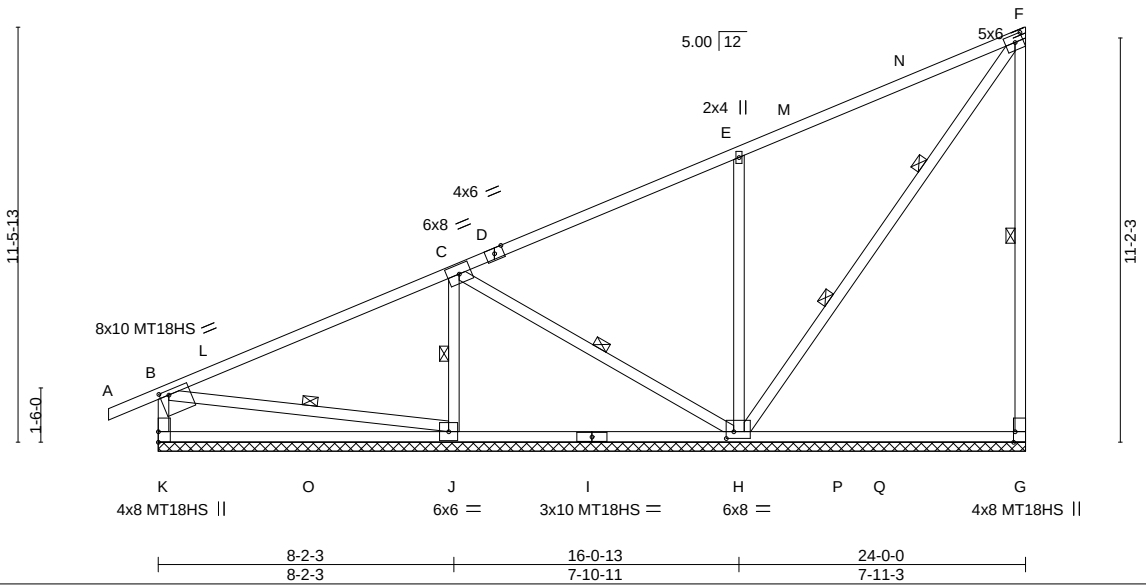

8-2-3 | 16-0-13 | 24-0-0

8-2-3 | 7-10-11 | 7-11-3

Plate Offsets (X,Y)-- [B:0-3-0,0-1-8], [F:0-2-12,0-2-8], [G:0-3-8,Edge], [H:0-2-8,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	0.00	A	n/r	120	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.65	Vert(CT)	0.01	A	n/r	120	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.02	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S							Weight: 130 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* A-D: 2x4 SPF 2100F 1.8E

BOT CHORD 2x4 SPF 2100F 1.8E

WEBS 2x4 SP 2400F 2.0E *Except* C-J,B-K: 2x4 SPF No.2, E-H: 2x4 SPF No.3, F-H: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

BOT CHORD Structural wood sheathing directly applied or 5-0-0 oc bracing.

WEBS 1 Row at midpt F-G, C-J, C-H, B-J; 2 Rows at 1/3 pts F-H

REACTIONS. All bearings 24-0-0.

(lb) - Max Horz K=-423(LC 26)

Max Uplift All uplift 100 lb or less at joint(s) except G=-1338(LC 25), K=-1977(LC 24), J=-2041(LC 24), H=-664(LC 24)

Max Grav All reactions 250 lb or less at joint(s) except G=1648(LC 26), K=2076(LC 29), J=2499(LC 27), H=1268(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD B-C=-3576/3567, C-E=-3692/3792, E-F=-1412/1558, F-G=-1529/1400, B-K=-1962/2012

BOT CHORD J-K=-2382/2892, H-J=-1522/1843, G-H=-2330/2519

WEBS C-J=-2701/2633, C-H=-3094/3124, E-H=-677/229, F-H=-2330/2370, B-J=-3458/3304

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) -1-4-8 to 1-7-8, Exterior(2N) 1-7-8 to 20-10-4, Corner(3E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1338 lb uplift at joint G, 1977 lb uplift at joint K, 2041 lb uplift at joint J and 664 lb uplift at joint H.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss has been designed for a total drag load of 300 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 24-0-0 for 300.0 plf.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O17A	GABLE	4	1	I73183935
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:18 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-GPKSuzdogrKffqg9pBD_o68n8lc9Z4xgUOYv_dzKqT?

-1-4-8 8-2-3 16-0-13 23-11-8 24-0-0
1-4-8 8-2-3 7-10-11 7-10-11 0-0-8

Scale: 3/16"=1'

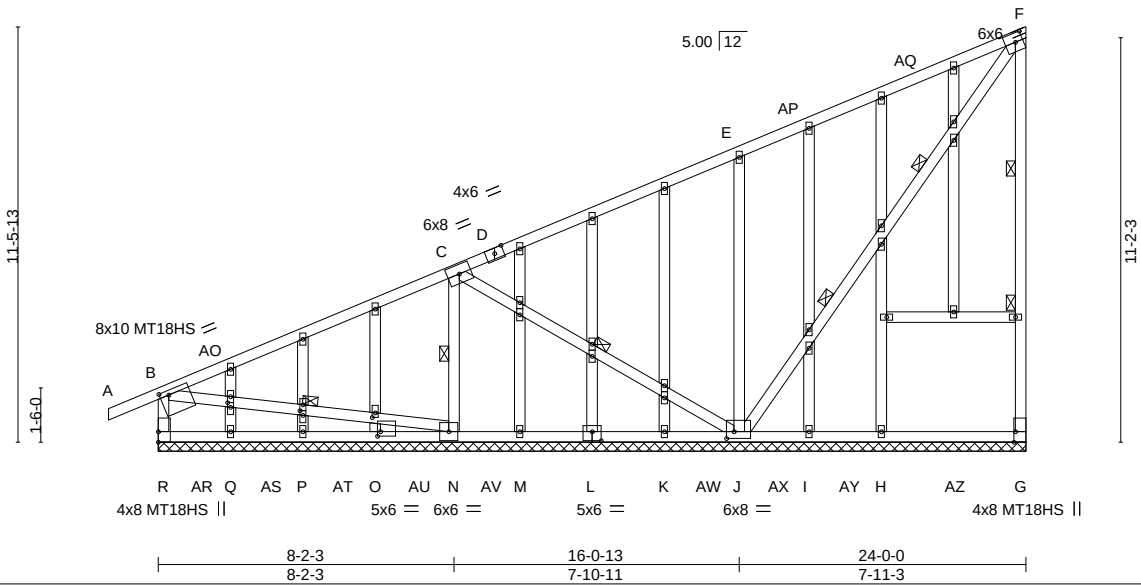

Plate Offsets (X,Y)-- [B:0-3-0,0-1-8], [F:0-2-9,0-3-0], [G:0-3-8,Edge], [J:0-2-8,0-2-4], [L:0-3-0,0-3-0], [O:0-1-0,0-1-8], [AF:0-1-9,0-1-0], [AI:0-1-9,0-1-0], [AK:0-1-9,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	0.00	A	n/r	120	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.54	Vert(CT)	0.01	A	n/r	120	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.03	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S							Weight: 185 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
A-D: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
F-G,F-J: 2x4 SPF 2100F 1.8E, C-J,B-N: 2x4 SP 2400F 2.0E
E-J: 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Structural wood sheathing directly applied or 3-10-5 oc bracing.
WEBS 1 Row at midpt C-N, C-J, B-N
2 Rows at 1/3 pts F-G, F-J

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz R=-423(LC 26)
Max Uplift All uplift 100 lb or less at joint(s) H, I, Q except G=-1301(LC 25), R=-2085(LC 24), N=-2126(LC 24), J=-705(LC 24)
Max Grav All reactions 250 lb or less at joint(s) except G=1602(LC 26), R=2069(LC 29), N=2295(LC 27), J=897(LC 2), H=361(LC 59), I=291(LC 58), K=354(LC 56), M=353(LC 55), O=319(LC 53), P=308(LC 52), Q=309(LC 51)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-3600/3626, C-E=-3716/3824, E-F=-1385/1534, F-G=-1499/1379, B-R=-1976/2025
BOT CHORD Q-R=-499/923, P-Q=-1099/1523, O-P=-1699/2124, N-O=-2353/2778, M-N=-842/1127, K-M=-874/1159, J-K=-1495/1780, I-J=-2332/2481, H-I=-1753/1942, G-H=-1153/1342
WEBS C-N=-2708/2612, C-J=-3064/3118, E-J=-679/229, F-J=-2294/2320, B-N=-3406/3304

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) -1-4-8 to 1-7-8, Exterior(2N) 1-7-8 to 20-10-4, Corner(3E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are MT20 plates unless otherwise indicated.
8) All plates are 2x4 MT20 unless otherwise indicated.
9) Gable requires continuous bottom chord bearing.
10) Vertical gable studs spaced at 2-0-0 oc and horizontal gable studs spaced at 2-0-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

May 2,2025

Continued on page 2

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NOTES-

13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, I, Q except (jt=lb) G=1301, R=2085, N=2126, J=705.
14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
15) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
16) This truss has been designed for a total drag load of 300 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 24-0-0 for 300.0 plf.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O18	MONOPITCH	1	1	I73183936
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:19 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-kbuq5JeQR9SWH_FMNvkDLKhyD9s1IXVpj2HSW4zKqT_

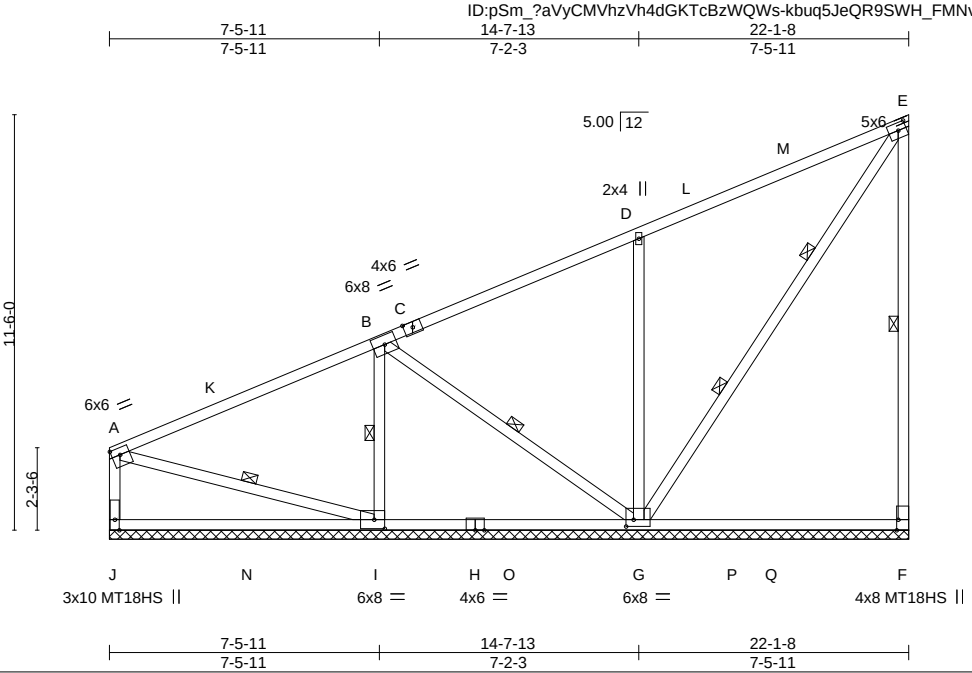

Plate Offsets (X,Y)-- [A:0-2-12,0-2-4], [E:0-2-12,0-2-8], [F:0-3-8,Edge], [G:0-2-8,0-2-4], [I:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.95	Vert(CT)	n/a	-	n/a	999	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.02	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S							Weight: 121 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except* E-F,B-G: 2x4 SP 2400F 2.0E, D-G: 2x4 SPF No.3 E-G: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.	
BOT CHORD	Structural wood sheathing directly applied or 2-2-0 oc bracing.	
WEBS	1 Row at midpt	E-F, B-I, B-G, A-I
	2 Rows at 1/3 pts	E-G

REACTIONS. All bearings 22-1-8.
(lb) - Max Horz J=-442(LC 25)
Max Uplift All uplift 100 lb or less at joint(s) except F=-1388(LC 24), J=-2026(LC 23), I=-1976(LC 23), G=-440(LC 23)
Max Grav All reactions 250 lb or less at joint(s) except F=1689(LC 25), J=2134(LC 28), I=2395(LC 26), G=1106(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-3116/3131, B-D=-3361/3481, D-E=-1349/1496, E-F=-1575/1447, A-J=-2032/2059
BOT CHORD	I-J=-2154/2648, G-I=-1511/1812, F-G=-2193/2381
WEBS	B-I=-2892/2846, B-G=-3147/3173, D-G=-623/204, E-G=-2329/2357, A-I=-3104/2964

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 18-11-12, Corner(3E) 18-11-12 to 21-11-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1388 lb uplift at joint F, 2026 lb uplift at joint J, 1976 lb uplift at joint I and 440 lb uplift at joint G.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss has been designed for a total drag load of 300 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 22-1-8 for 300.0 plf.

May 2,2025

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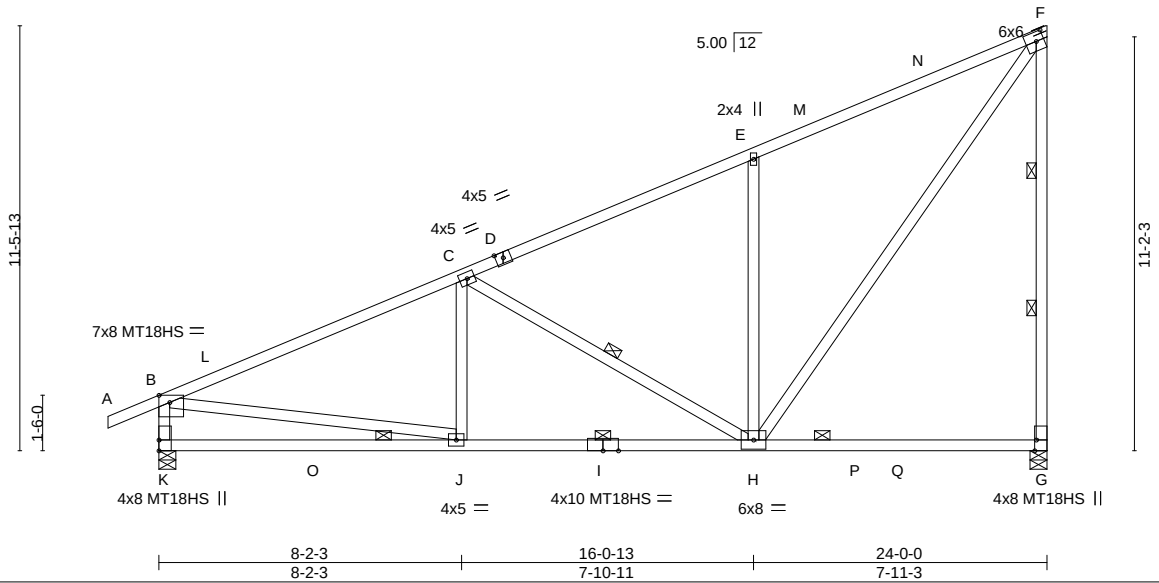
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O19	Half Hip	1	1	I73183937
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:20 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-CoSCJff2BTaNv8qYxcFStXE80ZE51_Ozyi101WzKqSz

-1-4-8 | 8-2-3 | 16-0-13 | 23-11-8 | 24-0-0
1-4-8 | 8-2-3 | 7-10-11 | 7-10-11 | 0-0-8

Scale = 1:62.3



8-2-3 | 16-0-13 | 24-0-0
8-2-3 | 7-10-11 | 7-11-3

Plate Offsets (X,Y)-- [B:0-3-8,Edge], [F:0-2-9,0-3-0], [G:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.27	G-H	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.41	G-H	>701	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.02	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.07	G-H	>999	240	Weight: 120 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
F-G,F-H,B-K: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt C-H
2 Rows at 1/3 pts F-G

REACTIONS. (size) G=0-5-8, K=0-5-8
Max Horz K=-371(LC 9)
Max Uplift G=-6(LC 8), K=-78(LC 8)
Max Grav G=1536(LC 15), K=1448(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1895/54, C-E=-1137/107, E-F=-1161/185, F-G=-1317/74, B-K=-1309/121
BOT CHORD J-K=0/665, H-J=0/1896
WEBS C-J=0/357, C-H=-871/39, E-H=-681/109, F-H=-76/1813, B-J=0/1275

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint G and 78 lb uplift at joint K.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O20	Half Hip	1	1	I73183938
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:21 2025 Page 1

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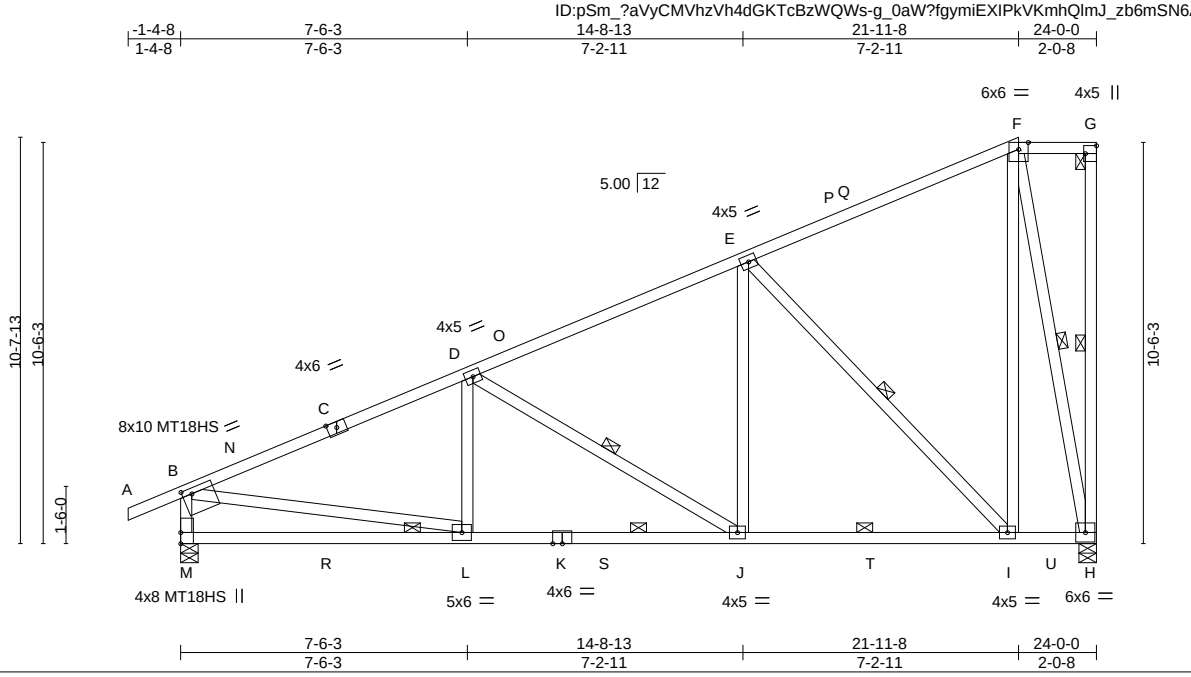

Plate Offsets (X,Y)-- [B:0-3-0,0-1-12], [G:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.20	J-L	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.29	J-L	>969	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.03	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	J-L	>999	240	Weight: 135 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except* F-I,F-H: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): F-G.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt G-H, D-J, E-I, F-H

REACTIONS. (size) H=0-5-8, M=0-5-8
Max Horz M=-346(LC 9)
Max Uplift H=-21(LC 8), M=-80(LC 8)
Max Grav H=1494(LC 15), M=1465(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-D=-1934/54, D-E=-1279/102, E-F=-401/141, B-M=-1317/120
BOT CHORD L-M=0/575, J-L=0/1922, I-J=0/1295, H-I=0/361
WEBS D-L=-12/320, D-J=-731/33, E-J=0/758, E-I=-1321/60, F-I=-79/1153, F-H=-1543/19, B-L=0/1368

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 17-8-10, Exterior(2R) 17-8-10 to 21-11-8, Exterior(2E) 21-11-8 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint H and 80 lb uplift at joint M.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O21	Roof Special	1	1	I73183939
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:22 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-8AazkLgJj4q58S_w21IwyyJU?MtoVw_FP0W76OzKqSx

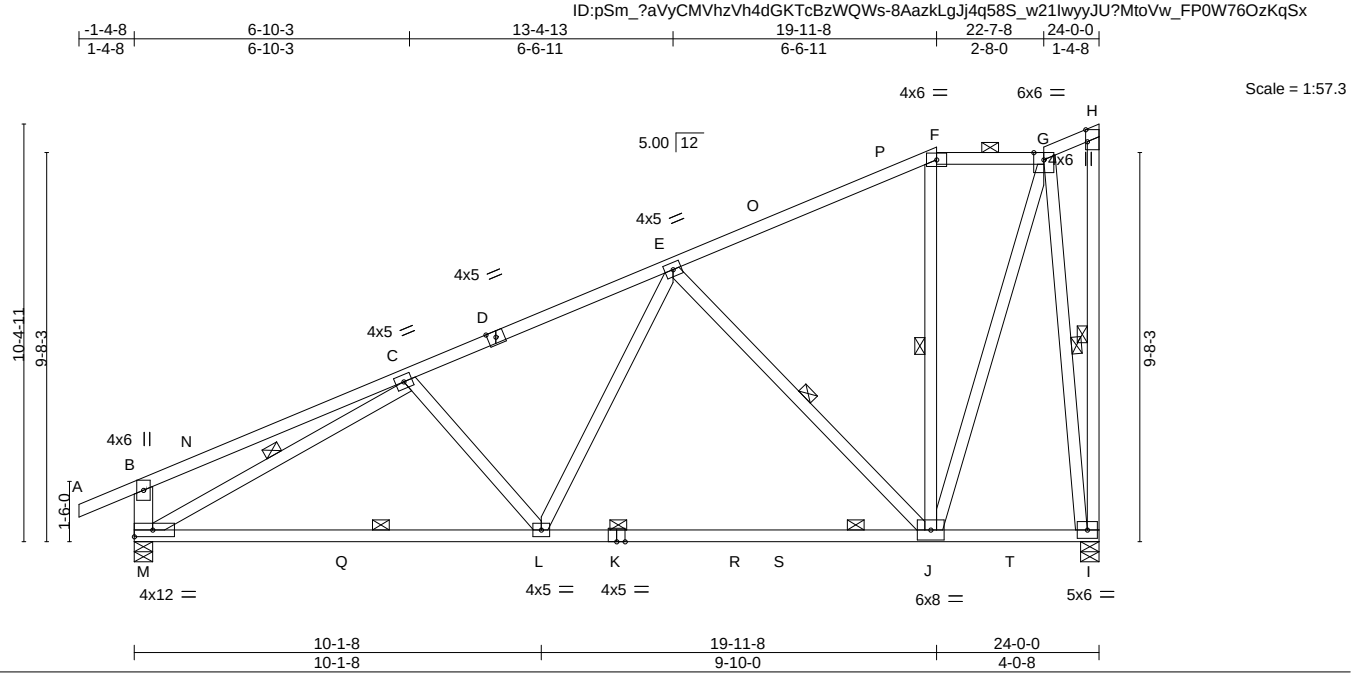

Plate Offsets (X,Y)-- [H:0-3-9,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.42	L-M	>677	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.63	L-M	>450	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.04	I	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	I-J	>999	240	Weight: 137 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
B-M: 2x6 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): F-G.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt H-I, E-J, F-J, G-I, C-M

REACTIONS. (size) I=0-5-8, M=0-5-8
Max Horz M=-340(LC 9)
Max Uplift I=-29(LC 8), M=-85(LC 8)
Max Grav I=1488(LC 15), M=1477(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-517/26, C-E=-1720/80, E-F=-649/133, F-G=-520/146, B-M=-532/111
BOT CHORD L-M=0/1852, J-L=0/1380, I-J=0/262
WEBS C-L=-251/93, E-L=0/757, E-J=-1076/74, G-J=-63/1364, G-I=-1435/0, C-M=-1451/52

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 15-8-10, Exterior(2R) 15-8-10 to 19-11-8, Exterior(2E) 19-11-8 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint I and 85 lb uplift at joint M.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O22	Roof Special	1	1	I73183940
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:22 2025 Page 1
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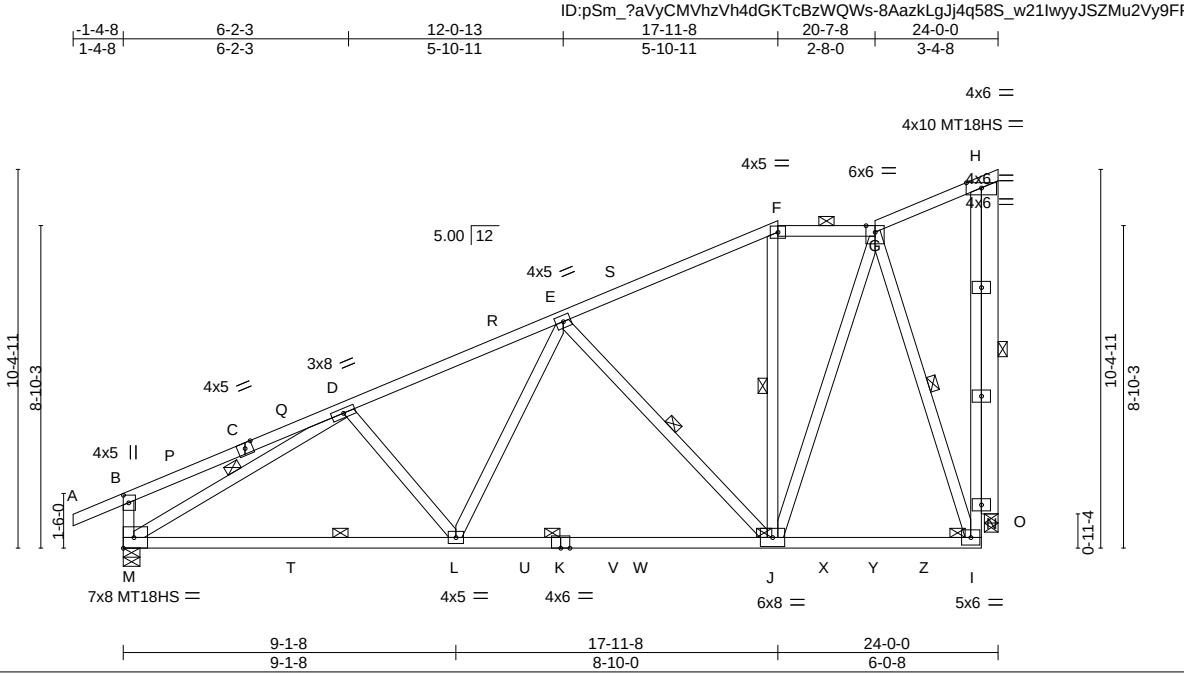

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.34	L-M	>844	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.50	L-M	>563	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.03	O	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	J-L	>999	240	Weight: 146 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3
OTHERS	2x6 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): F-G.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt E-J, F-J, G-I, D-M, H-O

REACTIONS. (size) M=0-5-8, O=0-4-8
Max Horz M=202(LC 8)
Max Uplift M=-26(LC 8), O=-78(LC 8)
Max Grav M=1509(LC 15), O=1434(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-D=-425/21, D-E=-1852/0, E-F=-935/0, F-G=-803/19, I-N=-56/1340, H-N=-56/1340, B-M=-469/103
BOT CHORD	L-M=-128/1783, J-L=-80/1437, I-J=-7/480
WEBS	E-L=0/613, E-J=-928/84, G-J=-59/1112, G-I=-1290/84, D-M=-1639/0, H-O=-1436/78

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 13-8-10, Exterior(2R) 13-8-10 to 17-11-8, Exterior(2E) 17-11-8 to 20-7-8, Interior(1) 20-7-8 to 23-4-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Bearing at joint(s) O considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint M and 78 lb uplift at joint O.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O23	Roof Special	1	1	I73183941
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:23 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-dN8LxhhxUOyymbZ7ckp9VAsf0mGxEM4PegFgerzKqSw

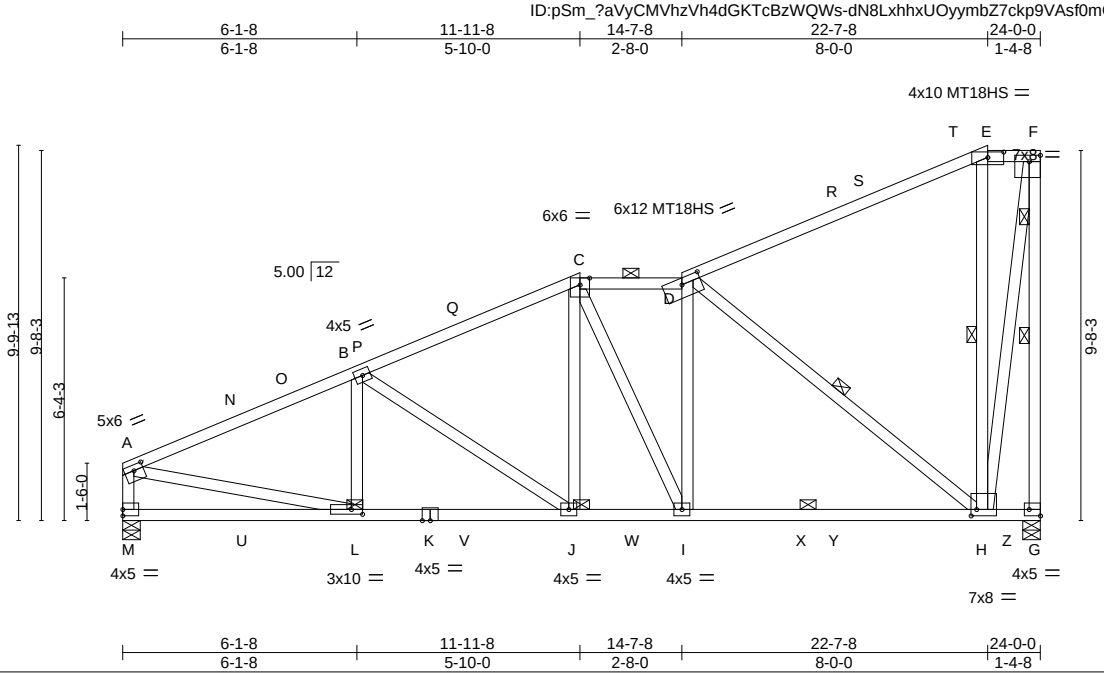

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [D:0-6-0,0-2-0], [E:0-5-0,0-1-11], [F:Edge,0-2-0], [G:Edge,0-2-0], [H:0-1-12,0-2-0], [L:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.18	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.31	H-I	>907	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	J	>999	240	Weight: 139 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
G-K: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-4-14 max.): C-D, E-F.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt F-G, D-H, E-H

REACTIONS. (size) G=0-5-8, M=0-5-8
Max Horz M=-326(LC 9)
Max Uplift G=-69(LC 8), M=-60(LC 8)
Max Grav G=1485(LC 14), M=1378(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1953/109, B-C=-1544/139, C-D=-1324/149, D-E=-355/126, F-G=-1465/161, A-M=-1247/92
BOT CHORD L-M=0/437, J-L=-18/1947, I-J=0/1530, H-I=0/1509
WEBS B-J=-529/55, C-J=0/432, D-I=0/440, D-H=-1511/120, E-H=-531/0, F-H=-74/1678, A-L=-57/1547

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-11-8, Exterior(2R) 8-11-8 to 11-11-8, Exterior(2E) 11-11-8 to 14-7-8, Interior(1) 14-7-8 to 19-7-8, Exterior(2R) 19-7-8 to 22-7-8, Exterior(2E) 22-7-8 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint G and 60 lb uplift at joint M.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O24	Roof Special	1	1	I73183942
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:24 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-5Zij91iZFh4pOl8JASKO2NOq9Aczzq1YsK?DAHzKqSv

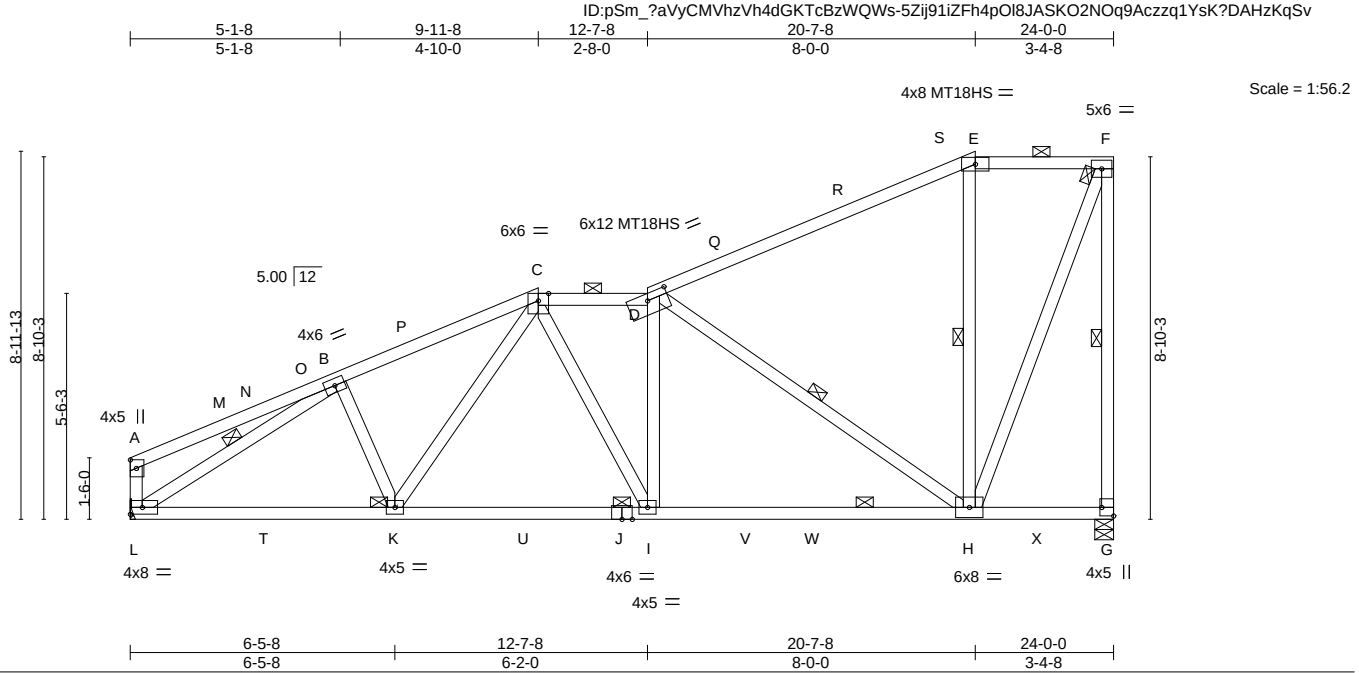

Plate Offsets (X,Y)-- [D:0-6-0,0-2-0], [G:Edge,0-3-8]

LOADING (psf)			SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0		Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.21	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4		Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.33	H-I	>850	360	MT18HS	197/144
TCDL	10.0		Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	G	n/a	n/a		
BCLL	0.0	*	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	I-K	>999	240	Weight: 127 lb	FT = 20%
BCDL	15.0												

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-0-1 max.): C-D, E-F.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt F-G, D-H, E-H, B-L

REACTIONS. (size) G=0-5-8, L=Mechanical
Max Horz L=-302(LC 9)
Max Uplift G=-69(LC 8), L=-65(LC 8)
Max Grav G=1467(LC 14), L=1385(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-304/27, B-C=-1887/151, C-D=-1633/153, D-E=-641/131, E-F=-494/156, F-G=-1416/119, A-L=-276/41
BOT CHORD K-L=-36/1862, I-K=0/1680, H-I=0/1801
WEBS C-K=-9/375, C-I=0/332, D-I=-60/259, D-H=-1435/114, E-H=-320/39, F-H=-75/1487, B-L=-1747/105

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-11-8, Exterior(2R) 6-11-8 to 9-11-8, Exterior(2E) 9-11-8 to 12-7-8, Interior(1) 12-7-8 to 17-7-8, Exterior(2R) 17-7-8 to 20-7-8, Exterior(2E) 20-7-8 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint G and 65 lb uplift at joint L.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O25	Roof Special	1	1	I73183943
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:25 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-ZIF5MNiB0?Cg?vjVk9rdabx_TaysiJ0i5_knijzKqSu

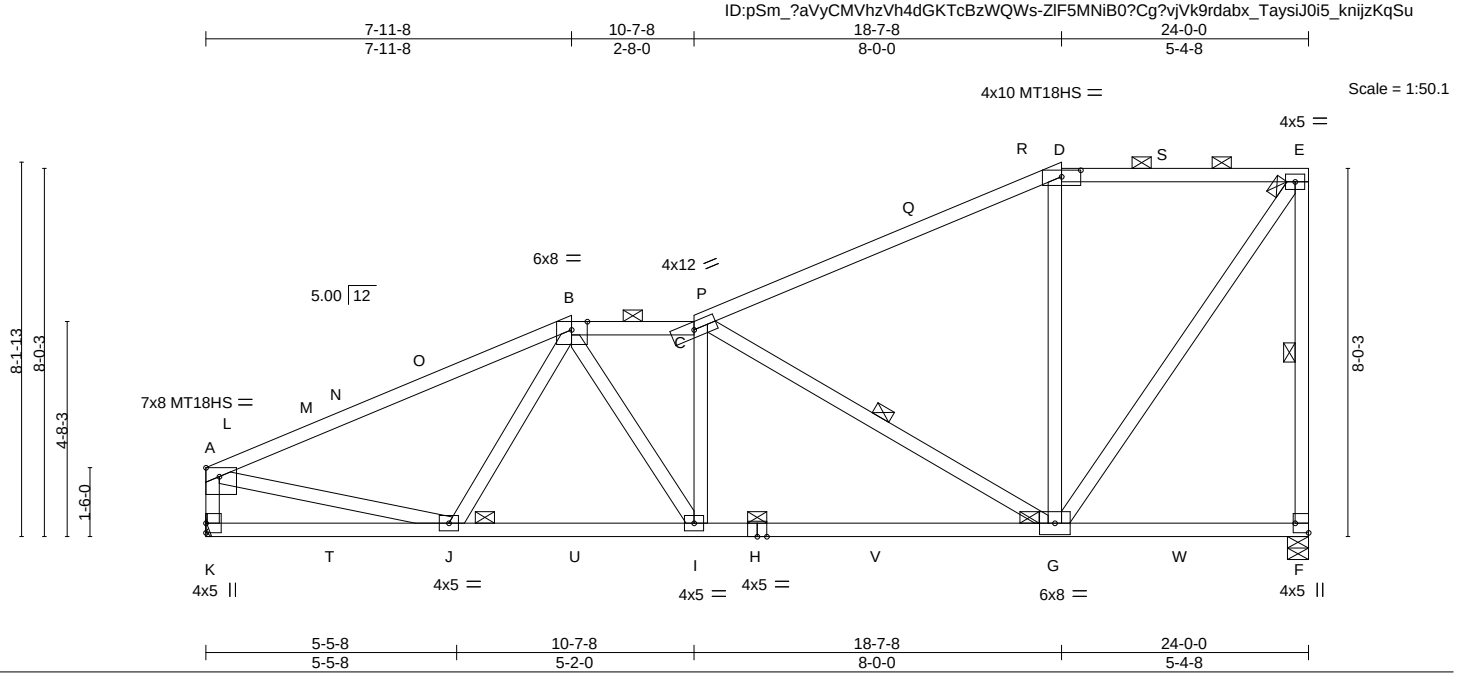

Plate Offsets (X,Y)-- [A:Edge,0-2-5], [B:0-4-2,Edge], [D:0-5-0,0-1-11], [F:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.22	G-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.35	G-I	>819	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.03	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	I	>999	240	Weight: 117 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
A-K: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-7-7 max.): B-C, D-E.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt E-F, C-G

REACTIONS. (size) F=0-5-8, K=Mechanical
Max Horz K=-278(LC 9)
Max Uplift F=-77(LC 8), K=-72(LC 8)
Max Grav F=1479(LC 14), K=1380(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1827/105, B-C=-1900/161, C-D=-932/138, D-E=-784/164, E-F=-1346/121, A-K=-1254/100
BOT CHORD J-K=-6/525, I-J=-28/1818, G-I=-22/2051
WEBS B-I=0/483, C-G=-1320/108, D-G=-261/77, E-G=-81/1458, A-J=0/1290

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-11-8, Exterior(2R) 4-11-8 to 7-11-8, Exterior(2E) 7-11-8 to 10-7-8, Interior(1) 10-7-8 to 15-7-8, Exterior(2R) 15-7-8 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint F and 72 lb uplift at joint K.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O26	Roof Special	1	1	I73183944
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:26 2025 Page 1
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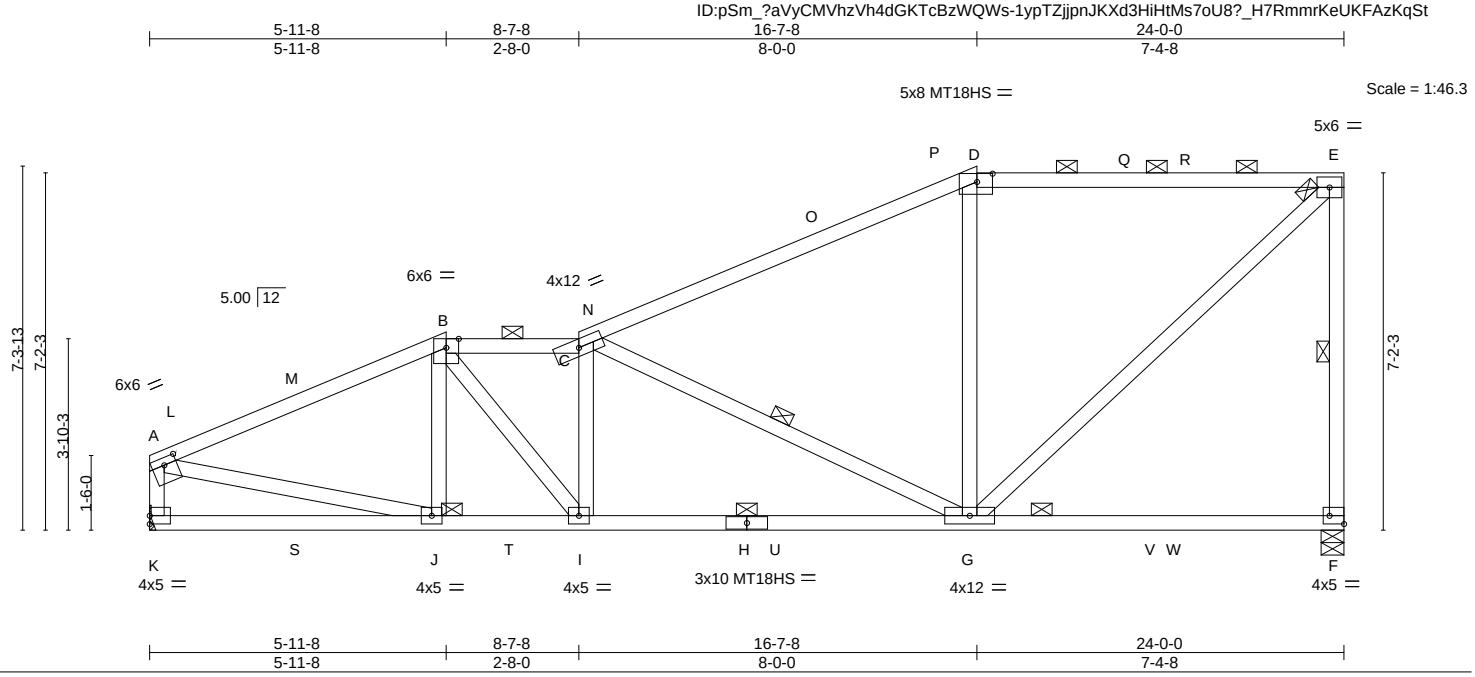

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [D:0-3-12,0-2-0], [F:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.23	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.34	G-I	>826	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.03	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	I	>999	240	Weight: 112 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* D-E: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-6-1 max.): B-C, D-E.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt E-F, C-G

REACTIONS. (size) F=0-5-8, K=Mechanical
Max Horz K=-253(LC 9)
Max Uplift F=-76(LC 8), K=-78(LC 8)
Max Grav F=1480(LC 14), K=1387(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-1930/126, B-C=-2202/168, C-D=-1269/143, D-E=-1104/169, E-F=-1293/123, A-K=-1248/110
BOT CHORD	J-K=0/420, I-J=-31/1877, G-I=-50/2329
WEBS	B-I=-37/760, C-I=-412/100, C-G=-1230/105, E-G=-83/1540, A-J=-56/1491

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Exterior(2R) 3-1-12 to 5-11-8, Exterior(2E) 5-11-8 to 8-7-8, Interior(1) 8-7-8 to 13-7-8, Exterior(2R) 13-7-8 to 19-7-8, Interior(1) 19-7-8 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) The Fabrication Tolerance at joint D = 12%
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint F and 78 lb uplift at joint K.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O27	Roof Special	1	1	I73183945
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:27 2025 Page 1
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3-11-8	6-7-8	11-7-2	16-6-12	18-6-0	24-0-0
3-11-8	2-8-0	4-11-10	4-11-10	1-11-4	5-6-0

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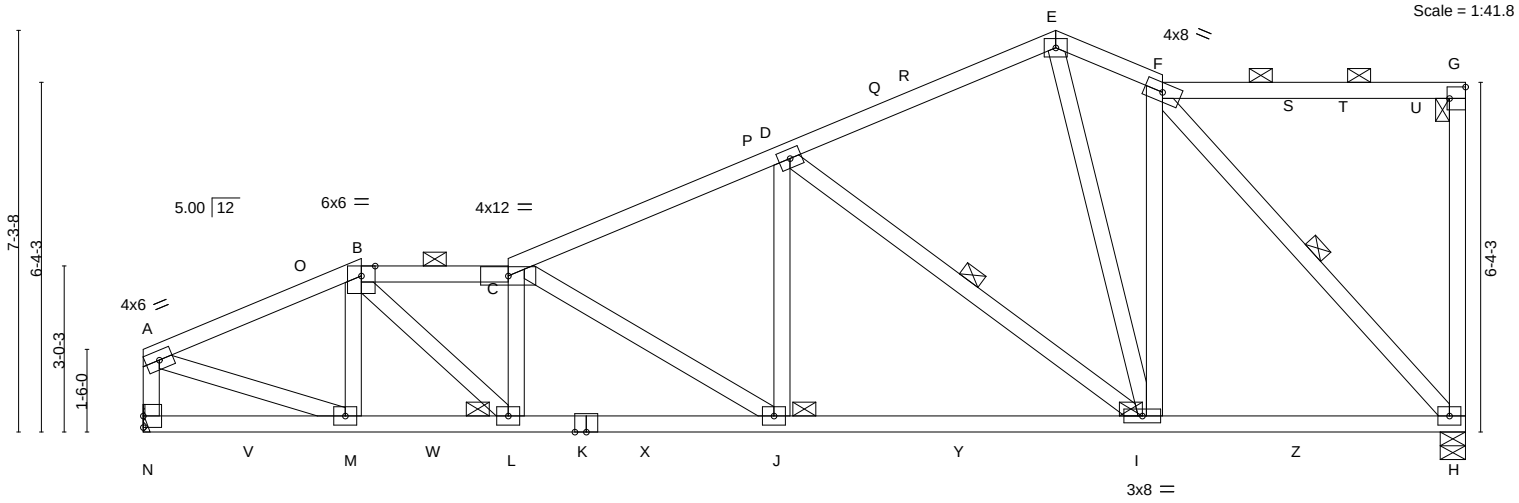

3-11-8	6-7-8	11-7-2	18-6-0	24-0-0
3-11-8	2-8-0	4-11-10	6-10-14	5-6-0

Plate Offsets (X,Y)-- [G:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.15	I-J	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.24	I-J	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.04	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	J-L	>999	240	Weight: 122 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
H-K: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-10-3 max.): B-C, F-G.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt D-I, F-H

REACTIONS. (size) H=0-5-8, N=Mechanical
Max Horz N=-228(LC 9)
Max Uplift H=-59(LC 8), N=-64(LC 8)
Max Grav H=1304(LC 2), N=1304(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1677/91, B-C=-2270/137, C-D=-1840/132, D-E=-964/135, E-F=-1062/158, A-N=-1239/83
BOT CHORD M-N=0/266, L-M=-10/1557, J-L=-40/2237, I-J=0/1628, H-I=0/934
WEBS B-M=-388/62, B-L=-48/1050, C-L=-640/74, C-J=-698/56, D-J=0/585, D-I=-1022/75, E-I=-41/541, F-I=0/435, F-H=-1356/55, A-M=-58/1474

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Exterior(2R) 3-1-12 to 3-11-8, Exterior(2E) 3-11-8 to 6-7-8, Interior(1) 6-7-8 to 13-6-12, Exterior(2R) 13-6-12 to 16-6-12, Exterior(2E) 16-6-12 to 18-6-0, Interior(1) 18-6-0 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 4x5 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint H and 64 lb uplift at joint N.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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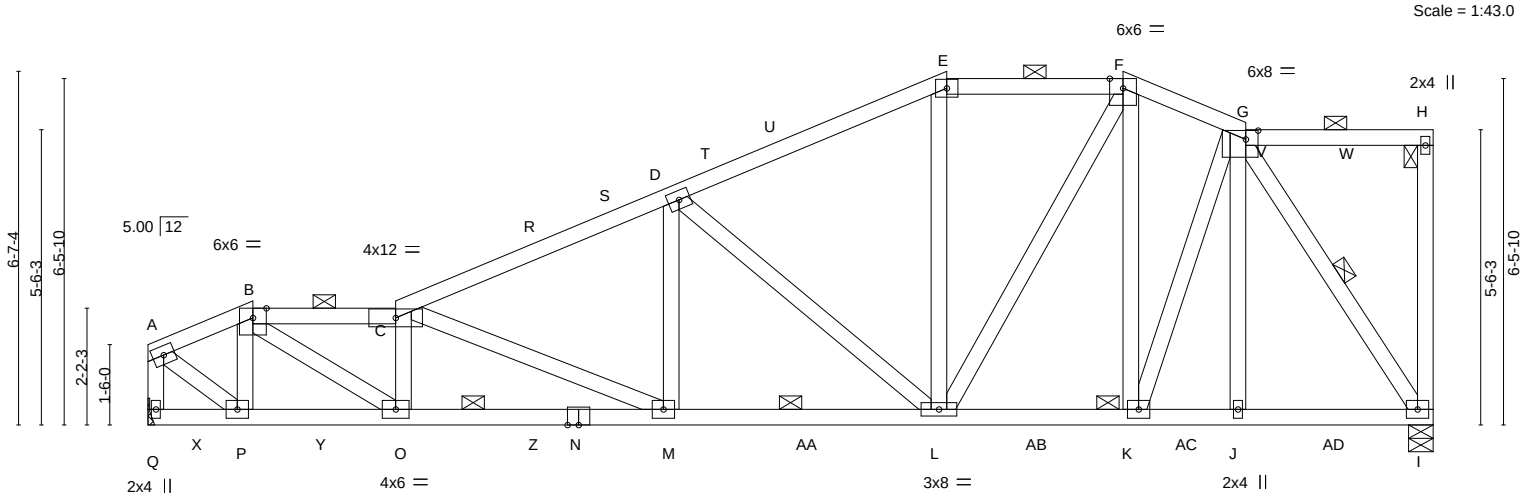
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O28	Roof Special	1	1	I73183946
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:28 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-zKxE_Ol3JwbFsNR4PIOKCDZdLnwlveS8nyzRJ2zKqSr

1-11-8	4-7-8	9-9-4	14-11-0	18-2-8	20-6-0	24-0-0
1-11-8	2-8-0	5-1-12	5-1-12	3-3-8	2-3-8	3-6-0

Scale = 1:43.0



1-11-8	4-7-8	9-9-4	14-11-0	18-2-8	20-6-0	24-0-0
1-11-8	2-8-0	5-1-12	5-1-12	3-3-8	2-3-8	3-6-0

Plate Offsets (X,Y)-- [G:0-2-12,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.10	M-O	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.19	M-O	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.05	I	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	M-O	>999	240	Weight: 130 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-7-7 max.): B-C, E-F, G-H.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt G-I

REACTIONS. (size) I=0-5-8, Q=Mechanical
Max Horz Q=-201(LC 9)
Max Uplift I=-73(LC 8), Q=-66(LC 8)
Max Grav I=1304(LC 2), Q=1304(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1188/59, B-C=-2533/136, C-D=-2095/145, D-E=-1382/155, E-F=-1198/166, F-G=-1012/150, A-Q=-1270/72
BOT CHORD O-P=0/1193, M-O=-59/2468, L-M=-26/1862, K-L=0/921, J-K=0/737, I-J=0/736
WEBS B-P=-723/64, B-O=-84/1693, C-O=-862/100, C-M=-650/36, D-M=0/517, D-L=-866/72, F-L=-33/650, F-K=-387/27, G-K=0/503, G-J=0/324, G-I=-1324/75, A-P=-63/1303

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 4-7-8, Interior(1) 4-7-8 to 11-11-0, Exterior(2R) 11-11-0 to 18-2-8, Exterior(2E) 18-2-8 to 20-6-0, Interior(1) 20-6-0 to 20-10-4, Exterior(2E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 4x5 MT20 unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint I and 66 lb uplift at joint Q.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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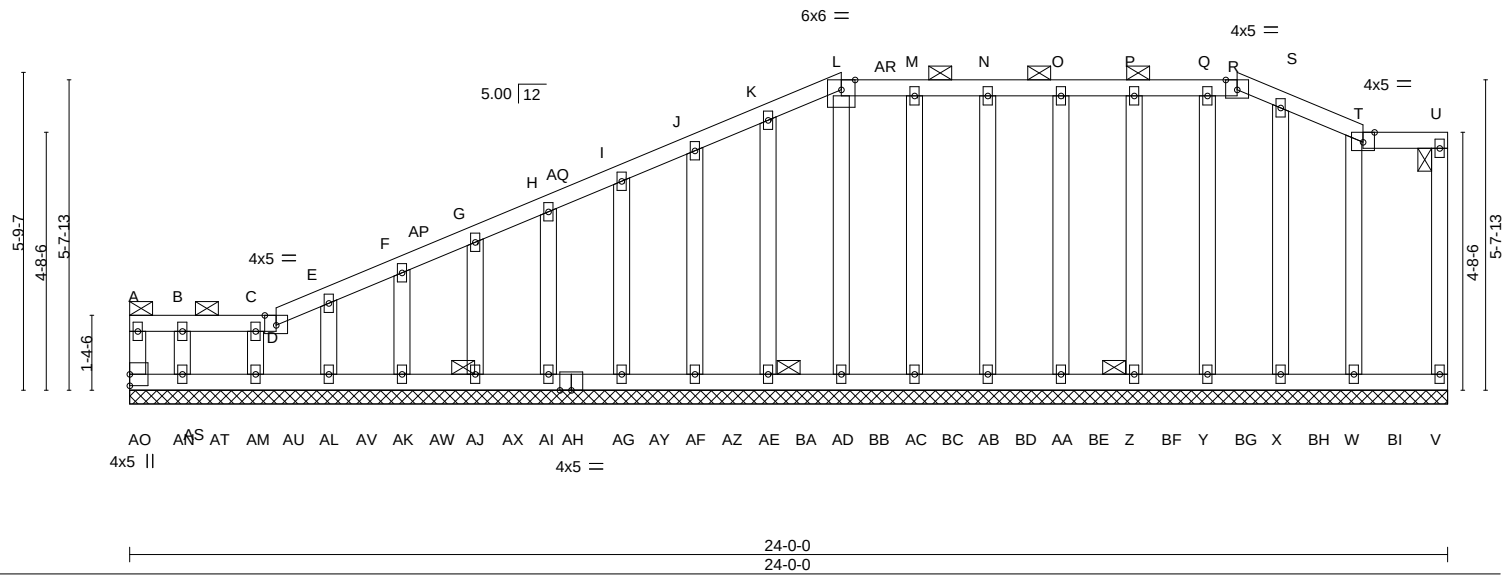
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O29	Roof Special Supported Gable	1	1	I73183947
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:29 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-RXVcCkmi4Ej6UW0Hz?wZlR6rZBSkeFFH0ci_rUzKqSq

2-8-0 | 12-11-8 | 20-2-0 | 22-5-8 | 24-0-0
2-8-0 | 10-3-8 | 7-2-8 | 2-3-8 | 1-6-8

Scale = 1:42.0



24-0-0
24-0-0

Plate Offsets (X,Y)-- [D:0-2-8,Edge], [R:0-2-8,Edge], [T:0-2-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	V	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-R							Weight: 133 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): A-D, L-R, T-U.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz AO=-203(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) V, AE, AF, AG, AI, AJ, AK, AL, AM, AN, AC, AB, AA, Z, X, W except AO=-169(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except AO=262(LC 61), V=283(LC 79), AD=315(LC 71), AE=318(LC 70), AF=317(LC 69), AG=317(LC 68), AI=317(LC 67), AJ=317(LC 66), AK=317(LC 65), AL=316(LC 64), AM=319(LC 63), AN=310(LC 62), AC=318(LC 72), AB=317(LC 73), AA=317(LC 74), Z=316(LC 75), Y=317(LC 76), X=317(LC 77), W=328(LC 78)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) 0-1-12 to 2-8-0, Exterior(2N) 2-8-0 to 9-11-8, Corner(3R) 9-11-8 to 15-11-8, Exterior(2N) 15-11-8 to 16-11-8, Corner(3R) 16-11-8 to 20-2-0, Corner(3E) 20-2-0 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
10) Gable studs spaced at 1-4-0 oc.
11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) V, AE, AF, AG, AI, AJ, AK, AL, AM, AN, AC, AB, AA, Z, X, W except (jt=lb) AO=169.
14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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NOTES-

15) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

16) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	O30	GABLE	1	1	I73183948
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:32 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-s6BkqmoaN95gL_lre7TGM3kG4OS4rarkiZxeSpzKqSn

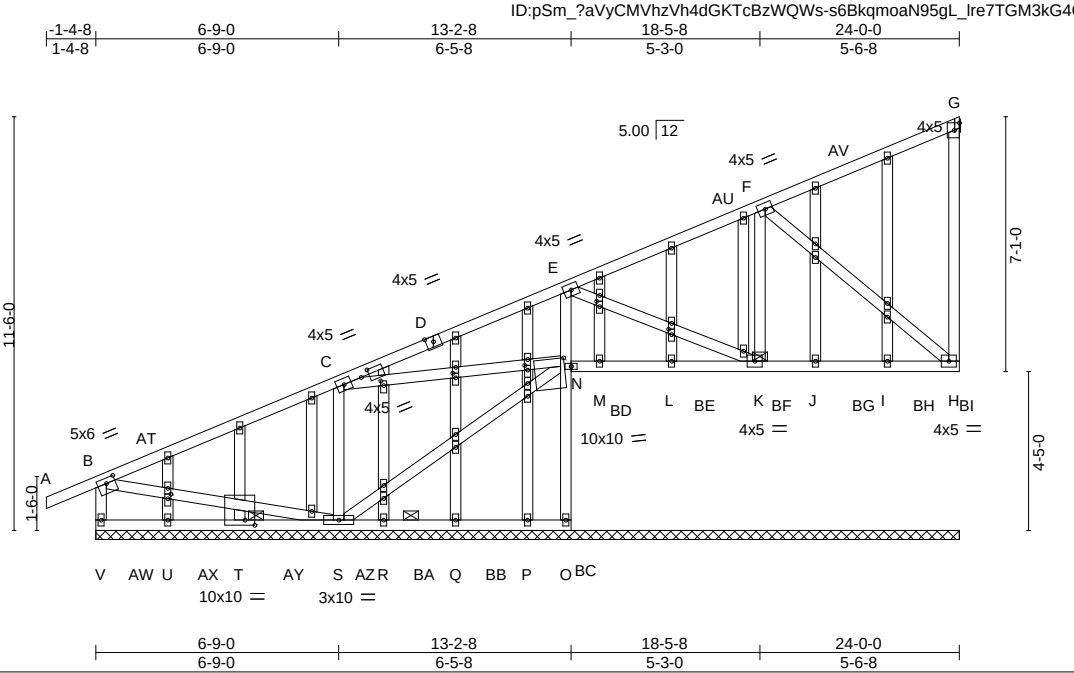

Plate Offsets (X,Y)-- [B:0-3-0,0-1-12], [N:0-2-4,0-3-2], [AC:0-1-12,0-1-0], [AE:0-1-12,0-1-0], [AF:0-1-9,0-1-0], [AI:0-1-9,0-1-0], [AL:0-1-9,0-1-0], [AL:0-2-12,0-1-10], [AP:0-3-4,0-1-12], [AR:0-1-9,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	0.00	A	n/r	120	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.31	Vert(CT)	0.01	A	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S							Weight: 167 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
E-O: 2x4 SPF No.3
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz V=-340(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) H, I, J, M, R except V=-118(LC 8), O=-103(LC 8), S=-140(LC 8), K=-115(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except H=320(LC 48), V=397(LC 2), O=460(LC 15), S=628(LC 2), K=528(LC 2), I=315(LC 47), J=297(LC 46), L=318(LC 44), M=312(LC 43), P=300(LC 42), Q=316(LC 41), R=287(LC 40), T=326(LC 38), U=305(LC 37)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-V=-363/129
BOT CHORD U-V=-161/377, T-U=-161/377, S-T=-161/377, N-O=-447/106, E-N=-426/103
WEBS C-S=-553/173, F-K=-455/108

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) -1-4-8 to 1-7-8, Exterior(2N) 1-7-8 to 20-10-4, Corner(3E) 20-10-4 to 23-10-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, I, J, M, R except (jt=lb) V=118, O=103, S=140, K=115.

May 2,2025

Continued on page 2

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NOTES-

13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) H, K, I, J, L, M.
14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
15) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	P	Monopitch	2	1	I73183949
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:37 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-C3_dtTsjBhjzRldpRh3R37R2?P13WgxTsreP81zKqSi

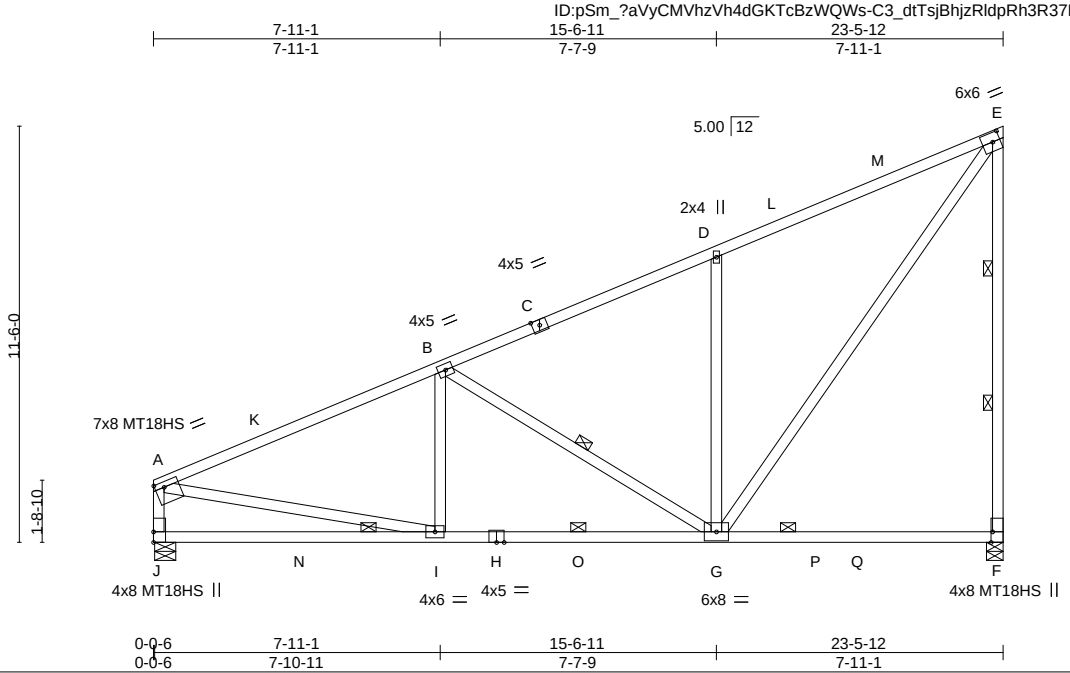

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [E:0-2-9,0-3-0], [F:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.27	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.40	F-G	>688	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.02	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.07	F-G	>999	240	Weight: 117 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
E-F,E-G: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt B-G
2 Rows at 1/3 pts E-F

REACTIONS. (size) F=0-5-8, J=0-7-0
Max Horz J=-380(LC 9)
Max Uplift F=-41(LC 8), J=-50(LC 8)
Max Grav F=1510(LC 14), J=1322(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1771/91, B-D=-1103/128, D-E=-1127/215, E-F=-1290/109, A-J=-1159/90
BOT CHORD I-J=0/545, G-I=0/1790
WEBS B-I=-10/324, B-G=-795/69, D-G=-664/132, E-G=-128/1760, A-I=-20/1287

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 20-4-0, Exterior(2E) 20-4-0 to 23-4-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F, J.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	P2	Jack-Closed	2	1	I73183950
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:38 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-gFY05ptLy_rq3vC?_OagcKzEKpOpF7Ic4VOzgTzKqSh

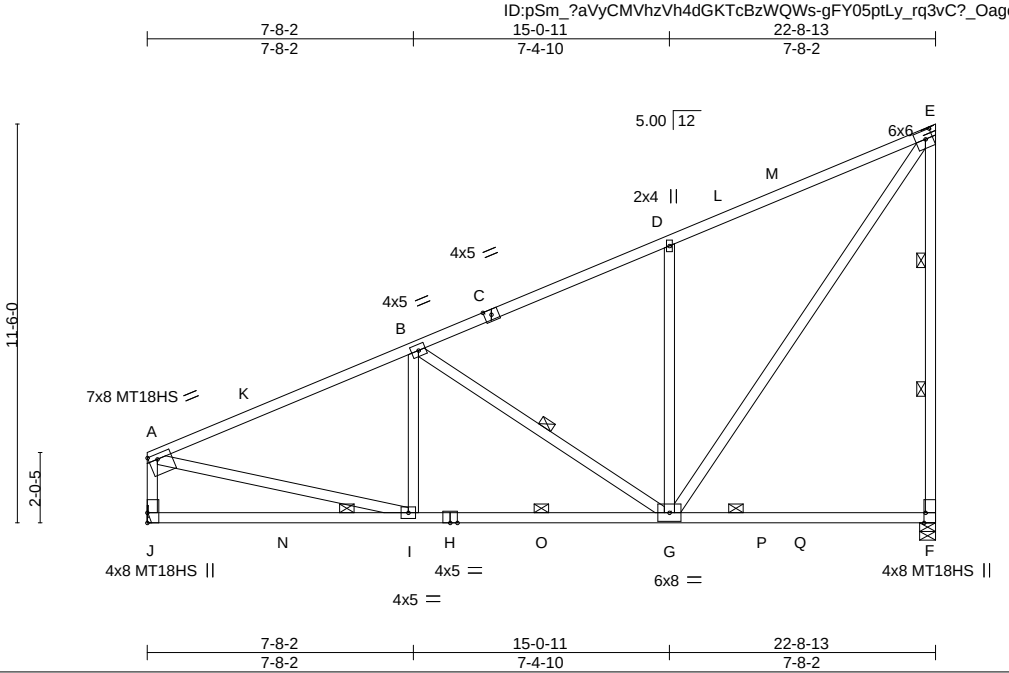

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [E:0-2-9,0-3-0], [F:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.25	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.36	F-G	>739	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.01	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.07	F-G	>999	240	Weight: 116 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except*
	E-F,E-G: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.	
BOT CHORD	6-0-0 oc bracing.	
WEBS	1 Row at midpt	B-G
	2 Rows at 1/3 pts	E-F

REACTIONS. (size) J=Mechanical, F=0-5-8
Max Horz J=-385(LC 9)
Max Uplift J=-32(LC 8), F=-16(LC 8)
Max Grav J=1275(LC 14), F=1466(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-J=-1123/70, A-B=-1593/57, B-D=-1025/110, D-E=-1045/184, E-F=-1251/84
BOT CHORD I-J=0/473, G-I=0/1626
WEBS A-I=0/1210, B-I=-55/291, B-G=-707/39, D-G=-642/104, E-G=-81/1669

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 18-4-2, Exterior(2R) 18-4-2 to 22-7-1; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) J, F.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	P3	Jack-Closed	2	1	I73183951
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:39 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-9S6Ol9tzjIzhh3nCY55v8YWOXDf?_h5mJ97WCvzKqSg

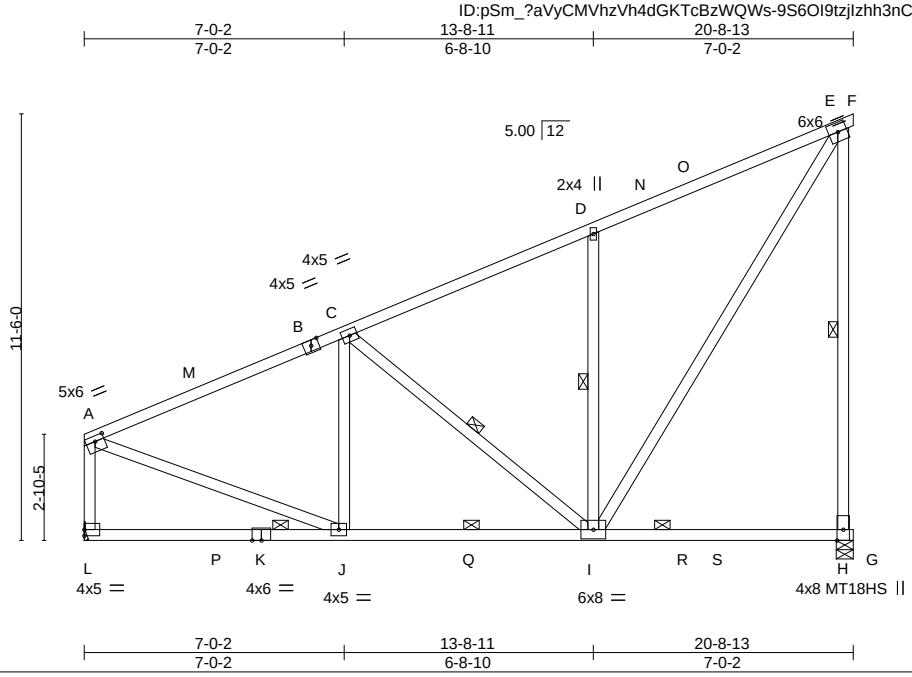

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.22	H-I	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.31	H-I	>786	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.01	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.07	H-I	>999	240	Weight: 111 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
E-H,E-I: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt E-H, C-I, D-I

REACTIONS. (size) L=Mechanical, H=0-5-8
Max Horz L=-398(LC 9)
Max Uplift L=-40(LC 8), H=-10(LC 8)
Max Grav L=1140(LC 14), H=1358(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-L=-1018/73, A-C=-1188/54, C-D=-820/110, D-E=-834/173, E-H=-1146/82
BOT CHORD J-L=0/414, I-J=0/1253
WEBS A-J=-16/983, C-I=-531/32, D-I=-573/83, E-I=-69/1425

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 16-5-14, Exterior(2R) 16-5-14 to 20-8-13; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) L, H.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	P4	Jack-Closed	2	1	I73183952
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:39 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-9S6OI9tzjIzhh3nCY55v8YWMVDhS_hLmJ97WCvzKqSg

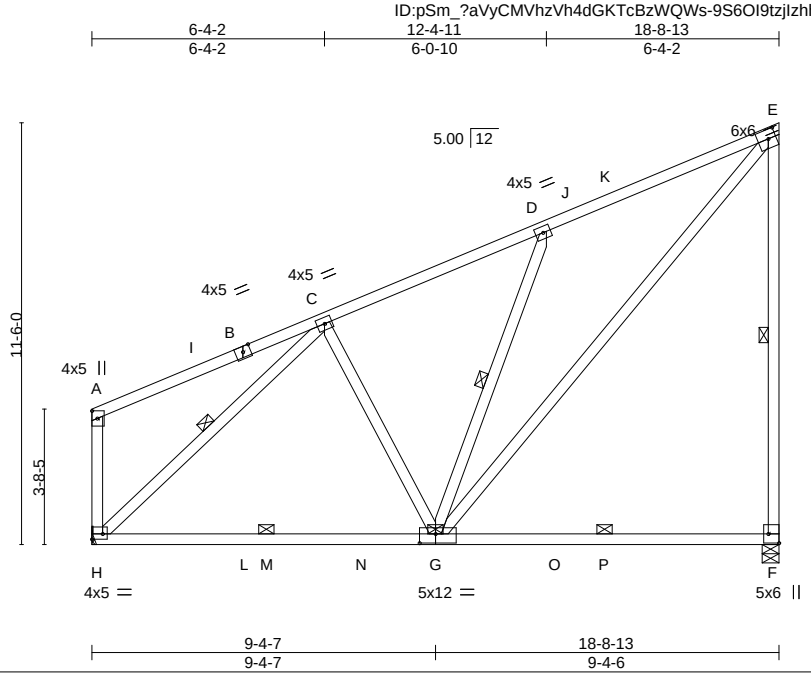

Plate Offsets (X,Y)-- [E:0-2-9,0-3-0], [F:Edge,0-3-8], [G:0-5-4,0-3-0], [H:Edge,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.41	F-G	>546	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.59	F-G	>376	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.01	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.09	F-G	>999	240	Weight: 110 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.3 *Except*
E-F,E-G: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt E-F, C-H, D-G

REACTIONS. (size) H=Mechanical, F=0-5-8
Max Horz H=-414(LC 9)
Max Uplift H=-50(LC 8), F=-20(LC 8)
Max Grav H=1062(LC 3), F=1270(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-H=-269/49, C-D=-870/101, D-E=-1120/194, E-F=-1028/88
BOT CHORD G-H=0/973
WEBS C-H=-934/74, D-G=-640/96, E-G=-89/1602

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 14-4-2, Exterior(2R) 14-4-2 to 18-7-1; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, F.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	P5	Jack-Closed	2	1	I73183953
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:40 2025 Page 1
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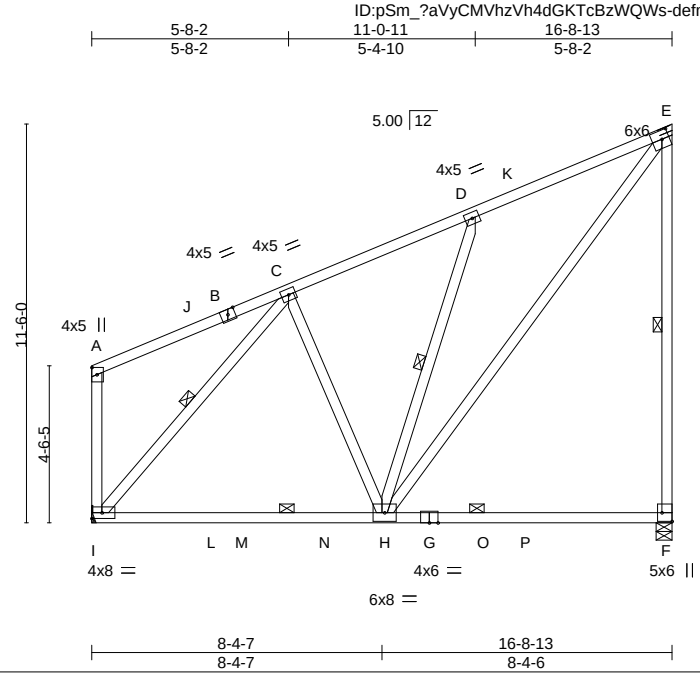

Plate Offsets (X,Y)-- [E:0-2-9,0-3-0], [F:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.31	F-H	>634	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.43	F-H	>457	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.01	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.08	F-H	>999	240	Weight: 100 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
E-F,E-H: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt E-F, C-I, D-H

REACTIONS. (size) I=Mechanical, F=0-5-8
Max Horz I=-430(LC 9)
Max Uplift I=-65(LC 8), F=-22(LC 8)
Max Grav I=951(LC 3), F=1158(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD C-D=-665/102, D-E=-850/177, E-F=-944/88
BOT CHORD H-I=0/762
WEBS C-I=-772/90, D-H=-545/78, E-H=-71/1330

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 12-4-2, Exterior(2R) 12-4-2 to 16-7-1; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) I, F.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	P6	Jack-Closed	2	1	I73183954
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:40 2025 Page 1
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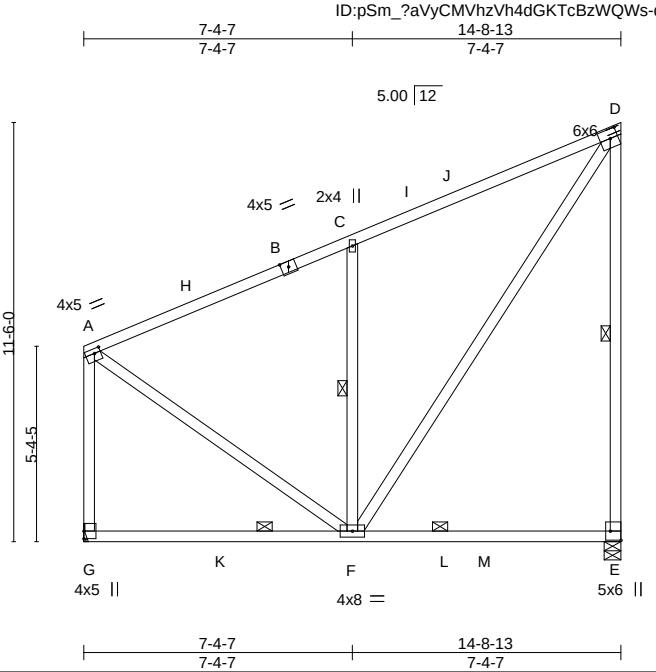

Plate Offsets (X,Y)-- [A:0-2-0,0-1-8], [D:0-2-9,0-3-0], [E:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.68	Vert(LL)	-0.22	E-F	>785	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.30	E-F	>581	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.06	E-F	>999	240	Weight: 87 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except* D-E,D-F: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt D-E, C-F

REACTIONS. (size) G=Mechanical, E=0-5-8
Max Horz G=-450(LC 9)
Max Uplift G=-87(LC 8), E=-27(LC 8)
Max Grav G=806(LC 3), E=1042(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-G=-698/124, A-C=-557/71, C-D=-603/165, D-E=-842/91
BOT CHORD F-G=0/397
WEBS A-F=-62/497, C-F=-675/158, D-F=-61/979

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-4-2, Exterior(2R) 10-4-2 to 14-7-1; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) G, E.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	P7	Jack-Closed	2	1	I73183955
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:41 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-5qD8jrvDFvDPwMxagW7NEzbnC1N1SdM2nTcdHozKqSe

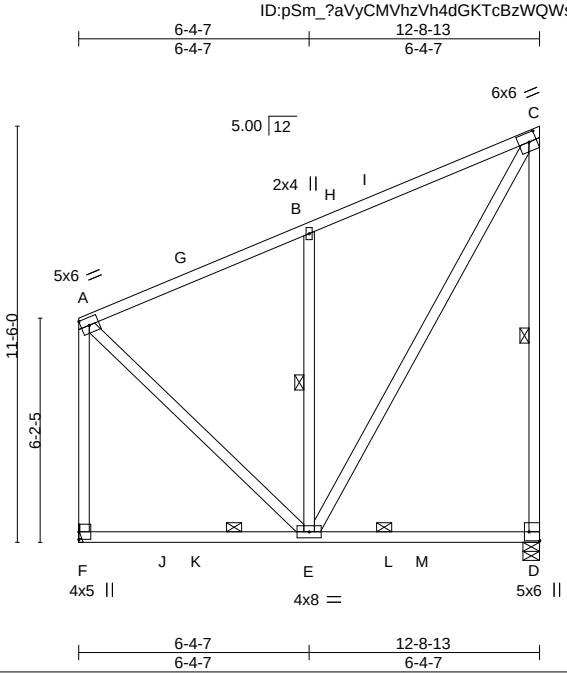

Plate Offsets (X,Y)-- [C:0-2-9,0-3-0], [D:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.18	D-E	>830	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.23	D-E	>638	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.06	D-E	>999	240	Weight: 82 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
C-D,C-E: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt C-D, B-E

REACTIONS. (size) F=Mechanical, D=0-5-8
Max Horz F=-468(LC 9)
Max Uplift F=-112(LC 8), D=-24(LC 8)
Max Grav F=724(LC 3), D=949(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-F=-601/143, A-B=-407/66, B-C=-450/154, C-D=-774/87
BOT CHORD E-F=0/397
WEBS A-E=-85/403, B-E=-583/155, C-E=-47/838

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-4-2, Exterior(2R) 8-4-2 to 12-7-1; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D except (jt=lb) F=112.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	P8	Jack-Closed	2	1	I73183956
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:41 2025 Page 1
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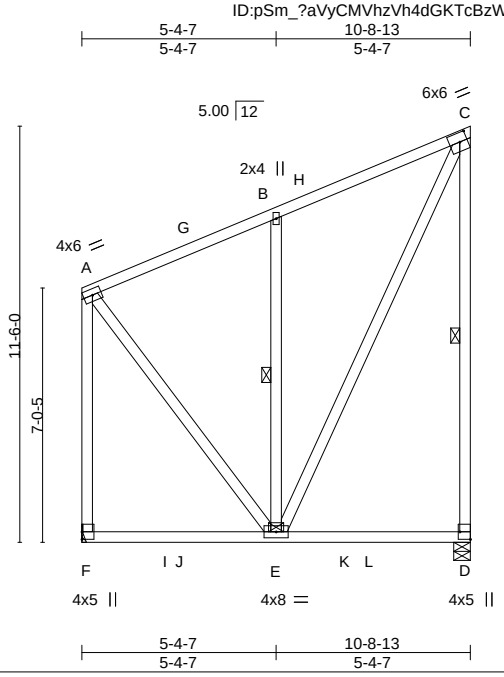

Plate Offsets (X,Y)-- [C:0-2-9,0-3-0], [D:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.11	D-E	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.14	D-E	>910	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.04	D-E	>999	240	Weight: 78 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
C-D,C-E: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt C-D, B-E

REACTIONS. (size) F=Mechanical, D=0-5-8
Max Horz F=-483(LC 9)
Max Uplift F=-144(LC 8), D=-12(LC 8)
Max Grav F=612(LC 3), D=862(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-F=-505/167, A-B=-286/59, B-C=-325/141, C-D=-709/77
BOT CHORD E-F=0/395
WEBS A-E=-113/325, B-E=-497/150, C-E=-28/725

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-4-2, Exterior(2R) 6-4-2 to 10-7-1; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D except (jt=lb) F=144.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	P9	Jack-Closed	2	1	I73183957
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:42 2025 Page 1
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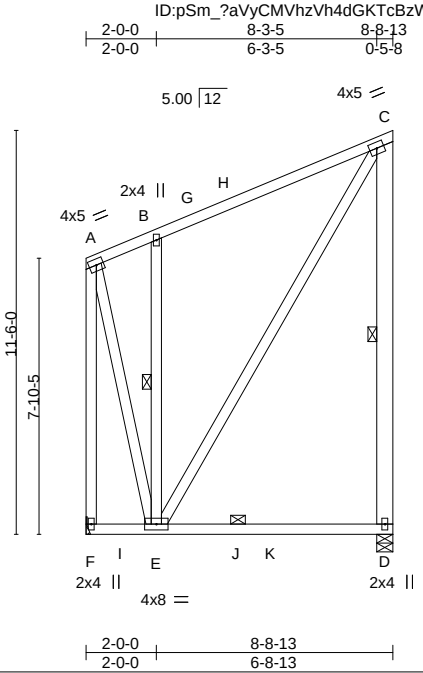

Scale = 1:65.6

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.15	D-E	>660	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.23	D-E	>444	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	D-E	>999	240	Weight: 81 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
C-D: 2x6 SPF No.2, C-E: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt C-D, B-E

REACTIONS. (size) F=Mechanical, D=0-5-8
Max Horz F=-495(LC 9)
Max Uplift F=-189(LC 8)
Max Grav F=475(LC 3), D=797(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-F=-546/170, B-C=-317/102, C-D=-640/12
BOT CHORD E-F=-0/389
WEBS A-E=-225/576, B-E=-546/266, C-E=0/598

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-3-2, Exterior(2R) 4-3-2 to 8-6-1; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) F=189.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	P10	Roof Special	2	1	I73183958
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:38 2025 Page 1

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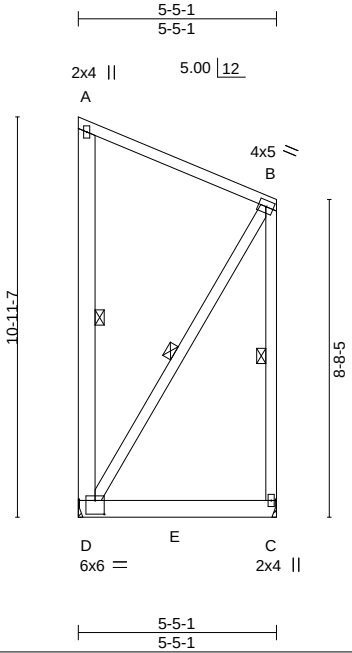

Scale = 1:63.0

Plate Offsets (X,Y)-- [D:0-3-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.04	C-D	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.05	C-D	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.00	C	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.00	D	****	240	Weight: 55 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x6 SPF No.3 *Except*
B-C: 2x4 SPF No.2, B-D: 2x4 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt A-D, B-C, B-D

REACTIONS. (size) C=Mechanical, D=Mechanical
Max Horz D=-547(LC 8)
Max Uplift D=-681(LC 8)
Max Grav C=610(LC 14), D=376(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-504/0
WEBS B-D=-0/637

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) D=681.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	Q	Diagonal Hip Girder	1	3	I73183959
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:42 2025 Page 1

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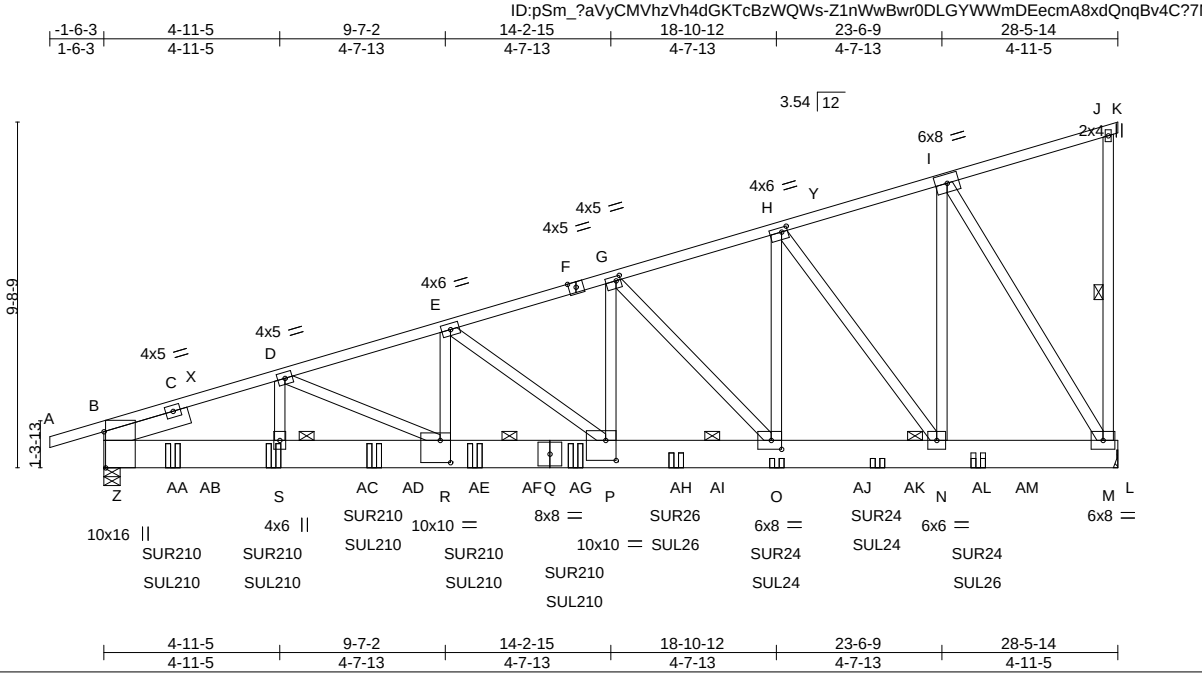

Plate Offsets (X,Y)-- [B:1-0-3,Edge], [G:0-1-8,0-1-8], [H:0-2-0,0-1-8], [O:0-3-8,0-3-0], [P:0-3-8,0-6-12], [R:0-3-8,0-7-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.24	R	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.42	R	>805	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.05	M	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.10	P-R	>999	240	Weight: 673 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* A-F: 2x4 SPF 2100F 1.8E
BOT CHORD	2x10 SP 2400F 2.0E *Except* L-Q: 2x10 SP No.1
WEBS	2x4 SPF No.3 *Except* I-N: 2x4 SPF No.2
SLIDER	Left 2x6 SPF No.3 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt J-M

REACTIONS. (size) M=Mechanical, B=0-5-8
Max Horz B=-283(LC 9)
Max Uplift M=-905(LC 8), B=-310(LC 8)
Max Grav M=6529(LC 3), B=10146(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-D=-16473/561, D-E=-17368/867, E-G=-12997/933, G-H=-8395/852, H-I=-3961/607
BOT CHORD	B-S=-529/15616, R-S=-529/15616, P-R=-782/16665, O-P=-793/12418, N-O=-667/8015, M-N=-380/3762
WEBS	D-S=-319/347, D-R=-280/1163, E-R=0/4043, E-P=-5374/0, G-P=-48/5749, G-O=-6451/185, H-O=-341/6758, H-N=-7196/485, I-N=-899/6967, I-M=-7246/996

NOTES-

1) N/A
2) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
   Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-6-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
3) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3) -1-6-3 to 2-8-11, Exterior(2R) 2-8-11 to 28-5-14; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
6) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
7) Unbalanced snow loads have been considered for this design.
8) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
11) Refer to girder(s) for truss to truss connections.

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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NOTES-

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) M=905, B=310.
13) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
14) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
15) Use Simpson Strong-Tie SUR210 (10-10d Girder, 10-10dx1 1/2 Truss) or equivalent spaced at 2-9-15 oc max. starting at 1-11-5 from the left end to 13-3-1 to connect truss(es) to front face of bottom chord.
16) Use Simpson Strong-Tie SUR26 (6-10d Girder, 6-10dx1 1/2 Truss) or equivalent at 16-1-0 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
17) Use Simpson Strong-Tie SUR24 (4-16d Girder, 4-10dx1 1/2 Truss) or equivalent at 18-10-15 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
18) Use Simpson Strong-Tie SUR24 (4-10d Girder, 4-10dx1 1/2 Truss) or equivalent spaced at 2-9-15 oc max. starting at 21-8-14 from the left end to 24-6-13 to connect truss(es) to front face of bottom chord.
19) Use Simpson Strong-Tie SUL210 (10-10d Girder, 10-10dx1 1/2 Truss) or equivalent spaced at 2-9-15 oc max. starting at 1-11-5 from the left end to 13-3-1 to connect truss(es) to back face of bottom chord.
20) Use Simpson Strong-Tie SUL26 (6-10d Girder, 6-10dx1 1/2 Truss) or equivalent spaced at 8-5-13 oc max. starting at 16-1-0 from the left end to 24-6-13 to connect truss(es) to back face of bottom chord.
21) Use Simpson Strong-Tie SUL24 (4-16d Girder, 4-10dx1 1/2 Truss) or equivalent at 18-10-15 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
22) Use Simpson Strong-Tie SUL24 (4-10d Girder, 4-10dx1 1/2 Truss) or equivalent at 21-8-14 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
23) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-J=-51, J-K=-51, L-T=-30
   Concentrated Loads (lb)
   Vert: S=-1593(F=-797, B=-797) O=-832(F=-416, B=-416) AA=-1773(F=-887, B=-887) AD=-1448(F=-724, B=-724) AE=-1297(F=-648, B=-648) AG=-1136(F=-568, B=-568) AH=-983(F=-492, B=-492) AK=-690(F=-345, B=-345) AL=-464(F=-232, B=-232)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R	Half Hip Girder	1	2	I73183960
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:44 2025 Page 1
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4-1-12	8-0-0	13-4-0	18-8-0	24-0-0	29-11-8
4-1-12	3-10-4	5-4-0	5-4-0	5-4-0	5-11-8

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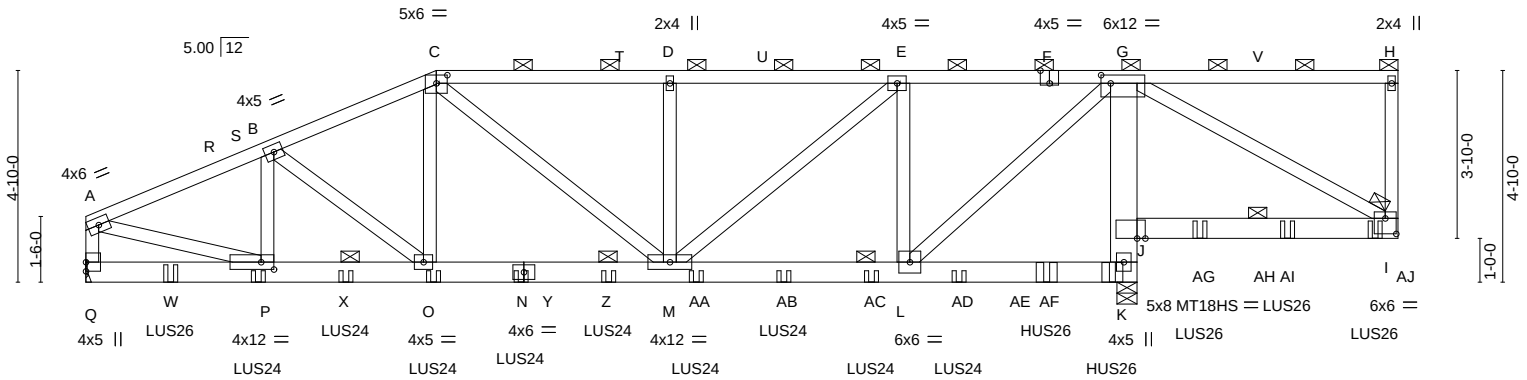

4-1-12	8-0-0	13-4-0	18-8-0	24-0-0	29-11-8
4-1-12	3-10-4	5-4-0	5-4-0	5-4-0	5-11-8

Plate Offsets (X,Y)-- [C:0-3-0,0-2-4], [F:0-2-8,Edge], [G:0-2-10,0-2-4], [I:0-3-0,0-4-4], [J:0-2-4,Edge], [P:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.09	M-O	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.16	M-O	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.81	Horz(CT)	0.02	K	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.04	M-O	>999	240	Weight: 348 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SP No.1 *Except*
G-K: 2x8 SP No.1, I-J: 2x6 SPF No.2
WEBS 2x4 SPF No.3 *Except*
G-L: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): C-H.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) Q=Mechanical, K=0-5-8
Max Horz Q=-151(LC 9)
Max Uplift Q=-277(LC 8), K=-516(LC 8)
Max Grav Q=3073(LC 2), K=6408(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-4116/378, B-C=-4114/371, C-D=-3805/329, D-E=-3805/329, E-G=-1927/170, A-Q=-2753/261
BOT CHORD P-Q=-2/321, O-P=-303/3740, M-O=-245/3703, L-M=-61/1927, K-L=-1683/202, J-K=-5669/480, G-J=-4850/418, I-J=-1934/233
WEBS B-P=-380/65, B-O=-142/307, C-O=-89/1134, C-M=-58/392, D-M=-500/81, E-M=-207/2449, E-L=-1937/188, G-I=-210/2296, A-P=-314/3646, G-L=-352/4822

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-9-1, Exterior(2R) 3-9-1 to 12-2-15, Interior(1) 12-2-15 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
6) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Refer to girder(s) for truss to truss connections.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) Q=277, K=516.

May 2,2025

Continued on page 2

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NOTES-

13) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
14) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
16) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent at 1-11-4 from the left end to connect truss(es) to back face of bottom chord.
17) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 3-11-4 from the left end to 19-11-4 to connect truss(es) to back face of bottom chord.
18) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 21-11-4 from the left end to connect truss(es) to back face of bottom chord.
19) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 23-5-4 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
20) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 25-5-4 from the left end to 29-5-4 to connect truss(es) to back face of bottom chord.
21) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-C=-51, C-H=-51, K-Q=-30, I-J=-30
   Concentrated Loads (lb)
   Vert: N=-392(B) K=-400(B) P=-274(B) O=-388(B) W=-274(B) X=-274(B) Z=-392(B) AA=-392(B) AB=-392(B) AC=-392(B) AD=-392(B) AF=-392(B) AG=-510(B) AI=-485(B) AJ=-469(B)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R2	Half Hip	1	1	I73183961
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:56 2025 Page 1
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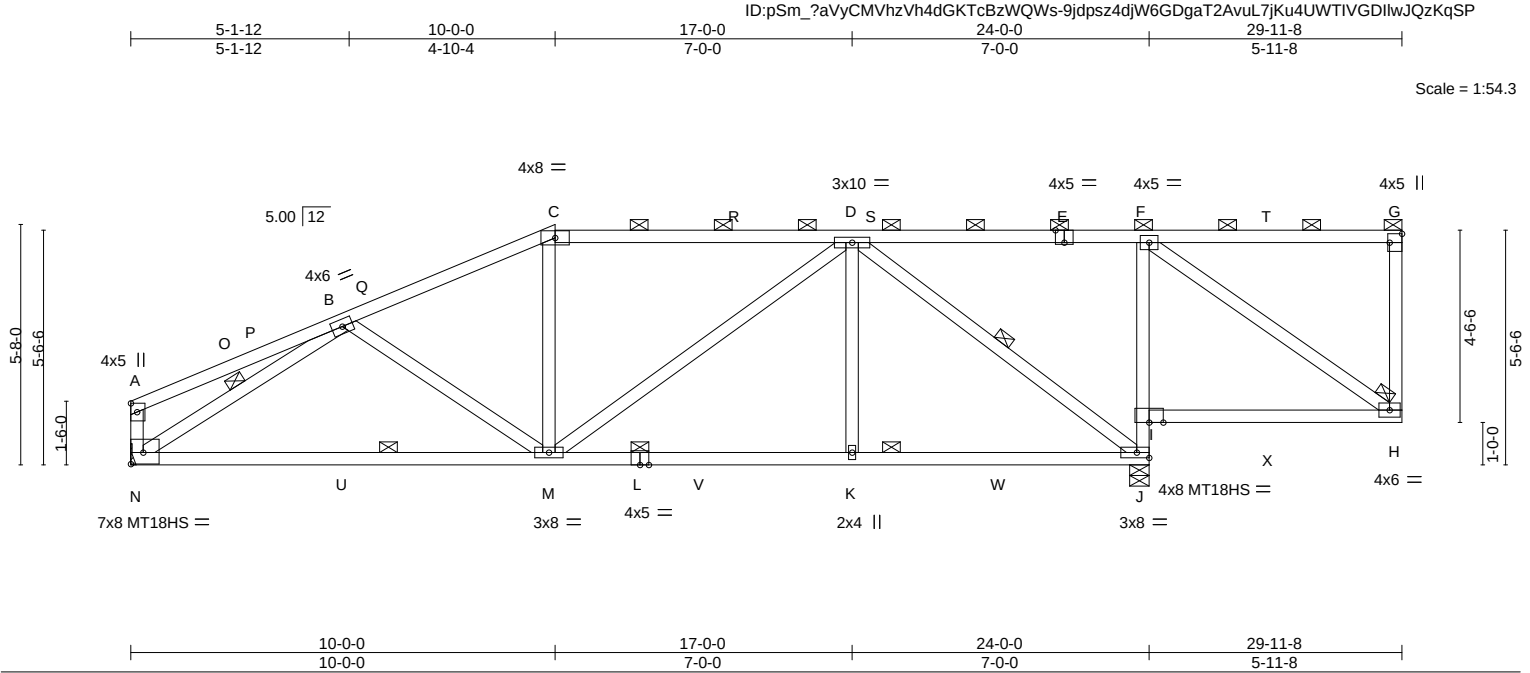

Plate Offsets (X,Y)-- [E:0-2-8,Edge], [G:Edge,0-3-8], [N:Edge,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.40	M-N	>710	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.65	M-N	>438	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.04	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	J-K	>999	240	Weight: 132 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	H-I: 2x4 SPF No.2
WEBS	2x4 SPF No.3 *Except*
	A-N: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-0-8 max.): C-G.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt D-J, B-N

REACTIONS. (size) J=0-5-8, N=Mechanical
Max Horz N=-180(LC 9)
Max Uplift J=-199(LC 8), N=-22(LC 8)
Max Grav J=2042(LC 2), N=1222(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-414/0, B-C=-1519/51, C-D=-1343/67, D-F=-17/435, A-N=-295/26
BOT CHORD	M-N=-6/1424, K-M=0/1056, J-K=0/1056, I-J=-983/201, F-I=-874/153, H-I=-502/161
WEBS	D-M=-35/421, D-K=0/457, D-J=-1689/69, F-H=-125/628, B-N=-1399/91

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-9-1, Exterior(2R) 5-9-1 to 14-2-15, Interior(1) 14-2-15 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N except (jt=lb) J=199.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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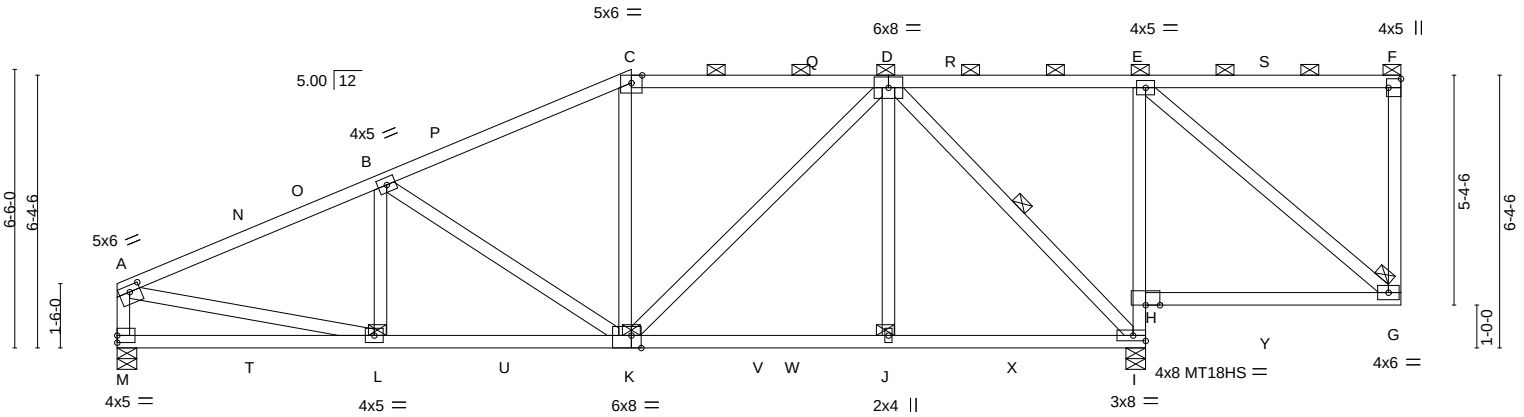
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R3	Half Hip	1	1	I73183962
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:05 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-OSgDl2BHbHF?o2mB4ZZ?C1buhiZd4OgbICQu7PzKqSG

6-1-12	12-0-0	18-0-0	24-0-0	29-11-8
6-1-12	5-10-4	6-0-0	6-0-0	5-11-8

Scale = 1:53.8



6-1-12	12-0-0	18-0-0	24-0-0	29-11-8
6-1-12	5-10-4	6-0-0	6-0-0	5-11-8

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [F:Edge,0-3-8], [K:0-2-12,Edge]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.15	J-K	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.21	K-L	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.03	I	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	K-L	>999	240	Weight: 141 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	E-I: 2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-9-12 max.): C-F.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt D-I

REACTIONS. (size) M=0-5-8, I=0-5-8
Max Horz M=-208(LC 9)
Max Uplift M=-20(LC 8), I=-201(LC 8)
Max Grav M=1319(LC 14), I=2167(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1845/42, B-C=-1429/67, C-D=-1266/82, D-E=0/380, A-M=-1185/52
BOT CHORD L-M=0/352, K-L=0/1757, J-K=0/928, I-J=0/928, H-I=-949/196, E-H=-840/145, G-H=-422/159
WEBS B-K=-553/52, D-K=-42/600, D-J=0/442, D-I=-1666/59, E-G=-112/565, A-L=0/1436

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-9-1, Exterior(2R) 7-9-1 to 16-2-15, Interior(1) 16-2-15 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) M except (jt=lb) I=201.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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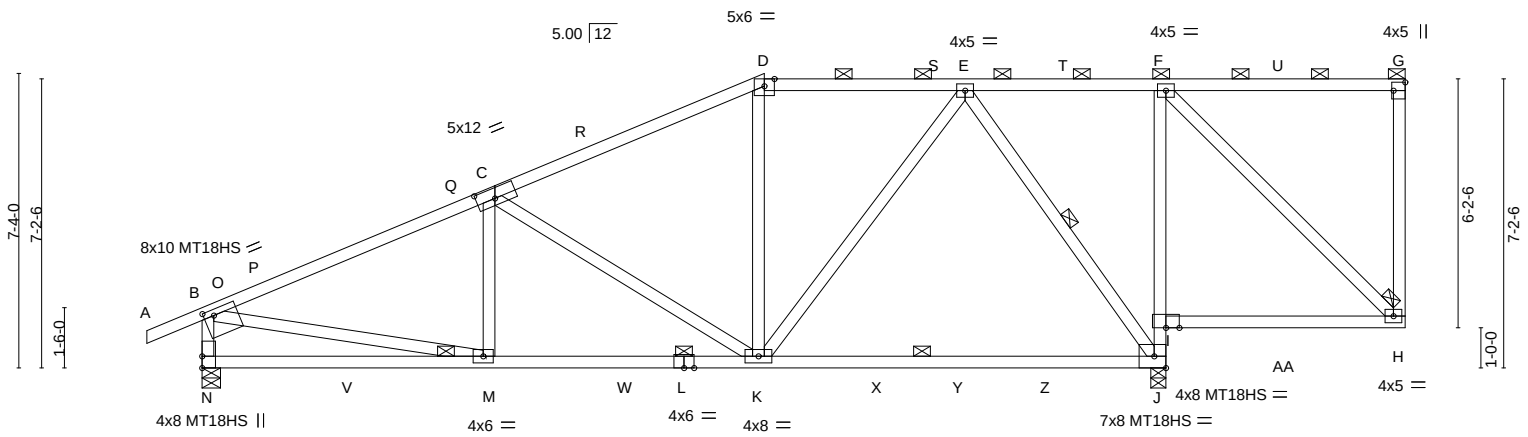
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R4	Half Hip	1	1	I73183963
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:08 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-o1MLO4E9uCdZfWVmlh6iqfDMZvZgHiM1_AfYkkzKqSD

-1-4-8	7-1-12	14-0-0	19-0-0	24-0-0	29-11-8
1-4-8	7-1-12	6-10-4	5-0-0	5-0-0	5-11-8

Scale = 1:57.4



7-1-12	14-0-0	24-0-0	29-11-8
7-1-12	6-10-4	10-0-0	5-11-8

Plate Offsets (X,Y)-- [B:0-3-0,0-1-12], [C:0-5-8,0-3-0], [G:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.46	J-K	>619	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.77	J-K	>368	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.02	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	J-K	>999	240	Weight: 143 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	H-I: 2x4 SPF No.2
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-4-12 max.): D-G.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt E-J

REACTIONS. (size) N=0-5-8, J=0-4-8
Max Horz N=-231(LC 9)
Max Uplift N=-68(LC 8), J=-202(LC 8)
Max Grav N=1410(LC 15), J=2196(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1820/37, C-D=-1269/61, D-E=-1103/80, E-F=0/317, B-N=-1243/108
BOT CHORD M-N=0/488, K-M=0/1734, J-K=0/622, I-J=-923/191, F-I=-808/138, H-I=-358/161
WEBS C-M=-46/281, C-K=-693/64, F-H=-105/513, B-M=0/1286, E-K=-7/968, E-J=-1359/87

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 9-9-1, Exterior(2R) 9-9-1 to 18-2-15, Interior(1) 18-2-15 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N except (jt=lb) J=202.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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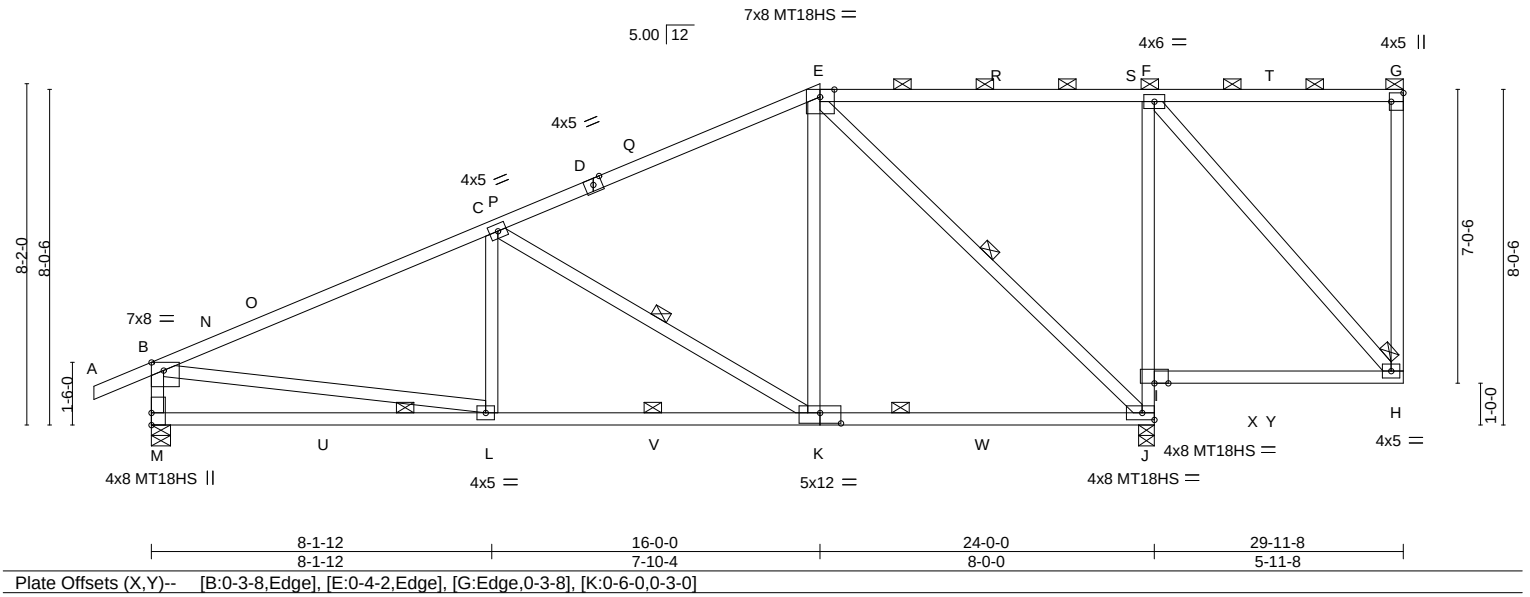
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R5	Half Hip	1	1	I73183964
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:09 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-GDwkbQFnfWlQHg4zJPdxMtmUfJxK09pADqO6GAzKqSC

-1-4-8	8-1-12	16-0-0	24-0-0	29-11-8
1-4-8	8-1-12	7-10-4	8-0-0	5-11-8

Scale = 1:55.1



8-1-12	16-0-0	24-0-0	29-11-8
8-1-12	7-10-4	8-0-0	5-11-8

Plate Offsets (X,Y)-- [B:0-3-8,Edge], [E:0-4-2,Edge], [G:Edge,0-3-8], [K:0-6-0,0-3-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.26	K-L	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.37	J-K	>772	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.03	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	J-K	>999	240	Weight: 143 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	H-I: 2x4 SPF No.2
WEBS	2x4 SPF No.3 *Except*
	E-J: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): E-G.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt C-K, E-J

REACTIONS. (size) M=0-5-8, J=0-4-8
Max Horz M=-256(LC 9)
Max Uplift M=-65(LC 8), J=-204(LC 8)
Max Grav M=1403(LC 15), J=2236(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1818/34, C-E=-1009/71, E-F=0/289, B-M=-1227/109
BOT CHORD L-M=0/554, K-L=0/1755, J-K=0/961, I-J=-1065/214, F-I=-959/157, H-I=-315/161
WEBS C-L=0/364, C-K=-955/58, E-K=0/908, E-J=-1540/52, F-H=-92/483, B-L=0/1229

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 11-9-1, Exterior(2R) 11-9-1 to 20-2-15, Interior(1) 20-2-15 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) M except (jt=lb) J=204.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R6	Half Hip	1	1	I73183965
					Job Reference (optional)

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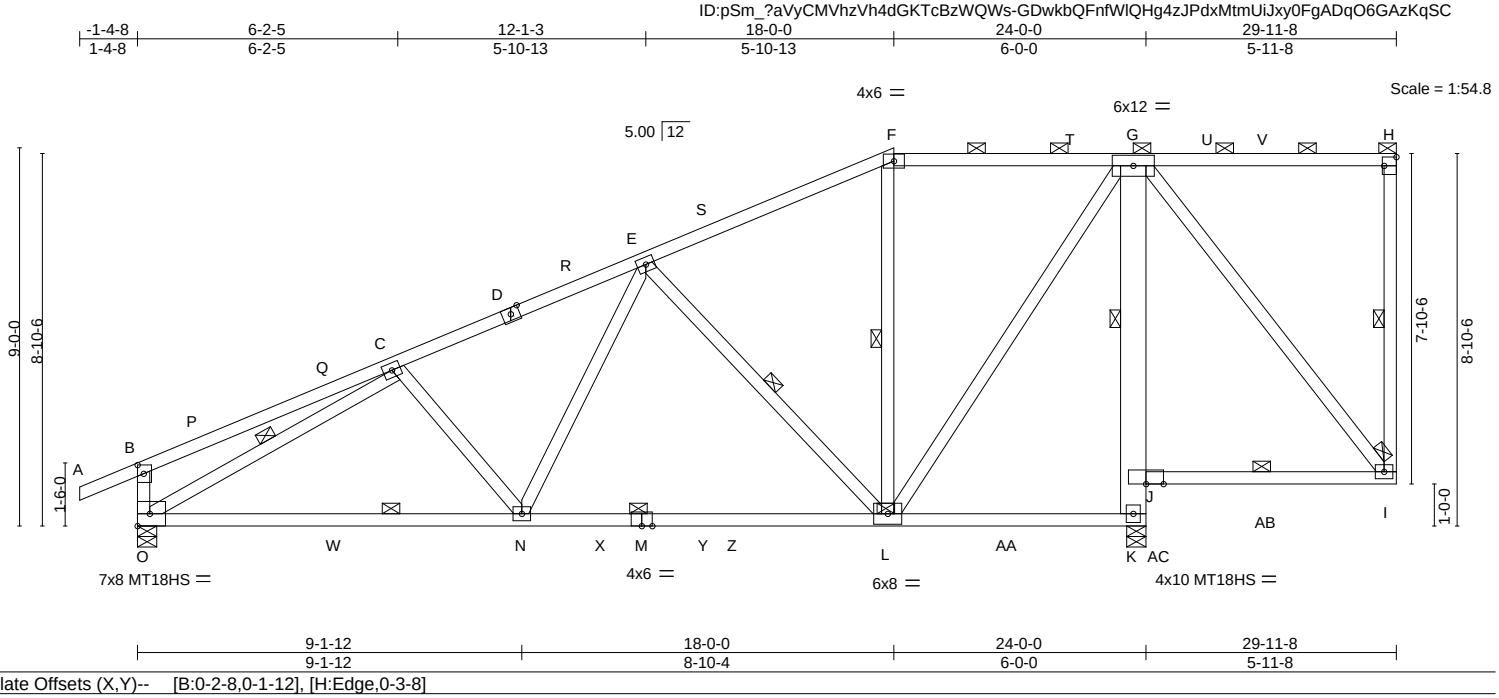

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [H:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.34	N-O	>836	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.50	N-O	>562	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.03	K	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	N	>999	240	Weight: 168 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	G-K: 2x8 SP No.1, I-J: 2x4 SPF No.2
WEBS	2x4 SPF No.3 *Except*
	G-L: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): F-H.
BOT CHORD	6-0-0 oc bracing. Except: 1 Row at midpt G-J
WEBS	1 Row at midpt H-I, E-L, F-L, C-O

REACTIONS. (size) K=0-5-8, O=0-5-8
Max Horz O=-281(LC 9)
Max Uplift K=-212(LC 8), O=-62(LC 8)
Max Grav K=2285(LC 15), O=1392(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-417/24, C-E=-1654/40, E-F=-699/77, F-G=-579/93, B-O=-466/103
BOT CHORD N-O=0/1705, L-N=0/1345, K-L=-275/160, J-K=-2156/241, G-J=-2016/180, I-J=-300/172
WEBS E-N=0/651, E-L=-953/73, G-I=-97/487, C-O=-1467/14, G-L=-39/1476

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 13-9-1, Exterior(2R) 13-9-1 to 22-2-15, Interior(1) 22-2-15 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) All plates are 4x5 MT20 unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O except (jt=lb) K=212.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R7	Half Hip	1	1	I73183966
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:10 2025 Page 1
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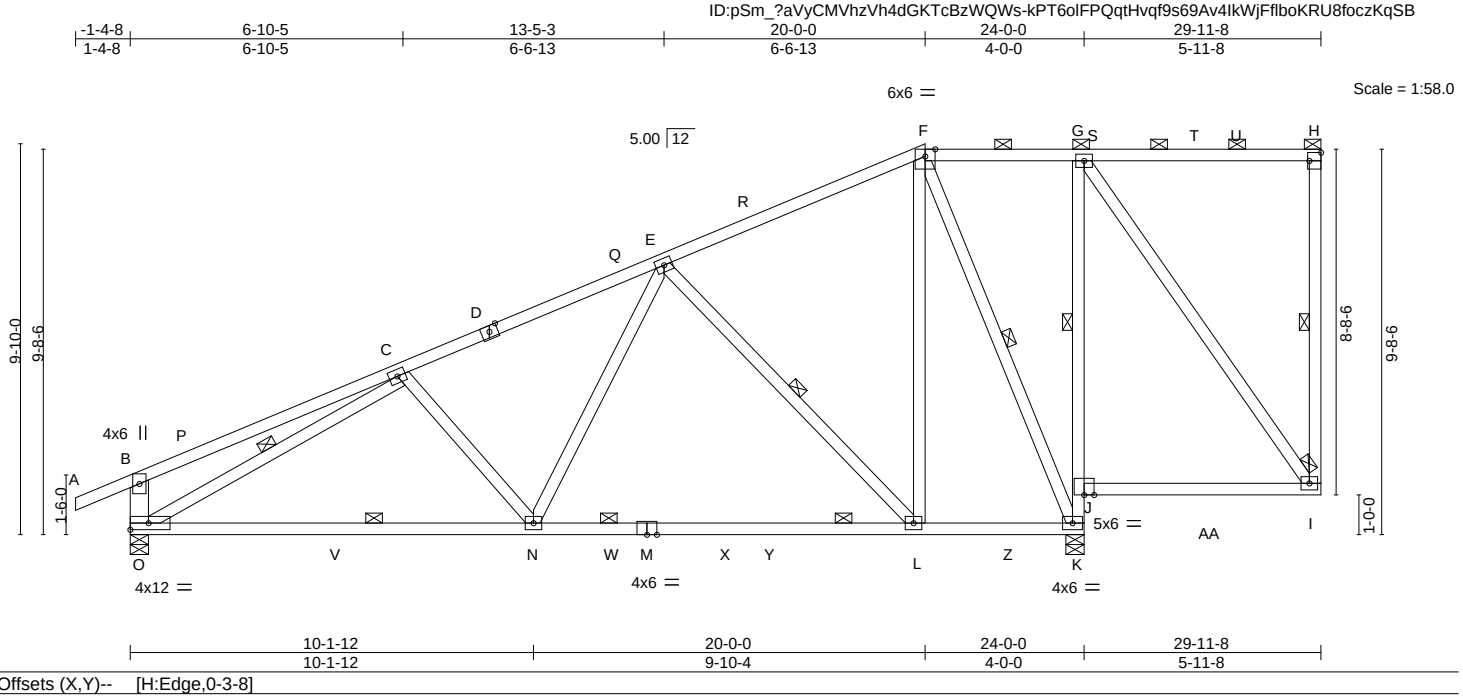

Plate Offsets (X,Y)-- [H:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.42	N-O	>674	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.63	N-O	>448	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.03	K	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	N	>999	240	Weight: 159 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
M-O,K-M: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3 *Except*
B-O: 2x6 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): F-H.
BOT CHORD 6-0-0 oc bracing. Except:
1 Row at midpt G-J
WEBS 1 Row at midpt H-I, E-L, F-K, C-O

REACTIONS. (size) K=0-5-8, O=0-5-8
Max Horz O=-306(LC 9)
Max Uplift K=-209(LC 8), O=-63(LC 8)
Max Grav K=2278(LC 15), O=1403(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-514/22, C-E=-1598/40, E-F=-516/84, F-G=0/271, B-O=-529/109
BOT CHORD N-O=0/1706, L-N=0/1252, K-L=0/487, J-K=-904/190, G-J=-800/121, I-J=-259/173
WEBS C-N=-280/99, E-N=0/776, E-L=-1087/81, F-L=0/1213, F-K=-1531/43, G-I=-86/457, C-O=-1350/17

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 15-9-1, Exterior(2R) 15-9-1 to 24-2-15, Interior(1) 24-2-15 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 4x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O except (jt=lb) K=209.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R8	Hip	1	1	I73183967
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:11 2025 Page 1
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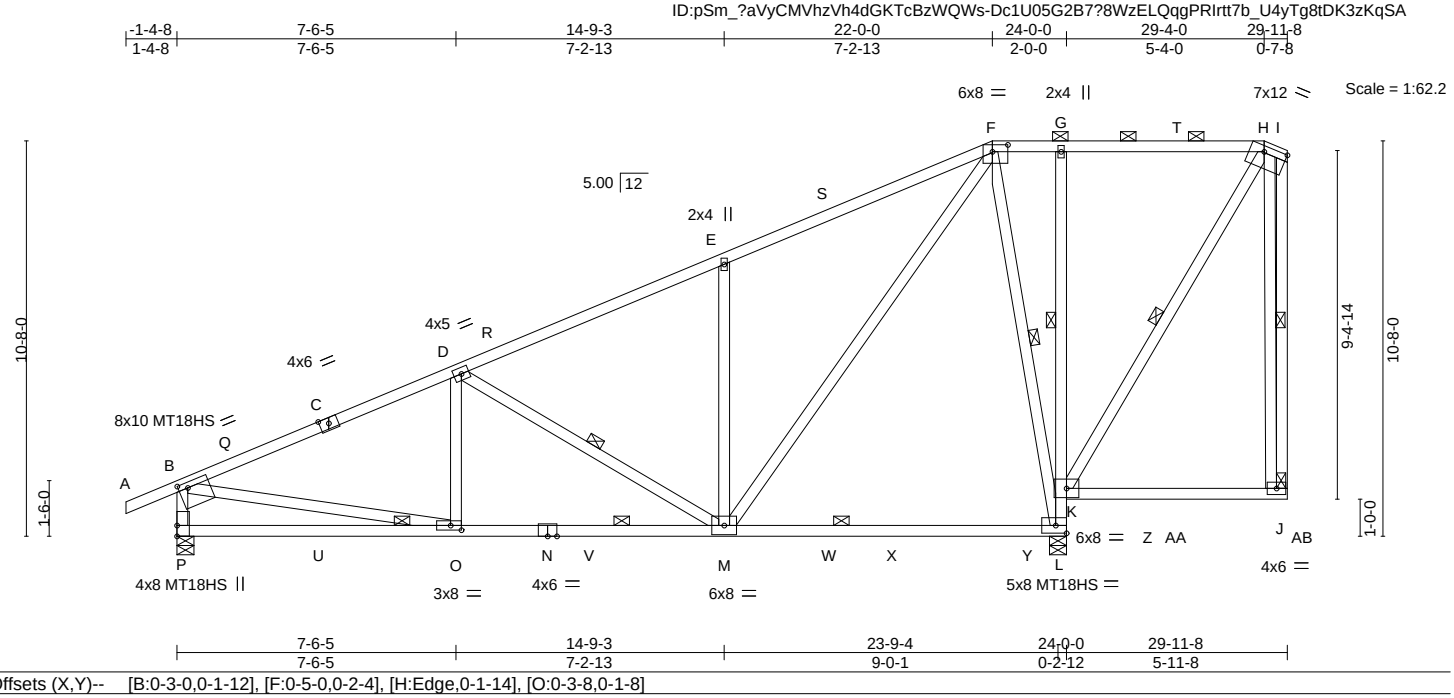

Plate Offsets (X,Y)-- [B:0-3-0,0-1-12], [F:0-5-0,0-2-4], [H:Edge,0-1-14], [O:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.37	L-M	>772	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.59	L-M	>482	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.02	L	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	L-M	>999	240	Weight: 174 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
J-K: 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
F-M,F-L,H-K: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): F-H.
BOT CHORD 6-0-0 oc bracing. Except:
1 Row at midpt G-K
WEBS 1 Row at midpt D-M, F-L, H-K, H-J

REACTIONS. (size) P=0-5-8, L=0-5-8
Max Horz P=-327(LC 9)
Max Uplift P=-57(LC 8), L=-215(LC 8)
Max Grav P=1374(LC 15), L=2297(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-D=-1760/15, D-E=-1129/53, E-F=-1188/137, B-P=-1232/99, I-J=0/362
BOT CHORD O-P=0/564, M-O=0/1747, K-L=-848/176, G-K=-413/39
WEBS D-O=-1/318, D-M=-738/44, E-M=-675/133, B-O=0/1204, F-M=-68/1712, F-L=-1308/96, H-K=-433/75, H-J=-279/228

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 17-9-1, Exterior(2R) 17-9-1 to 29-4-0, Exterior(2E) 29-4-0 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) P except (jt=lb) L=215.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R9	Hip	1	1	I73183968
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:12 2025 Page 1

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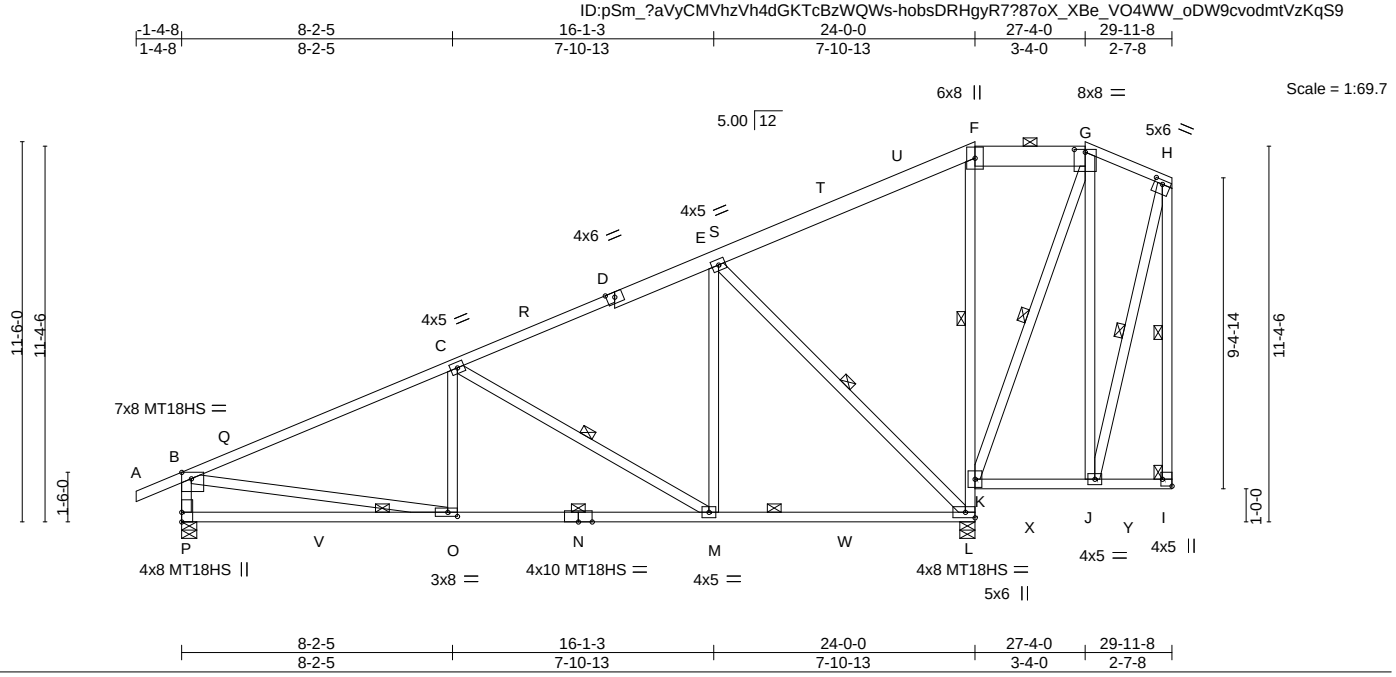

Plate Offsets (X,Y)-- [B:0-3-8,Edge], [G:0-4-0,0-1-0], [H:0-3-0,0-1-8], [I:Edge,0-3-8], [O:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.26	M-O	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.36	O-P	>781	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03	L	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	L-M	>999	240	Weight: 189 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
D-F: 2x6 SPF No.2, F-G: 2x8 SP No.1
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
I-K: 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
E-L,G-K,B-P: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): F-G.
BOT CHORD 6-0-0 oc bracing. Except:
1 Row at midpt F-K
WEBS 1 Row at midpt C-M, E-L, G-K, H-I, H-J

REACTIONS. (size) P=0-5-8, L=0-5-8
Max Horz P=-327(LC 9)
Max Uplift P=-57(LC 8), L=-206(LC 8)
Max Grav P=1384(LC 15), L=2218(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1770/13, C-E=-1028/61, E-F=-34/326, B-P=-1256/100, H-I=-4/288
BOT CHORD O-P=0/636, M-O=0/1746, L-M=0/992, K-L=-993/204, F-K=-535/92
WEBS C-O=0/369, C-M=-873/40, E-M=0/867, E-L=-1511/72, G-K=-445/83, G-J=-183/352, B-O=0/1171, H-J=-285/88

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 19-9-1, Exterior(2R) 19-9-1 to 27-4-0, Exterior(2E) 27-4-0 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) P except (jt=lb) L=206.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R10	ROOF SPECIAL	3	1	I73183969
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:44 2025 Page 1
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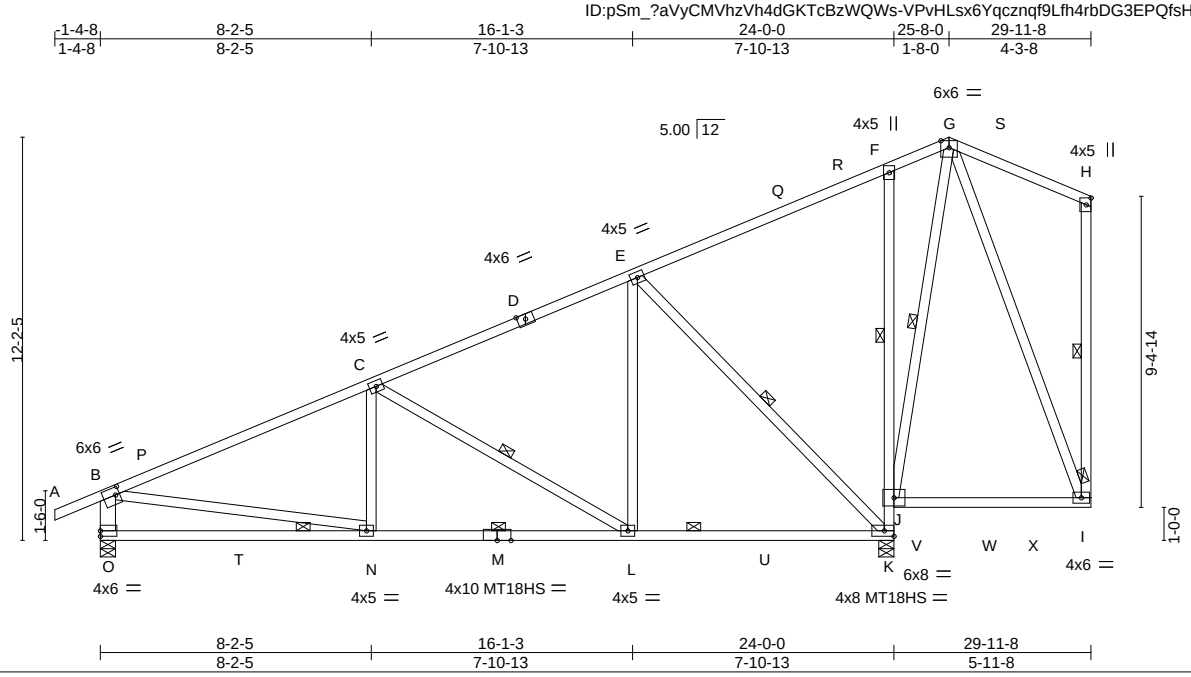

Plate Offsets (X,Y)-- [B:0-1-8,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.26	L-N	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.36	K-L	>797	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03	K	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	K-L	>999	240	Weight: 167 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
I-J: 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
E-K,G-J,G-I: 2x4 SPF No.2, B-O: 2x6 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing. Except:
1 Row at midpt F-J
WEBS 1 Row at midpt C-L, E-K, G-J, H-I

REACTIONS. (size) O=0-5-8, K=0-5-8
Max Horz O=-327(LC 9)
Max Uplift O=-58(LC 8), K=-214(LC 8)
Max Grav O=1390(LC 18), K=2273(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1768/12, C-E=-1034/55, E-F=0/330, B-O=-1270/103
BOT CHORD N-O=0/640, L-N=0/1723, K-L=0/958, J-K=-1054/217, F-J=-498/133
WEBS C-N=0/363, C-L=-886/47, E-L=0/872, E-K=-1470/61, G-J=-520/11, B-N=0/1164, G-I=-155/384

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 22-8-0, Exterior(2R) 22-8-0 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O except (jt=lb) K=214.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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MiTek®
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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R11	Roof Special	1	1	I73183970
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:45 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-zcTfZCykJ8kqP_ELvMCJOpmQ3emUOJXeh5aqQZzKqSa

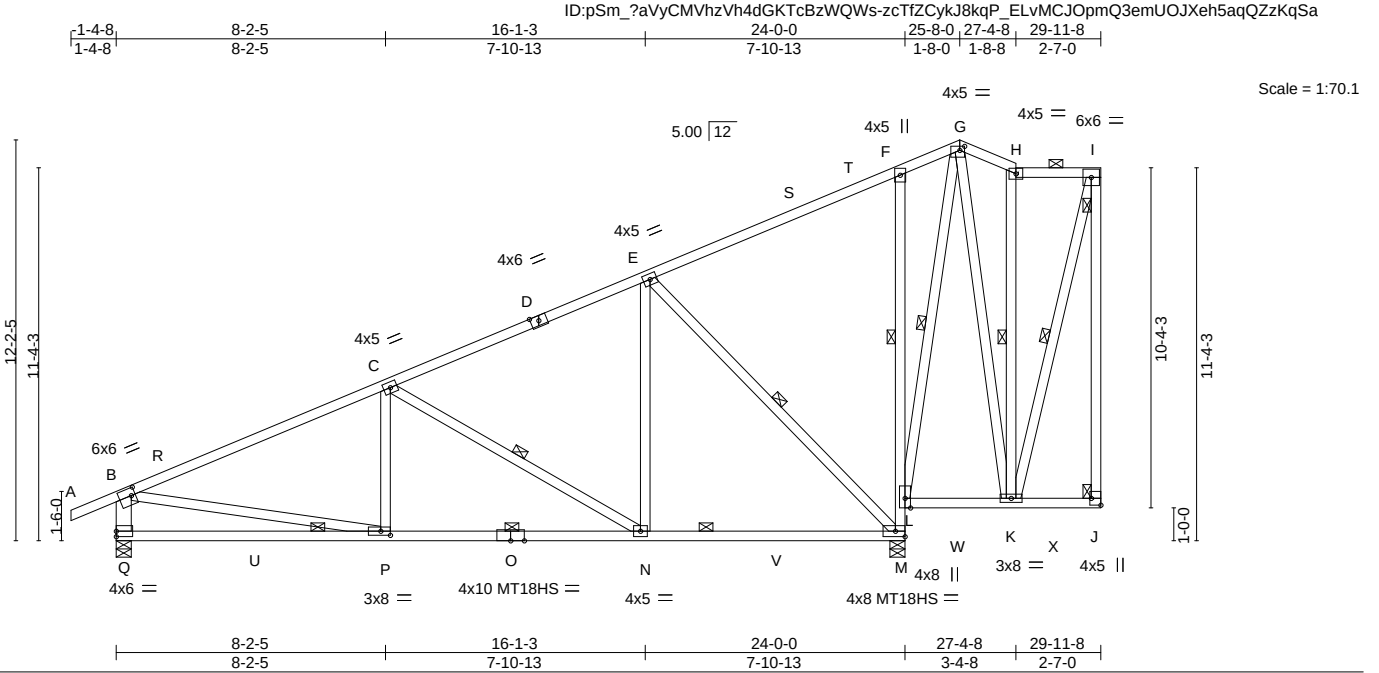

Plate Offsets (X,Y)-- [B:0-1-8,0-2-12], [G:0-1-12,0-1-8], [J:Edge,0-3-8], [P:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.26	N-P	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.36	M-N	>796	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03	M	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	M-N	>999	240	Weight: 190 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
J-L: 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
E-M,G-K,G-L,I-K: 2x4 SPF No.2, B-Q: 2x6 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): H-I.
BOT CHORD 6-0-0 oc bracing. Except:
1 Row at midpt F-L
WEBS 1 Row at midpt C-N, E-M, H-K, G-L, I-K

REACTIONS. (size) Q=0-5-8, M=0-5-8
Max Horz Q=-353(LC 9)
Max Uplift Q=-57(LC 8), M=-209(LC 8)
Max Grav Q=1390(LC 35), M=2223(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1768/10, C-E=-1035/53, E-F=0/337, I-J=0/293, B-Q=-1270/101
BOT CHORD P-Q=0/658, N-P=0/1737, M-N=0/970, L-M=-1013/213, F-L=-511/118
WEBS C-P=0/362, C-N=-887/46, E-N=0/874, E-M=-1470/64, G-K=-143/406, B-P=0/1171, G-L=-498/67, I-K=-323/50

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 22-8-0, Exterior(2R) 22-8-0 to 25-8-0, Exterior(2E) 25-8-0 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) Q except (jt=lb) M=209.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R12	Hip	1	1	I73183971
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:46 2025 Page 1
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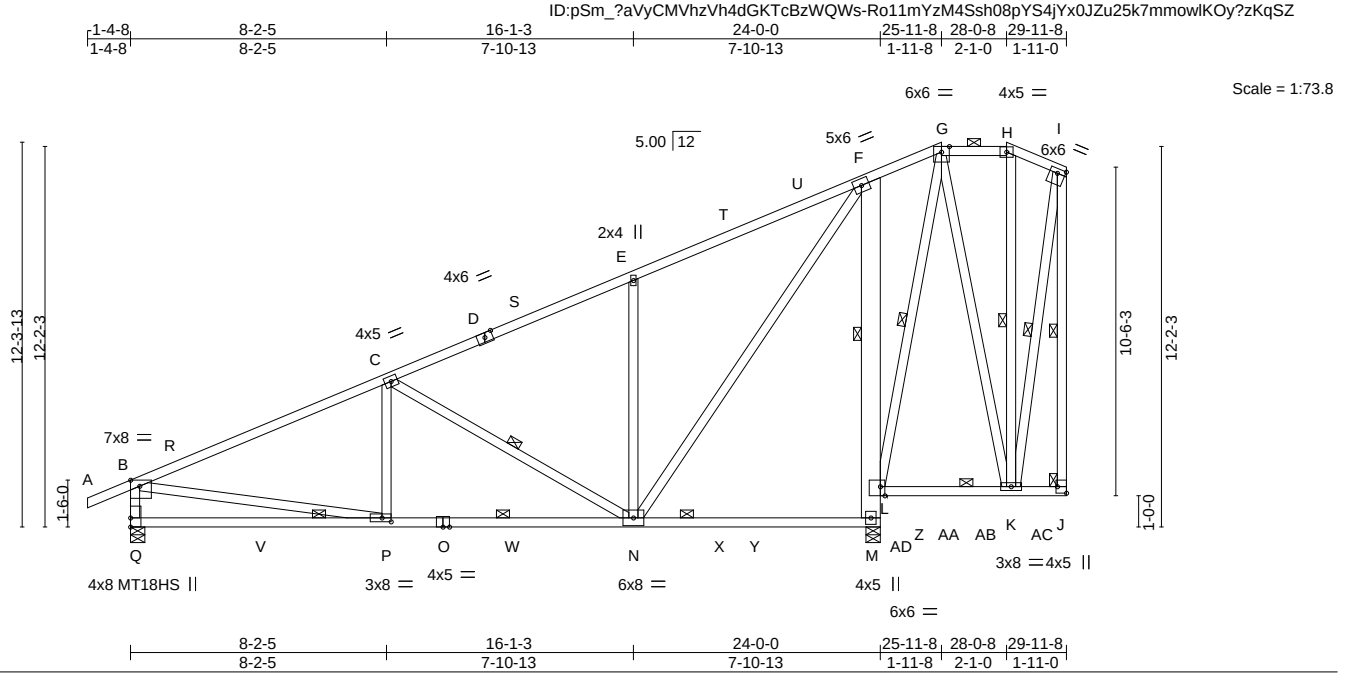

Plate Offsets (X,Y)-- [B:0-3-8,Edge], [I:0-3-0,0-1-12], [J:Edge,0-3-8], [L:0-1-12,Edge], [P:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.26	N-P	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.37	P-Q	>768	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.02	M	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	N-P	>999	240	Weight: 215 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
F-M: 2x8 SP No.1, J-L: 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
C-P,C-N,E-N,B-Q,B-P: 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): G-H.
BOT CHORD 6-0-0 oc bracing. Except:
1 Row at midpt F-L
WEBS 1 Row at midpt C-N, H-K, I-J, I-K, G-L

REACTIONS. (size) Q=0-5-8, M=0-5-8
Max Horz Q=-359(LC 9)
Max Uplift Q=-55(LC 8), M=-201(LC 8)
Max Grav Q=1348(LC 15), M=2299(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1711/12, C-E=-917/55, E-F=-912/138, F-G=0/289, B-Q=-1214/99, I-J=-68/252
BOT CHORD P-Q=0/632, N-P=0/1719, L-M=-2089/246, F-L=-1433/136
WEBS C-P=0/373, C-N=-931/49, E-N=-634/126, G-K=-87/420, B-P=0/1127, I-K=-255/58, F-N=-70/1737, G-L=-563/87

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 21-8-9, Exterior(2R) 21-8-9 to 28-0-8, Exterior(2E) 28-0-8 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) Q except (jt=lb) M=201.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R13	GABLE I Gable I Gable COMMON I I Gable I	3	1	I73183972
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:48 2025 Page 1

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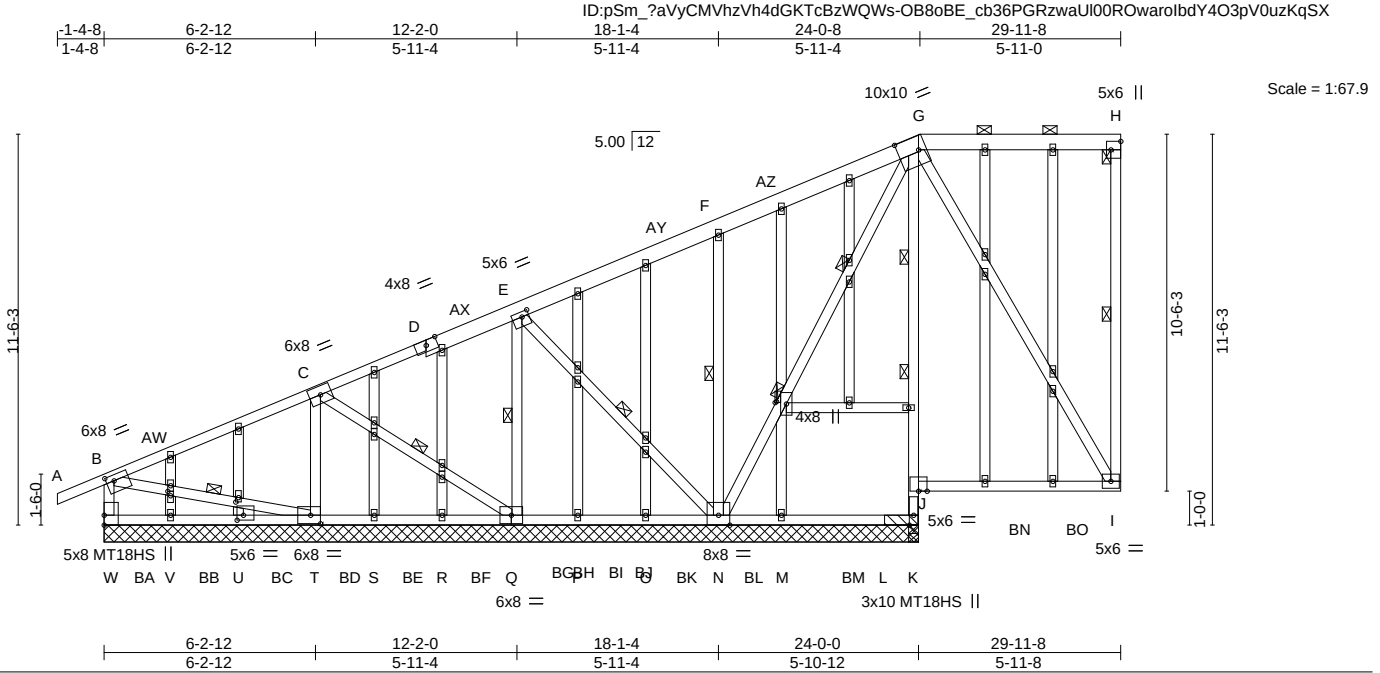

Plate Offsets (X,Y)-- [B:0-2-12,0-2-0], [E:0-2-8,0-1-12], [G:0-7-4,0-4-12], [H:Edge,0-3-8], [T:0-3-8,0-3-0], [U:0-2-4,0-1-12], [AH:0-0-6,0-0-8], [AQ:0-1-9,0-1-0], [AT:0-1-9,0-1-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.04	K-M	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.05	K-M	>996	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.01	Q	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	K-M	>999	240	Weight: 257 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* A-D: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except* H-I,F-N: 2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-6-5 max.): G-H.
BOT CHORD	Structural wood sheathing directly applied. Except:
	2 Rows at 1/3 pts G-J
WEBS	1 Row at midpt H-I, C-Q, E-Q, E-N, F-N, B-T
	2 Rows at 1/3 pts G-N

REACTIONS. All bearings 24-0-0.

(lb) - Max Horz W=-377(LC 27)

Max Uplift All uplift 100 lb or less at joint(s) U, V except W=-2287(LC 25), K=-2142(LC 26), T=-2111(LC 25), Q=-1144(LC 25), N=-548(LC 26)

Max Grav All reactions 250 lb or less at joint(s) except W=2306(LC 30), K=2455(LC 27), K=597(LC 1), T=2292(LC 28), Q=1318(LC 28), N=951(LC 33), M=364(LC 73), O=319(LC 71), P=306(LC 70), R=312(LC 68), S=303(LC 67), U=317(LC 65), V=307(LC 64)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-C=-3705/3686, C-E=-4541/4719, E-F=-4831/5073, F-G=-2845/3130, G-H=-1749/1850, B-W=-2184/2200
BOT CHORD	V-W=-481/875, U-V=-1230/1624, T-U=-2081/2474, S-T=-1095/1294, R-S=-447/646, Q-R=-1072/1271, P-Q=-1697/1776, O-P=-963/1042, N-O=-605/765, M-N=-2250/2360, K-M=-1556/1527, J-K=-2393/2176, G-J=-2367/2093
WEBS	C-T=-2859/2793, C-Q=-3287/3232, E-Q=-2927/2863, E-N=-2962/2915, F-N=-539/152, G-I=-102/426, B-T=-3438/3297, G-N=-1931/1871

NOTES-

1) 2x4 SPF No.2 bearing block 12" long at jt. K attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 19-9-1, Exterior(2R) 19-9-1 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
4) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
5) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.

May 2,2025

Continued on page 2

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NOTES-

10) All plates are 2x4 MT20 unless otherwise indicated.
11) Vertical gable studs spaced at 2-0-0 oc and horizontal gable studs spaced at 2-0-0 oc.
12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
13) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) U, V except (jt=lb) W=2287, K=2142, T=2111, Q=1144, N=548.
15) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
16) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
17) This truss has been designed for a total drag load of 300 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 24-0-0 for 374.5 plf.
18) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
19) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R13A	Piggyback Base Structural Gable COMMON I I Gable	2 I Gable	1	I73183973
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:49 2025 Page 1
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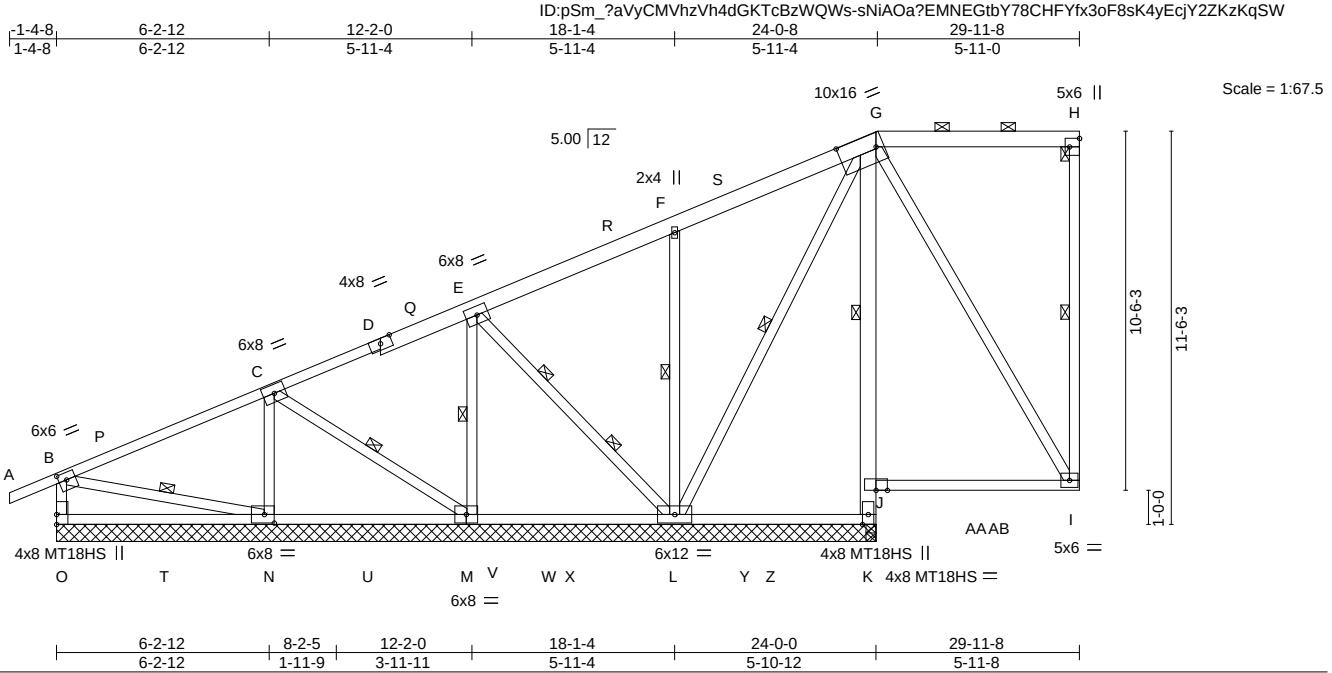

Plate Offsets (X,Y)-- [B:0-2-12,0-2-8], [G:1-1-4,0-4-12], [H:Edge,0-3-8], [N:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.14	L-M	>525	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.18	N-O	>416	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.02	M	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	-0.03	N-O	>999	240	Weight: 198 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* A-D: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* G-K: 2x6 SP No.1
WEBS	2x4 SPF No.3 *Except* G-I,C-N,C-M,B-N: 2x4 SPF No.2, G-L: 2x4 SP 2400F 2.0E

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-6-7 max.): G-H.
BOT CHORD	Structural wood sheathing directly applied. Except: 1 Row at midpt G-J
WEBS	1 Row at midpt H-I, F-L, G-L, C-M, E-M, B-N; 2 Rows at 1/3 pts E-L

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz O=-408(LC 27)
Max Uplift All uplift 100 lb or less at joint(s) except O=-2054(LC 25), K=-2863(LC 26), L=-906(LC 25), N=-2121(LC 25), M=-731(LC 25)
Max Grav All reactions 250 lb or less at joint(s) except O=2155(LC 30), K=3225(LC 27), K=669(LC 1), L=1432(LC 34), N=2477(LC 28), M=1068(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-C=-3479/3441, C-E=-4333/4489, E-F=-4342/4563, F-G=-2374/2622, G-H=-1748/1850, B-O=-2058/2075
BOT CHORD	N-O=-2173/2644, M-N=-1314/1542, L-M=-1451/1541, K-L=-2247/2355, J-K=-3146/2895, G-J=-3118/2815
WEBS	E-L=-2608/2559, F-L=-534/156, G-I=-105/431, G-L=-2895/2865, C-N=-2893/2837, C-M=-3321/3258, E-M=-2574/2513, B-N=-3332/3148

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 19-9-1, Exterior(2R) 19-9-1 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2054 lb uplift at joint O, 2863 lb uplift at joint K, 906 lb uplift at joint L, 2121 lb uplift at joint N and 731 lb uplift at joint M.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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NOTES-

12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss has been designed for a total drag load of 300 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 24-0-0 for 374.5 plf.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R13B	PIGGYBACK BASE STRUC I Gable I Gable COMMON I I	2	1	I73183974
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:50 2025 Page 1

ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-KZGYcw0t7gM7Vl7JhvoU5sTEkfRd3X5NrNIb5nzKqSV

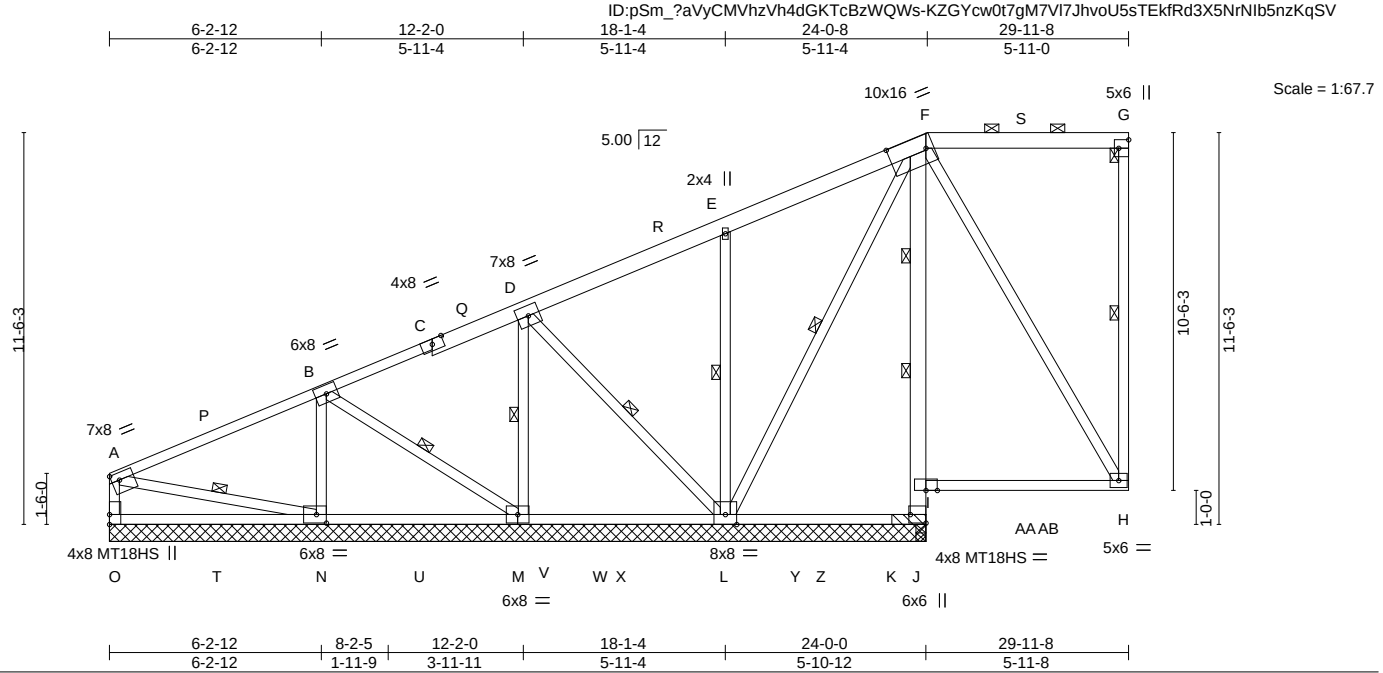

Plate Offsets (X,Y)-- [A:Edge,0-2-8], [F:1-1-4,0-4-12], [G:Edge,0-3-8], [J:Edge,0-5-8], [N:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.14	L-M	>524	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.17	N-O	>421	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.02	M	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	-0.03	N-O	>999	240	Weight: 192 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
A-C: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
F-J: 2x6 SPF No.3
WEBS 2x4 SPF No.2 *Except*
E-L: 2x4 SPF No.3, F-L: 2x4 SP 2400F 2.0E

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-6-11 max.): F-G.
BOT CHORD Structural wood sheathing directly applied. Except:
2 Rows at 1/3 pts F-I
WEBS 1 Row at midpt G-H, D-L, E-L, F-L, B-M, D-M, A-N

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz O=-465(LC 26)
Max Uplift All uplift 100 lb or less at joint(s) except O=-2015(LC 24), J=-2707(LC 25), L=-518(LC 24), N=-2123(LC 24), M=-1133(LC 24)
Max Grav All reactions 250 lb or less at joint(s) except O=2100(LC 29), J=2993(LC 26), J=638(LC 1), L=1140(LC 14), N=2424(LC 27), M=1425(LC 27)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-3444/3399, B-D=-4259/4427, D-E=-4541/4767, E-F=-2534/2825, F-G=-1749/1877, A-O=-2004/2036
BOT CHORD N-O=-2266/2711, M-N=-1344/1605, L-M=-1376/1482, J-L=-2243/2400, I-J=-2913/2742, F-I=-2890/2656
WEBS D-L=-2949/2943, E-L=-536/212, F-H=-157/431, F-L=-2599/2574, B-N=-2836/2826, B-M=-3264/3244, D-M=-2894/2848, A-N=-3336/3187

NOTES-

1) 2x4 SPF No.2 bearing block 12" long at jt. J attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 21-0-0, Corner(3R) 21-0-0 to 26-9-12, Corner(3E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
5) Unbalanced snow loads have been considered for this design.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2015 lb uplift at joint O, 2707 lb uplift at joint J, 518 lb uplift at joint L, 2123 lb uplift at joint N and 1133 lb uplift at joint M.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI

May 2,2025

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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NOTES-

12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss has been designed for a total drag load of 300 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 24-0-0 for 374.5 plf.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R15	Piggyback Base	70	1	I73183975
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:51 2025 Page 1

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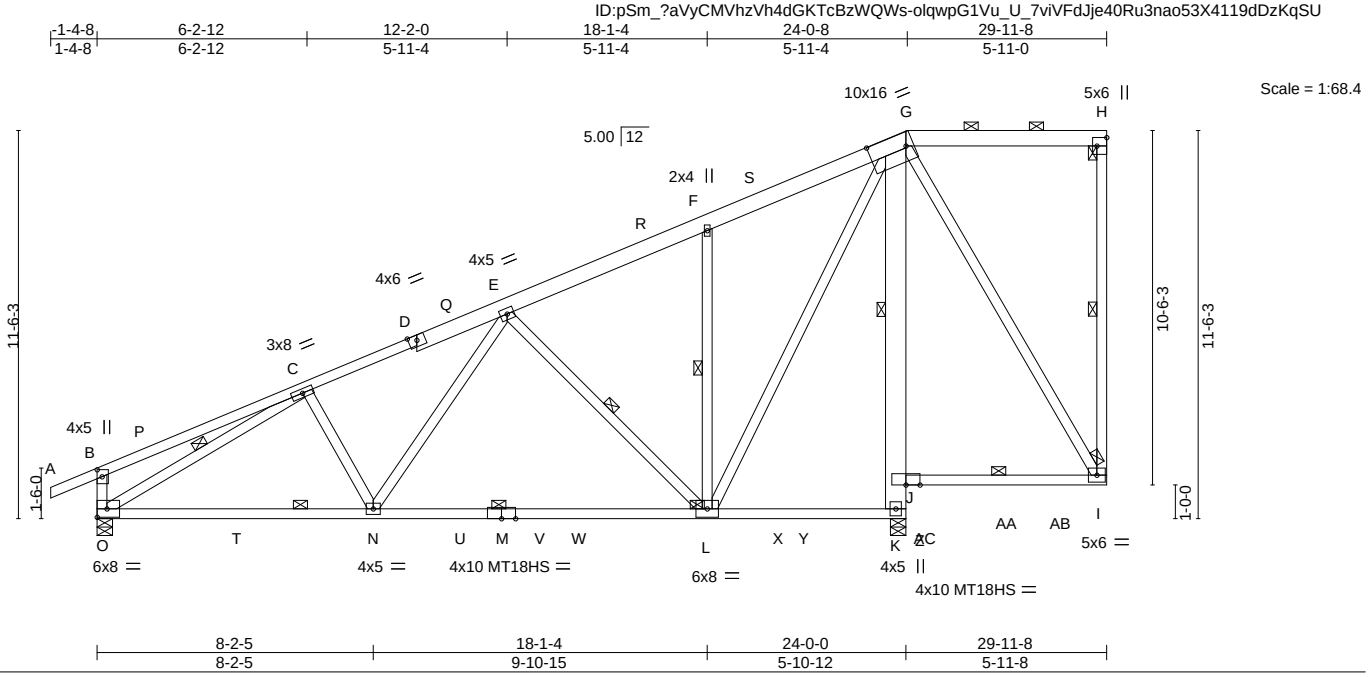

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [G:1-1-4,0-4-12], [H:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.44	L-N	>650	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.68	L-N	>415	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	K	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	L-N	>999	240	Weight: 197 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except* A-D: 2x4 SPF No.2

BOT CHORD 2x4 SPF 2100F 1.8E *Except* G-K: 2x8 SP No.1, I-J: 2x4 SPF No.2

WEBS 2x4 SPF No.3 *Except* G-I,G-L: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): G-H.

BOT CHORD 6-0-0 oc bracing. Except: 1 Row at midpt G-J

WEBS 1 Row at midpt H-I, E-L, F-L, C-O

REACTIONS. (size) K=0-5-8, O=0-5-8
Max Horz O=-355(LC 9)
Max Uplift K=-211(LC 8), O=-55(LC 8)
Max Grav K=2329(LC 15), O=1369(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-374/39, C-E=-1661/30, E-F=-712/63, F-G=-716/132, B-O=-465/109
BOT CHORD N-O=0/1750, L-N=0/1307, J-K=-2226/234, G-J=-2085/158
WEBS E-N=0/698, E-L=-916/73, F-L=-517/108, G-I=-99/433, C-O=-1472/0, G-L=-65/1718

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 19-9-1, Exterior(2R) 19-9-1 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 211 lb uplift at joint K and 55 lb uplift at joint O.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R16	PIGGYBACK BASE	38	1	I73183976
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:52 2025 Page 1
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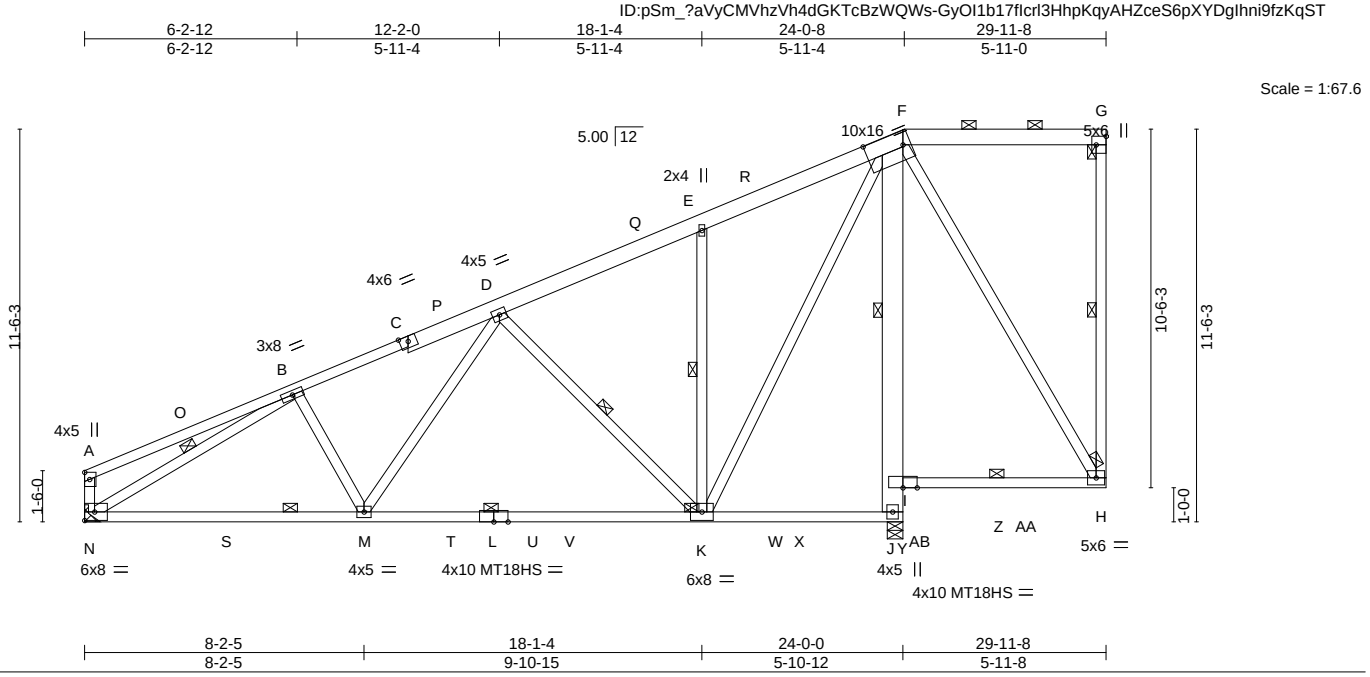

Plate Offsets (X,Y)-- [F:1-1-4,0-4-12], [G:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.44	K-M	>650	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.68	K-M	>415	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	K-M	>999	240	Weight: 196 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* A-C: 2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except* F-J: 2x8 SP No.1, H-I: 2x4 SPF No.2
WEBS	2x4 SPF No.3 *Except* F-H,F-K: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): F-G.
BOT CHORD	6-0-0 oc bracing. Except: 1 Row at midpt F-I
WEBS	1 Row at midpt G-H, D-K, E-K, B-N

REACTIONS. (size) J=0-5-8, N=Mechanical
Max Horz N=-360(LC 9)
Max Uplift J=-213(LC 8), N=-4(LC 8)
Max Grav J=2333(LC 14), N=1275(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-366/38, B-D=-1676/37, D-E=-714/64, E-F=-718/133, A-N=-331/53
BOT CHORD M-N=0/1769, K-M=0/1311, I-J=-2229/235, F-I=-2088/160
WEBS D-M=0/714, D-K=-919/74, E-K=-519/109, F-H=-100/433, B-N=-1495/0, F-K=-68/1723

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 19-9-1, Exterior(2R) 19-9-1 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 213 lb uplift at joint J and 4 lb uplift at joint N.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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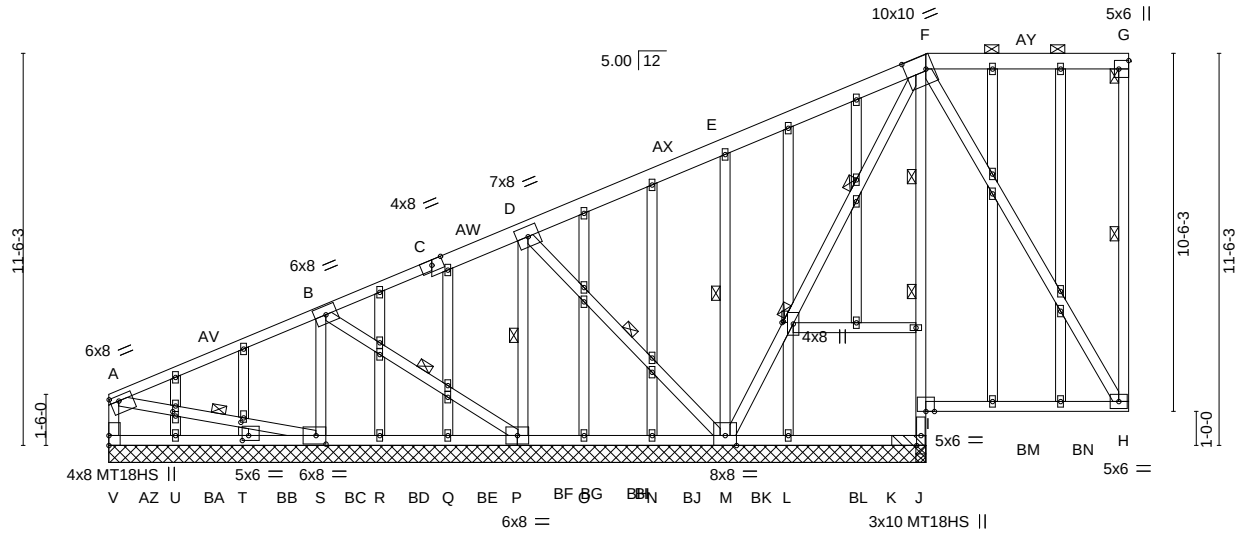
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R17	GABLE L GABLE L GABL I MMON I I MON	1	1	I73183977
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:54 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-CKW3SH3NBvsZ_MQ4wlsQFiezWGrp?K?zm?GpEYzKqSR

6-2-12	12-2-0	18-1-4	24-0-8	29-11-8
6-2-12	5-11-4	5-11-4	5-11-4	5-11-0

Scale = 1:67.7



6-2-12	12-2-0	18-1-4	24-0-0	29-11-8
6-2-12	5-11-4	5-11-4	5-10-12	5-11-8

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [F:0-7-4,0-4-12], [G:Edge,0-3-8], [S:0-3-8,0-3-0], [T:0-2-4,0-1-12], [AG:0-0-6,0-0-8], [AP:0-1-9,0-1-0], [AS:0-1-9,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.04	J-L	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.05	J-L	>995	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.01	P	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	J-L	>999	240	Weight: 255 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* A-C: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except* E-M: 2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-6-10 max.): F-G.
BOT CHORD	Structural wood sheathing directly applied. Except: 2 Rows at 1/3 pts F-I
WEBS	1 Row at midpt G-H, B-P, D-P, D-M, E-M, A-S; 2 Rows at 1/3 pts F-M

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz V=-434(LC 26)
Max Uplift All uplift 100 lb or less at joint(s) L, T, U except V=-2266(LC 24), J=-2212(LC 25), S=-2171(LC 24), P=-1186(LC 24), M=-658(LC 25)
Max Grav All reactions 250 lb or less at joint(s) except V=2267(LC 29), J=2471(LC 26), J=597(LC 1), S=2300(LC 27), P=1320(LC 27), M=953(LC 32), L=364(LC 72), N=320(LC 70), O=306(LC 69), Q=312(LC 67), R=303(LC 66), T=317(LC 64), U=306(LC 63)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-3699/3671, B-D=-4561/4744, D-E=-4867/5101, E-F=-2859/3159, F-G=-1749/1877, A-V=-2147/2176
BOT CHORD	U-V=-574/948, T-U=-1323/1697, S-T=-2173/2547, R-S=-1087/1319, Q-R=-440/671, P-Q=-1074/1305, O-P=-1694/1795, N-O=-961/1062, M-N=-609/790, L-M=-2250/2408, J-L=-1556/1568, I-J=-2407/2253, F-I=-2387/2164
WEBS	B-S=-2868/2846, B-P=-3296/3290, D-P=-2929/2876, D-M=-2966/2970, E-M=-540/213, F-H=-153/426, A-S=-3474/3373, F-M=-1931/1892

NOTES-
1) 2x4 SPF No.2 bearing block 12" long at jt. J attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 21-0-0, Corner(3R) 21-0-0 to 26-9-12, Corner(3E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
4) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
5) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
6) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) All plates are 2x4 MT20 unless otherwise indicated.
10) Vertical gable studs spaced at 2-0-0 oc and horizontal gable studs spaced at 2-0-0 oc.

May 2,2025

Continued on page 2

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NOTES-

11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) L, T, U except (jt=lb) V=2266, J=2212, S=2171, P=1186 , M=658.
14) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
15) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
16) This truss has been designed for a total drag load of 300 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 24-0-0 for 374.5 plf.
17) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
18) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R18	Hip	1	1	I73183978
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:55 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-hX3Rfd4?yD_PcW?GUTNfowB76gApkq46?e?Mm_zKqSQ

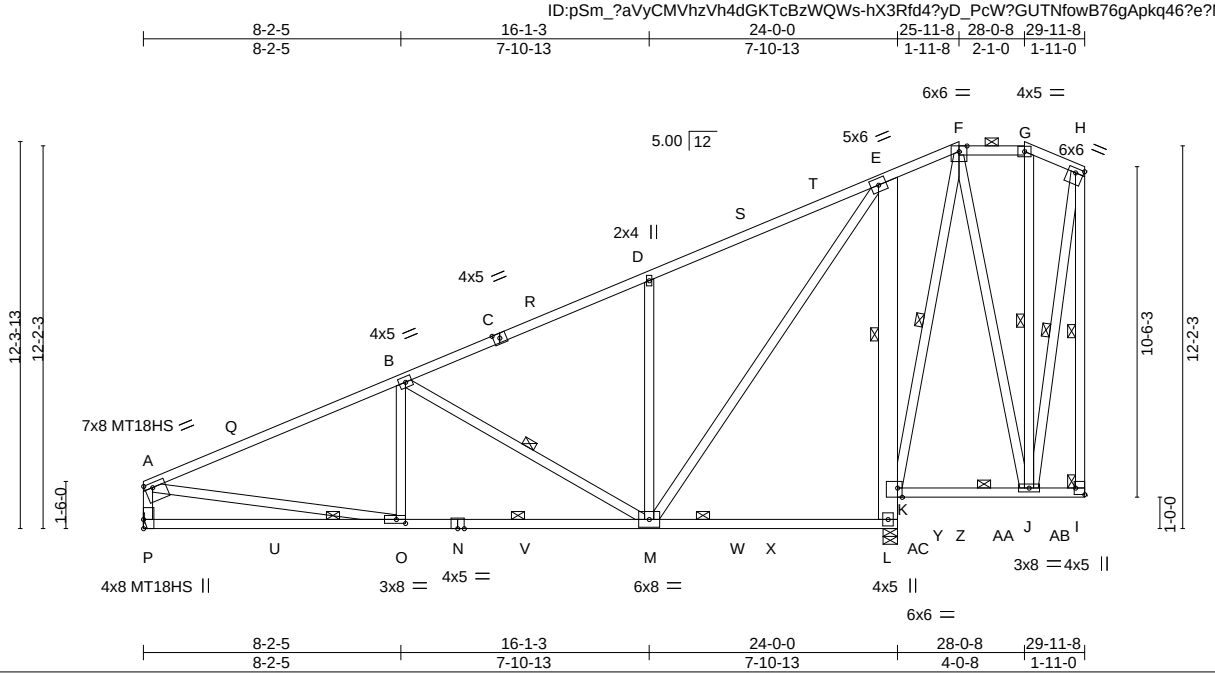

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [H:0-3-0,0-1-12], [I:Edge,0-3-8], [K:0-1-12,Edge], [O:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.26	M-O	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.37	O-P	>767	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.02	L	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	M-O	>999	240	Weight: 213 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
E-L: 2x8 SP No.1, I-K: 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
B-O,B-M,D-M,A-P,A-O: 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): F-G.
BOT CHORD 6-0-0 oc bracing. Except:
1 Row at midpt E-K
WEBS 1 Row at midpt B-M, G-J, H-I, H-J, F-K

REACTIONS. (size) P=Mechanical, L=0-5-8
Max Horz P=-363(LC 9)
Max Uplift P=-4(LC 8), L=-203(LC 8)
Max Grav P=1254(LC 14), L=2302(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1723/18, B-D=-922/56, D-E=-914/139, E-F=0/289, A-P=-1089/48, H-I=-68/252
BOT CHORD O-P=0/602, M-O=0/1736, K-L=-2092/247, E-K=-1437/138
WEBS B-O=0/370, B-M=-948/56, D-M=-629/124, F-J=-87/421, A-O=0/1165, H-J=-255/58, F-K=-562/87, E-M=-72/1740

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 21-8-9, Exterior(2R) 21-8-9 to 28-0-8, Exterior(2E) 28-0-8 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) P except (jt=lb) L=203.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R19	Roof Special	1	1	I73183979
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:56 2025 Page 1
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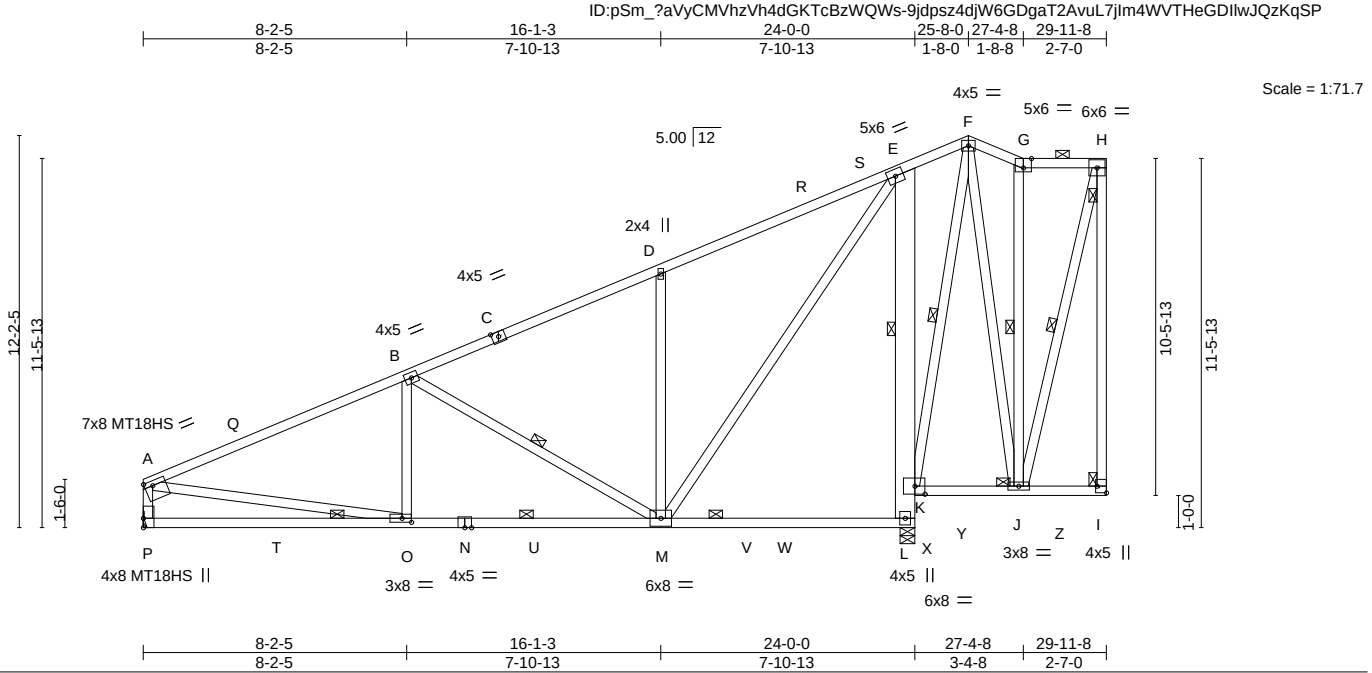

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [G:0-3-0,Edge], [I:Edge,0-3-8], [K:0-3-12,0-3-0], [O:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.26	M-O	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.37	O-P	>767	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.02	L	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	M-O	>999	240	Weight: 212 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
E-L: 2x8 SP No.1, I-K: 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
E-M,F-K,F-J,H-J: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): G-H.
BOT CHORD 6-0-0 oc bracing. Except:
1 Row at midpt E-K
WEBS 1 Row at midpt B-M, F-K, G-J, H-J

REACTIONS. (size) P=Mechanical, L=0-5-8
Max Horz P=-361(LC 9)
Max Uplift P=-2(LC 8), L=-216(LC 8)
Max Grav P=1259(LC 14), L=2262(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1785/13, B-D=-1015/51, D-E=-1008/133, E-F=0/275, H-I=0/284, A-P=-1131/45
BOT CHORD O-P=0/600, M-O=0/1742, K-L=-2052/260, E-K=-1430/142
WEBS B-O=0/370, B-M=-946/57, D-M=-613/123, E-M=-72/1740, F-K=-561/106, F-J=-150/430, H-J=-317/43, A-O=0/1238

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 22-8-0, Exterior(2R) 22-8-0 to 25-8-0, Exterior(2E) 25-8-0 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) P except (jt=lb) L=216.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R20	Roof Special	1	1	I73183980
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:57 2025 Page 1
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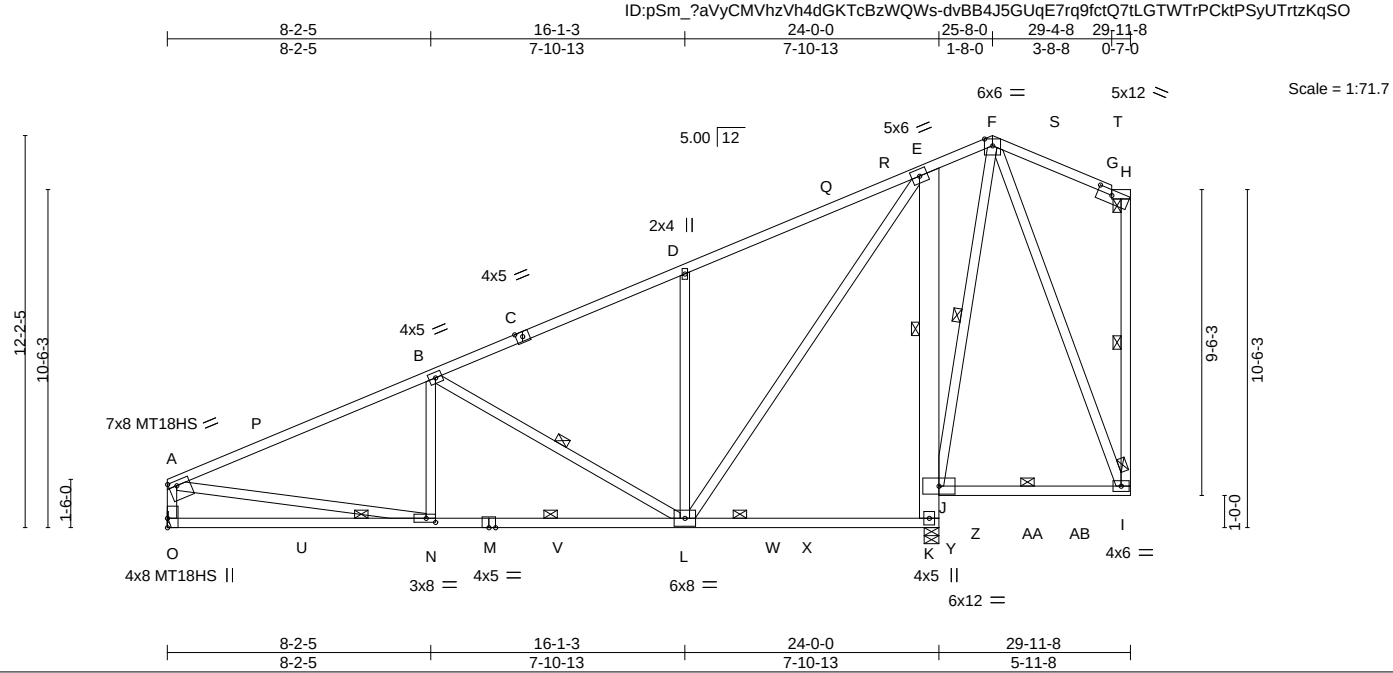

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [G:0-5-7,0-2-0], [N:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.26	L-N	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.37	N-O	>767	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.02	K	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	L-N	>999	240	Weight: 189 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
E-K: 2x8 SP No.1, I-J: 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
F-J,E-L,F-I: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): G-H.
BOT CHORD 6-0-0 oc bracing. Except:
1 Row at midpt E-J
WEBS 1 Row at midpt H-I, B-L, F-J

REACTIONS. (size) O=Mechanical, K=0-5-8
Max Horz O=-334(LC 9)
Max Uplift O=-4(LC 8), K=-225(LC 8)
Max Grav O=1263(LC 14), K=2311(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1785/16, B-D=-1015/55, D-E=-1008/137, E-F=0/284, A-O=-1131/47
BOT CHORD N-O=0/580, L-N=0/1728, J-K=-2100/269, E-J=-1379/159
WEBS B-N=0/371, B-L=-945/57, D-L=-614/124, F-J=-599/41, A-N=0/1238, E-L=-71/1740, F-I=-160/394

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 22-8-0, Exterior(2R) 22-8-0 to 28-8-0, Interior(1) 28-8-0 to 29-4-8, Exterior(2E) 29-4-8 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O except (jt=lb) K=225.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R21	GABLE	1	1	I73183981
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:21:59 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-ZIJyV?7W0RUr47J2jISbymLo9HXxgcriwGzavlzKqSM

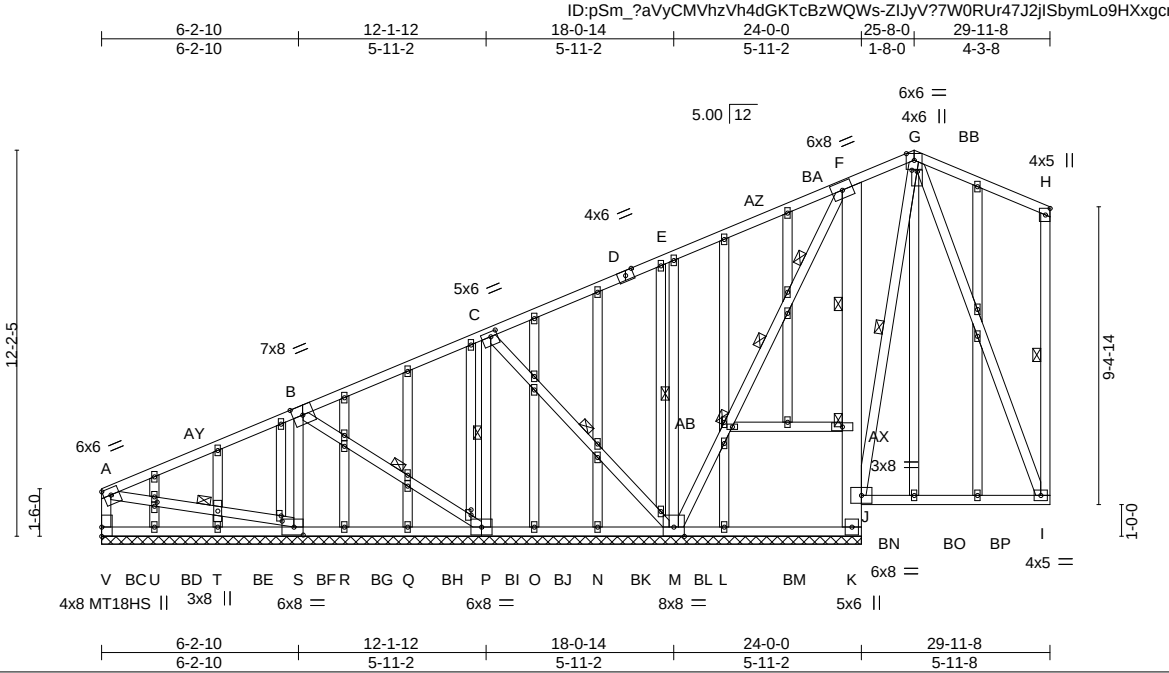

Plate Offsets (X,Y)-- [A:Edge,0-2-8], [B:0-3-12,Edge], [C:0-2-8,0-1-12], [G:0-0-8,0-2-0], [S:0-3-8,0-3-0], [AI:0-2-0,0-0-0], [AO:0-2-0,0-0-6], [AS:0-1-9,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.79	Vert(CT)	n/a	-	n/a	999	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.02	P	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S							Weight: 293 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* B-D: 2x4 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except* F-K: 2x8 SP No.1
WEBS	2x4 SPF No.2 *Except* E-M,H-I: 2x4 SPF No.3
OTHERS	2x4 SPF No.3 *Except* G-W: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-11-6 oc purlins, except end verticals.
BOT CHORD	Structural wood sheathing directly applied or 3-10-1 oc bracing. Except:
	1 Row at midpt F-AX
WEBS	1 Row at midpt B-P, C-P, C-M, E-M, G-J, A-S, H-I
	2 Rows at 1/3 pts F-AB
JOINTS	1 Brace at Jt(s): AB, AX

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz V=-412(LC 25)
Max Uplift All uplift 100 lb or less at joint(s) O, R, U except P=-934(LC 23), K=-3238(LC 24), S=-2339(LC 23), V=-2092(LC 23), M=-681(LC 23)
Max Grav All reactions 250 lb or less at joint(s) except P=1130(LC 26), K=3589(LC 25), S=2533(LC 26), V=2127(LC 28), M=837(LC 32), L=360(LC 62), N=327(LC 60), O=293(LC 59), Q=323(LC 57), R=291(LC 56), T=323(LC 54), U=300(LC 53)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-3477/3451, B-C=-4464/4591, C-E=-4575/4745, E-F=-2625/2794, F-G=-2118/2352, G-H=-1339/1545, A-V=-2022/2012
BOT CHORD	U-V=-520/882, T-U=-1269/1631, S-T=-2224/2587, R-S=-921/1133, Q-R=-379/591, P-Q=-1287/1499, O-P=-1440/1540, N-O=-871/970, M-N=-836/935, L-M=-2362/2467, K-L=-1766/1871, J-K=-3529/3263, J-AX=-2116/2040, F-AX=-2116/2040
WEBS	B-S=-3079/2999, B-P=-3354/3320, C-P=-2799/2710, C-M=-2779/2767, E-M=-469/109, G-J=-1401/1176, A-S=-3279/3165, G-I=-157/399, M-AB=-2753/2807, F-AB=-2755/2808

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 22-8-0, Exterior(2R) 22-8-0 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Vertical gable studs spaced at 2-0-0 oc and horizontal gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

STATE OF MISSOURI
JIE LU
NUMBER
PE-029327
PROFESSIONAL ENGINEER

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
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NOTES-

10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O, R, U except (jt=lb) P=934, K=3238, S=2339, V=2092 , M=681.
12) Non Standard bearing condition. Review required.
13) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
14) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
15) This truss has been designed for a total drag load of 300 plf. Lumber DOL=(1.33) Plate grip DOL=(1.33) Connect truss to resist drag loads along bottom chord from 0-0-0 to 24-0-0 for 374.5 plf.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R22	Roof Special	1	1	I73183982
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:00 2025 Page 1
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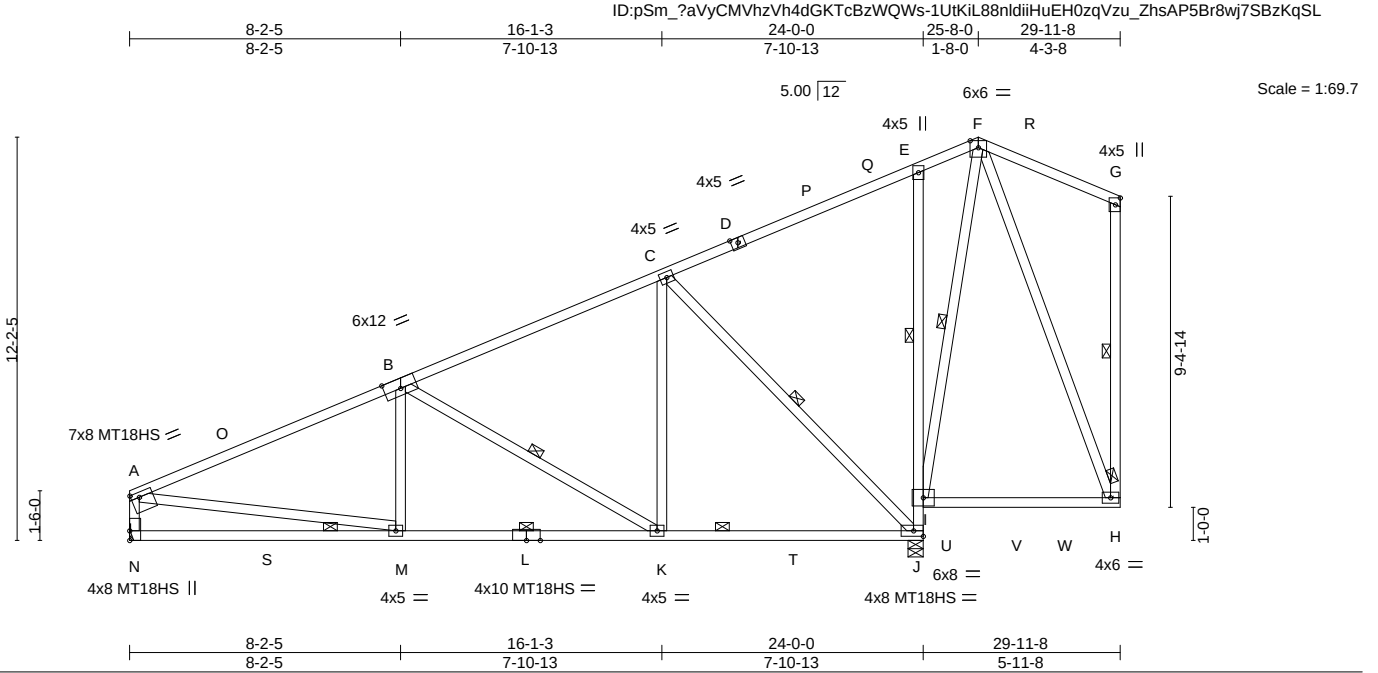

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [B:0-6-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.26	K-M	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.37	M-N	>770	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	J-K	>999	240	Weight: 165 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	H-I: 2x4 SPF No.2
WEBS	2x4 SPF No.3 *Except*
	C-J,F-I,F-H: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.	
BOT CHORD	6-0-0 oc bracing. Except:	
	1 Row at midpt	E-I
WEBS	1 Row at midpt	B-K, C-J, F-I, G-H

REACTIONS. (size) N=Mechanical, J=0-5-8
Max Horz N=-332(LC 9)
Max Uplift N=-5(LC 8), J=-215(LC 8)
Max Grav N=1285(LC 14), J=2281(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-1804/18, B-C=-1045/58, C-E=-68/330, A-N=-1142/48
BOT CHORD	M-N=0/585, K-M=0/1761, J-K=0/964, I-J=-1056/218, E-I=-504/135
WEBS	B-M=0/366, B-K=-924/55, C-K=0/890, C-J=-1478/63, F-I=-512/11, A-M=0/1250, F-H=-155/384

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 22-8-0, Exterior(2R) 22-8-0 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N except (jt=lb) J=215.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R23	Hip	1	1	I73183983
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:00 2025 Page 1
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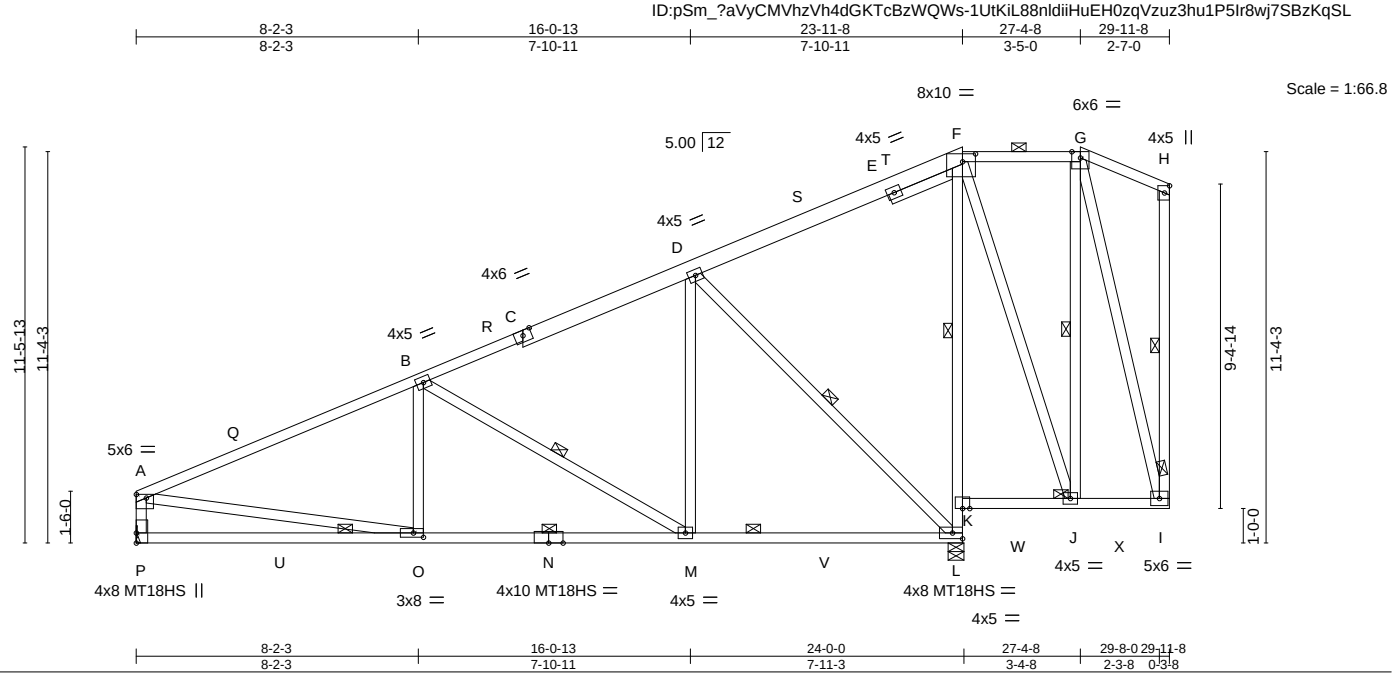

Plate Offsets (X,Y)-- [A:Edge,0-1-4], [F:0-4-8,0-2-12], [O:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.26	M-O	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.37	O-P	>774	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03	L	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.03	L-M	>999	240	Weight: 185 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* C-F: 2x6 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except* I-K: 2x4 SPF No.2
WEBS	2x4 SPF No.3 *Except* D-L,G-I,F-J: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): F-G.
BOT CHORD	6-0-0 oc bracing. Except: 1 Row at midpt F-K
WEBS	1 Row at midpt B-M, H-I, D-L, G-J

REACTIONS. (size) P=Mechanical, L=0-5-8
Max Horz P=-332(LC 9)
Max Uplift P=-6(LC 8), L=-210(LC 8)
Max Grav P=1287(LC 14), L=2224(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-1773/18, B-D=-1023/60, D-F=0/329, A-P=-1127/49
BOT CHORD O-P=0/593, M-O=0/1756, L-M=0/983, K-L=-1005/207, F-K=-915/176
WEBS B-O=0/366, B-M=-894/49, D-M=0/876, A-O=0/1214, D-L=-1503/74, G-I=-97/322, G-J=-367/2, F-J=-101/451

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 19-6-13, Exterior(2R) 19-6-13 to 27-4-8, Exterior(2E) 27-4-8 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) P except (jt=lb) L=210.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R24	Hip	1	1	I73183984
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:01 2025 Page 1
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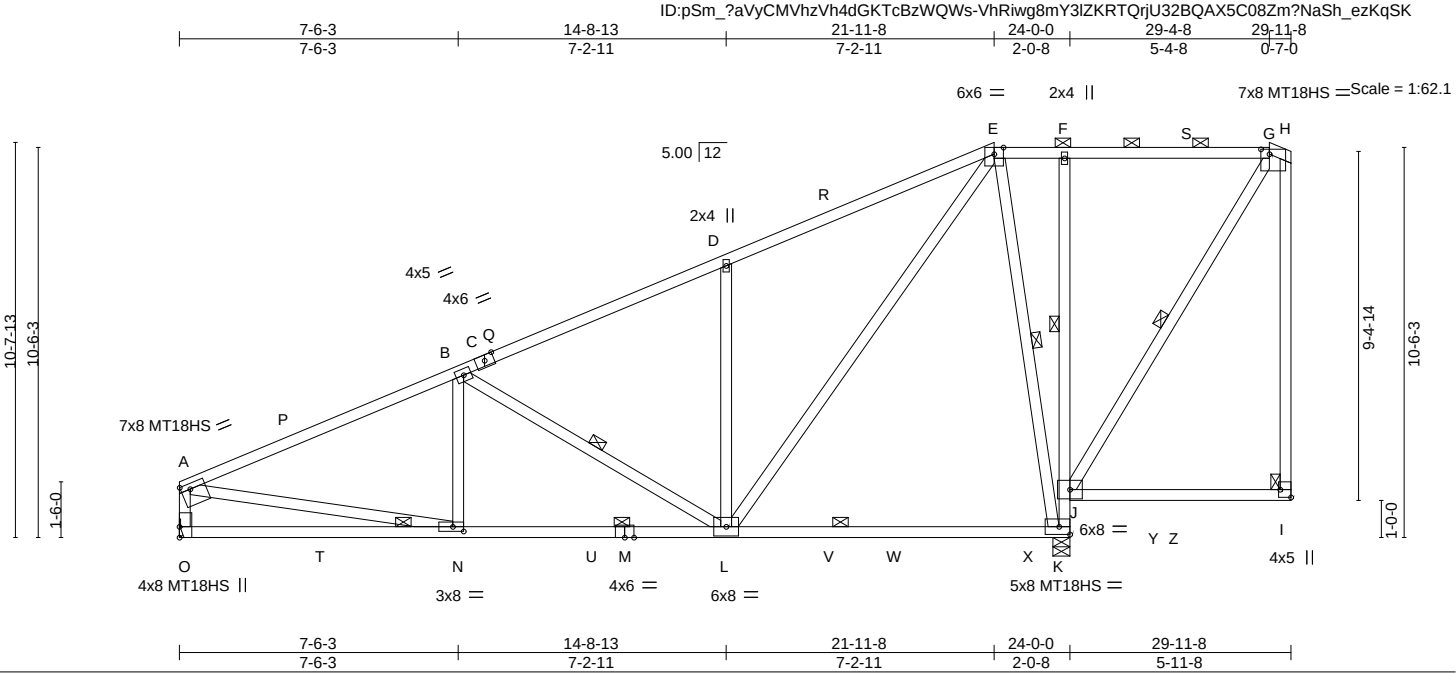

Plate Offsets (X,Y)-- [A:0-3-0,0-1-12], [G:0-2-12,0-1-9], [I:Edge,0-3-8], [N:0-3-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.35	K-L	>797	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.56	K-L	>507	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.02	K	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	K-L	>999	240	Weight: 161 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	I-J: 2x4 SPF No.2
WEBS	2x4 SPF No.3 *Except*
	G-J,E-K,E-L: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): E-G.	
BOT CHORD	6-0-0 oc bracing. Except:	
	1 Row at midpt	F-J
WEBS	1 Row at midpt	B-L, G-J, E-K

REACTIONS. (size) O=Mechanical, K=0-5-8
Max Horz O=-332(LC 9)
Max Uplift O=-5(LC 8), K=-220(LC 8)
Max Grav O=1265(LC 14), K=2315(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	A-B=-1744/18, B-D=-1114/52, D-E=-1155/133, E-F=0/253, F-G=0/259, A-O=-1097/46, H-I=-0/314
BOT CHORD	N-O=0/542, L-N=0/1739, J-K=-869/188, F-J=-426/9
WEBS	B-N=-1/319, B-L=-761/53, D-L=-660/128, G-J=-457/94, A-N=0/1214, E-K=-1310/111, E-L=-67/1699

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 17-8-9, Exterior(2R) 17-8-9 to 29-4-8, Exterior(2E) 29-4-8 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O except (jt=lb) K=220.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R25	Half Hip	1	1	I73183985
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:02 2025 Page 1
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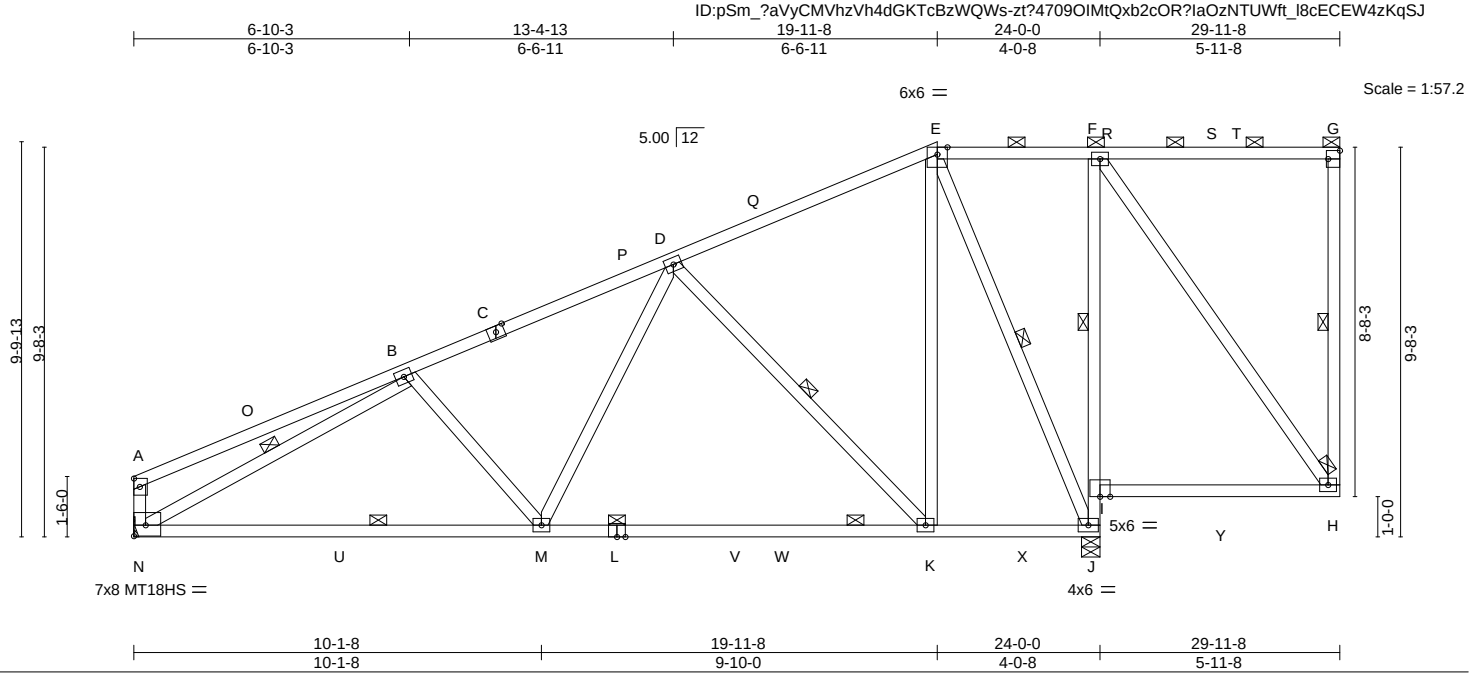

Plate Offsets (X,Y)-- [G:Edge,0-3-8], [N:Edge,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.45	M-N	>632	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.68	M-N	>417	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.03	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	M	>999	240	Weight: 157 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* L-N,J-L: 2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except* A-N: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): E-G.
BOT CHORD	6-0-0 oc bracing. Except: 1 Row at midpt F-I
WEBS	1 Row at midpt G-H, D-K, E-J, B-N

REACTIONS. (size) J=0-5-8, N=Mechanical
Max Horz N=-309(LC 9)
Max Uplift J=-211(LC 8), N=-10(LC 8)
Max Grav J=2286(LC 14), N=1310(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-486/24, B-D=-1623/46, D-E=-522/85, E-F=0/271, A-N=-390/51
BOT CHORD M-N=0/1748, K-M=0/1265, J-K=0/495, I-J=-905/191, F-I=-801/122, H-I=-259/173
WEBS B-M=-308/109, D-M=0/802, D-K=-1095/82, E-K=0/1218, E-J=-1538/46, F-H=-86/457, B-N=-1403/24

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-8-9, Exterior(2R) 15-8-9 to 24-2-6, Interior(1) 24-2-6 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 4x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N except (jt=lb) J=211.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R26	Half Hip	1	1	I73183986
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:02 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-zt?4709OIMtQxb2cOR?IaOzIUUYRt0p8cECEW4zKqSJ

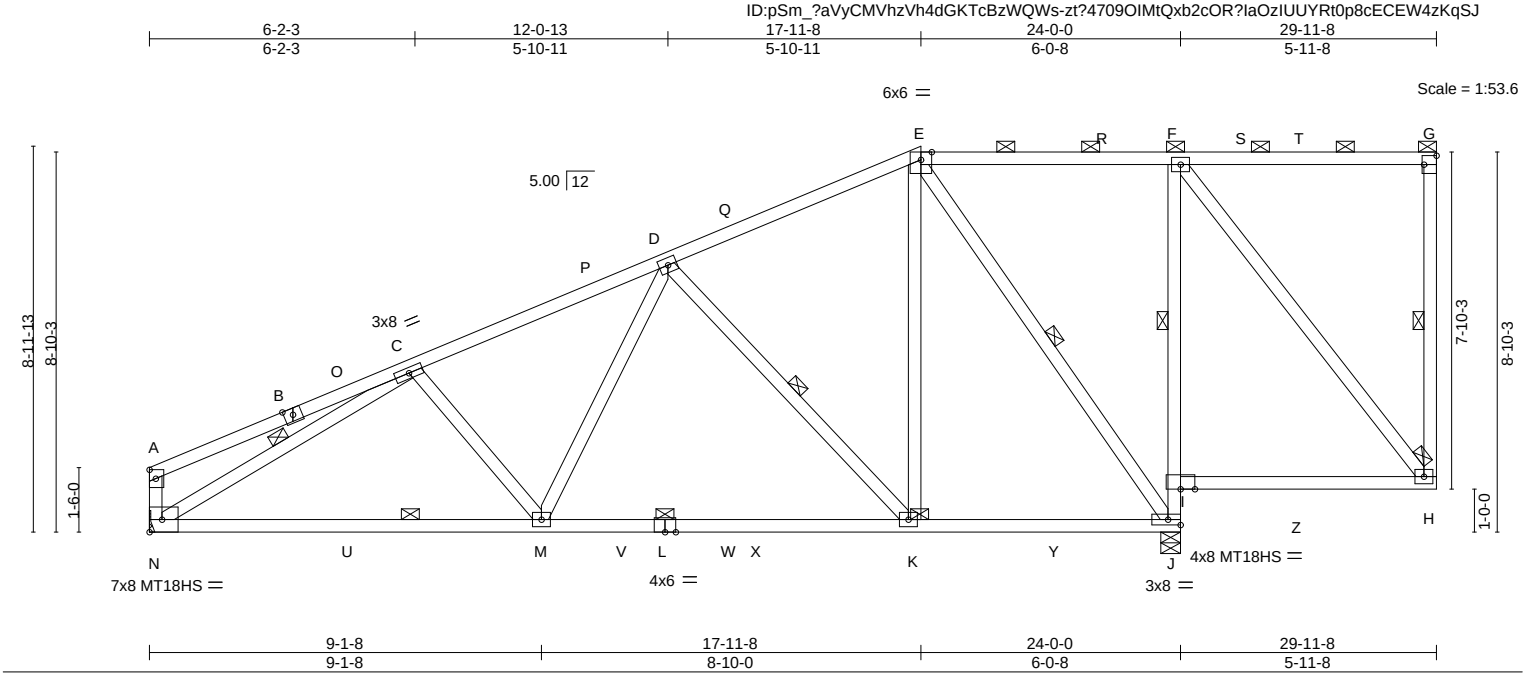

Plate Offsets (X,Y)-- [G:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.34	M-N	>845	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.50	M-N	>567	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.03	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	M	>999	240	Weight: 150 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
H-I: 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
E-J: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): E-G.
BOT CHORD 6-0-0 oc bracing. Except:
1 Row at midpt F-I
WEBS 1 Row at midpt G-H, D-K, E-J, C-N

REACTIONS. (size) J=0-5-8, N=Mechanical
Max Horz N=-285(LC 9)
Max Uplift J=-209(LC 8), N=-13(LC 8)
Max Grav J=2273(LC 14), N=1320(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-C=-413/24, C-D=-1698/49, D-E=-747/82, E-F=0/272, A-N=-343/47
BOT CHORD M-N=0/1749, K-M=0/1384, J-K=0/725, I-J=-981/205, F-I=-876/142, H-I=-285/166
WEBS D-M=0/652, D-K=-944/74, E-K=0/1108, E-J=-1510/48, F-H=-89/469, C-N=-1520/26

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-8-9, Exterior(2R) 13-8-9 to 22-2-6, Interior(1) 22-2-6 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 4x5 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Refer to girder(s) for truss to truss connections.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) N except (jt=lb) J=209.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R27	Half Hip	1	1	I73183987
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:03 2025 Page 1
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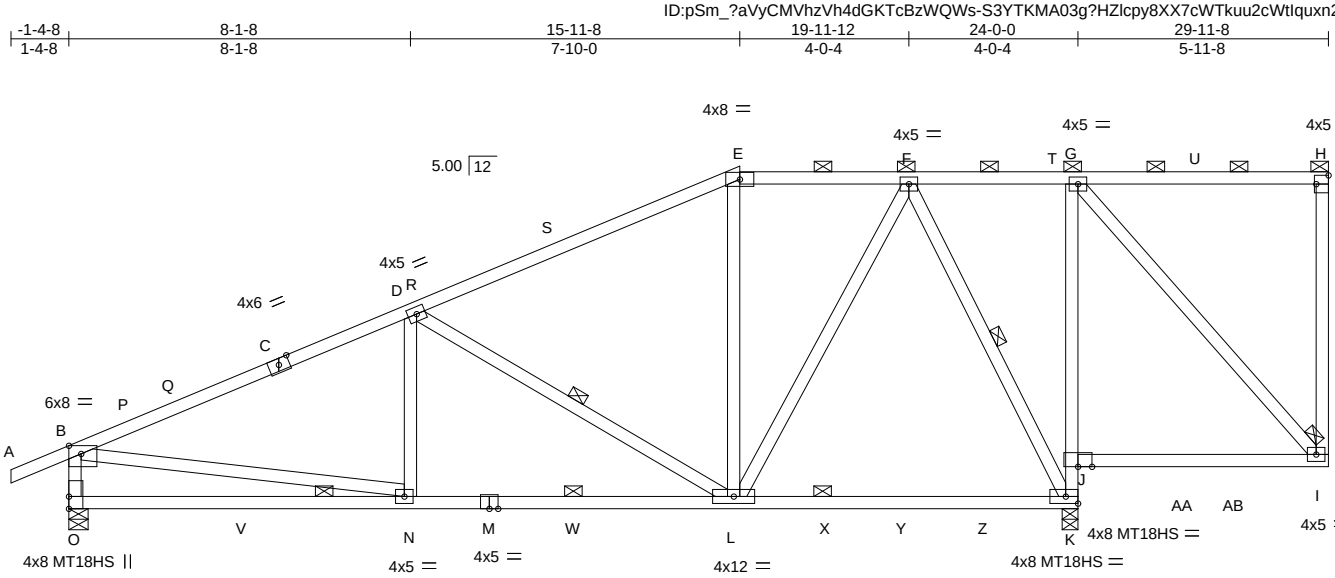

Plate Offsets (X,Y)-- [B:0-3-8,Edge], [H:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.26	K-L	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.40	K-L	>718	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.02	K	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	K-L	>999	240	Weight: 150 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	I-J: 2x4 SPF No.2
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): E-H.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt D-L, F-K

REACTIONS. (size) O=0-5-8, K=0-4-8
Max Horz O=-256(LC 9)
Max Uplift O=-65(LC 8), K=-203(LC 8)
Max Grav O=1398(LC 15), K=2239(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-D=-1811/35, D-E=-1012/69, E-F=-854/91, F-G=0/293, B-O=-1226/109
BOT CHORD	N-O=0/545, L-N=0/1747, K-L=-27/438, J-K=-902/188, G-J=-791/130, I-J=-318/163
WEBS	D-N=0/358, D-L=-943/62, F-L=-21/1104, F-K=-1323/71, G-I=-97/488, B-N=0/1224

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 11-8-9, Exterior(2R) 11-8-9 to 19-11-12, Interior(1) 19-11-12 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O except (jt=lb) K=203.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R28	Half Hip	1	1	I73183988
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:04 2025 Page 1
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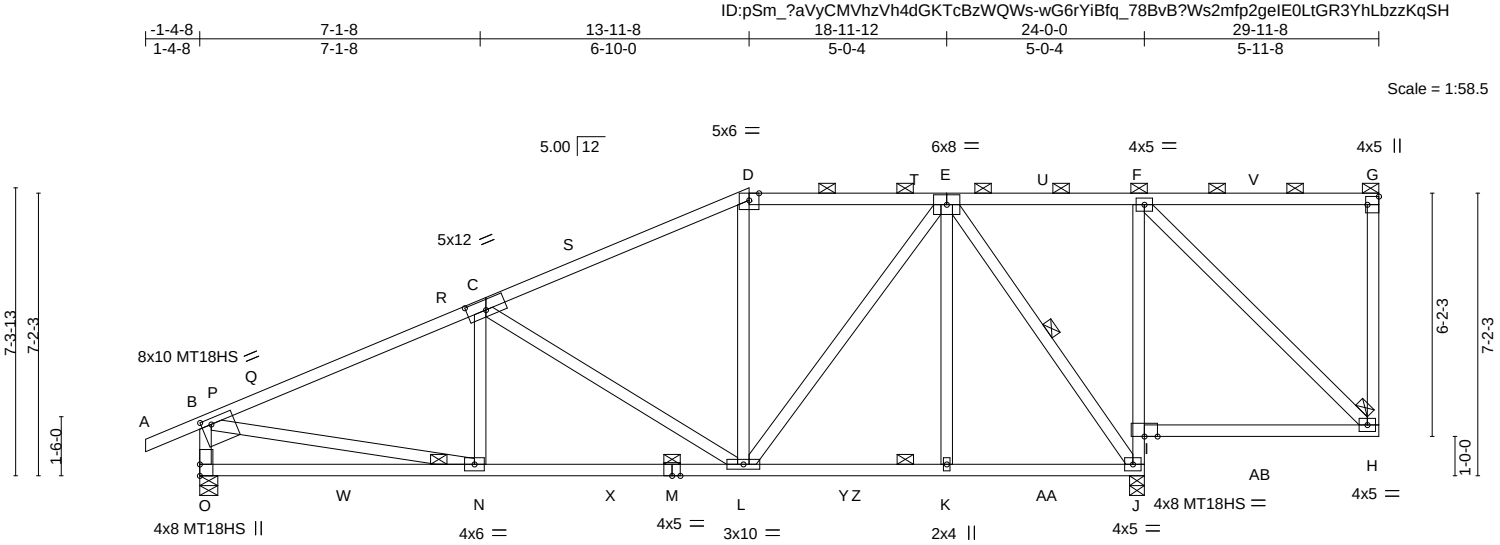

7-1-8
7-1-8
13-11-8
6-10-0
18-11-12
5-0-4
24-0-0
5-0-4
29-11-8
5-11-8

Plate Offsets (X,Y)-- [B:0-3-0,0-1-12], [C:0-5-12,0-3-0], [G:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.16	N-O	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.24	N-O	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.02	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	L-N	>999	240	Weight: 150 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E *Except*
	H-I: 2x4 SPF No.2
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-6-2 max.): D-G.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt E-J

REACTIONS. (size) O=0-5-8, J=0-4-8
Max Horz O=-230(LC 9)
Max Uplift O=-68(LC 8), J=-202(LC 8)
Max Grav O=1406(LC 15), J=2171(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	B-C=-1830/34, C-D=-1221/68, D-E=-1060/87, E-F=0/342, B-O=-1252/106
BOT CHORD	N-O=0/469, L-N=0/1741, K-L=0/685, J-K=0/685, I-J=-919/192, F-I=-812/137, H-I=-366/160
WEBS	C-N=-14/311, C-L=-753/53, E-L=-38/786, E-K=0/406, E-J=-1530/57, F-H=-103/525, B-N=0/1316

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 9-8-9, Exterior(2R) 9-8-9 to 18-2-6, Interior(1) 18-2-6 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O except (jt=lb) J=202.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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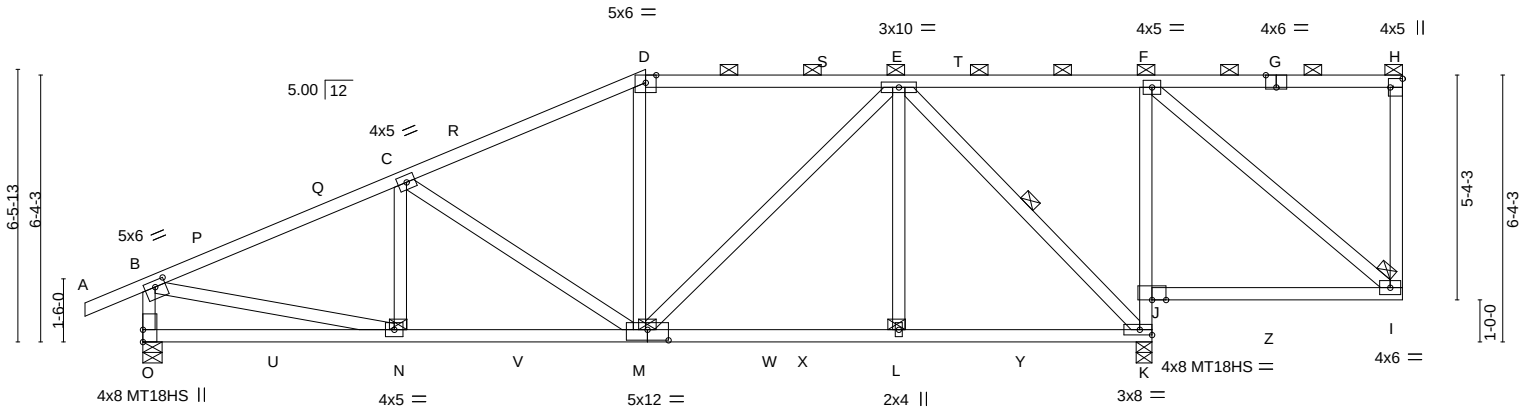
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R29	Half Hip	1	1	I73183989
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:05 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-OSgDl2BHbHF?o2mB4ZZ?C1bufiZ54OgbICQu7PzKqSG

-1-4-8	6-1-8	11-11-8	17-11-12	24-0-0	29-11-8
1-4-8	6-1-8	5-10-0	6-0-4	6-0-4	5-11-8

Scale = 1:54.8



6-1-8	11-11-8	17-11-12	24-0-0	29-11-8
6-1-8	5-10-0	6-0-4	6-0-4	5-11-8

Plate Offsets (X,Y)-- [B:0-3-0,0-1-12], [G:0-3-0,Edge], [H:Edge,0-3-8], [M:0-6-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.16	L-M	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.22	L-M	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.03	K	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	M-N	>999	240	Weight: 143 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
F-K: 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-9-11 max.): D-H.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt E-K

REACTIONS. (size) O=0-5-8, K=0-4-8
Max Horz O=-203(LC 9)
Max Uplift O=-71(LC 8), K=-199(LC 8)
Max Grav O=1413(LC 15), K=2164(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1828/35, C-D=-1437/63, D-E=-1272/81, E-F=0/381, B-O=-1278/104
BOT CHORD N-O=0/347, M-N=0/1736, L-M=0/932, K-L=0/932, J-K=-949/195, F-J=-840/144, I-J=-423/158
WEBS C-M=-521/45, E-M=-42/594, E-L=0/446, E-K=-1666/56, F-I=-111/566, B-N=0/1420

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 7-8-9, Exterior(2R) 7-8-9 to 16-2-6, Interior(1) 16-2-6 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O except (jt=lb) K=199.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R30	Half Hip	1	1	I73183990
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:06 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-seEbzOCvMbNsQCLOdG4ElE81I6uypmukXsASfrzKqSF

-1-4-8 5-1-8 9-11-8 16-11-12 24-0-0 29-11-8
1-4-8 5-1-8 4-10-0 7-0-4 7-0-4 5-11-8

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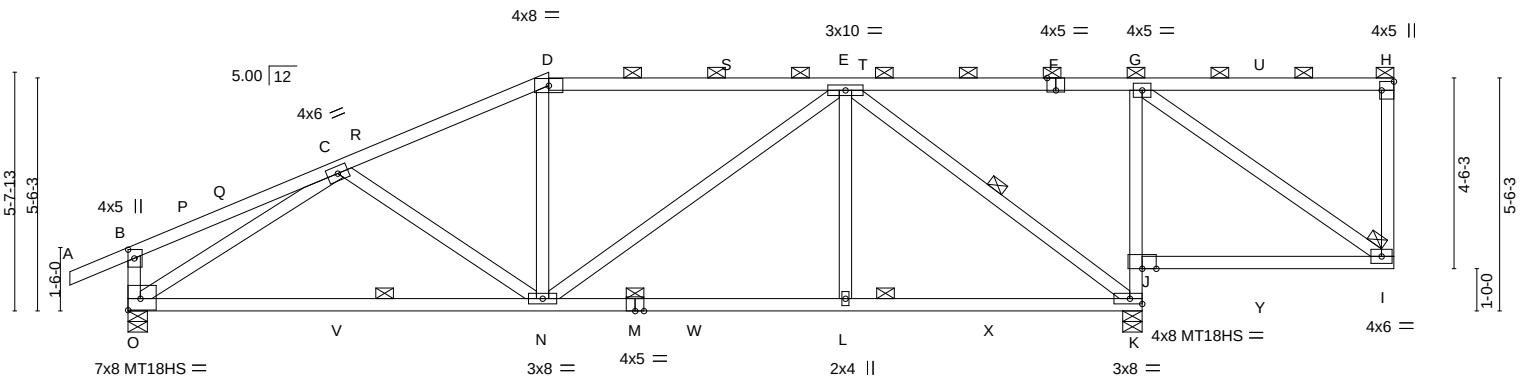

9-11-8 16-11-12 24-0-0 29-11-8
9-11-8 7-0-4 7-0-4 5-11-8

Plate Offsets (X,Y)-- [B:0-2-8,0-1-12], [F:0-2-8,Edge], [H:Edge,0-3-8], [O:Edge,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.40	N-O	>719	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.64	N-O	>444	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.04	K	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	K-L	>999	240	Weight: 133 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
I-J: 2x4 SPF No.2
WEBS 2x4 SPF No.3 *Except*
B-O: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-0-10 max.): D-H.
BOT CHORD 6-0-0 oc bracing.
WEBS 1 Row at midpt E-K

REACTIONS. (size) K=0-5-8, O=0-5-8
Max Horz O=-174(LC 9)
Max Uplift K=-197(LC 8), O=-73(LC 8)
Max Grav K=2038(LC 2), O=1347(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-415/0, C-D=-1510/46, D-E=-1337/63, E-G=-17/437, B-O=-429/83
BOT CHORD N-O=0/1401, L-N=0/1058, K-L=0/1058, J-K=-984/201, G-J=-875/153, I-J=-504/161
WEBS E-N=-34/411, E-L=0/458, E-K=-1688/66, G-I=-126/630, C-O=-1395/81

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 5-8-9, Exterior(2R) 5-8-9 to 14-2-6, Interior(1) 14-2-6 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) O except (jt=lb) K=197.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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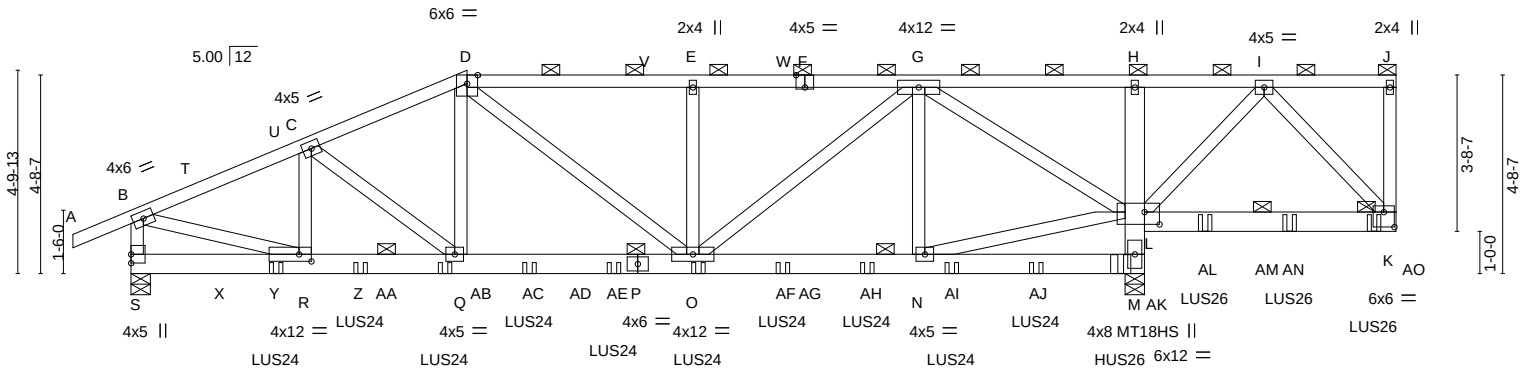
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	R31	Half Hip Girder	1	2	I73183991
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:07 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-KqozAkDX7vVi2MwaB_bTHSgDCVFNYEctlWv?BHzKqSE

-1-4-8	4-1-8	7-11-8	13-3-11	18-7-13	24-0-0	26-10-0	29-11-8
1-4-8	4-1-8	3-10-0	5-4-3	5-4-3	5-4-3	2-10-0	3-1-8

Scale = 1:54.6



4-1-8	7-11-8	13-3-11	18-7-13	24-0-0	29-11-8
4-1-8	3-10-0	5-4-3	5-4-3	5-4-3	5-11-8

Plate Offsets (X,Y)-- [F:0-2-8,Edge], [K:0-3-0,0-4-4], [L:0-4-4,0-3-8], [R:0-3-8,0-2-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.09	O-Q	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.17	O-Q	>999	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.02	M	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.05	O-Q	>999	240	Weight: 327 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* D-F: 2x4 SPF No.3
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-10 max.): D-J.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) S=0-5-8, M=0-5-8
Max Horz S=-142(LC 9)
Max Uplift S=-317(LC 8), M=-510(LC 8)
Max Grav S=3124(LC 2), M=6276(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-4156/379, C-D=-4190/385, D-E=-3983/353, E-G=-3980/352, G-H=-142/2102, H-I=-145/2076, B-S=-2936/323
BOT CHORD R-S=-3/300, Q-R=-299/3767, O-Q=-263/3803, N-O=-81/2109, L-M=-5590/478, H-L=-401/54, K-L=-900/131
WEBS C-R=-301/78, C-Q=-106/252, D-Q=-81/1106, D-O=-14/422, E-O=-523/81, G-O=-214/2477, G-N=-63/814, I-L=-1737/176, I-K=-123/1438, B-R=-314/3709, L-N=-119/2330, G-L=-4959/391

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 3-8-9, Exterior(2R) 3-8-9 to 12-2-6, Interior(1) 12-2-6 to 26-9-12, Exterior(2E) 26-9-12 to 29-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) All plates are MT20 plates unless otherwise indicated.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

May 2,2025

Continued on page 2

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NOTES-

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) S=317, M=510.
13) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
14) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
16) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 3-5-4 from the left end to 21-5-4 to connect truss(es) to front face of bottom chord.
17) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 23-5-4 from the left end to connect truss(es) to front face of bottom chord.
18) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 25-5-4 from the left end to 29-5-4 to connect truss(es) to front face of bottom chord.
19) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-B=-51, B-D=-51, D-J=-51, M-S=-30, K-L=-30
   Concentrated Loads (lb)
   Vert: O=-390(F) Y=-608(F) Z=-309(F) AB=-377(F) AC=-390(F) AE=-390(F) AF=-390(F) AH=-390(F) AI=-390(F) AJ=-390(F) AK=-398(F) AL=-509(F) AN=-483(F) AO=-467(F)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	S	Jack-Closed	2	1	I73183992
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:12 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-hobsDRHgyR7?87oX_XBe_VO5YW0UDTNcvodmtVzKqS9

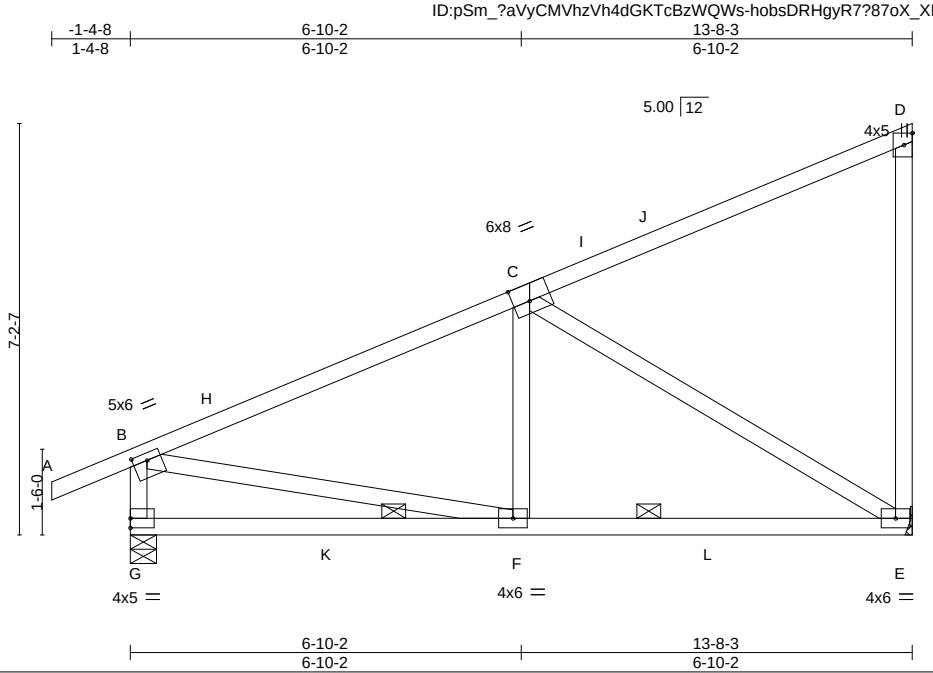

Plate Offsets (X,Y)-- [B:0-3-0,0-1-8], [C:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.17	E-F	>931	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.23	E-F	>688	360		
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.01	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.02	E-F	>999	240	Weight: 63 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-257(LC 9)
Max Uplift G=-109(LC 8), E=-63(LC 8)
Max Grav G=865(LC 2), E=748(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-771/147, B-C=-864/68
BOT CHORD F-G=0/376, E-F=0/761
WEBS B-F=0/519, C-F=0/393, C-E=-808/92

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 9-3-9, Exterior(2R) 9-3-9 to 13-6-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=109.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	S2	Jack-Closed	2	1	I73183993
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:13 2025 Page 1
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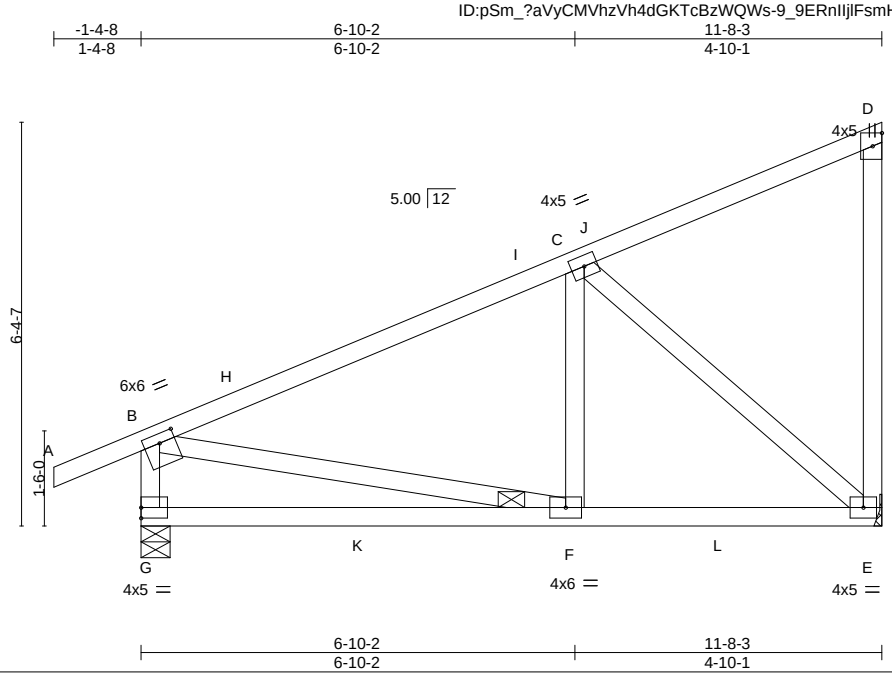

Plate Offsets (X,Y)-- [B:0-3-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.17	F-G	>788	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.24	F-G	>564	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.01	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.01	E-F	>999	240	Weight: 56 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-236(LC 9)
Max Uplift G=-119(LC 8), E=-75(LC 8)
Max Grav G=756(LC 2), E=645(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-657/159, B-C=-651/70
BOT CHORD F-G=0/381, E-F=0/567
WEBS B-F=-7/298, C-F=0/387, C-E=-671/98

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 7-3-9, Exterior(2R) 7-3-9 to 11-6-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=119.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	S3	Jack-Closed	2	1	I73183994
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:13 2025 Page 1
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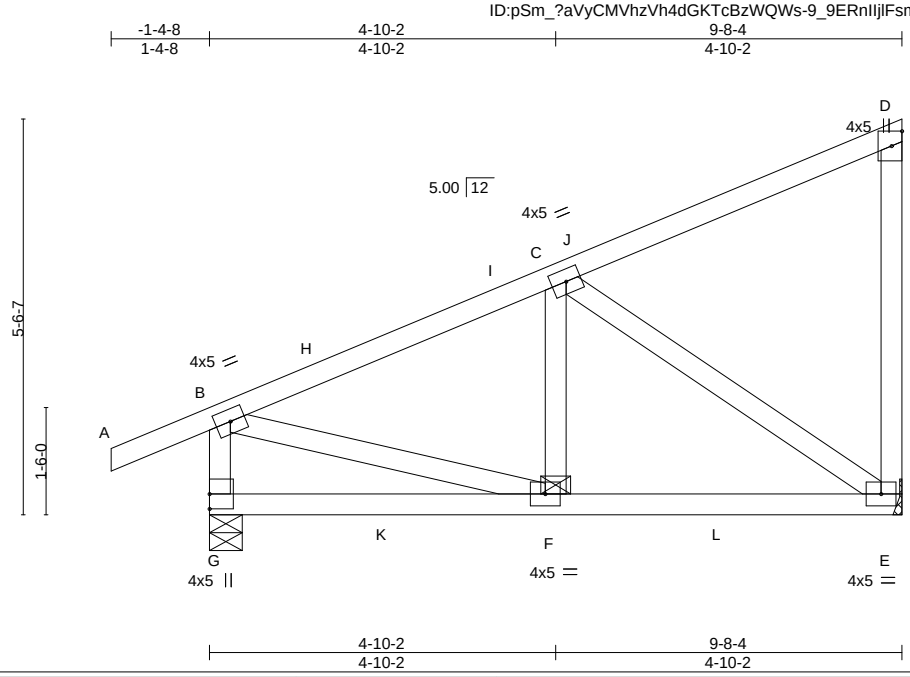

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.08	E-F	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.10	E-F	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.01	E-F	>999	240	Weight: 46 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-211(LC 9)
Max Uplift G=-128(LC 8), E=-85(LC 8)
Max Grav G=648(LC 2), E=541(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-581/155, B-C=-538/70
BOT CHORD F-G=-3/253, E-F=-9/502
WEBS B-F=-15/383, C-F=0/314, C-E=-536/104

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 5-3-9, Exterior(2R) 5-3-9 to 9-6-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=128.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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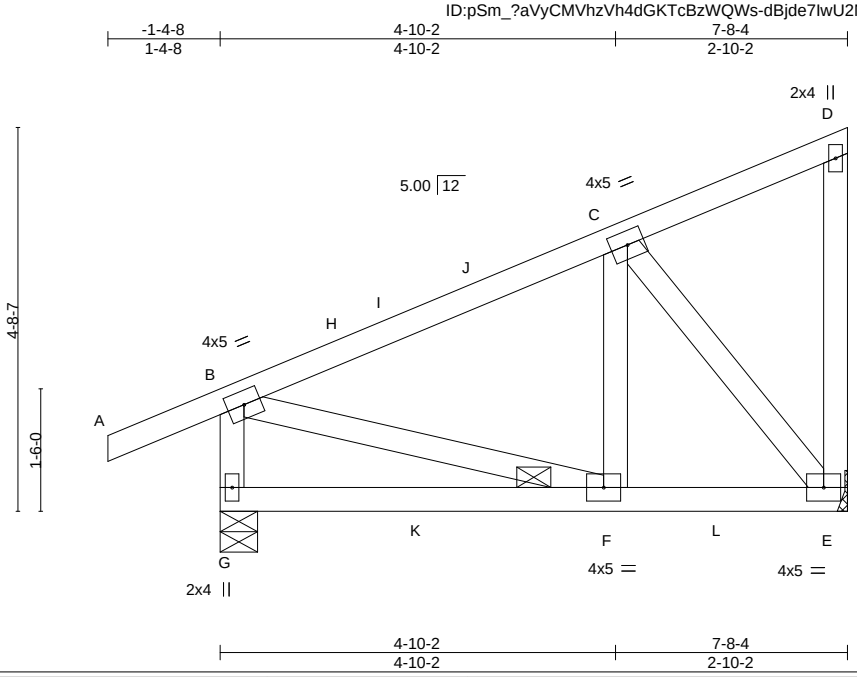
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	S4	Jack-Closed	2	1	I73183995
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:14 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-dBjde7IwU2NjNRyw5yD63wTWgKhJhauvM66txNzKqS7



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.08	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.11	F-G	>805	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.00	F	>999	240	Weight: 39 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) G=0-5-8, E=Mechanical
Max Horz G=-184(LC 9)
Max Uplift G=-137(LC 8), E=-91(LC 8)
Max Grav G=541(LC 2), E=434(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-G=-482/159, B-C=-355/60
BOT CHORD E-F=-4/324
WEBS B-F=0/273, C-F=0/325, C-E=-447/113

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 3-3-9, Exterior(2R) 3-3-9 to 7-6-8; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E except (jt=lb) G=137.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	S5	Jack-Closed	2	1	I73183996
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:14 2025 Page 1
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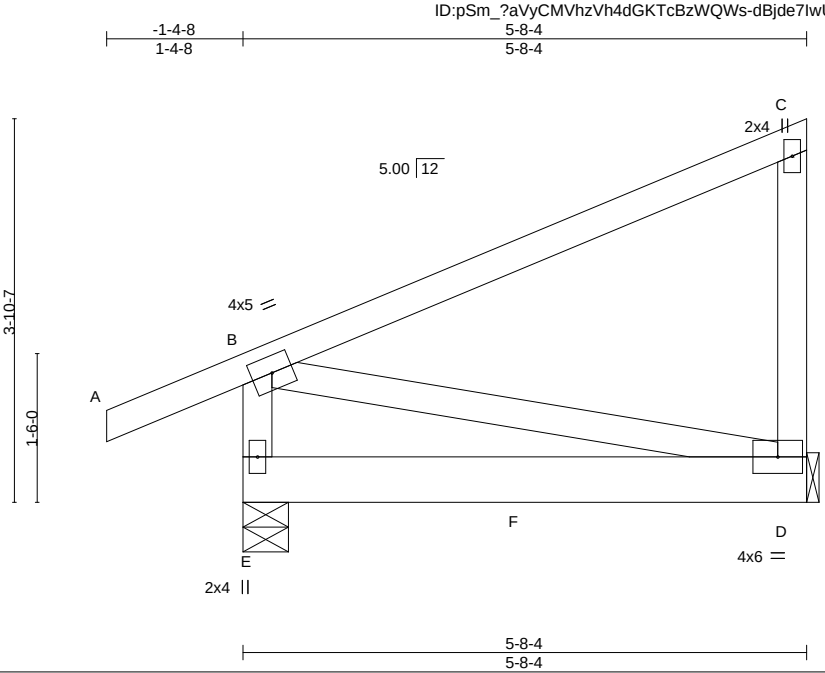

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.05	D-E	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.07	D-E	>950	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-AS		Wind(LL)	0.00	E	****	240	Weight: 29 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) E=0-5-8, D=Mechanical
Max Horz E=-149(LC 9)
Max Uplift E=-143(LC 8), D=-87(LC 8)
Max Grav E=435(LC 2), D=381(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-E=-355/175

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D except (jt=lb) E=143.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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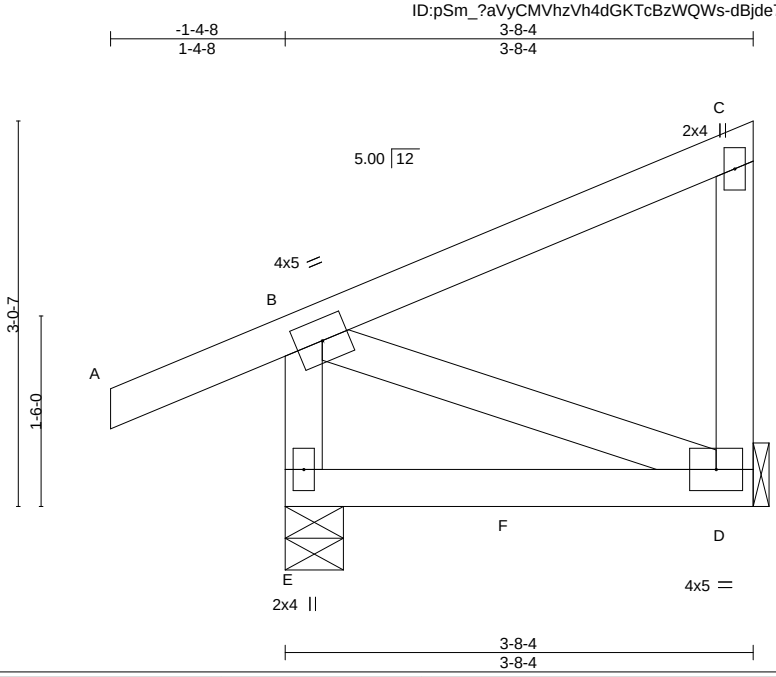
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	S6	Jack-Closed	2	1	I73183997
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:14 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-dBjde7IwU2NjNRyw5yD63wTY8Kihhc9vM66txNzKqS7



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.05	D-E	>869	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.06	D-E	>693	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-MP		Wind(LL)	0.00	E	****	240	Weight: 18 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-4 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) E=0-5-8, D=Mechanical
Max Horz E=-117(LC 9)
Max Uplift E=-126(LC 8), D=-50(LC 8)
Max Grav E=372(LC 23), D=328(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-E=-285/146

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D except (jt=lb) E=126.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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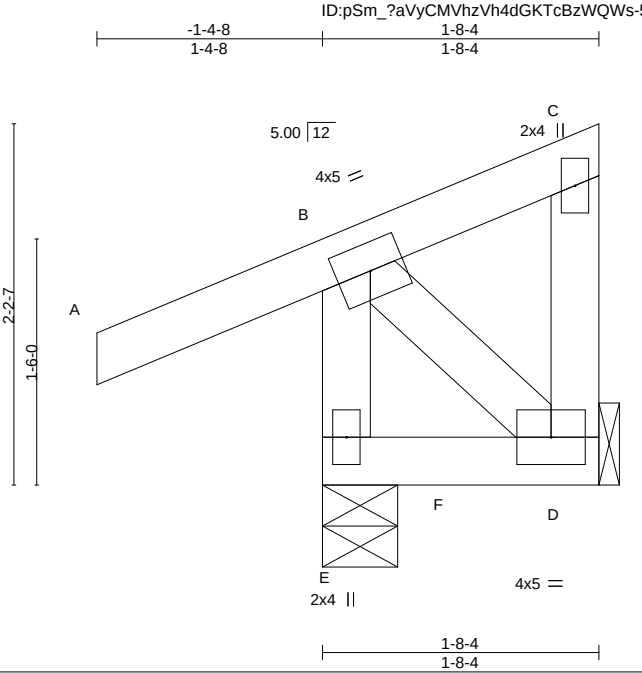
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	S7	Jack-Closed	2	1	I73183998
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:15 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-5NH?sTJYFMVa?bX6ffkLc70juk94Q3Y3bmrQUqzKqS6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00	D-E	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.00	D-E	>999	360		
TCDL	10.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-MP		Wind(LL)	0.00	E	****	240	Weight: 11 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-8-4 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) E=0-5-8, D=Mechanical
Max Horz E=-80(LC 9)
Max Uplift E=-126(LC 8), D=-33(LC 10)
Max Grav E=332(LC 23), D=268(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D except (jt=lb) E=126.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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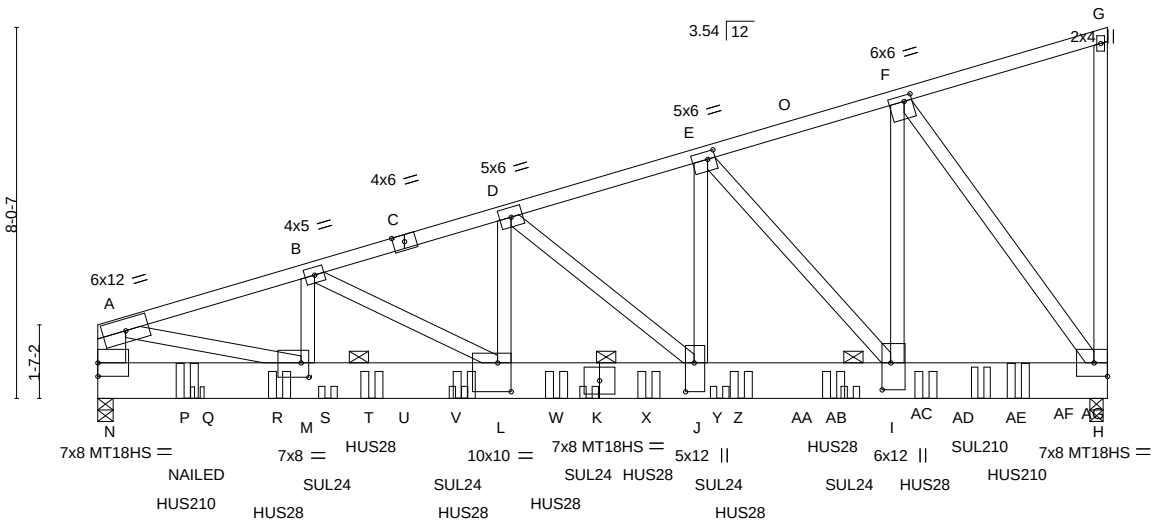
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	T	Roof Special Girder	2	3	I73183999
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:16 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-ZZrN3pKA?geRdl6JDNGa8LYjz8KG9HiCqQbz0GzKqS5

4-6-9	8-9-11	13-0-12	17-3-13	21-10-7
4-6-9	4-3-1	4-3-1	4-3-1	4-6-9

Scale = 1:49.9



4-6-9	8-9-11	13-0-12	17-3-13	21-9-5	21-10-7
4-6-9	4-3-1	4-3-1	4-3-1	4-5-8	0-1-2

Plate Offsets (X,Y)-- [E:0-2-0,0-2-0], [F:0-2-0,0-1-8], [I:0-7-0,0-2-4], [J:0-7-8,0-2-4], [L:0-3-8,0-7-8], [M:0-2-0,0-3-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.18	J-L	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.32	J-L	>811	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.04	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.07	L	>999	240	Weight: 508 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x10 SP No.1
WEBS 2x4 SPF No.3 *Except*
E-J,F-I,F-H: 2x4 SPF No.2, A-N: 2x8 SP No.1
A-M: 2x4 SPF 2100F 1.8E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

REACTIONS. (size) H=0-3-7 (req. 0-4-9), N=0-4-0 (req. 0-4-5)
Max Horz N=-267(LC 33)
Max Uplift H=-57(LC 8), N=-122(LC 8)
Max Grav H=11678(LC 3), N=10936(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-16698/198, B-D=-17596/219, D-E=-13606/147, E-F=-7629/104, A-N=-8536/143
BOT CHORD M-N=-40/2631, L-M=-178/15961, J-L=-148/16856, I-J=-31/13012, H-I=0/7295
WEBS B-M=-973/108, B-L=-16/1027, D-L=-10/4116, D-J=-5063/154, E-J=-1/8029, E-I=-8721/137, F-I=0/11992, A-M=-143/13942, F-H=-12509/99

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 3 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3) 0-3-10 to 4-6-9, Exterior(2R) 4-6-9 to 21-8-10; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) WARNING: Required bearing size at joint(s) H, N greater than input bearing size.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H except (jt=lb) N=122.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

May 2,2025

Continued on page 2

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NOTES-

13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) Use Simpson Strong-Tie SUL24 (4-10d Girder, 4-10dx1 1/2 Truss) or equivalent spaced at 2-9-15 oc max. starting at 4-11-13 from the left end to 13-5-10 to connect truss(es) to front face of bottom chord.
15) Use Simpson Strong-Tie SUL24 (4-16d Girder, 4-10dx1 1/2 Truss) or equivalent at 16-3-10 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
16) Use Simpson Strong-Tie SUL210 (10-10d Girder, 10-10dx1 1/2 Truss) or equivalent at 19-1-9 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
17) Use Simpson Strong-Tie HUS210 (30-10d Girder, 10-10d Truss) or equivalent at 1-11-4 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
18) Use Simpson Strong-Tie HUS28 (22-10d Girder, 8-10d Truss) or equivalent spaced at 6-0-0 oc max. starting at 3-11-4 from the left end to 15-11-4 to connect truss(es) to back face of bottom chord.
19) Use Simpson Strong-Tie HUS28 (22-10d Girder, 8-10d Truss) or equivalent spaced at 8-0-0 oc max. starting at 5-11-4 from the left end to 13-11-4 to connect truss(es) to back face of bottom chord.
20) Use Simpson Strong-Tie HUS28 (22-10d Girder, 8-10d Truss) or equivalent at 7-11-4 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
21) Use Simpson Strong-Tie HUS28 (22-10d Girder, 8-10d Truss) or equivalent at 11-11-4 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
22) Use Simpson Strong-Tie HUS28 (22-10d Girder, 8-10d Truss) or equivalent at 17-11-4 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
23) Use Simpson Strong-Tie HUS210 (30-10d Girder, 10-10d Truss) or equivalent at 19-11-4 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
24) Fill all nail holes where hanger is in contact with lumber.
25) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-G=-51, H-N=-30
   Concentrated Loads (lb)
   Vert: K=-343(F) P=-1271(F=1, B=-1272) R=-1288(B) S=-115(F) T=-1273(B) V=-1513(F=-240, B=-1273) W=-1273(B) X=-1273(B) Y=-437(F) Z=-1362(B) AB=-1409(B) AC=-526(F) AD=-1268(B) AE=-613(F) AG=-1269(B)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	U	Monopitch Girder	1	2	I73184000

Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:16 2025 Page 1

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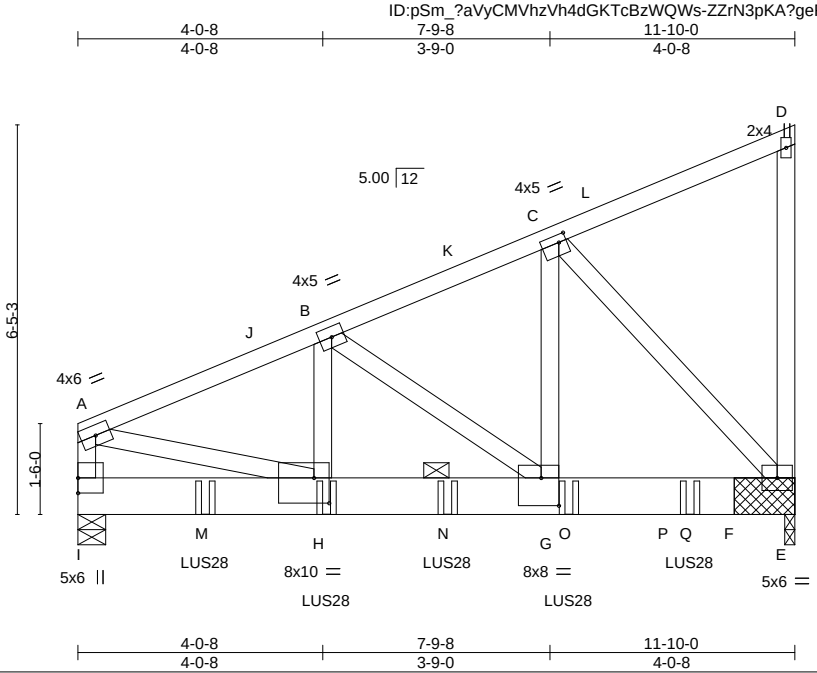

Plate Offsets (X,Y)-- [C:0-1-8,0-1-8], [G:0-3-8,0-5-8], [H:0-3-0,0-5-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.04	G-H	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.07	G-H	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.01	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.01	G-H	>999	240	Weight: 173 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-9 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) E=(0-2-0 + bearing block) (req. 0-2-5), I=0-5-8
Max Horz I=-236(LC 9)
Max Grav E=3916(LC 2), I=3723(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-4553/0, B-C=-3033/0, A-I=-2972/0
BOT CHORD H-I=-3/494, G-H=0/4140, E-G=0/2755
WEBS B-H=0/1437, B-G=-1712/5, C-G=0/3808, C-E=-4072/0, A-H=0/3931

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) 2x8 SP No.1 bearing block 12" long at jt. E attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP No.1.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-8-4, Exterior(2E) 8-8-4 to 11-8-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
6) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
7) Unbalanced snow loads have been considered for this design.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-1-4 from the left end to 10-1-4 to connect truss(es) to back face of bottom chord.
13) Fill all nail holes where hanger is in contact with lumber.

May 2,2025

LOAD CASE(S) Standard

Continued on page 2

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LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-D=-51, E-I=-30
   Concentrated Loads (lb)
   Vert: H=-951(B) M=-951(B) N=-951(B) O=-951(B) Q=-951(B)

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V	Monopitch	4	1	I73184001
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:17 2025 Page 1

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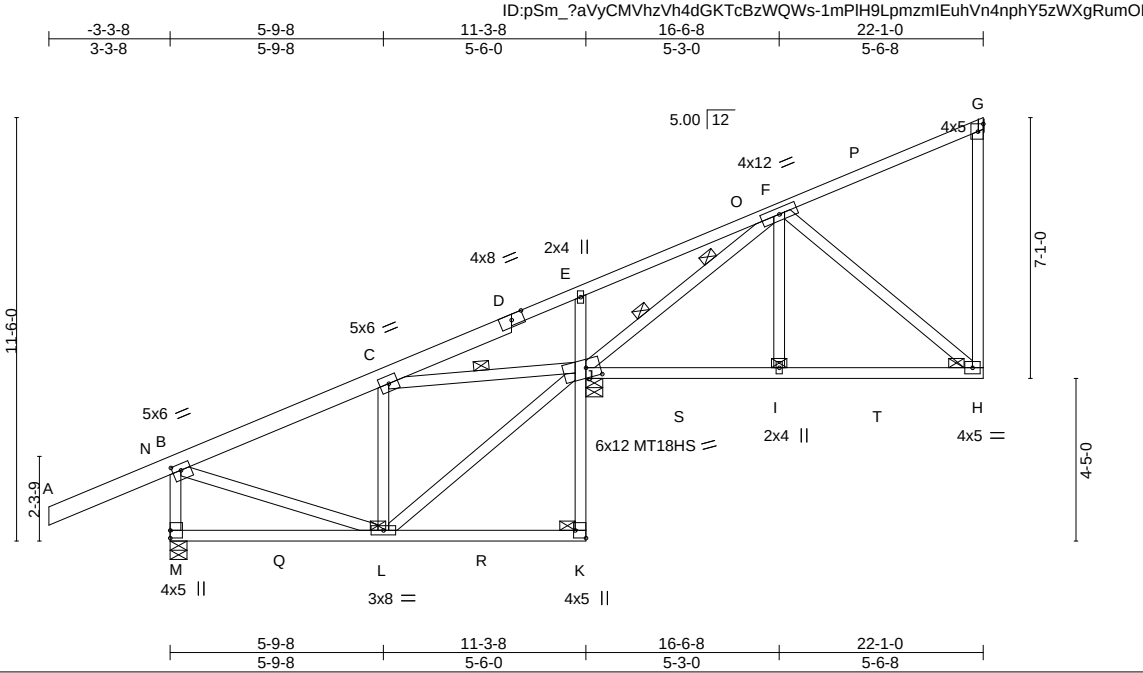

Plate Offsets (X,Y)-- [B:0-2-12,0-2-0], [J:0-4-9,0-3-5], [K:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.11	L-M	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.54	H	>240	120	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.89	Horz(CT)	-0.01	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.00	L-M	>999	240	Weight: 127 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF 2100F 1.8E *Except*
	A-D: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	E-K: 2x4 SPF No.3
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt C-J
	2 Rows at 1/3 pts F-J

REACTIONS. (size) M=0-5-8, J=0-5-8
Max Horz M=-302(LC 9)
Max Uplift M=-155(LC 32), J=-452(LC 8)
Max Grav M=341(LC 2), J=2331(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-215/531, C-E=-728/3041, E-F=-647/2991, B-M=-270/227
BOT CHORD L-M=-51/294, J-K=0/314, E-J=-535/146, I-J=-446/144, H-I=-446/144
WEBS C-L=-146/739, J-L=-594/217, C-J=-2335/520, F-J=-3103/718, F-I=-74/416, F-H=-61/588, B-L=-502/241

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -3-3-8 to -0-3-8, Interior(1) -0-3-8 to 18-11-4, Exterior(2E) 18-11-4 to 21-11-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) M=155, J=452.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V01	GABLE	2	1	I73184002
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:17 2025 Page 1
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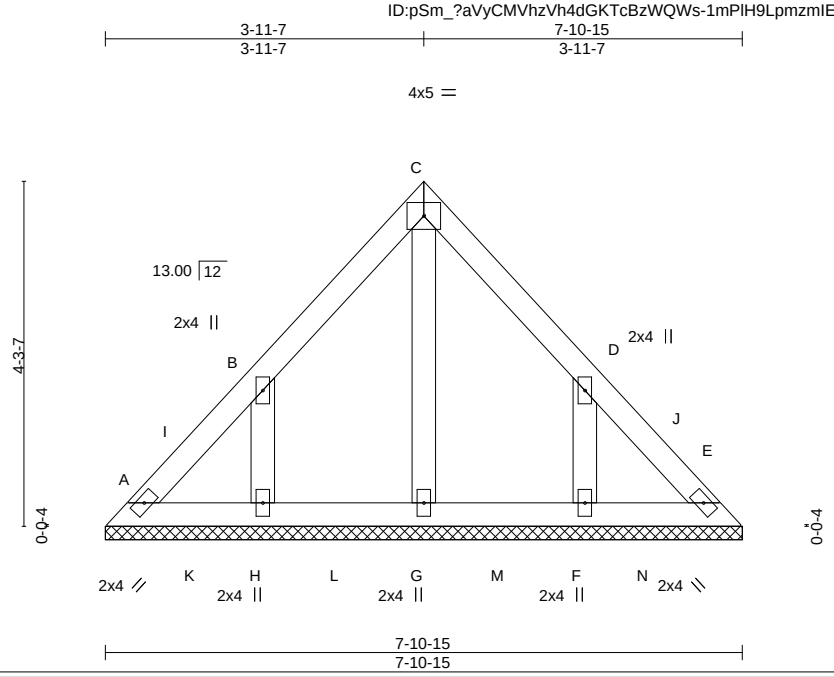

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Structural wood sheathing directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 7-10-15.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) H, F
Max Grav All reactions 250 lb or less at joint(s) except A=286(LC 25), E=286(LC 29), G=329(LC 27), H=356(LC 26), F=356(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-4-0 to 3-4-0, Exterior(2R) 3-4-0 to 4-6-15, Exterior(2E) 4-6-15 to 7-6-15; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, F.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V02	Valley	10	1	I73184003
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:18 2025 Page 1
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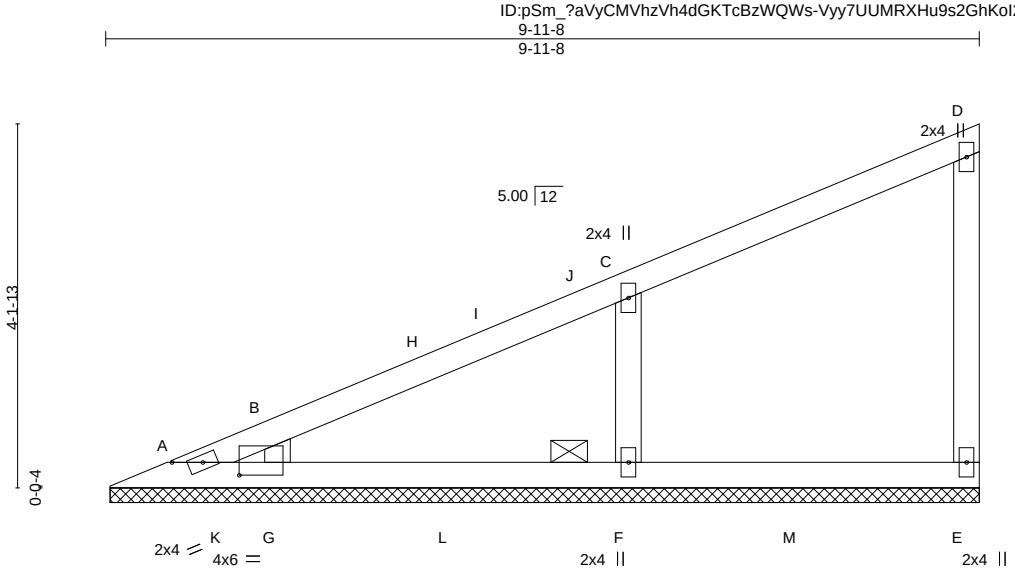

Plate Offsets (X,Y)-- [G:0-9-3,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.47	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S								
BCDL	15.0										Weight: 29 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 9-10-14.
(lb) - Max Horz A=-149(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) E, G except A=-107(LC 22), F=-101(LC 8)
Max Grav All reactions 250 lb or less at joint(s) A except E=328(LC 27), F=485(LC 2), G=412(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS C-F=-355/149, B-G=-264/119

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 5-6-13, Exterior(2R) 5-6-13 to 9-9-12; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) E, G except (jt=lb) A=107, F=101.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V03	Valley	10	1	I73184004
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:18 2025 Page 1
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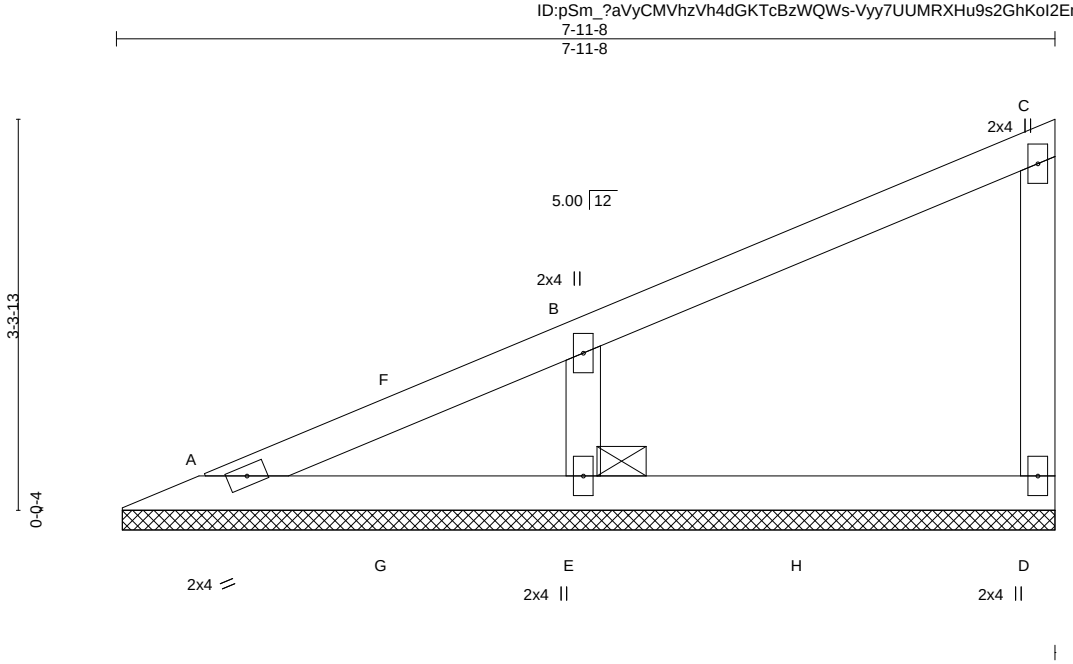

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.52	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-P							Weight: 22 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) A=7-10-14, D=7-10-14, E=7-10-14
Max Horz A=-122(LC 9)
Max Uplift D=-29(LC 8), E=-142(LC 8)
Max Grav A=305(LC 23), D=326(LC 25), E=494(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS B-E=-361/195

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D except (jt=lb) E=142.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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MiTek®
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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V3	Monopitch	1	1	I73184005
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:29 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-h37IoFUKyfGbhkcpUc_dA4bzkNoviDB7pxF9y0zKqRu

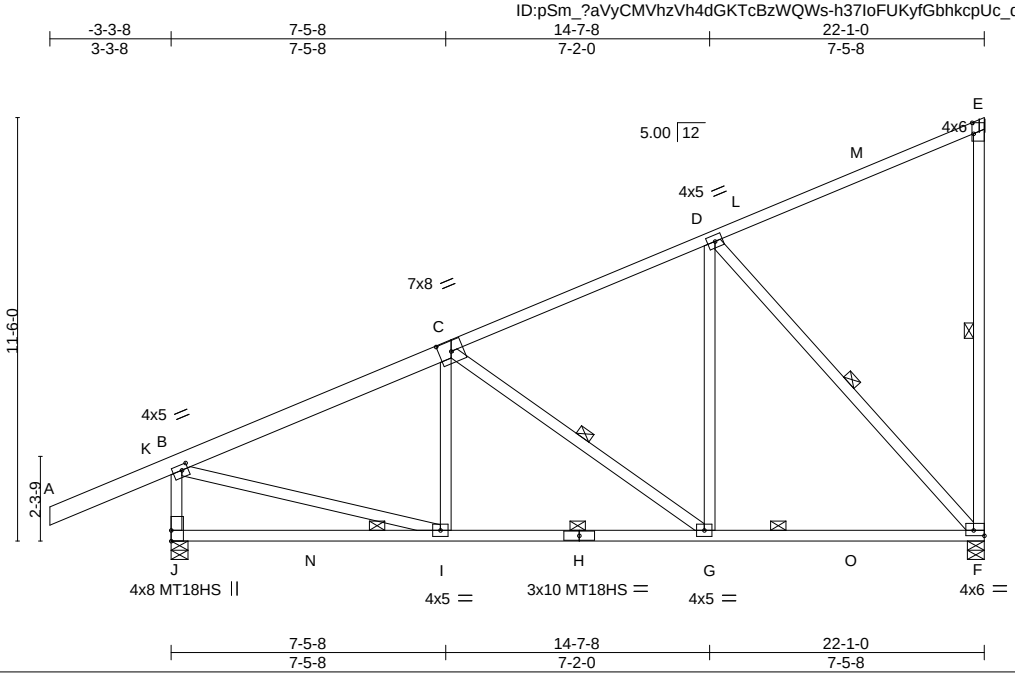

Plate Offsets (X,Y)-- [B:0-2-0,0-1-12], [C:0-4-0,0-3-4], [E:0-3-9,Edge], [F:Edge,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.23	F-G	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.33	F-G	>800	360	MT18HS	197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.02	F	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-AS		Wind(LL)	0.06	F-G	>999	240	Weight: 123 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	A-C: 2x6 SPF No.2
BOT CHORD	2x4 SPF 2100F 1.8E
WEBS	2x4 SPF No.3 *Except*
	E-F,D-F: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt E-F, C-G, D-F

REACTIONS. (size) F=0-5-8, J=0-5-8
Max Horz J=-377(LC 9)
Max Uplift F=-41(LC 8), J=-185(LC 8)
Max Grav F=1391(LC 15), J=1495(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-1412/71, C-D=-950/123, E-F=-261/35, B-J=-1391/224
BOT CHORD I-J=-20/423, G-I=0/1435, F-G=0/977
WEBS C-I=-73/278, C-G=-568/43, D-G=0/714, D-F=-1306/100, B-I=-0/1141

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -3-3-8 to -0-3-8, Interior(1) -0-3-8 to 18-11-4, Exterior(2E) 18-11-4 to 21-11-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F except (jt=lb) J=185.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V04	Valley	10	1	I73184006
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:19 2025 Page 1
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5-11-8

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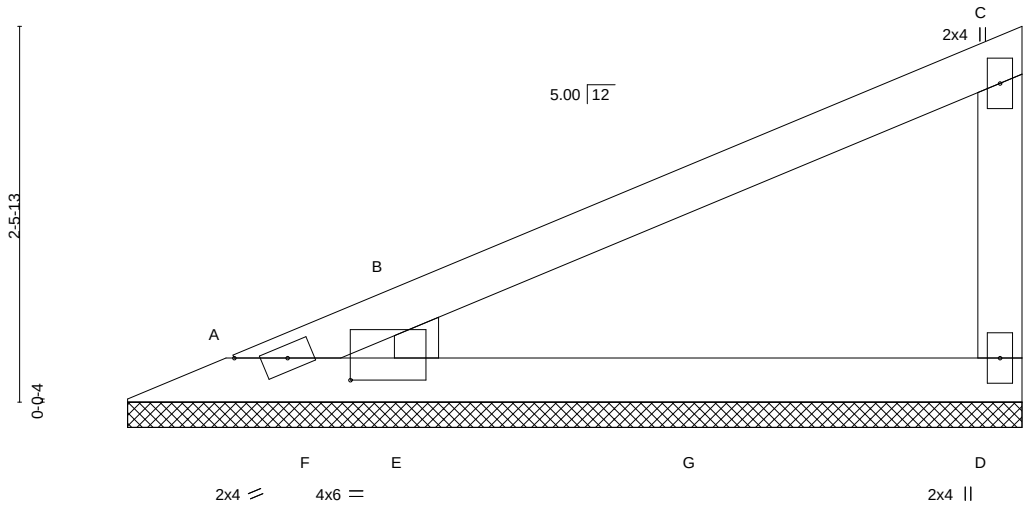

Plate Offsets (X,Y)-- [E:0-9-3,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.48	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-P								
BCDL	15.0										Weight: 16 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) A=5-10-14, D=5-10-14, E=5-10-14
Max Horz A=-92(LC 9)
Max Uplift A=-145(LC 22), D=-44(LC 8), E=-154(LC 8)
Max Grav A=220(LC 23), D=327(LC 25), E=481(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS B-E=-343/204

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) D except (jt=lb) A=145, E=154.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V05	Valley	10	1	I73184007
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:19 2025 Page 1
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3-11-8

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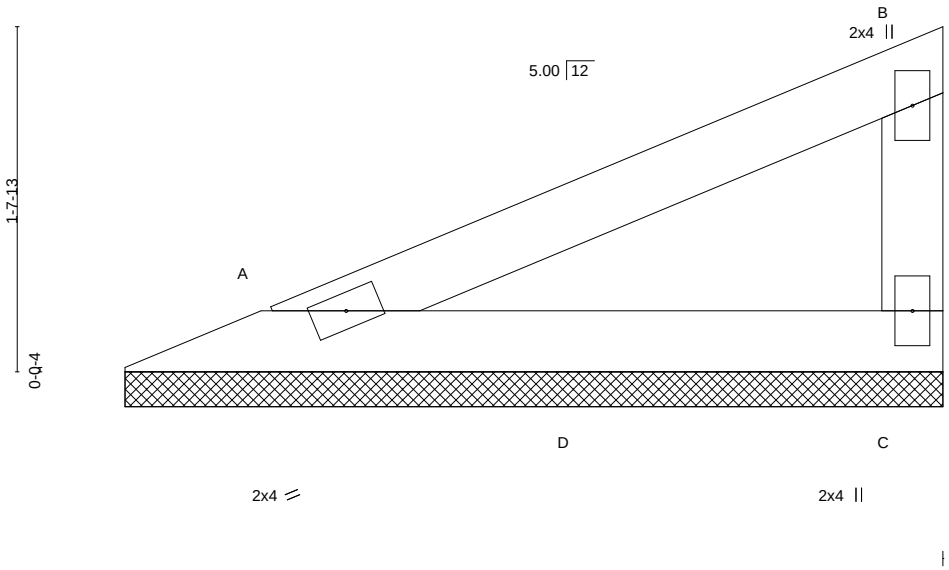

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.50	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	C	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) A=3-10-14, C=3-10-14
Max Horz A=-57(LC 9)
Max Uplift A=-39(LC 8), C=-51(LC 8)
Max Grav A=326(LC 22), C=326(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A, C.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V06	Valley	10	1	I73184008
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:20 2025 Page 1

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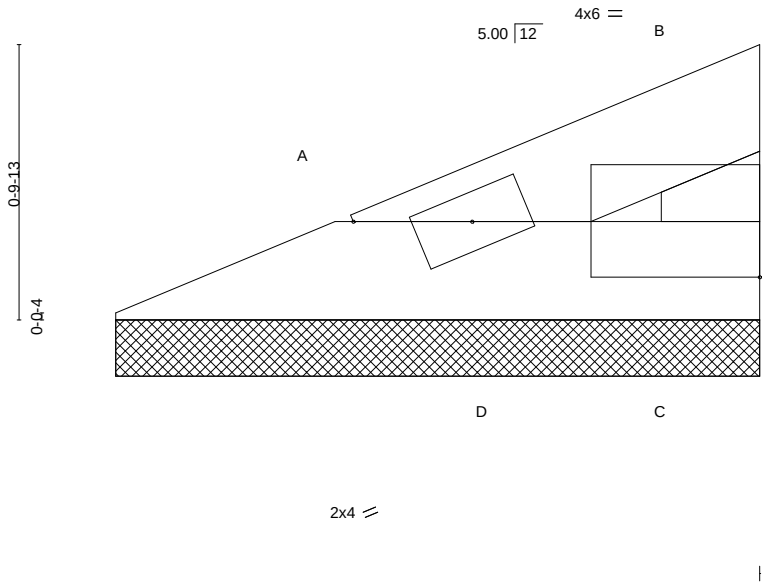

Plate Offsets (X,Y)-- [B:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	C	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-P								
BCDL	15.0										Weight: 4 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-11-8 oc purlins, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. (size) A=1-10-14, C=1-10-14
Max Horz A=-20(LC 9)
Max Uplift A=-14(LC 8), C=-18(LC 8)
Max Grav A=276(LC 22), C=276(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A, C.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V07	GABLE	1	1	I73184009
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:20 2025 Page 1
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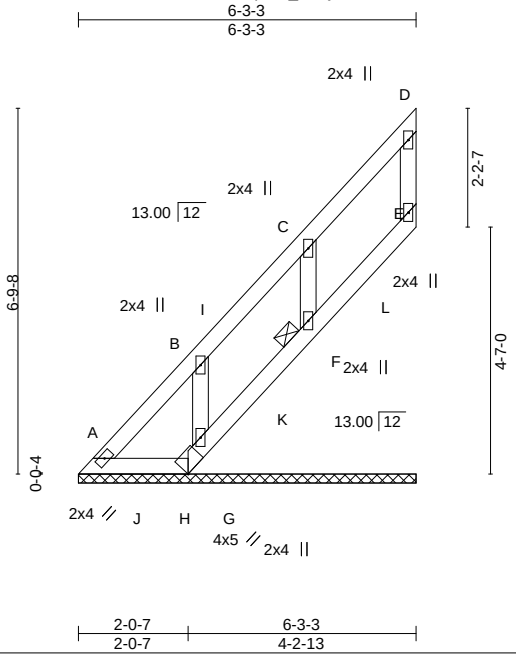

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	E	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-P							Weight: 26 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 6-3-3.
(lb) - Max Horz A=-220(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) F, G except A=-127(LC 9), H=-295(LC 23)
Max Grav All reactions 250 lb or less at joint(s) H except A=291(LC 25), E=286(LC 29), F=359(LC 28), G=542(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-213/276
BOT CHORD G-H=-45/266

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) F, G except (jt=lb) A=127, H=295.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) E, F, G.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V08	GABLE	2	1	I73184010
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:21 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-wXeG6WOJqCGjjW?G0wrlrOFk_9B0qnMxzhIkhUzKqS0

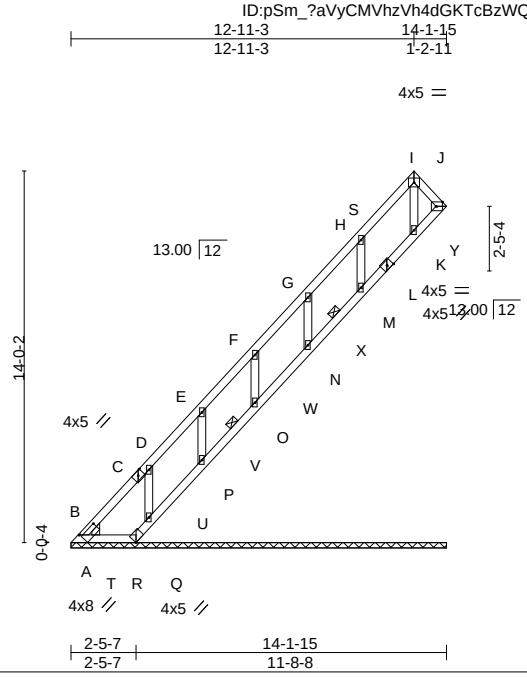

Plate Offsets (X,Y)-- [A:0-8-3,0-1-4], [J:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	J	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S								
BCDL	15.0										Weight: 61 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 14-1-15.
(lb) - Max Horz A=351(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) K, M, N, O, P except J=-193(LC 8), A=-183(LC 9), R=-108(LC 23), Q=-119(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except J=276(LC 37), A=301(LC 29), R=280(LC 22), K=322(LC 36), M=355(LC 35), N=349(LC 34), O=350(LC 33), P=350(LC 32), Q=363(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-350/288, B-D=-354/328
WEBS D-Q=-272/142

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-6-10 to 3-6-10, Interior(1) 3-6-10 to 9-11-3, Exterior(2R) 9-11-3 to 12-11-3, Exterior(2E) 12-11-3 to 13-11-9; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K, M, N, O, P except (jt=lb) J=193, A=183, R=108, Q=119.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) J, K, M, N, O, P, Q.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V10	GABLE	2	1	I73184011
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:21 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-wXeG6WOJqCGjjW?G0wrlrOFaS98CqkMxzhIkhUzKqS0

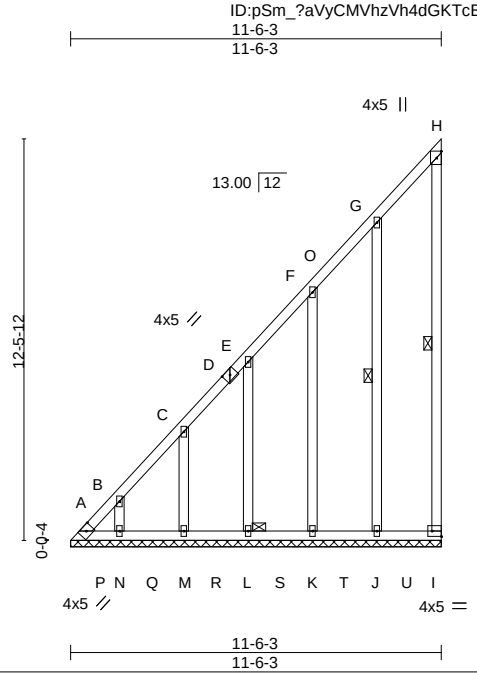

Plate Offsets (X,Y)-- [I:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.39	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.00	I	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S								
BCDL	15.0										Weight: 77 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt H-I, G-J

REACTIONS. All bearings 11-6-3.
(lb) - Max Horz A=-550(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) K, L, M, N except A=-427(LC 9), J=-104(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except I=288(LC 33), A=268(LC 27), J=356(LC 32), K=349(LC 31), L=350(LC 30), M=352(LC 29), N=339(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-241/628, B-C=-167/560, C-E=-73/474, E-F=-59/388, F-G=-60/318
WEBS G-J=-301/0

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-4-0 to 3-6-3, Interior(1) 3-6-3 to 7-1-9, Exterior(2R) 7-1-9 to 11-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K, L, M, N except (jt=lb) A=427, J=104.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V11	GABLE	1	1	I73184012
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:22 2025 Page 1
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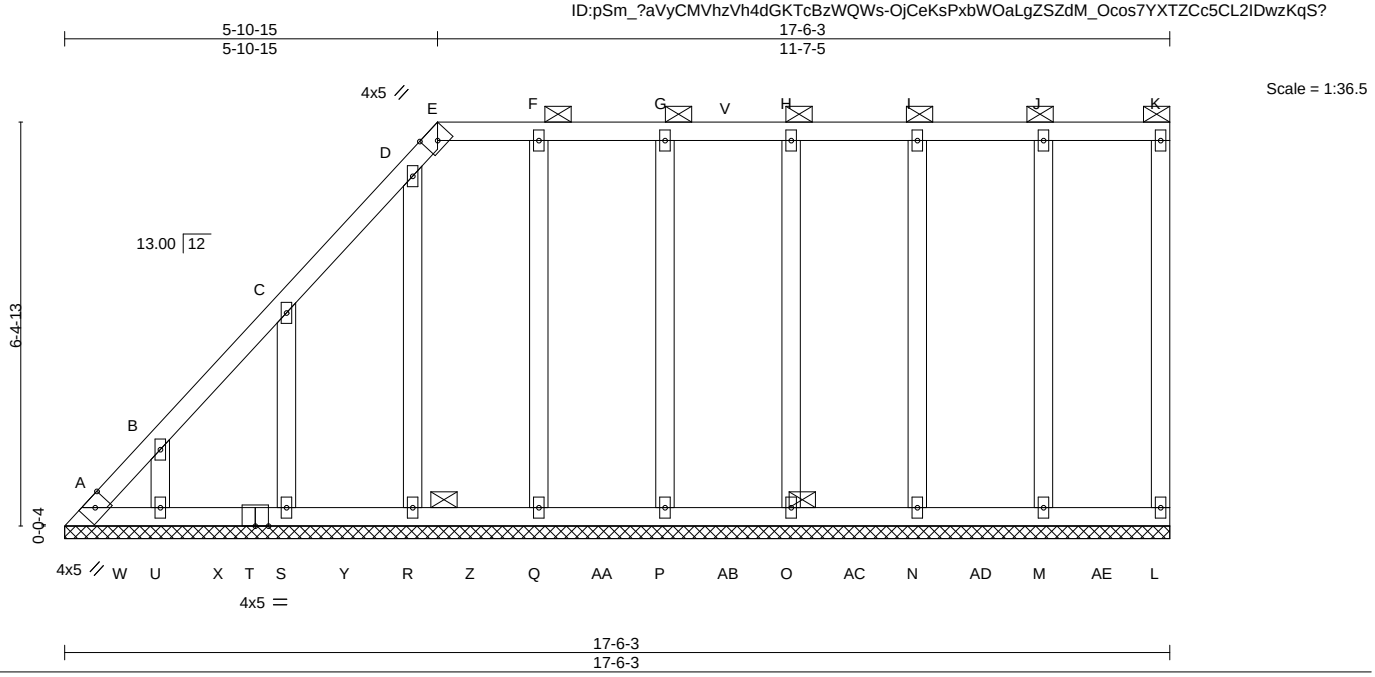

Plate Offsets (X,Y)-- [E:0-2-7,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	L	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S								
BCDL	15.0										Weight: 94 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): E-K.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 17-6-3.
(lb) - Max Horz A=-287(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) M, N, O, P, S, U except A=-198(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except A=269(LC 39), L=288(LC 48), M=356(LC 47), N=349(LC 46), O=350(LC 45), P=350(LC 44), Q=350(LC 43), R=348(LC 42), S=353(LC 41), U=339(LC 40)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-90/317, B-C=-75/252
WEBS C-S=-263/112

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-4-0 to 3-6-3, Exterior(2R) 3-6-3 to 10-1-13, Interior(1) 10-1-13 to 14-4-7, Exterior(2E) 14-4-7 to 17-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) M, N, O, P, S, U except (jt=lb) A=198.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V12	GABLE	1	1	I73184013
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:23 2025 Page 1

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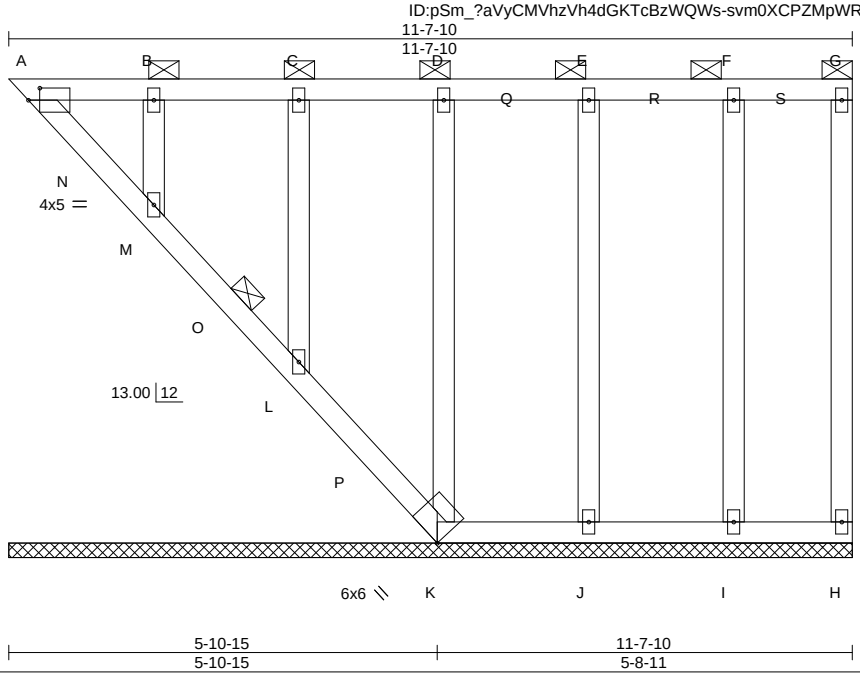

Scale: 3/8"=1'

Plate Offsets (X,Y)-- [A:0-1-14,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S								
BCDL	15.0										Weight: 62 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): A-G, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 11-7-10.

(lb) - Max Horz A=-195(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) H, M, L, J, I except K=-192(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except A=283(LC 29), H=279(LC 35), M=354(LC 30), L=351(LC 31), K=344(LC 32), J=358(LC 33), I=343(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Bearing at joint(s) A considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, M, L, J, I except (jt=lb) K=192.
12) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) A, M, L.
13) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
14) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V13	Valley	5	1	I73184014
					Job Reference (optional)

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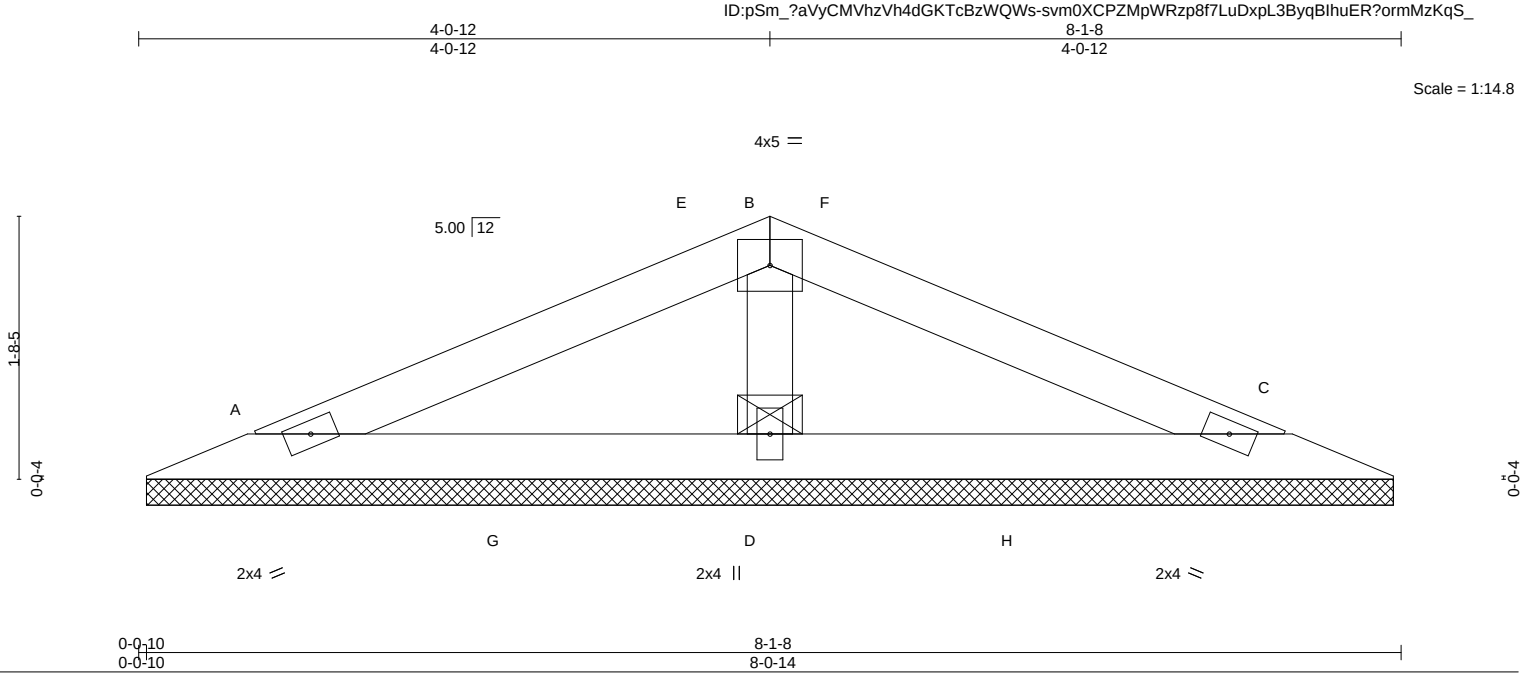

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.42	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	C	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) A=8-0-5, C=8-0-5, D=8-0-5
Max Uplift A=-54(LC 8), C=-54(LC 8), D=-53(LC 8)
Max Grav A=323(LC 23), C=323(LC 25), D=436(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-9-1 to 3-9-1, Exterior(2R) 3-9-1 to 4-4-7, Exterior(2E) 4-4-7 to 7-4-7; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A, C, D.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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MiTek®
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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V14	Valley	5	1	I73184015
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:24 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-K6KPlYQC77elazjrh2PST1tHyMDy18gNffXPHozKqRz

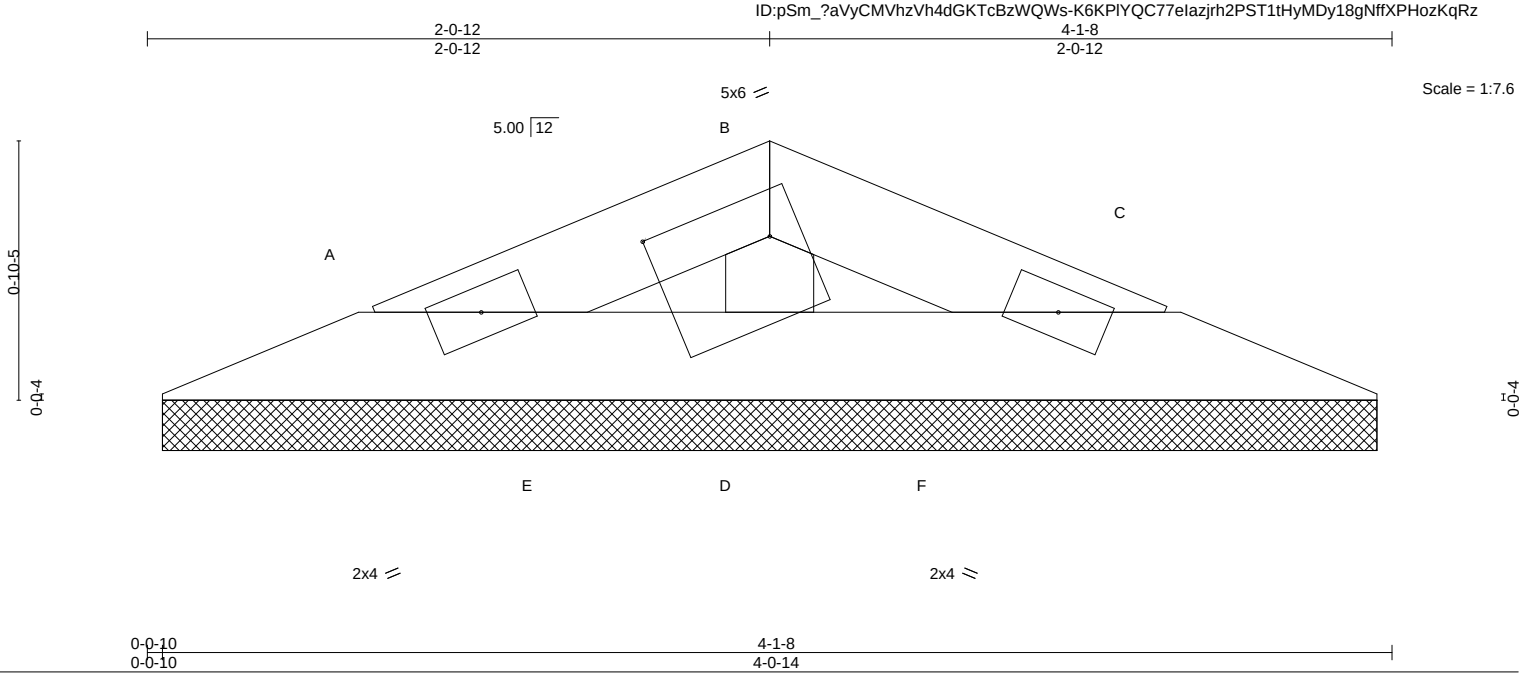

Plate Offsets (X,Y)-- [B:0-4-12,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	C	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-8 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) A=4-0-5, C=4-0-5, D=4-0-5
Max Uplift A=-26(LC 8), C=-26(LC 8), D=-26(LC 8)
Max Grav A=279(LC 23), C=279(LC 25), D=323(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A, C, D.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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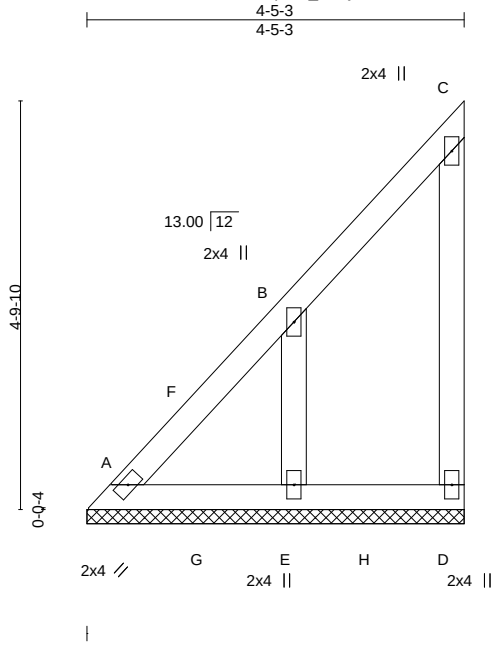
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V15	GABLE	1	1	I73184016
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:24 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-K6KPlYQC77eIazjrh2PST1tDGMCK184NffXPHozKqRz



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-P							Weight: 19 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-3 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) A=4-5-3, D=4-5-3, E=4-5-3
Max Horz A=-222(LC 9)
Max Uplift A=-95(LC 9), E=-108(LC 8)
Max Grav A=291(LC 23), D=283(LC 25), E=374(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS B-E=-277/138

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A except (jt=lb) E=108.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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MiTek®
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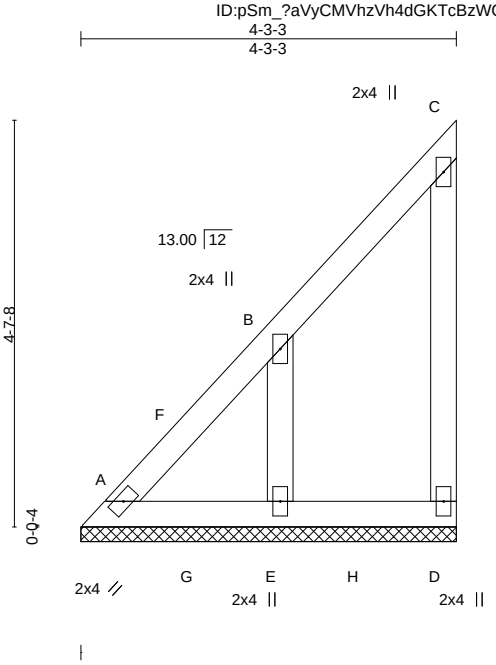
Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V16	GABLE	2	1	I73184017
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:25 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-oItnyuRquRm9C7I1Fmwh0EQPOmYvmbOXuJHypFzKqRy



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.3
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-3-3 oc purlins, except end verticals.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) A=4-3-3, D=4-3-3, E=4-3-3
Max Horz A=-212(LC 9)
Max Uplift A=-96(LC 9), E=-103(LC 8)
Max Grav A=287(LC 23), D=285(LC 25), E=368(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS B-E=-264/132

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A except (jt=lb) E=103.
9) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V17	GABLE	2	1	I73184018
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:25 2025 Page 1
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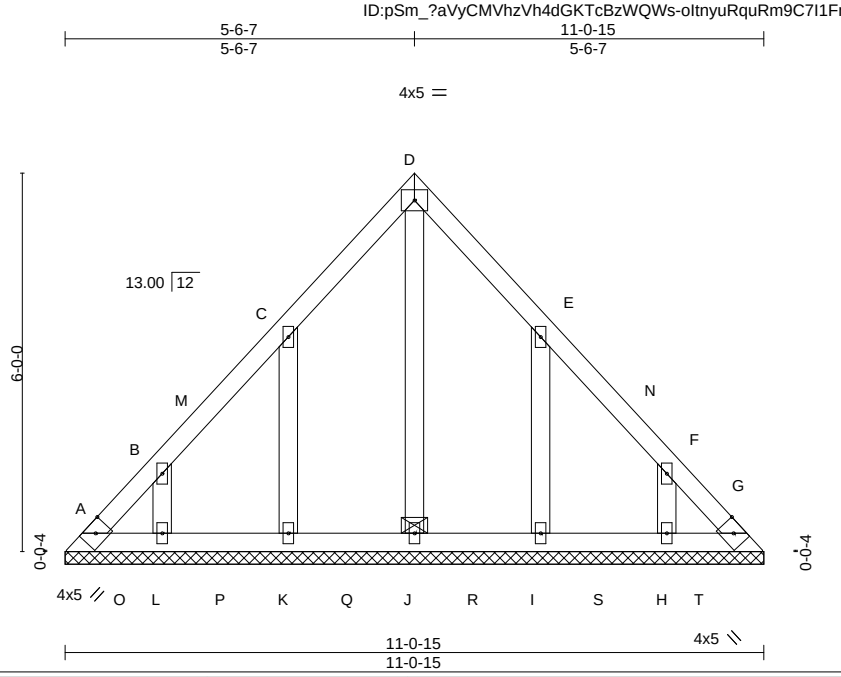

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	G	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S							Weight: 46 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 11-0-15.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) A, G, K, L, I, H
Max Grav All reactions 250 lb or less at joint(s) except A=277(LC 27), G=277(LC 33), J=330(LC 30), K=355(LC 29), L=339(LC 28), I=355(LC 31), H=339(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-4-0 to 3-6-7, Exterior(2R) 3-6-7 to 7-6-7, Exterior(2E) 7-6-7 to 10-8-15; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A, G, K, L, I, H.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V18	GABLE	1	1	I73184019
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:26 2025 Page 1
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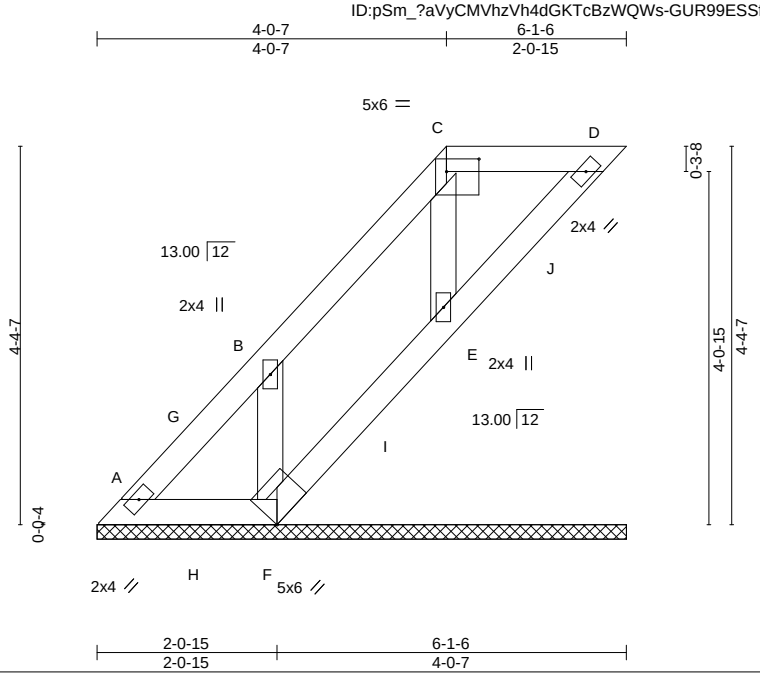

Plate Offsets (X,Y)-- [C:0-4-8,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	D	n/a	n/a		
BCLL	0.0 *	Code IBC2018/TPI2014		Matrix-P							Weight: 21 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): C-D.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. All bearings 6-1-6.
(lb) - Max Horz A=130(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) A, D, F, E
Max Grav All reactions 250 lb or less at joint(s) except A=292(LC 34), D=291(LC 37), F=340(LC 35), E=352(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS B-F=-293/124

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-4-0 to 3-4-0, Exterior(2R) 3-4-0 to 4-0-7, Exterior(2E) 4-0-7 to 5-10-2; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) A, D, F, E.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) D, E.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V20	GABLE	2	1	I73184020
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:26 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-GUR99ESSfku0qHtEoTRwYSzR5ArKV?Zg7z0VLhzKqRx

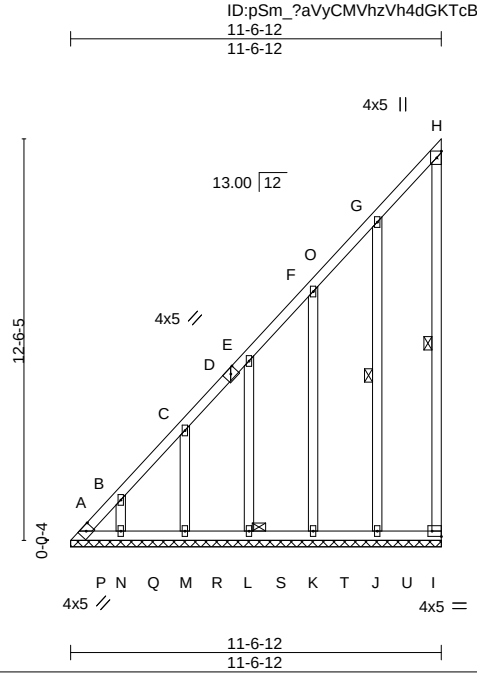

Plate Offsets (X,Y)-- [I:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.40	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.00	I	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S								
BCDL	15.0										Weight: 77 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	6-0-0 oc bracing.
WEBS	1 Row at midpt H-I, G-J

REACTIONS. All bearings 11-6-12.
(lb) - Max Horz A=-551(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) K, L, M, N except A=-426(LC 9), J=-104(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except I=287(LC 33), A=270(LC 27), J=356(LC 32), K=349(LC 31), L=350(LC 30), M=352(LC 29), N=340(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-241/629, B-C=-166/560, C-E=-71/474, E-F=-59/389, F-G=-60/318
WEBS G-J=-301/0

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-4-0 to 3-6-12, Interior(1) 3-6-12 to 7-2-1, Exterior(2R) 7-2-1 to 11-5-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) K, L, M, N except (jt=lb) A=426, J=104.
10) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V21	GABLE	1	1	I73184021
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:27 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-lh?XNZS4Q20tRRSQMBy95fVjsZEfETsqMdm3u7zKqRw

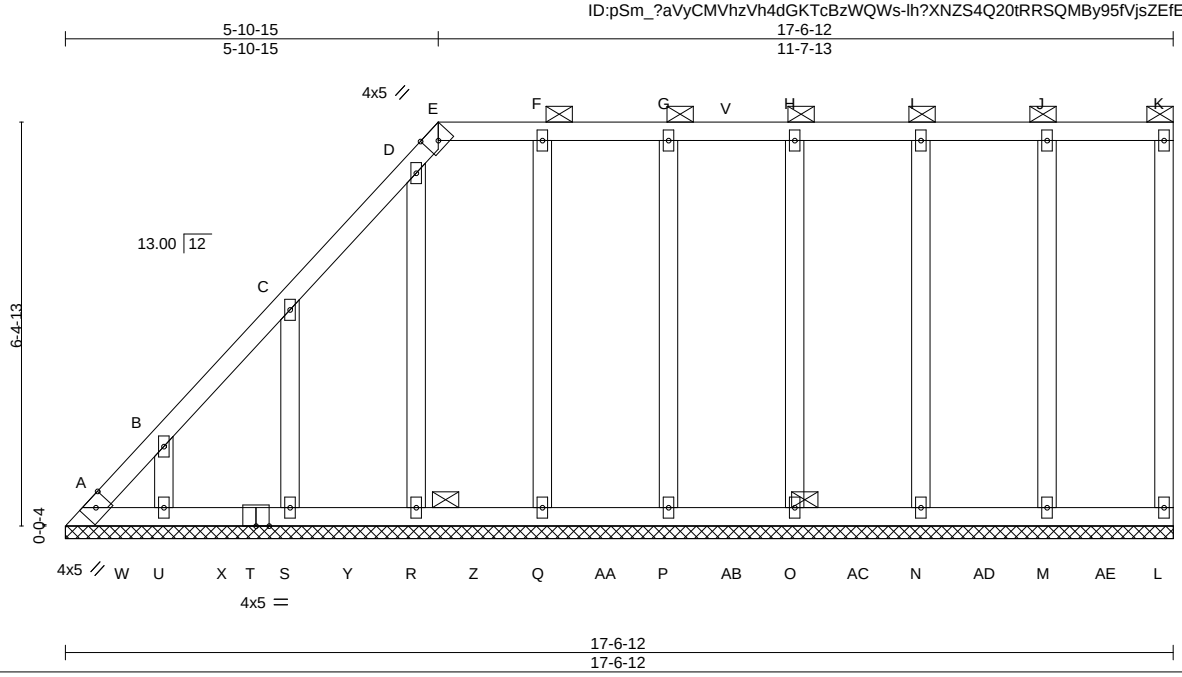

Plate Offsets (X,Y)-- [E:0-2-7,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	L	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S								
BCDL	15.0										Weight: 94 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): E-K.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 17-6-12.
(lb) - Max Horz A=-287(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) M, N, O, P, S, U except A=-196(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except A=270(LC 39), L=288(LC 48), M=356(LC 47), N=349(LC 46), O=350(LC 45), P=350(LC 44), Q=350(LC 43), R=348(LC 42), S=353(LC 41), U=340(LC 40)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD A-B=-89/316
WEBS C-S=-263/111

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) 0-4-0 to 3-6-12, Exterior(2R) 3-6-12 to 10-1-13, Interior(1) 10-1-13 to 14-5-0, Exterior(2E) 14-5-0 to 17-5-0; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) M, N, O, P, S, U except (jt=lb) A=196.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 2,2025

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	V22	GABLE	1	1	I73184022
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:28 2025 Page 1

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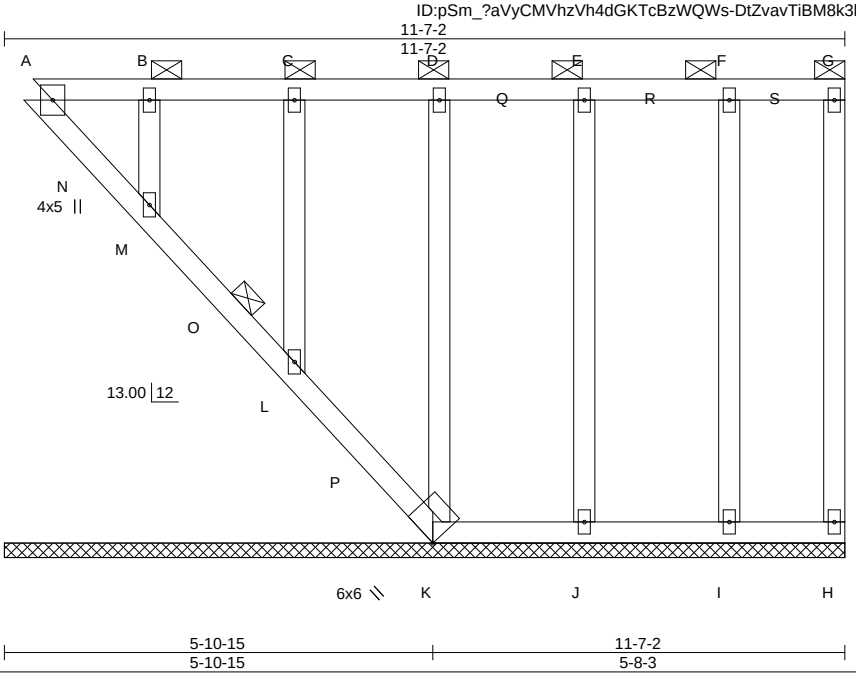

Scale: 3/8"=1'

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	H	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-S							Weight: 61 lb	FT = 20%
BCDL	15.0											

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.3
OTHERS	2x4 SPF No.3

BRACING-

TOP CHORD	2-0-0 oc purlins (6-0-0 max.): A-G, except end verticals.
BOT CHORD	6-0-0 oc bracing.

REACTIONS. All bearings 11-7-2.
(lb) - Max Horz A=-186(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) H, M, L, J, I except K=-192(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except A=280(LC 28), H=278(LC 34), M=350(LC 29), L=352(LC 30), K=344(LC 31), J=358(LC 32), I=342(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Corner(3); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
3) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10; Min. flat roof snow load governs.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) H, M, L, J, I except (jt=lb) K=192.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) A, M, L.
11) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
12) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	WILSHIRE HILLS III - ROOF
241087-G	W	Hip Girder	1	2	I73184023
					Job Reference (optional)

Mattingly Millwork & Lumber, Madison, IL - 62040, 8.830 s Apr 24 2025 MiTek Industries, Inc. Thu May 1 15:22:30 2025 Page 1
ID:pSm_?aVyCMVhzVh4dGKTcBzWQWs-9Ghg?bVyizOSluB?1JWsjI7DmnDKRfjG2b_jUSzKqRt

-1-4-8	3-10-12	4-3-4	8-3-0	11-11-9	15-9-15	19-6-8	21-4-0
1-4-8	3-10-12	0-4-8	3-11-12	3-8-9	3-10-5	3-8-9	1-9-8

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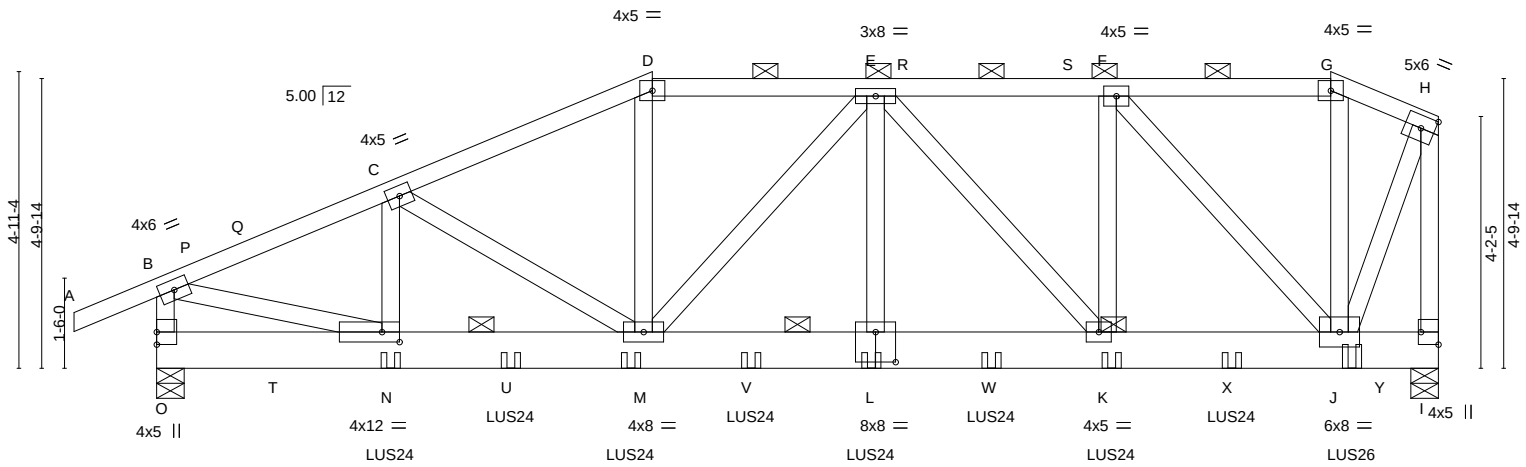

3-10-12	4-3-4	8-3-0	11-11-9	15-9-15	19-6-8	21-4-0
3-10-12	0-4-8	3-11-12	3-8-9	3-10-5	3-8-9	1-9-8

Plate Offsets (X,Y)-- [I:Edge,0-3-8], [L:0-4-0,0-6-0], [N:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.06	L-M	>999	480	MT20	197/144
Snow (Pf)	15.4	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.11	L-M	>999	360		
TCDL	10.0	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.02	I	n/a	n/a		
BCLL	0.0 *	Code	IBC2018/TPI2014	Matrix-MS		Wind(LL)	0.03	L	>999	240	Weight: 300 lb	FT = 20%
BCDL	15.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP No.1
WEBS 2x4 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): D-G.
BOT CHORD 6-0-0 oc bracing.

REACTIONS. (size) O=0-5-8, I=0-5-8
Max Horz O=-145(LC 9)
Max Uplift O=-333(LC 8), I=-264(LC 8)
Max Grav O=3097(LC 2), I=3209(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD B-C=-4151/403, C-D=-4188/411, D-E=-3784/396, E-F=-3084/319, F-G=-1042/154, G-H=-1142/161, B-O=-2911/340, H-I=-3048/270
BOT CHORD N-O=0/310, M-N=-299/3769, L-M=-259/3945, K-L=-259/3945, J-K=-182/3084
WEBS D-M=-78/1278, E-M=-412/38, E-L=-23/834, E-K=-1307/116, F-K=-119/1975, F-J=-3089/252, G-J=-96/286, H-J=-206/2783, C-N=-304/95, B-N=-340/3700

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; C-C Exterior(2E) -1-4-8 to 1-7-8, Interior(1) 1-7-8 to 3-10-12, Exterior(2R) 3-10-12 to 12-5-15, Interior(1) 12-5-15 to 15-3-9, Exterior(2R) 15-3-9 to 19-6-8, Exterior(2E) 19-6-8 to 21-2-4; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
5) TCLL: ASCE 7-16; Pr=30.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) O=333, I=264.
12) This truss is designed in accordance with the 2018 International Building Code section 2306.1 and referenced standard ANSI/TPI

Continued on page 2

May 2,2025

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NOTES-

13) This truss has been designed for a moving concentrated load of 250.0lb live located at all mid panels and at all panel points along the Bottom Chord, nonconcurrent with any other live loads.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 3-10-12 from the left end to 17-10-12 to connect truss(es) to back face of bottom chord.
16) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss) or equivalent at 19-10-12 from the left end to connect truss(es) to back face of bottom chord.
17) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: A-B=-51, B-D=-51, D-G=-51, G-H=-51, I-O=-30
   Concentrated Loads (lb)
   Vert: M=-379(B) L=-404(B) K=-404(B) J=-379(B) N=-691(B) U=-312(B) V=-404(B) W=-404(B) X=-404(B)

May 2,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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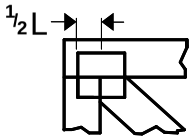
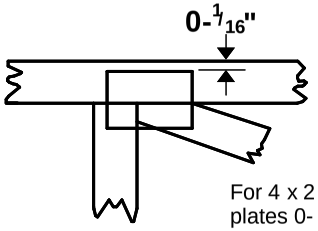
Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

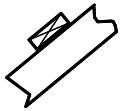
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

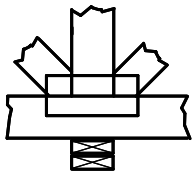
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

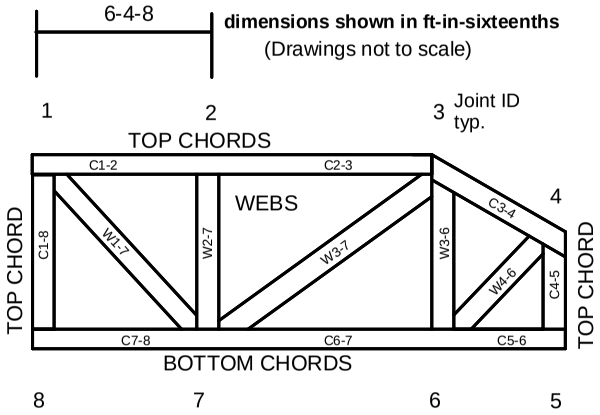


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.