MiTek®

RE: P240424-01 - Roof - HR Lot 181

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

Site Information:

Project Customer: Clayton Properties Project Name: Tupelo - Farmhouse 3 Car
Lot/Block: 181 Subdivision: Hawthorne Ridge
Model:
Address: 1621 SW Arborway Ter
City: Lee's Summit State: MO

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 115 mph Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Roof Load: 45.0 psf Floor Load: N/A psf

Mean Roof Height (feet): 35 Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I65267704	A01	5/2/24	35	I65267738	J05	5/2/24
2	I65267705	A02	5/2/24	36	I65267739	J06	5/2/24
3	I65267706	A03	5/2/24	37	I65267740	J07	5/2/24
4	I65267707	B01	5/2/24	38	I65267741	J08	5/2/24
5	I65267708	B02	5/2/24	39	I65267742	J09	5/2/24
6	I65267709	B03	5/2/24	40	I65267743	J10	5/2/24
7	I65267710	C01	5/2/24	41	I65267744	J11	5/2/24
8	I65267711	C02	5/2/24	42	I65267745	LG01	5/2/24
9	I65267712	C03	5/2/24	43	I65267746	LG02	5/2/24
10	I65267713	CJ01	5/2/24	44	I65267747	LG03	5/2/24
11	I65267714	CJ02	5/2/24	45	I65267748	V01	5/2/24
12	I65267715	D01	5/2/24	46	I65267749	V02	5/2/24
13	I65267716	D02	5/2/24	47	I65267750	V03	5/2/24
14	I65267717	D03	5/2/24	48	I65267751	V04	5/2/24
15	I65267718	D04	5/2/24	49	I65267752	V05	5/2/24
16	I65267719	D05	5/2/24	50	I65267753	V06	5/2/24
17	I65267720	D06	5/2/24	51	I65267754	V07	5/2/24
18	I65267721	D07	5/2/24	52	I65267755	V08	5/2/24
19	I65267722	D08	5/2/24	53	I65267756	V09	5/2/24
20	I65267723	D09	5/2/24	54	I65267757	V10	5/2/24
21	I65267724	D10	5/2/24	55	I65267758	V11	5/2/24
22	I65267725	D11	5/2/24	56	I65267759	V12	5/2/24
23	I65267726	D12	5/2/24	57	I65267760	V13	5/2/24
24	I65267727	D13	5/2/24	58	I65267761	V14	5/2/24
25	I65267728	D14	5/2/24				
26	I65267729	D15	5/2/24				
27	I65267730	E01	5/2/24				
28	I65267731	E02	5/2/24				
29	I65267732	E03	5/2/24				
30	I65267733	J01	5/2/24				
31	I65267734	J01A	5/2/24				
32	I65267735	J02	5/2/24				
33	I65267736	J03	5/2/24				
34	I65267737	J04	5/2/24				

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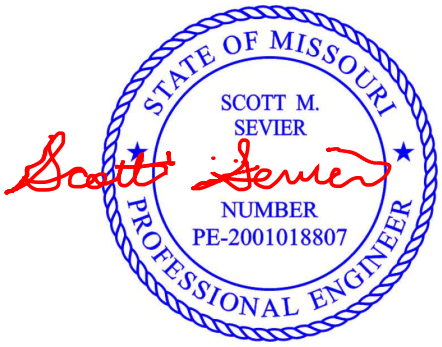
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/03/2024 3:52:54

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Premier Building Supply (Springhill, KS)20300 W 207th Street.

Truss Design Engineer's Name: Sevier, Scott
My license renewal date for the state of Missouri is December 31, 2025.

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.



May 2,2024

Sevier, Scott

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	A01	Common Supported Gable	1	1	I65267704 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:54 Page: 1
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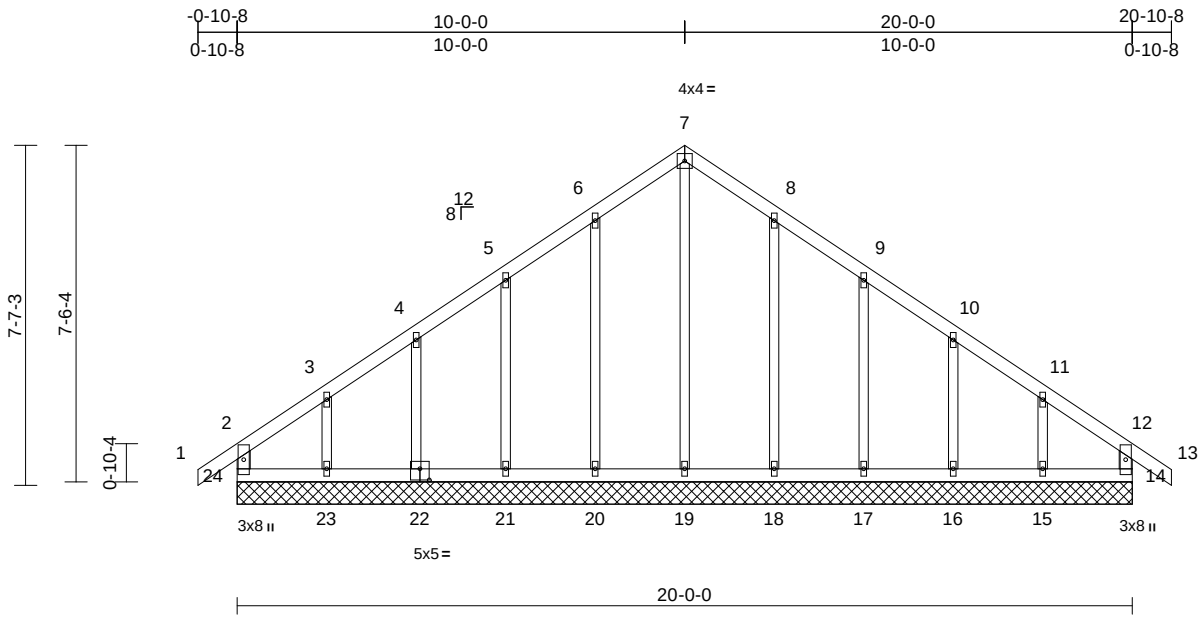

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Plate Offsets (X, Y): [22:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 100 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 14=20-0-0, 15=20-0-0, 16=20-0-0, 17=20-0-0, 18=20-0-0, 19=20-0-0, 20=20-0-0, 21=20-0-0, 22=20-0-0, 23=20-0-0, 24=20-0-0
Max Horiz 24=228 (LC 11)
Max Uplift 14=-47 (LC 9), 15=-127 (LC 13), 16=-66 (LC 13), 17=-85 (LC 13), 18=-72 (LC 13), 20=-73 (LC 12), 21=-85 (LC 12), 22=-64 (LC 12), 23=-132 (LC 12), 24=-81 (LC 8)
Max Grav 14=174 (LC 19), 15=208 (LC 20), 16=185 (LC 20), 17=189 (LC 20), 18=197 (LC 20), 19=212 (LC 22), 20=199 (LC 19), 21=187 (LC 19), 22=182 (LC 1), 23=220 (LC 19), 24=205 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-24=-170/75, 1-2=0/40, 2-3=-151/138, 3-4=-114/109, 4-5=-100/137, 5-6=-113/207, 6-7=-150/275, 7-8=-150/275, 8-9=-113/207, 9-10=-73/130, 10-11=-80/77, 11-12=-109/96, 12-13=0/40, 12-14=-147/71
BOT CHORD 23-24=-97/117, 21-23=-98/117, 20-21=-98/117, 19-20=-98/117, 18-19=-98/117, 17-18=-98/117, 16-17=-98/117, 15-16=-98/117, 14-15=-98/117
WEBS 7-19=-222/66, 6-20=-159/98, 5-21=-147/115, 4-22=-145/116, 3-23=-159/137, 8-18=-157/98, 9-17=-148/115, 10-16=-148/117, 11-15=-154/139

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-0-0, Exterior(2N) 4-0-0 to 10-0-0, Corner(3R) 10-0-0 to 15-0-0, Exterior(2N) 15-0-0 to 20-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 24, 47 lb uplift at joint 14, 73 lb uplift at joint 20, 85 lb uplift at joint 21, 64 lb uplift at joint 22, 132 lb uplift at joint 23, 72 lb uplift at joint 18, 85 lb uplift at joint 17, 66 lb uplift at joint 16 and 127 lb uplift at joint 15.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	A02	Common	3	1	I65267705 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:55 Page: 1
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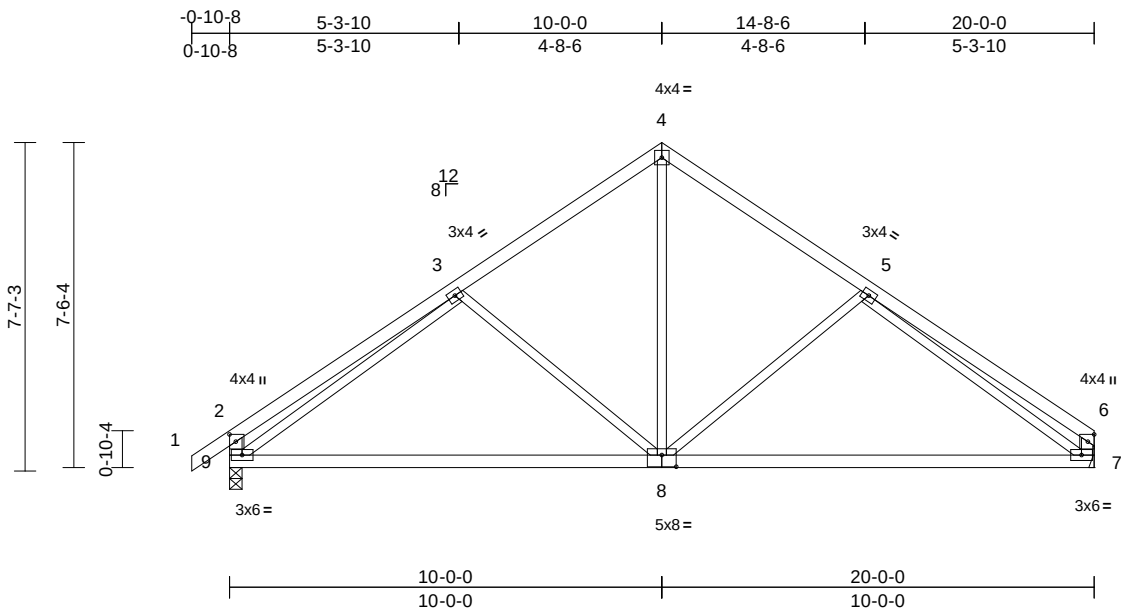

Scale = 1:53.3

Plate Offsets (X, Y): [2:0-2-0,0-1-12], [8:0-4-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.18	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.37	8-9	>637	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 94 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 9-2,7-6:2x4 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 7= Mechanical, 9=0-3-8
Max Horiz 9=222 (LC 9)
Max Uplift 7=-123 (LC 13), 9=-149 (LC 12)
Max Grav 7=885 (LC 1), 9=960 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-507/160, 3-4=-872/201, 4-5=-874/203, 5-6=-440/103, 2-9=-476/181, 6-7=-362/117
BOT CHORD 7-9=-185/863
WEBS 4-8=-91/550, 3-9=-640/108, 5-7=-709/150, 3-8=-296/237, 5-8=-307/241

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 14-9-12, Interior (1) 14-9-12 to 19-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 9 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 149 lb uplift at joint 9 and 123 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	A03	Common	7	1	I65267706
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:55 Page: 1
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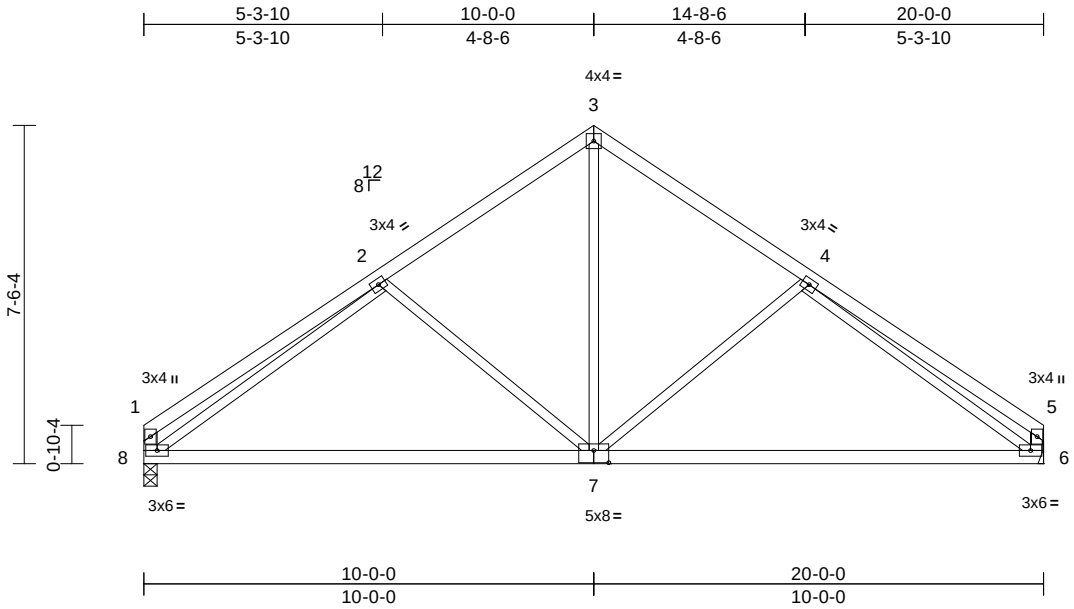

Scale = 1:51.2

Plate Offsets (X, Y): [7:0-4-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.18	7-8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.37	7-8	>633	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 93 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 8-1,6-5:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 6= Mechanical, 8=0-3-8
Max Horiz 8=209 (LC 9)
Max Uplift 6=-123 (LC 13), 8=-123 (LC 12)
Max Grav 6=887 (LC 1), 8=887 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-434/102, 2-3=-877/203, 3-4=-877/203, 4-5=-434/102, 1-8=-359/116, 5-6=-358/116
BOT CHORD 6-8=-188/873
WEBS 3-7=-93/558, 2-8=-718/151, 4-6=-718/151, 2-7=-307/241, 4-7=-307/242

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-2-4, Interior (1) 5-2-4 to 10-0-0, Exterior(2R) 10-0-0 to 14-9-12, Interior (1) 14-9-12 to 19-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) Bearings are assumed to be: Joint 8 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 8 and 123 lb uplift at joint 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	B01	Common Supported Gable	1	1	I65267707 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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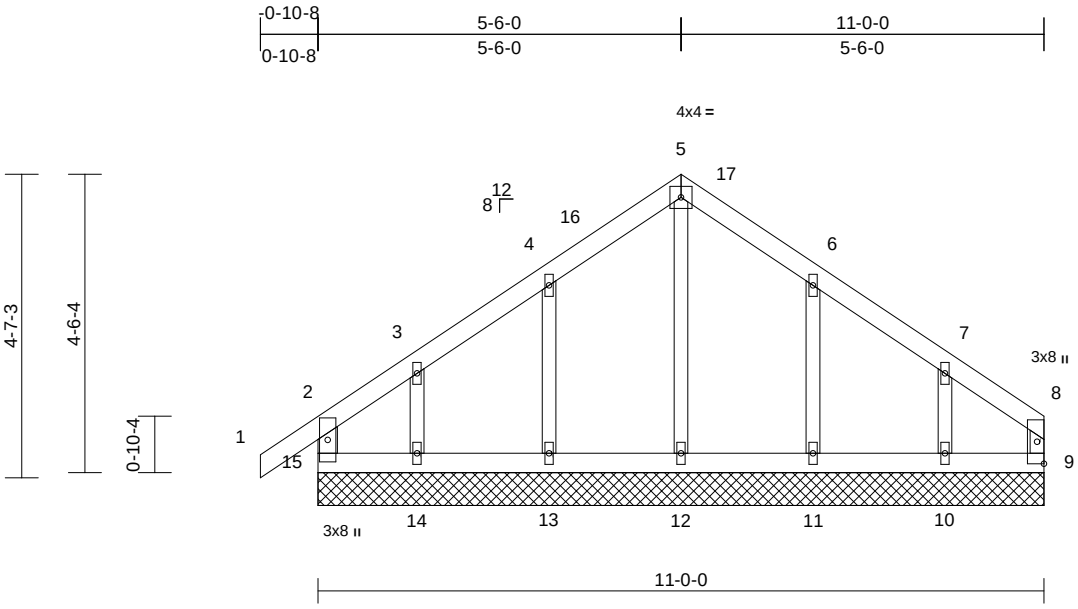

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 49 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 8-9:2x3 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 9=11-0-0, 10=11-0-0, 11=11-0-0, 12=11-0-0, 13=11-0-0, 14=11-0-0, 15=11-0-0
Max Horiz 15=138 (LC 9)
Max Uplift 9=-25 (LC 9), 10=-96 (LC 13), 11=-78 (LC 13), 13=-79 (LC 12), 14=-99 (LC 12), 15=-59 (LC 8)
Max Grav 9=71 (LC 19), 10=192 (LC 20), 11=200 (LC 20), 12=164 (LC 22), 13=203 (LC 19), 14=173 (LC 19), 15=165 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-15=-135/114, 1-2=0/40, 2-3=-95/86, 3-4=-76/115, 4-5=-109/213, 5-6=-108/208, 6-7=-59/109, 7-8=-56/53, 8-9=-52/24
BOT CHORD 14-15=-50/55, 13-14=-50/55, 12-13=-50/55, 11-12=-50/55, 10-11=-50/55, 9-10=-50/55
WEBS 5-12=-129/15, 4-13=-164/182, 3-14=-126/156, 6-11=-160/188, 7-10=-144/183

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 5-6-0, Corner(3R) 5-6-0 to 10-6-0, Exterior(2N) 10-6-0 to 10-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 59 lb uplift at joint 15, 25 lb uplift at joint 9, 79 lb uplift at joint 13, 99 lb uplift at joint 14, 78 lb uplift at joint 11 and 96 lb uplift at joint 10.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/03/2024 3:52:55

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	B02	Common	3	1	I65267708 Job Reference (optional)

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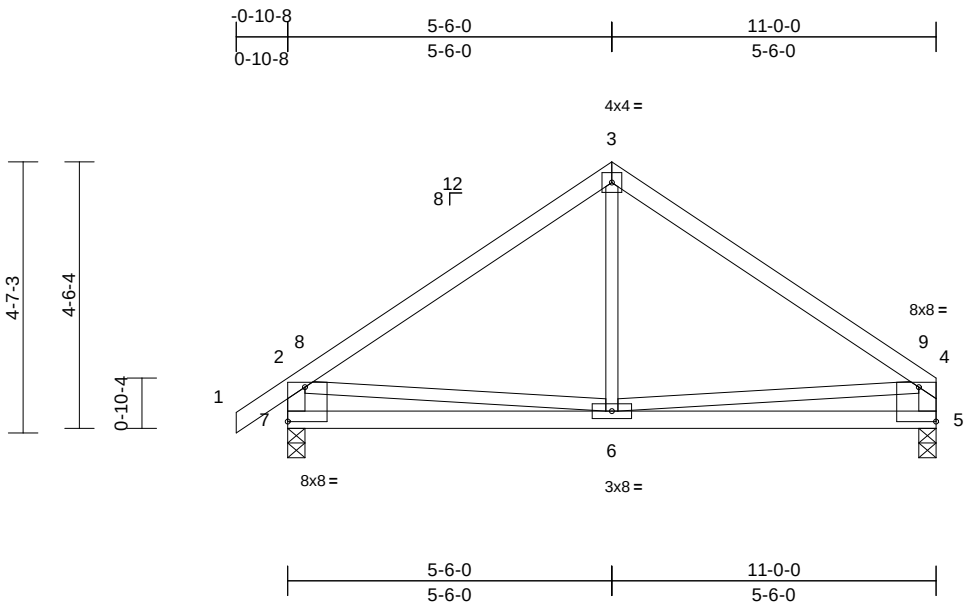

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Plate Offsets (X, Y): [4:Edge,0-7-0], [7:Edge,0-7-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.04	6-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 7-2,5-4:2x4 SP No.2

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

REACTIONS (size) 5=0-3-8, 7=0-3-8
Max Horiz 7=138 (LC 9)
Max Uplift 5=-65 (LC 13), 7=-92 (LC 12)
Max Grav 5=478 (LC 1), 7=557 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-520/154, 3-4=-513/150, 2-7=-509/221, 4-5=-430/160
BOT CHORD 6-7=-212/365, 5-6=-114/211
WEBS 3-6=0/215, 2-6=-82/200, 4-6=-53/197

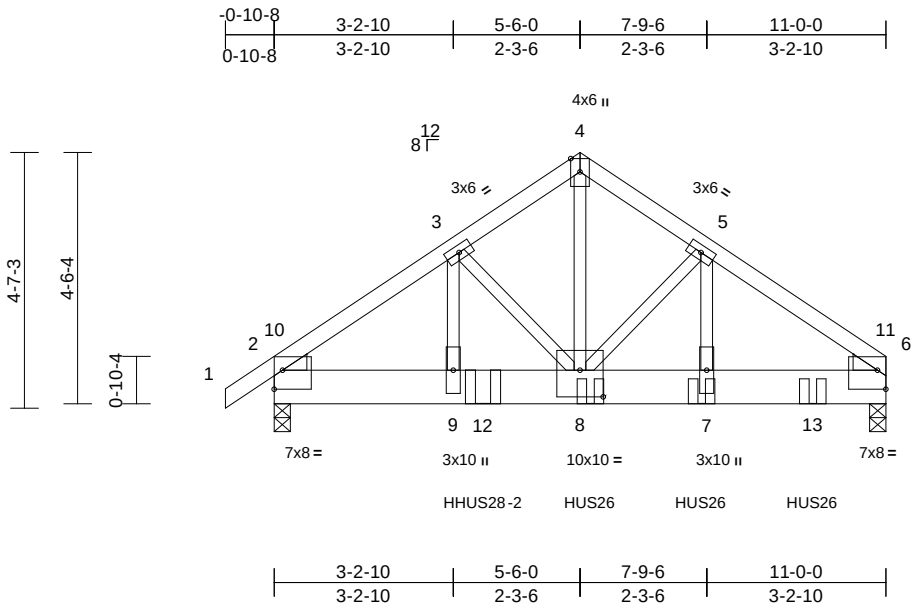
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-6-0, Exterior(2R) 5-6-0 to 10-6-0, Interior (1) 10-6-0 to 10-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 7 and 65 lb uplift at joint 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	B03	Common Girder	1	2	I65267709 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:55 Page: 1
ID:NKjSjSJVQakGlWU1jorOP2zWwwe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:41.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	0.04	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.07	8-9	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 121 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SPF No.2
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=117 (LC 32)
Max Uplift 2=-982 (LC 12), 6=-950 (LC 13)
Max Grav 2=3319 (LC 1), 6=4427 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/14, 2-3=-4762/1510, 3-4=-3793/1151, 4-5=-3797/1155, 5-6=-5099/1280
BOT CHORD 2-9=-1103/3614, 8-9=-1103/3614, 7-8=-921/3899, 6-7=-921/3899
WEBS 3-9=-562/1284, 3-8=-782/447, 4-8=-1187/3954, 5-8=-1139/192, 5-7=-217/1797

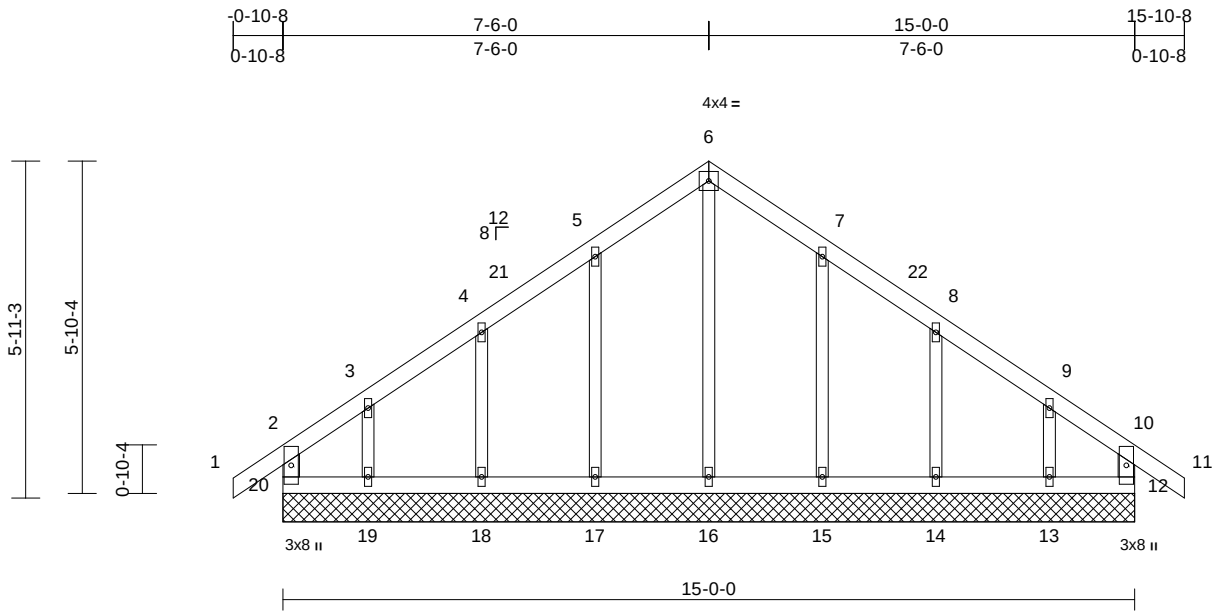
NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally 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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-6-0, Exterior(2R) 5-6-0 to 10-6-0, Interior (1) 10-6-0 to 10-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 982 lb uplift at joint 2 and 950 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use Simpson Strong-Tie HHUS28-2 (22-10d Girder, 8-10d Truss, Single Ply Girder) or equivalent at 3-9-1 from the left end to connect truss(es) to back face of bottom chord.
11) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 5-8-4 from the left end to 9-8-4 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-6=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 8=-1543 (B), 7=-1543 (B), 12=-2080 (B), 13=-1543 (B)

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	C01	Common Supported Gable	1	1	I65267710 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:56 Page: 1
ID:561pCsGxdSCRDR6unjsc?6zWx19-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:40.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 71 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 12=15-0-0, 13=15-0-0, 14=15-0-0, 15=15-0-0, 16=15-0-0, 17=15-0-0, 18=15-0-0, 19=15-0-0, 20=15-0-0
Max Horiz 20=-182 (LC 10)
Max Uplift 12=-46 (LC 9), 13=-107 (LC 13), 14=-76 (LC 13), 15=-79 (LC 13), 17=-80 (LC 12), 18=-75 (LC 12), 19=-114 (LC 12), 20=-75 (LC 8)
Max Grav 12=149 (LC 19), 13=175 (LC 20), 14=191 (LC 20), 15=198 (LC 20), 16=191 (LC 22), 17=199 (LC 19), 18=188 (LC 19), 19=188 (LC 19), 20=172 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-20=-141/81, 1-2=0/40, 2-3=-115/110, 3-4=-85/86, 4-5=-76/156, 5-6=-117/237, 6-7=-117/237, 7-8=-76/156, 8-9=-61/70, 9-10=-83/75, 10-11=0/40, 10-12=-129/81
BOT CHORD 19-20=-80/97, 18-19=-80/97, 17-18=-80/97, 16-17=-80/97, 15-16=-80/97, 14-15=-80/97, 13-14=-80/97, 12-13=-80/97
WEBS 6-16=-172/29, 5-17=-159/123, 4-18=-150/158, 3-19=-135/136, 7-15=-157/123, 8-14=-152/158, 9-13=-128/136

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 7-6-0, Corner(3R) 7-6-0 to 12-6-0, Exterior(2N) 12-6-0 to 15-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 20, 46 lb uplift at joint 12, 80 lb uplift at joint 17, 75 lb uplift at joint 18, 114 lb uplift at joint 19, 79 lb uplift at joint 15, 76 lb uplift at joint 14 and 107 lb uplift at joint 13.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

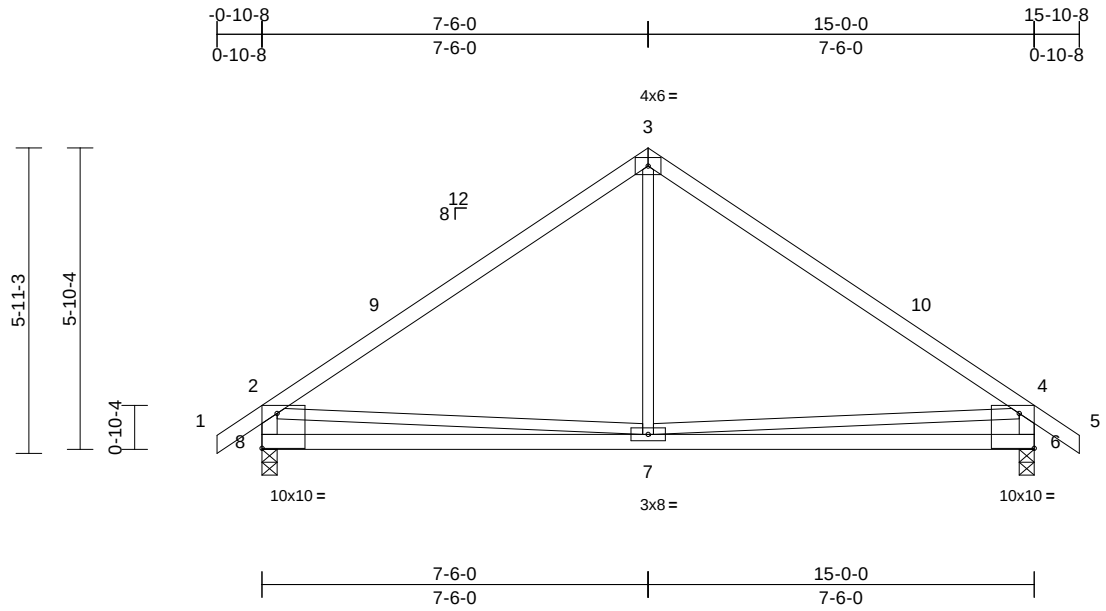
STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/03/2024 3:52:55

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	C02	Common	4	1	I65267711 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:56 Page: 1
ID:ztGK2EJRggish2Qf0ZxY9yzWx15-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:44.8

Plate Offsets (X, Y): [6:Edge,0-8-2], [8:Edge,0-8-2]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.06	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.12	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 70 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 8-2,6-4:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-6-2 oc bracing.

REACTIONS (size) 6=0-3-8, 8=0-3-8
Max Horiz 8=-182 (LC 10)
Max Uplift 6=-117 (LC 13), 8=-117 (LC 12)
Max Grav 6=733 (LC 1), 8=733 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-738/161, 3-4=-738/161, 4-5=0/40, 2-8=-670/211, 4-6=-670/211
BOT CHORD 7-8=-378/695, 6-7=-301/568
WEBS 3-7=0/321, 2-7=-214/378, 4-7=-227/384

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 7-6-0, Exterior(2R) 7-6-0 to 12-6-0, Interior (1) 12-6-0 to 15-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 8 and 117 lb uplift at joint 6.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	C03	Common Girder	1	2	I65267712 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:56 Page: 1
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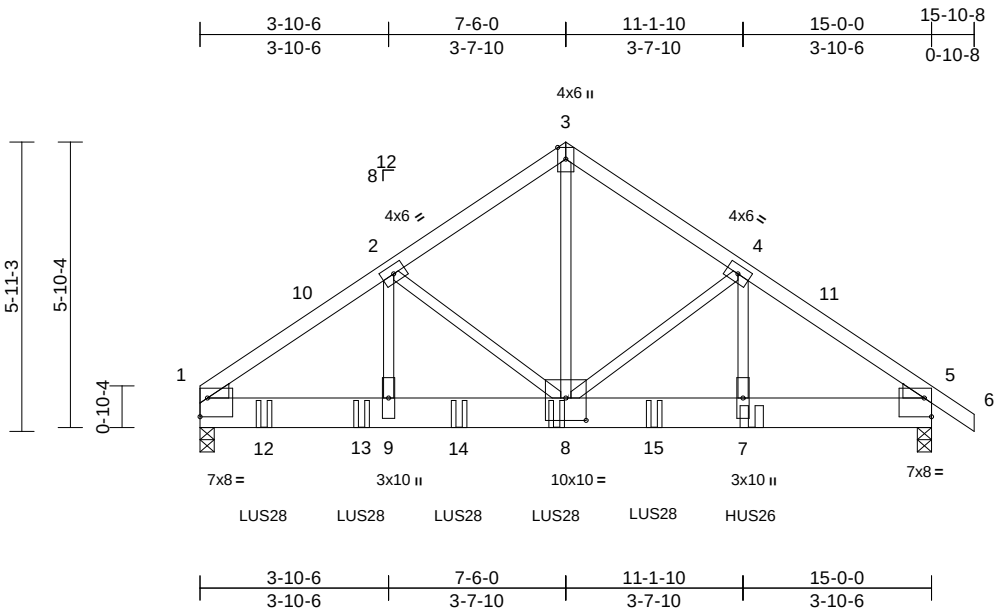

Scale = 1:47.2

Plate Offsets (X, Y): [1:Edge,0-4-10], [5:Edge,0-4-10], [8:0-5-0,0-5-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.06	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.11	7-8	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 183 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-8-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 5=0-3-8
Max Horiz 1=-154 (LC 8)
Max Uplift 1=-984 (LC 12), 5=-1000 (LC 13)
Max Grav 1=5071 (LC 1), 5=4120 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6274/1279, 2-3=-4538/1035, 3-4=-4536/1032, 4-5=-6071/1498, 5-6=0/14
BOT CHORD 1-9=-984/4868, 8-9=-984/4868, 7-8=-1098/4686, 5-7=-1098/4686
WEBS 2-9=-326/2195, 2-8=-1569/357, 3-8=-1031/4682, 4-8=-1265/575, 4-7=-606/1804

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 0-6-0 oc.
Web connected as follows: 2x3 - 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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 7-6-0, Exterior(2R) 7-6-0 to 12-6-0, Interior (1) 12-6-0 to 15-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1000 lb uplift at joint 5 and 984 lb uplift at joint 1.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-3-12 from the left end to 9-3-12 to connect truss(es) to front face of bottom chord.
11) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 11-3-12 from the left end 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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-6=-70, 1-5=-20
Concentrated Loads (lb)
Vert: 8=-1242 (F), 7=-1590 (F), 12=-1240 (F), 13=-1240 (F), 14=-1242 (F), 15=-1242 (F)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	CJ01	Diagonal Hip Girder	1	1	I65267713 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:56 Page: 1
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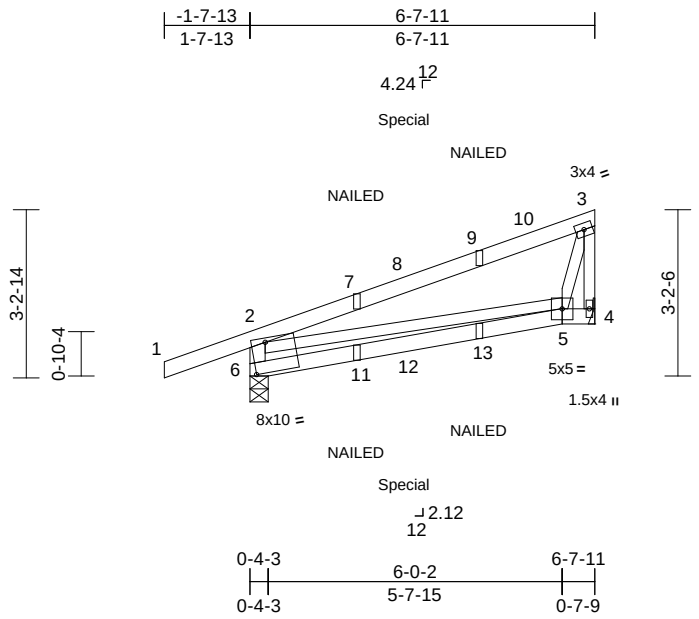


Scale = 1:44.4

Plate Offsets (X, Y): [6:0-3-4,0-7-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.07	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.14	5-6	>529	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 31 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 6-2:2x4 SP No.2

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

REACTIONS (size) 4= Mechanical, 6=0-4-3
Max Horiz 6=131 (LC 9)
Max Uplift 4=-104 (LC 12), 6=-185 (LC 8)
Max Grav 4=263 (LC 1), 6=414 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-354/489, 1-2=0/42, 2-3=-188/57, 3-4=-258/287
BOT CHORD 5-6=-322/135, 4-5=-38/42
WEBS 2-5=-67/290, 3-5=-27/135

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-7-13 to 5-5-1, Exterior(2R) 5-5-1 to 6-6-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: Joint 6 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 185 lb uplift at joint 6 and 104 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 30 lb down and 90 lb up at 2-11-13 on top chord, and 2 lb down and 0 lb up at 2-11-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

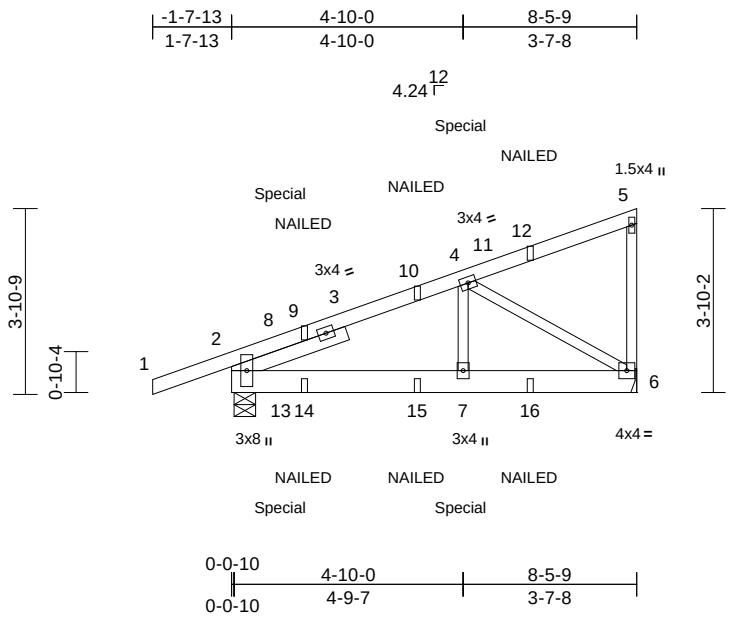
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 5-6=-20, 4-5=-20
Concentrated Loads (lb)
Vert: 7=26 (F), 12=-2 (B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	CJ02	Diagonal Hip Girder	2	1	I65267714 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:56 Page: 1
ID:oD2JcrmDHs1Fo7U0ucd_rTzWx1o-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:48.1

Plate Offsets (X, Y): [2:0-5-1,0-2-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	0.01	2-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	2-7	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.20	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 42 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-6-7

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

REACTIONS (size) 2=0-5-6, 6= Mechanical
Max Horiz 2=167 (LC 9)
Max Uplift 2=-232 (LC 8), 6=-169 (LC 12)
Max Grav 2=489 (LC 1), 6=386 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/8, 2-4=-545/299, 4-5=-135/79, 5-6=-109/114
BOT CHORD 2-7=-421/398, 6-7=-421/398
WEBS 4-6=-468/437, 4-7=0/222

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) -1-7-13 to 5-5-1, Exterior(2R) 5-5-1 to 8-4-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: Joint 2 SPF No.2 crushing capacity of 425 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 169 lb uplift at joint 6 and 232 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 15 lb down and 49 lb up at 1-0-6, and 48 lb down and 127 lb up at 4-9-11 on top chord, and at 1-0-6, and 22 lb down at 4-9-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

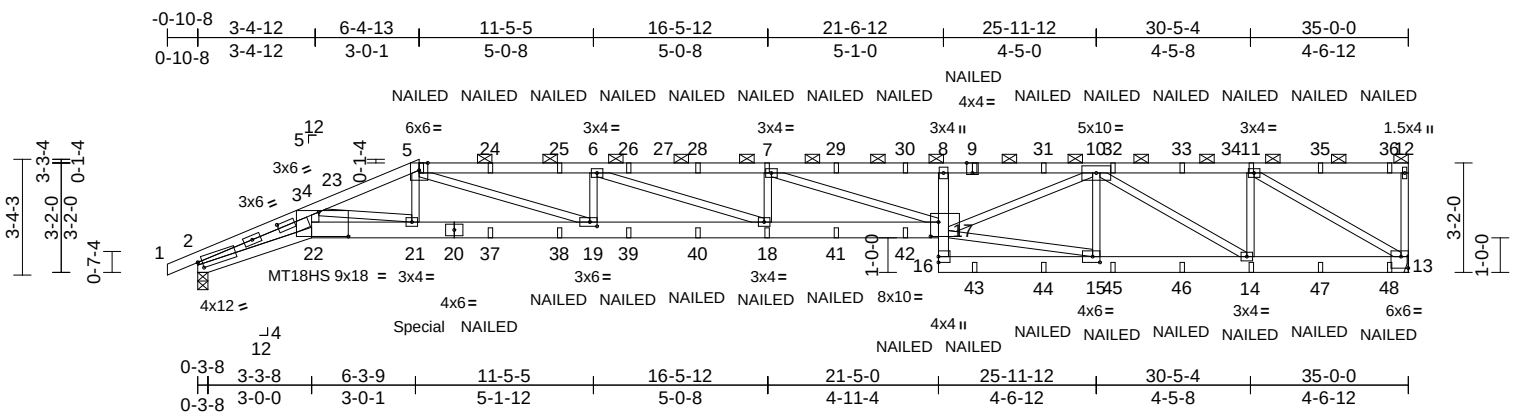
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 4=-14 (B), 7=-6 (B), 9=35 (F), 12=-13 (F), 16=-8 (F)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D01	Half Hip Girder	1	2	I65267715 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:57 ID:Dtr9V7dlZg_Ap2PfY1PeDRzWx0h-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:66.6

Plate Offsets (X, Y): [2:0-1-8,0-2-6], [2:2-6-5,0-1-8], [9:0-2-0,Edge], [13:Edge,0-4-0], [15:0-2-8,0-2-0], [17:0-2-12,0-5-0], [19:0-2-8,0-1-8], [22:0-10-4,0-8-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	0.77	17-18	>539	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-1.10	17-18	>378	180	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.35	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 344 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-5:2x4 SP 1650F 1.5E
BOT CHORD 2x6 SPF No.2 *Except* 2-22:2x4 SP 2400F 2.0E, 8-16:2x4 SP 1650F 1.5E, 20-17:2x6 SP 2400F 2.0E
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-5-4

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-9-4 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-11 max.): 5-12.
BOT CHORD Rigid ceiling directly applied or 8-7-1 oc bracing.

REACTIONS (size) 2=0-3-8, 13= Mechanical
Max Horiz 2=134 (LC 9)
Max Uplift 2=-810 (LC 8), 13=-919 (LC 9)
Max Grav 2=2151 (LC 1), 13=2100 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-9705/3959, 4-5=-6820/2885, 5-6=-8893/3859, 6-7=-10033/4364, 7-8=-9299/4058, 8-10=-8987/3921, 10-11=-2916/1295, 11-12=-77/74, 12-13=-206/133
BOT CHORD 2-22=-3812/8896, 21-22=-3463/8069, 19-21=-2748/6309, 18-19=-3907/8891, 17-18=-4414/10033, 16-17=-29/166, 8-17=-373/251, 15-16=-540/1220, 14-15=-2179/4949, 13-14=-1294/2916
WEBS 4-22=-1030/2527, 5-21=-423/1120, 7-17=-778/329, 6-19=-941/513, 5-19=-1245/2829, 6-18=-549/1277, 7-18=-206/188, 10-17=-1932/4358, 11-13=-3405/1478, 10-15=-811/438, 15-17=-1681/3823, 10-14=-2399/1045, 11-14=-516/1387, 4-21=-1732/734

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, 2x3 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x3 - 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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 6-4-13, Exterior(2R) 6-4-13 to 13-5-10, Interior (1) 13-5-10 to 34-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Bearings are assumed to be: Joint 2 SP 2400F 2.0E crushing capacity of 805 psi.
10) Refer to girder(s) for truss to truss connections.
11) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 919 lb uplift at joint 13 and 810 lb uplift at joint 2.
13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 244 lb down and 139 lb up at 6-4-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-70, 5-12=-70, 2-22=-20, 17-22=-20, 13-16=-20
Concentrated Loads (lb)

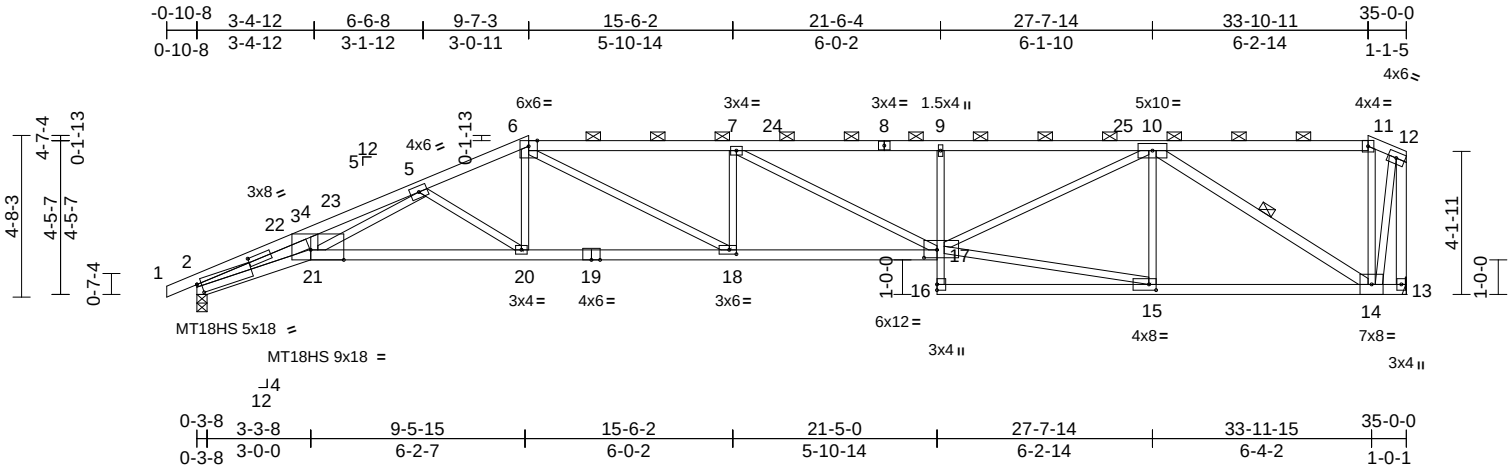
May 2,2024

Continued on page 2

Vert: 5=-34 (F), 9=-39 (F), 21=-244 (F), 7=-34 (F), 18=-19 (F), 11=-39 (F), 14=-15 (F), 24=-34 (F), 25=-34 (F), 26=-34 (F), 28=-34 (F), 29=-34 (F), 30=-34 (F), 31=-39 (F), 32=-39 (F), 33=-39 (F), 35=-39 (F), 36=-59 (F), 37=-19 (F), 38=-19 (F), 39=-19 (F), 40=-19 (F), 41=-19 (F), 42=-19 (F), 43=-15 (F), 44=-15 (F), 45=-15 (F), 46=-15 (F), 47=-15 (F), 48=-20 (F)

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D02	Hip	1	1	I65267716 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:57 Page: 1
ID:wLVokA9LBBXx5pm67GBy?jzWx0?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:66.7

Plate Offsets (X, Y): [2:0-1-8,0-3-6], [2:1-7-11,0-1-8], [15:0-2-8,0-2-0], [17:0-4-8,0-2-12], [18:0-2-8,0-1-8], [21:0-11-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.48	17-18	>876	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.88	17-18	>474	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.42	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 173 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 1-6:2x4 SP 2400F 2.0E, 6-8:2x4 SP 1650F 1.5E

BOT CHORD 2x4 SP 1650F 1.5E *Except* 2-21:2x4 SP 2400F 2.0E, 9-16:2x3 SPF No.2, 16-13:2x4 SP No.2

WEBS 2x3 SPF No.2 *Except* 14-10,13-12:2x4 SP No.2

SLIDER Left 2x4 SP No.2 -- 3-5-4

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-11 max.): 6-11.

BOT CHORD Rigid ceiling directly applied or 7-1-0 oc bracing.

WEBS 1 Row at midpt 10-14

REACTIONS (size) 2=0-3-8, 13= Mechanical
Max Horiz 2=183 (LC 9)
Max Uplift 2=-272 (LC 8), 13=-321 (LC 9)
Max Grav 2=1633 (LC 1), 13=1563 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/0, 2-4=-6815/1255, 4-5=-6184/1208, 5-6=-3715/688, 6-7=-4319/891, 7-9=-4109/877, 9-10=-4079/874, 10-11=-344/133, 11-12=-344/136, 12-13=-1523/281

BOT CHORD 2-21=-1392/6208, 20-21=-900/4130, 18-20=-709/3388, 17-18=-937/4316, 16-17=0/109, 9-17=-402/183, 15-16=-31/153, 14-15=-505/2223, 13-14=-68/85

WEBS 4-21=-133/961, 6-20=-78/618, 6-18=-271/1188, 7-18=-447/207, 7-17=-236/61, 15-17=-480/2097, 10-17=-457/2089, 10-15=-204/161, 10-14=-2251/478, 11-14=-177/155, 12-14=-289/1473, 5-20=-854/279, 5-21=-478/1923

NOTES

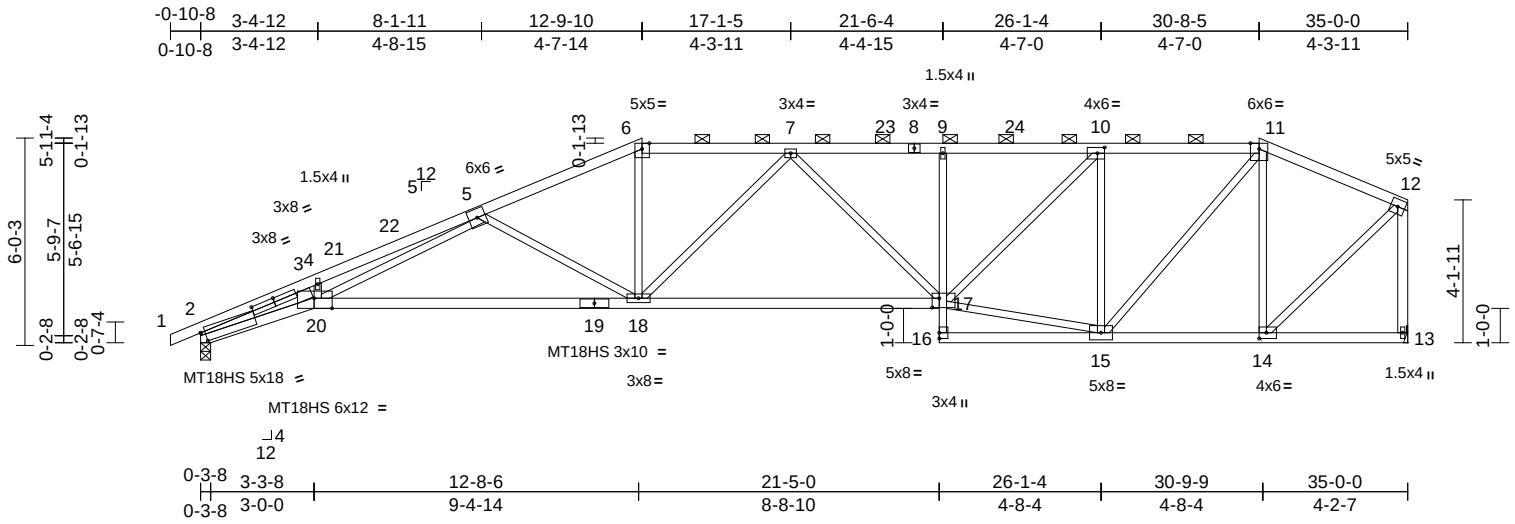
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 9-7-3, Exterior(2R) 9-7-3 to 16-8-1, Interior (1) 16-8-1 to 33-10-11, Exterior(2E) 33-10-11 to 34-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 2 SP 2400F 2.0E crushing capacity of 805 psi.
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 2 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 272 lb uplift at joint 2 and 321 lb uplift at joint 13.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D03	Hip	1	1	I65267717 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:57 Page: 1
ID:LBiLx?OuUK25UtIyITYfpxzWx?h-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:66.8

Plate Offsets (X, Y): [2:0-1-8,0-3-6], [2:1-7-11,0-1-8], [2:2-3-13,0-1-8], [10:0-2-8,0-2-0], [14:0-2-8,0-2-0], [17:0-2-8,0-3-4], [20:0-6-4,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.42	18-20	>997	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.91	18-20	>458	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.39	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 172 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-6:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 2-20:2x4 SP 2400F 2.0E, 9-16:2x3 SPF No.2, 16-13:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 13-12:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-5-4

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-2-15 max.): 6-11.
BOT CHORD Rigid ceiling directly applied or 7-0-14 oc bracing.

REACTIONS (size) 2=0-3-8, 13= Mechanical
Max Horiz 2=180 (LC 9)
Max Uplift 2=-242 (LC 8), 13=-269 (LC 9)
Max Grav 2=1633 (LC 1), 13=1563 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-6937/1251, 4-5=-6370/1227, 5-6=-3131/528, 6-7=-2811/504, 7-9=-2882/586, 9-10=-2871/587, 10-11=-1893/426, 11-12=-1162/258, 12-13=-1526/286
BOT CHORD 2-20=-1380/6329, 18-20=-834/3679, 17-18=-620/3025, 16-17=0/83, 9-17=-304/138, 15-16=-39/65, 14-15=-241/1048, 13-14=-70/82
WEBS 4-20=-83/837, 6-18=-101/927, 11-14=-882/238, 12-14=-258/1406, 10-15=-1338/345, 10-17=-264/1373, 11-15=-264/1348, 15-17=-366/1868, 7-17=-221/102, 7-18=-469/169, 5-18=-972/336, 5-20=-532/2528

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 12-9-10, Exterior(2R) 12-9-10 to 19-10-7, Interior (1) 19-10-7 to 30-8-5, Exterior(2E) 30-8-5 to 34-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: Joint 2 SP 2400F 2.0E crushing capacity of 805 psi.
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 2 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 242 lb uplift at joint 2 and 269 lb uplift at joint 13.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D04	Hip	1	1	I65267718 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:58 Page: 1
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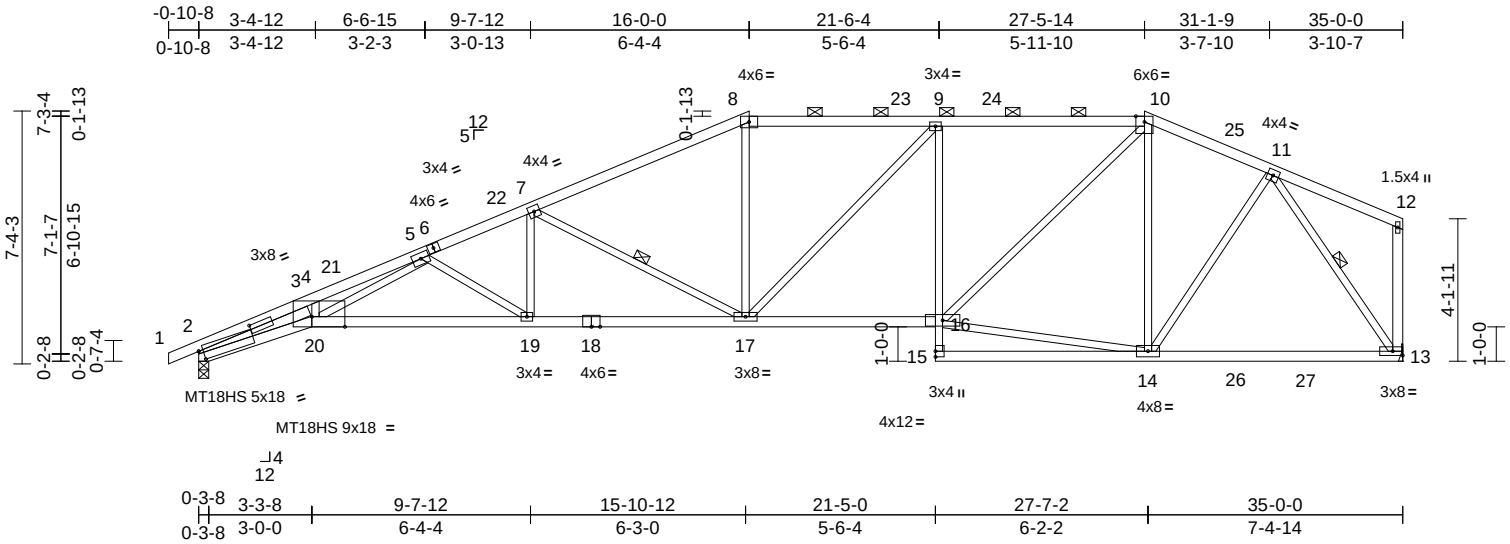

Scale = 1:67

Plate Offsets (X, Y): [2:0-1-8,0-3-6], [2:1-7-11,0-1-8], [20:0-11-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.40	19-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.71	19-20	>586	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.36	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 177 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 6-8:2x4 SP 1650F 1.5E, 1-6:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 2-20:2x4 SP 2400F 2.0E, 9-15:2x3 SPF No.2, 15-13:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 13-12:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-5-4

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-11-10 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-14 max.): 8-10.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 7-17, 11-13

REACTIONS (size) 2=0-3-8, 13= Mechanical
Max Horiz 2=176 (LC 9)
Max Uplift 2=-256 (LC 12), 13=-217 (LC 9)
Max Grav 2=1667 (LC 2), 13=1634 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-7058/1262, 4-5=-6408/1213, 5-7=-3762/642, 7-8=-2667/483, 8-9=-2396/483, 9-10=-2286/466, 10-11=-1540/340, 11-12=-134/135, 12-13=-125/99
BOT CHORD 2-20=-1387/6445, 19-20=-899/4200, 17-19=-722/3441, 16-17=-461/2290, 15-16=0/97, 9-16=-636/199, 14-15=-16/75, 13-14=-244/968
WEBS 4-20=-116/1026, 7-19=-44/722, 7-17=-1173/323, 8-17=-41/685, 9-17=-127/191, 14-16=-269/1346, 10-16=-255/1260, 10-14=-634/191, 11-13=-1683/341, 5-19=-890/232, 5-20=-471/2086, 11-14=-68/791

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 23-0-14, Interior (1) 23-0-14 to 27-5-14, Exterior(2E) 27-5-14 to 34-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearings are assumed to be: Joint 2 SP 2400F 2.0E crushing capacity of 805 psi.
8) Refer to girder(s) for truss to truss connections.
9) Bearing at joint(s) 2 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 256 lb uplift at joint 2 and 217 lb uplift at joint 13.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D05	Hip	1	1	I65267719 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:58 Page: 1
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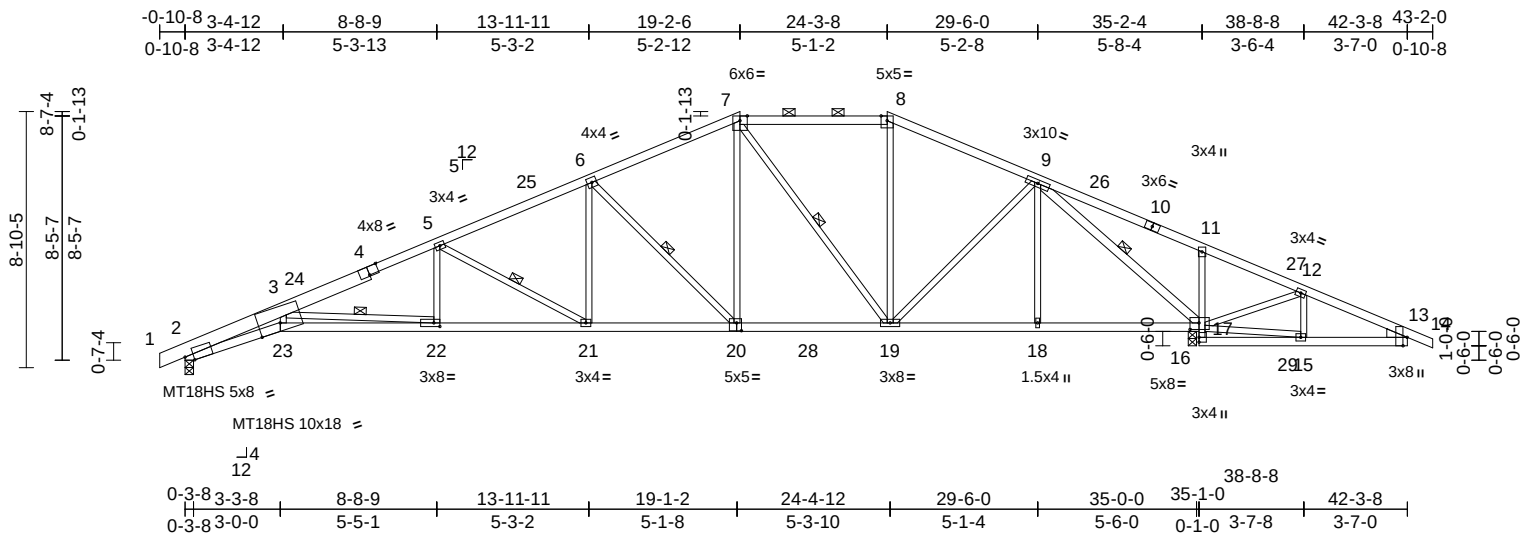

Scale = 1:79.7

Plate Offsets (X, Y): [2:0-3-8,Edge], [4:0-4-0,Edge], [13:0-3-8,Edge], [17:0-3-12,0-2-12], [20:0-2-0,0-3-4], [22:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.36	22-23	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.64	22-23	>654	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.31	17	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 211 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-7:2x4 SP 1650F 1.5E, 1-4:2x6 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 11-16:2x3 SPF No.2, 16-13,20-17:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 17-9:2x4 SP No.2
WEDGE Right: 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (4-3-10 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 7-19, 9-17, 6-20, 5-21, 3-22

REACTIONS (size) 2=0-3-8, 17=0-3-8
Max Horiz 2=172 (LC 12)
Max Uplift 2=-281 (LC 12), 17=-410 (LC 9)
Max Grav 2=1619 (LC 2), 17=2426 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/8, 2-3=-6517/1230, 3-5=-3799/639, 5-6=-2785/475, 6-7=-2021/355, 7-8=-1470/269, 8-9=-1650/277, 9-11=-872/1052, 11-12=-939/1046, 12-13=-412/508, 13-14=0/4
BOT CHORD 2-23=-1261/5934, 22-23=-1142/5311, 21-22=-637/3521, 19-21=-373/2507, 18-19=-56/1126, 17-18=-56/1126, 16-17=-70/56, 11-17=-358/186, 15-16=-145/31, 13-15=-402/398
WEBS 3-23=-328/1938, 7-20=-143/909, 7-19=-619/177, 8-19=-42/356, 9-19=-235/494, 9-18=0/220, 9-17=-2718/882, 6-20=-972/291, 12-15=-293/193, 12-17=-559/600, 15-17=-285/371, 5-22=-2/467, 5-21=-1161/302, 6-21=-83/720, 3-22=-1802/508

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 19-2-6, Exterior(2E) 19-2-6 to 24-3-8, Exterior(2R) 24-3-8 to 31-4-6, Interior (1) 31-4-6 to 43-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearings are assumed to be: Joint 2 SP 2400F 2.0E crushing capacity of 805 psi, Joint 17 SP No.2 crushing capacity of 565 psi.
8) Bearing at joint(s) 2 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 281 lb uplift at joint 2 and 410 lb uplift at joint 17.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D06	Hip	1	1	I65267720 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:58 Page: 1
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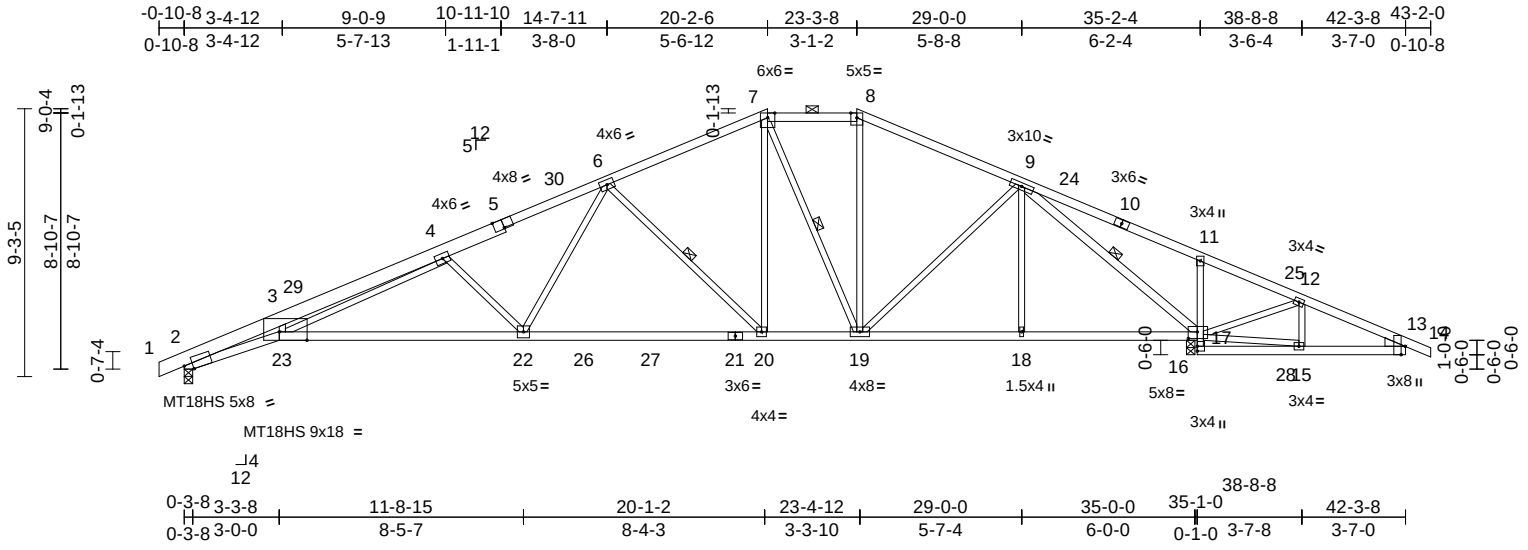

Scale = 1:79.8

Plate Offsets (X, Y): [2:0-3-8,Edge], [5:0-4-0,Edge], [13:0-3-8,Edge], [17:0-3-12,0-2-12], [23:0-11-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.48	22-23	>883	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.89	22-23	>473	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.34	17	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 215 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 5-1:2x6 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 11-16:2x3 SPF No.2, 16-13,21-17:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 17-9:2x4 SP No.2
WEDGE Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-7-11 oc purlins, except
2-0-0 oc purlins (4-9-4 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 7-19, 9-17, 6-20

REACTIONS (size) 2=0-3-8, 17=0-3-8
Max Horiz 2=180 (LC 12)
Max Uplift 2=-288 (LC 12), 17=-393 (LC 9)
Max Grav 2=1623 (LC 2), 17=2419 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 7-8=-1460/301, 8-9=-1650/311, 9-11=-867/1051, 11-12=-939/1041, 12-13=-412/510, 13-14=0/4, 1-2=0/8, 2-3=-6339/1168, 3-4=-5645/1145, 4-6=-3269/577, 6-7=-1873/349
BOT CHORD 2-23=-1201/5741, 22-23=-712/3540, 20-22=-383/2391, 19-20=-152/1668, 18-19=-74/1197, 17-18=-74/1197, 16-17=-70/56, 11-17=-379/199, 15-16=-150/26, 13-15=-404/399
WEBS 3-23=-82/1079, 7-20=-149/926, 7-19=-596/147, 8-19=-70/412, 9-19=-210/379, 9-18=0/258, 9-17=-2748/888, 4-22=-925/356, 4-23=-466/1939, 6-22=-164/1129, 6-20=-1000/322, 12-15=-294/193, 12-17=-551/597, 15-17=-287/377

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 20-2-6, Exterior(2E) 20-2-6 to 23-3-8, Exterior(2R) 23-3-8 to 30-4-6, Interior (1) 30-4-6 to 43-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearings are assumed to be: Joint 2 SP 1650F 1.5E crushing capacity of 565 psi, Joint 17 SP No.2 crushing capacity of 565 psi.
8) Bearing at joint(s) 2 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 288 lb uplift at joint 2 and 393 lb uplift at joint 17.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D07	Roof Special	1	1	I65267721 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:58 Page: 1
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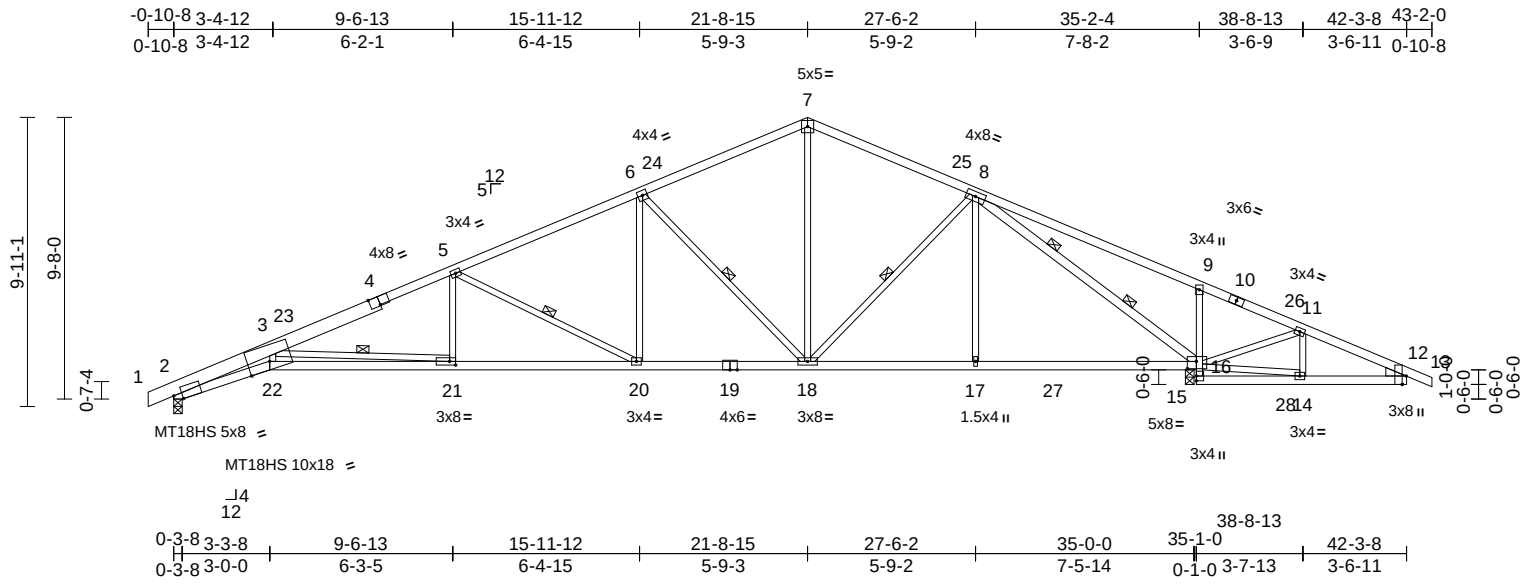

Scale = 1:79

Plate Offsets (X, Y): [2:0-3-8,Edge], [4:0-4-0,Edge], [12:0-3-8,Edge], [16:0-3-12,0-3-0], [21:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.39	21-22	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.70	21-22	>605	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.32	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 208 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 1-4:2x6 SP 2400F 2.0E, 10-13:2x4 SP No.2
BOT CHORD 2x4 SP 2400F 2.0E *Except* 9-15:2x3 SPF No.2, 15-12,19-16:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 16-8:2x4 SP No.2
WEDGE Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-0-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 8-18, 6-18, 5-20, 3-21
WEBS 2 Rows at 1/3 pts 8-16

REACTIONS (size) 2=0-3-8, 16=0-3-8
Max Horiz 2=194 (LC 12)
Max Uplift 2=-296 (LC 12), 16=-376 (LC 13)
Max Grav 2=1610 (LC 2), 16=2438 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/8, 2-3=-6438/1312, 3-5=-3614/658, 5-6=-2476/469, 6-7=-1632/346, 7-8=-1637/366, 8-9=-844/1016, 9-11=-933/1012, 11-12=-413/516, 12-13=0/4
BOT CHORD 2-22=-1355/5856, 21-22=-1229/5237, 20-21=-668/3338, 18-20=-360/2211, 17-18=-112/1371, 16-17=-112/1371, 15-16=-71/56, 9-16=-482/252, 14-15=-203/0, 12-14=-413/401
WEBS 3-22=-352/1936, 7-18=-154/905, 8-18=-157/220, 6-18=-1104/327, 11-14=-299/188, 14-16=-279/408, 11-16=-500/583, 8-16=-2786/922, 8-17=0/341, 5-21=0/478, 5-20=-1266/346, 6-20=-80/778, 3-21=-1909/564

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 21-8-15, Exterior(2R) 21-8-15 to 26-8-15, Interior (1) 26-8-15 to 43-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearings are assumed to be: Joint 2 SP 2400F 2.0E crushing capacity of 805 psi, Joint 16 SP No.2 crushing capacity of 565 psi.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 296 lb uplift at joint 2 and 376 lb uplift at joint 16.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/03/2024 3:52:56

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D08	Roof Special	1	1	I65267722 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:59 Page: 1
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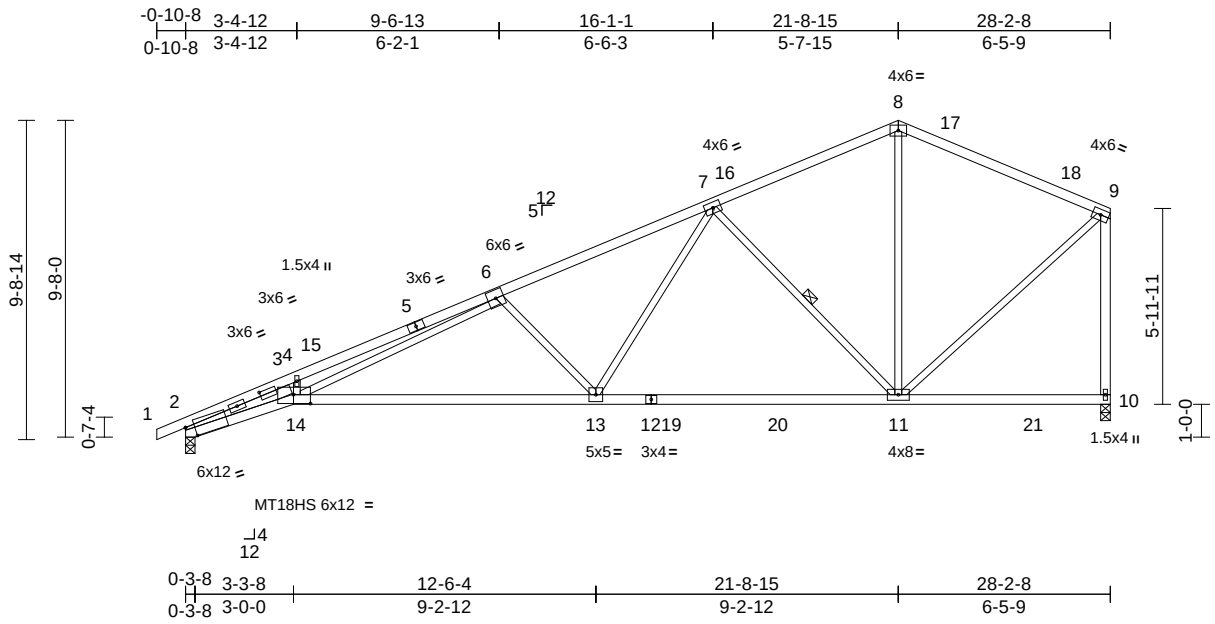


Scale = 1:70.3

Plate Offsets (X, Y): [2:0-3-4,0-4-2], [2:2-5-13,0-1-8], [14:0-6-4,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.49	13-14	>692	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.93	13-14	>361	180	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.29	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 137 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 8-9:2x4 SP No.2, 1-5:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 12-10:2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 10-9:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-5-4

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 7-11

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=292 (LC 9)
Max Uplift 2=-253 (LC 12), 10=-202 (LC 12)
Max Grav 2=1372 (LC 2), 10=1353 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-5732/1229, 4-6=-5291/1263, 6-7=-2357/456, 7-8=-955/289, 8-9=-957/268, 9-10=-1244/306
BOT CHORD 2-14=-1397/5239, 13-14=-705/2612, 11-13=-458/1533, 10-11=-104/118
WEBS 4-14=-20/614, 8-11=-53/408, 9-11=-238/1081, 6-13=-810/352, 6-14=-716/2559, 7-13=-162/1108, 7-11=-1046/351

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 21-8-15, Exterior(2R) 21-8-15 to 26-8-15, Interior (1) 26-8-15 to 28-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearings are assumed to be: Joint 2 SP 1650F 1.5E crushing capacity of 565 psi, Joint 10 SP No.2 crushing capacity of 565 psi.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 253 lb uplift at joint 2 and 202 lb uplift at joint 10.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

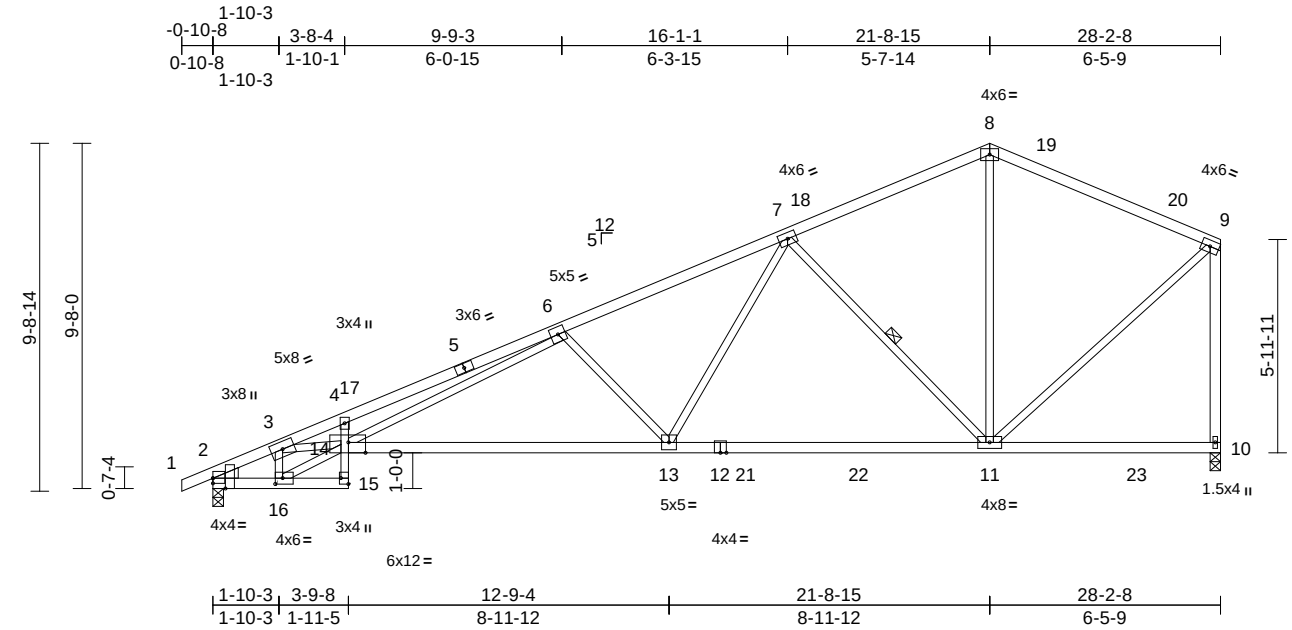
LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D09	Roof Special	1	1	I65267723 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:59 Page: 1

ID:7zWVRVztZTl0wSVii_MMPezWwyN-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:64.5

Plate Offsets (X, Y): [2:Edge,0-1-12], [2:0-3-7,Edge], [14:0-5-12,Edge], [15:Edge,0-2-8], [16:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.40	13-14	>832	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.78	13-14	>431	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.21	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 137 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 1650F 1.5E *Except* 8-9:2x4 SP No.2

BOT CHORD 2x4 SP No.2 *Except* 15-4:2x3 SPF No.2, 14-12:2x4 SP 1650F 1.5E

WEBS 2x3 SPF No.2 *Except* 10-9:2x4 SP No.2

WEDGE Left: 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 7-11-5 oc bracing.

WEBS 1 Row at midpt 7-11

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=291 (LC 9)
Max Uplift 2=-254 (LC 12), 10=-201 (LC 12)
Max Grav 2=1372 (LC 2), 10=1349 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/4, 2-3=-2277/374, 3-4=-4880/1060, 4-6=-5074/1158, 6-7=-2288/443, 7-8=-952/289, 8-9=-954/268, 9-10=-1239/305

BOT CHORD 2-16=-557/1907, 15-16=-80/198, 14-15=-7/82, 4-14=-206/144, 13-14=-684/2538, 11-13=-455/1529, 10-11=-104/118

WEBS 8-11=-53/406, 9-11=-237/1076, 6-13=-787/339, 6-14=-630/2424, 7-13=-152/1057, 7-11=-1046/347, 3-16=-961/307, 14-16=-545/1958, 3-14=-641/2548

NOTES

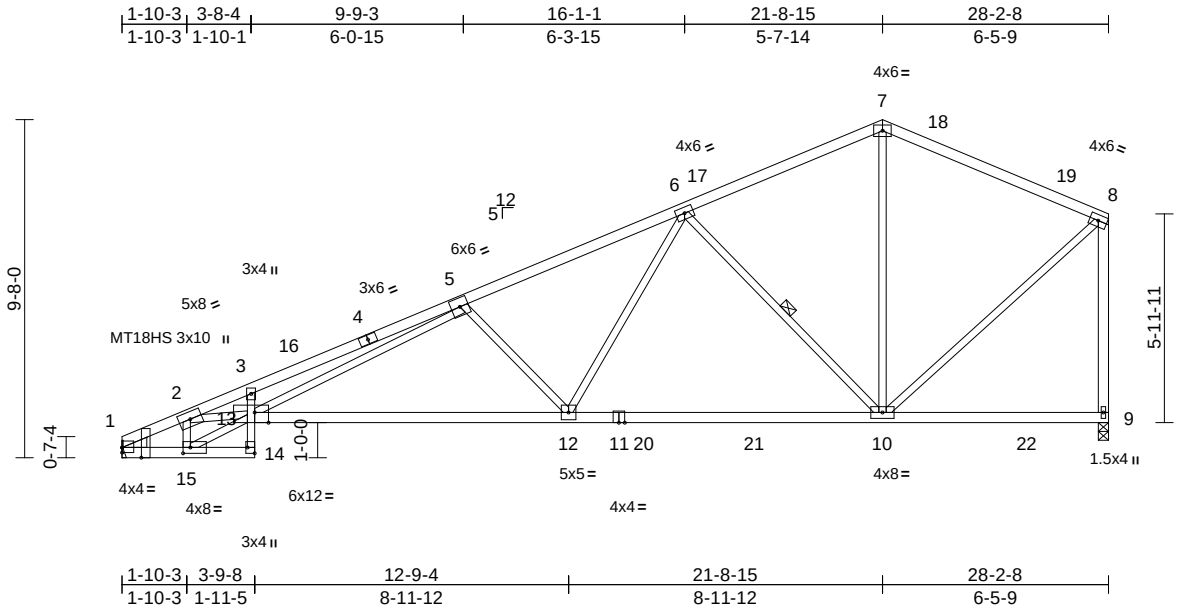
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 21-8-15, Exterior(2R) 21-8-15 to 26-8-15, Interior (1) 26-8-15 to 28-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 254 lb uplift at joint 2 and 201 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D10	Roof Special	2	1	I65267724 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:59 Page: 1
ID:QKR8vu2Gvde0GXY2dy_?B7zWwyG-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:65.9

Plate Offsets (X, Y): [1:Edge,0-1-12], [1:0-3-7,Edge], [13:0-4-12,Edge], [14:Edge,0-2-8], [15:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.42	12-13	>803	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.80	12-13	>418	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.22	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 136 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 7-8:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 14-3:2x3 SPF No.2, 13-11:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 9-8:2x4 SP No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-9-13 oc bracing.
WEBS 1 Row at midpt 6-10

REACTIONS (size) 1= Mechanical, 9=0-3-8
Max Horiz 1=290 (LC 9)
Max Uplift 1=-229 (LC 12), 9=-202 (LC 12)
Max Grav 1=1316 (LC 2), 9=1354 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2380/400, 2-3=-5025/1093, 3-5=-5209/1190, 5-6=-2307/448, 6-7=-955/291, 7-8=-958/270, 8-9=-1244/306
BOT CHORD 1-15=-575/2028, 14-15=-82/206, 13-14=-7/84, 3-13=-198/141, 12-13=-688/2566, 10-12=-456/1539, 9-10=-104/118
WEBS 7-10=-53/409, 8-10=-238/1081, 5-12=-804/343, 5-13=-656/2539, 6-12=-156/1072, 6-10=-1055/349, 2-15=-1015/315, 13-15=-564/2087, 2-13=-640/2555

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 5-0-12, Interior (1) 5-0-12 to 21-8-15, Exterior(2R) 21-8-15 to 26-8-15, Interior (1) 26-8-15 to 28-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearings are assumed to be: , Joint 9 SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 229 lb uplift at joint 1 and 202 lb uplift at joint 9.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

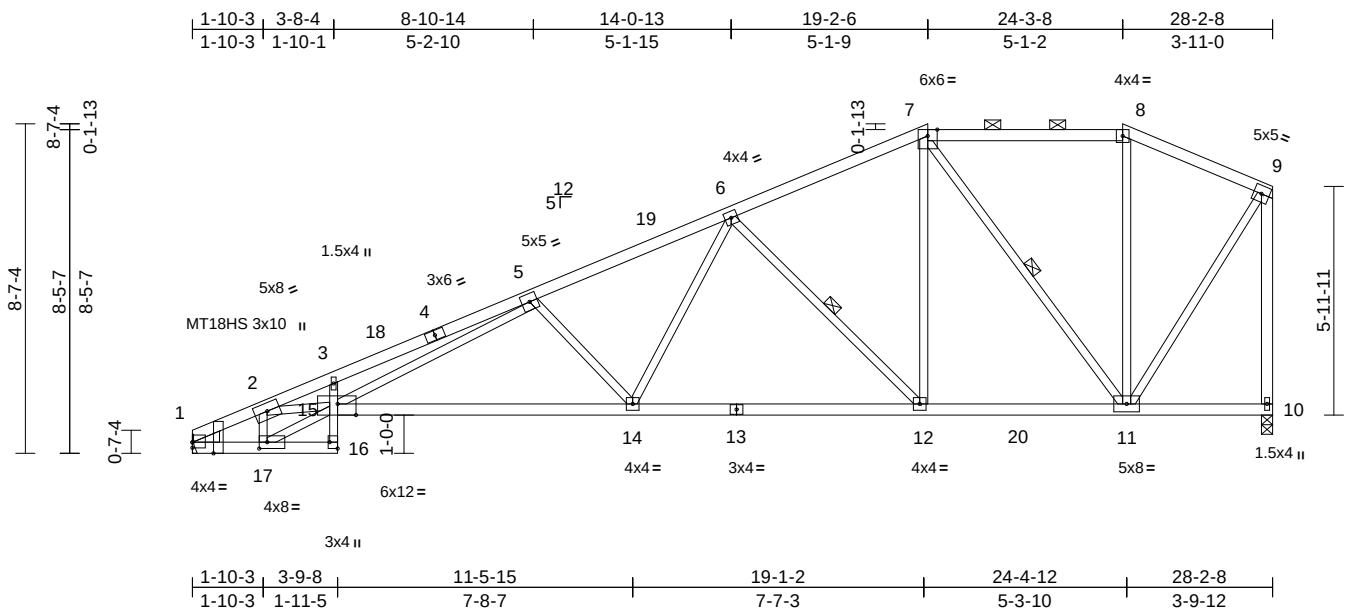
LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D11	Hip	1	1	I65267725 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:59 Page: 1
ID:cRcICfB9J?1S4Dt9mmga7RzWwy5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:60.2

Plate Offsets (X, Y): [1:Edge,0-1-12], [1:0-3-7,Edge], [15:0-5-12,Edge], [16:Edge,0-2-8], [17:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.36	14-15	>932	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.66	14-15	>507	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.21	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 143 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 7-8,8-9:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 16-3:2x3 SPF No.2, 15-13:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 10-9:2x4 SP No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-8 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied or 7-10-14 oc bracing.
WEBS 1 Row at midpt 7-11, 6-12

REACTIONS (size) 1= Mechanical, 10=0-3-8
Max Horiz 1=293 (LC 9)
Max Uplift 1=-223 (LC 12), 10=-172 (LC 9)
Max Grav 1=1305 (LC 2), 10=1322 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2361/392, 2-3=-4958/1034, 3-5=-5100/1117, 5-6=-2464/462, 6-7=-1298/292, 7-8=-605/240, 8-9=-687/236, 9-10=-1271/279
BOT CHORD 1-17=-562/2013, 16-17=-72/211, 15-16=-6/85, 3-15=-138/117, 14-15=-709/2687, 12-14=-508/1798, 11-12=-335/1138, 10-11=-113/125
WEBS 7-12=-140/915, 7-11=-928/201, 8-11=-170/112, 9-11=-245/1109, 5-14=-747/302, 5-15=-582/2318, 6-14=-142/934, 6-12=-928/308, 2-17=-1005/313, 15-17=-559/2063, 2-15=-616/2506

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 5-0-12, Interior (1) 5-0-12 to 19-2-6, Exterior(2E) 19-2-6 to 28-0-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearings are assumed to be: , Joint 10 SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 223 lb uplift at joint 1 and 172 lb uplift at joint 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/03/2024 3:52:56

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D12	Half Hip	1	1	I65267726 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:59 Page: 1
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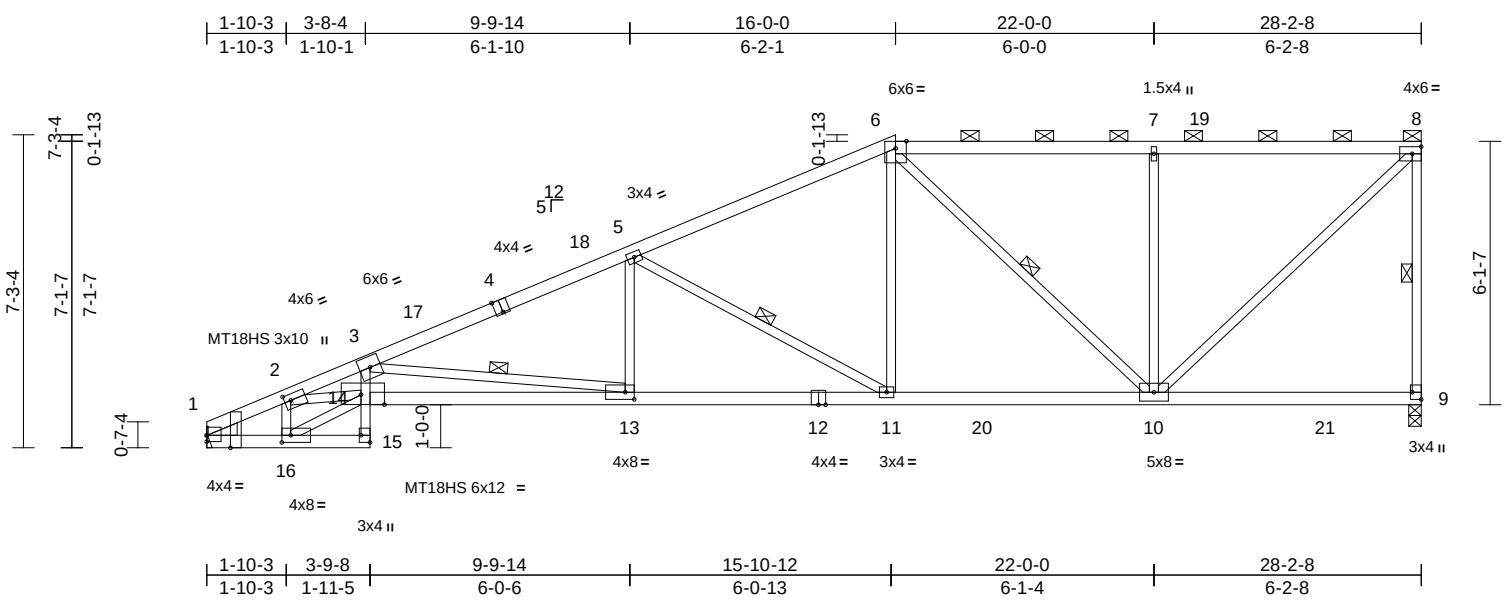


Scale = 1:53.5

Plate Offsets (X, Y): [1:Edge,0-1-12], [1:0-3-7,Edge], [2:0-1-12,0-1-12], [4:0-2-0,Edge], [9:Edge,0-2-8], [13:0-2-8,0-2-0], [14:0-6-8,0-2-12], [15:Edge,0-2-8], [16:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.30	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.54	13-14	>626	180	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.21	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 132 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 15-3:2x3 SPF No.2, 14-12:2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-7 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 7-3-0 oc bracing.
WEBS 1 Row at midpt 8-9, 6-10, 5-11, 3-13

REACTIONS (size) 1= Mechanical, 9=0-3-8
Max Horiz 1=300 (LC 9)
Max Uplift 1=-207 (LC 12), 9=-247 (LC 9)
Max Grav 1=1311 (LC 2), 9=1347 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2356/358, 2-3=-5136/988, 3-5=-2840/461, 5-6=-1794/331, 6-7=-1152/289, 7-8=-1149/287, 8-9=-1232/273
BOT CHORD 1-16=-569/2003, 15-16=-76/261, 14-15=-6/90, 3-14=-228/1075, 13-14=-1265/4903, 11-13=-671/2589, 10-11=-420/1578, 9-10=-113/128
WEBS 8-10=-300/1574, 6-11=-90/780, 6-10=-601/166, 7-10=-512/234, 5-11=-1143/333, 5-13=-8/562, 3-13=-2335/611, 2-16=-992/320, 14-16=-564/1995, 2-14=-671/2703

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 5-0-12, Interior (1) 5-0-12 to 16-0-0, Exterior(2R) 16-0-0 to 23-0-14, Interior (1) 23-0-14 to 28-1-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearings are assumed to be: , Joint 9 SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 247 lb uplift at joint 9 and 207 lb uplift at joint 1.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

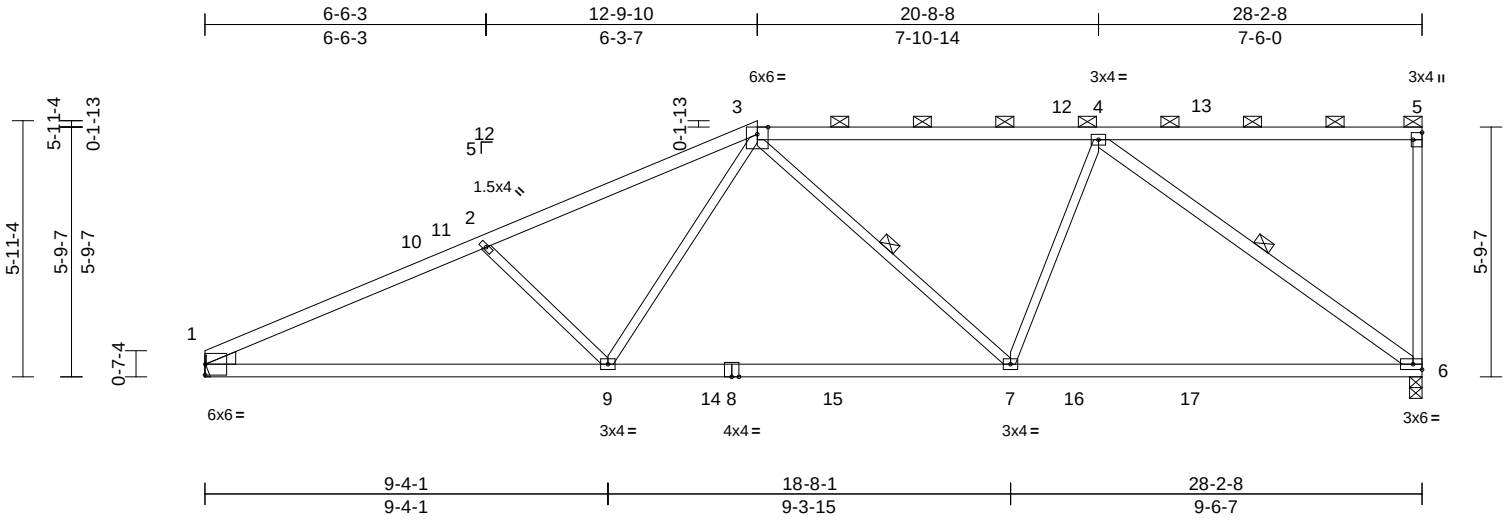
LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D13	Half Hip	1	1	I65267727 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:59 Page: 1

ID:JdkVttW5yIQdqNRLrxfwk7zWwxg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:53.4

Plate Offsets (X, Y): [5:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.28	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.51	6-7	>655	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.08	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 124 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 3-5:2x4 SP 1650F 1.5E

BOT CHORD 2x4 SP 1650F 1.5E

WEBS 2x3 SPF No.2 *Except* 6-4:2x4 SP No.2

WEDGE Left: 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-5 max.): 3-5.

BOT CHORD Rigid ceiling directly applied or 9-1-3 oc bracing.

WEBS 1 Row at midpt 3-7, 4-6

REACTIONS (size) 1= Mechanical, 6=0-3-8

Max Horiz 1=256 (LC 9)

Max Uplift 1=-184 (LC 12), 6=-258 (LC 9)

Max Grav 1=1329 (LC 2), 6=1348 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-2536/417, 2-3=-2293/376, 3-4=-1597/307, 4-5=-126/122, 5-6=-205/96

BOT CHORD 1-9=-606/2257, 7-9=-425/1694, 6-7=-338/1409

WEBS 2-9=-378/268, 3-9=-89/682, 3-7=-195/143, 4-7=0/536, 4-6=-1728/360

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 5-0-12, Interior (1) 5-0-12 to 12-9-10, Exterior(2R) 12-9-10 to 19-10-7, Interior (1) 19-10-7 to 28-1-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearings are assumed to be: , Joint 6 SP 1650F 1.5E crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 258 lb uplift at joint 6 and 184 lb uplift at joint 1.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

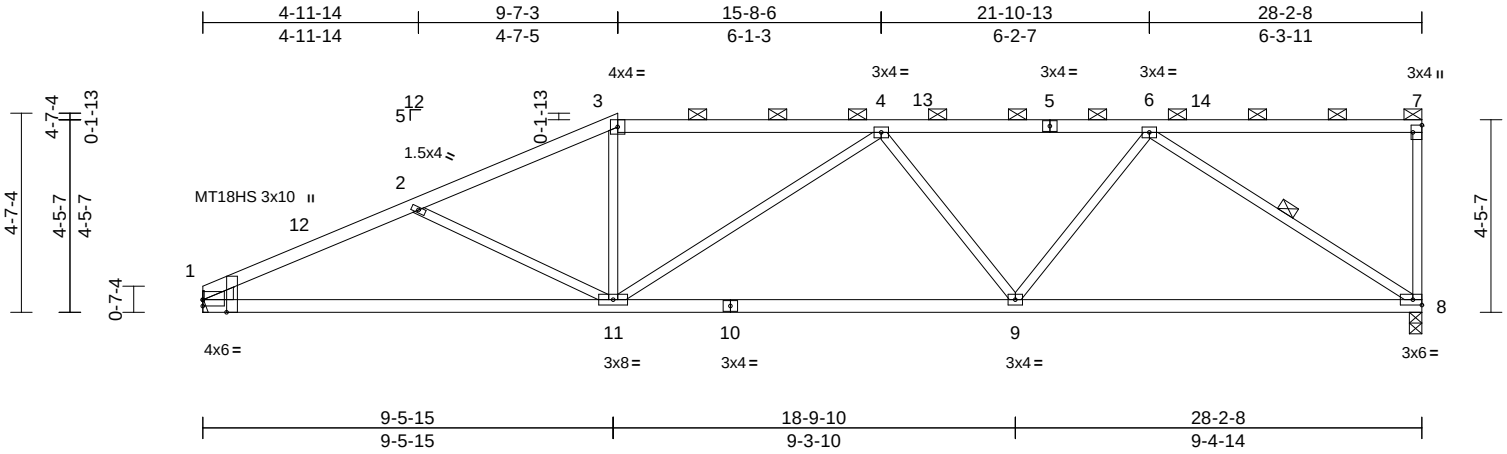
LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D14	Half Hip	1	1	I65267728 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:46:59 Page: 1
ID:NW8A00hWQvJV7g5EDbRRqIzWwxR-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:53.3

Plate Offsets (X, Y): [1:Edge,0-1-12], [1:0-3-7,Edge], [7:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.22	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.47	8-9	>716	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 117 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 10-8:2x4 SP No.2
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-4 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-12 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-8

REACTIONS (size) 1= Mechanical, 8=0-3-8
Max Horiz 1=193 (LC 9)
Max Uplift 1=-176 (LC 8), 8=-266 (LC 9)
Max Grav 1=1262 (LC 1), 8=1262 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2451/442, 2-3=-2161/377, 3-4=-1934/369, 4-6=-1898/386, 6-7=-105/92, 7-8=-185/85
BOT CHORD 1-11=-579/2166, 9-11=-494/2143, 8-9=-382/1507
WEBS 3-11=-10/458, 4-9=-410/171, 4-11=-401/141, 6-9=-17/655, 6-8=-1785/416, 2-11=-249/232

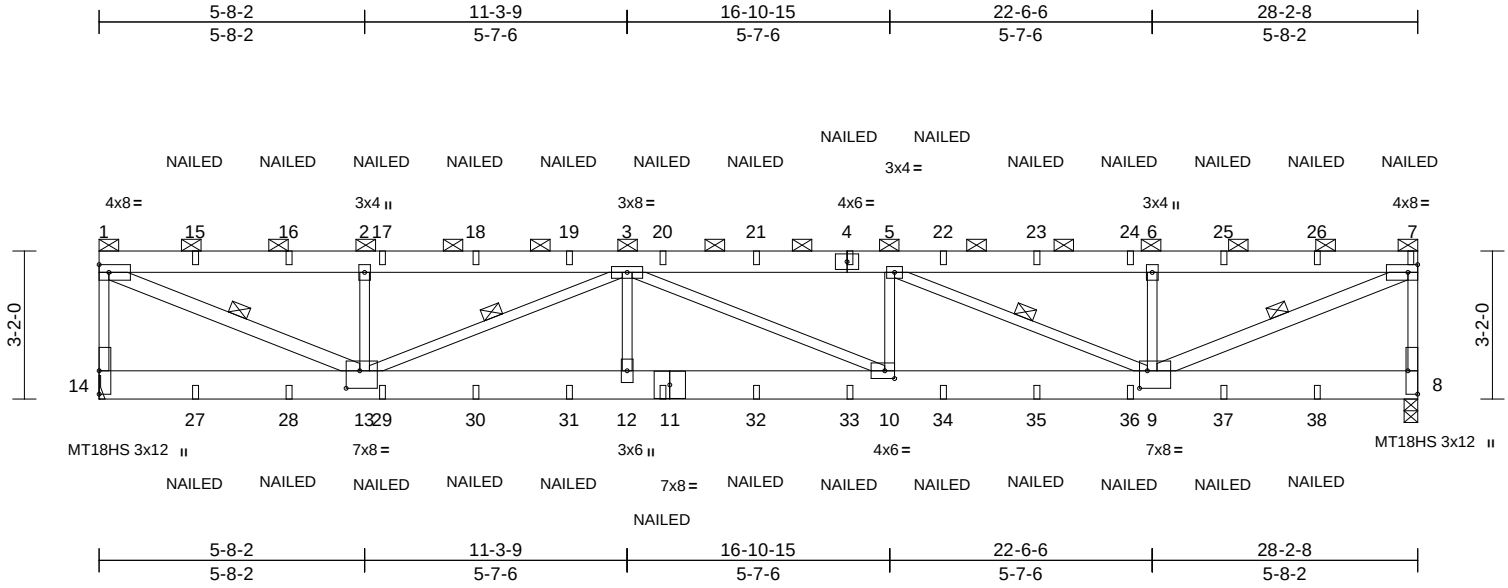
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-12 to 4-9-12, Interior (1) 4-9-12 to 9-7-3, Exterior(2R) 9-7-3 to 16-8-1, Interior (1) 16-8-1 to 28-1-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) Bearings are assumed to be: , Joint 8 SP No.2 crushing capacity of 565 psi.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 266 lb uplift at joint 8 and 176 lb uplift at joint 1.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	D15	Flat Girder	1	1	I65267729 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:00 Page: 1
ID:GZv6RBxhUMyW8vCGyVJMBjzWwx6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:49.3

Plate Offsets (X, Y): [8:Edge,0-2-8], [9:0-2-0,0-4-8], [10:0-2-8,0-2-0], [13:0-3-8,0-4-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	0.28	10-12	>999	240	MT18HS	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.39	10-12	>856	180	MT20	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 159 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x8 SPF No.2
WEBS 2x3 SPF No.2 *Except* 7-9,13-1:2x4 SP No.2

BRACING
TOP CHORD 2-0-0 oc purlins (3-3-10 max.): 1-7, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-6-14 oc bracing.
WEBS 1 Row at midpt 7-9, 1-13, 3-13, 5-9

REACTIONS (size) 8=0-3-8, 14= Mechanical
Max Horiz 14=-108 (LC 27)
Max Uplift 8=-745 (LC 9), 14=-684 (LC 8)
Max Grav 8=1685 (LC 1), 14=1610 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-1523/849, 1-2=-2826/1524, 2-3=-2826/1524, 3-5=-4181/2221, 5-6=-2828/1525, 6-7=-2828/1525, 7-8=-1599/900
BOT CHORD 13-14=-149/161, 12-13=-2302/4193, 10-12=-2302/4193, 9-10=-2276/4181, 8-9=-54/66
WEBS 7-9=-1648/3098, 2-13=-542/412, 1-13=-1646/3096, 3-13=-1510/822, 3-12=0/300, 3-10=-29/30, 5-10=0/298, 5-9=-1494/809, 6-9=-544/414

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are MT20 plates unless otherwise indicated.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
6) Bearings are assumed to be: , Joint 8 SPF No.2 crushing capacity of 425 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 684 lb uplift at joint 14 and 745 lb uplift at joint 8.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-7=-70, 8-14=-20
Concentrated Loads (lb)
Vert: 4=-39 (B), 7=-77 (B), 11=-15 (B), 15=-39 (B), 16=-39 (B), 17=-39 (B), 18=-39 (B), 19=-39 (B), 20=-39 (B), 21=-39 (B), 22=-39 (B), 23=-39 (B), 24=-39 (B), 25=-39 (B), 26=-39 (B), 27=-15 (B), 28=-15 (B), 29=-15 (B), 30=-15 (B), 31=-15 (B), 32=-15 (B), 33=-15 (B), 34=-15 (B), 35=-15 (B), 36=-15 (B), 37=-15 (B), 38=-15 (B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	E01	Hip Girder	1	2	I65267730 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:00 Page: 1
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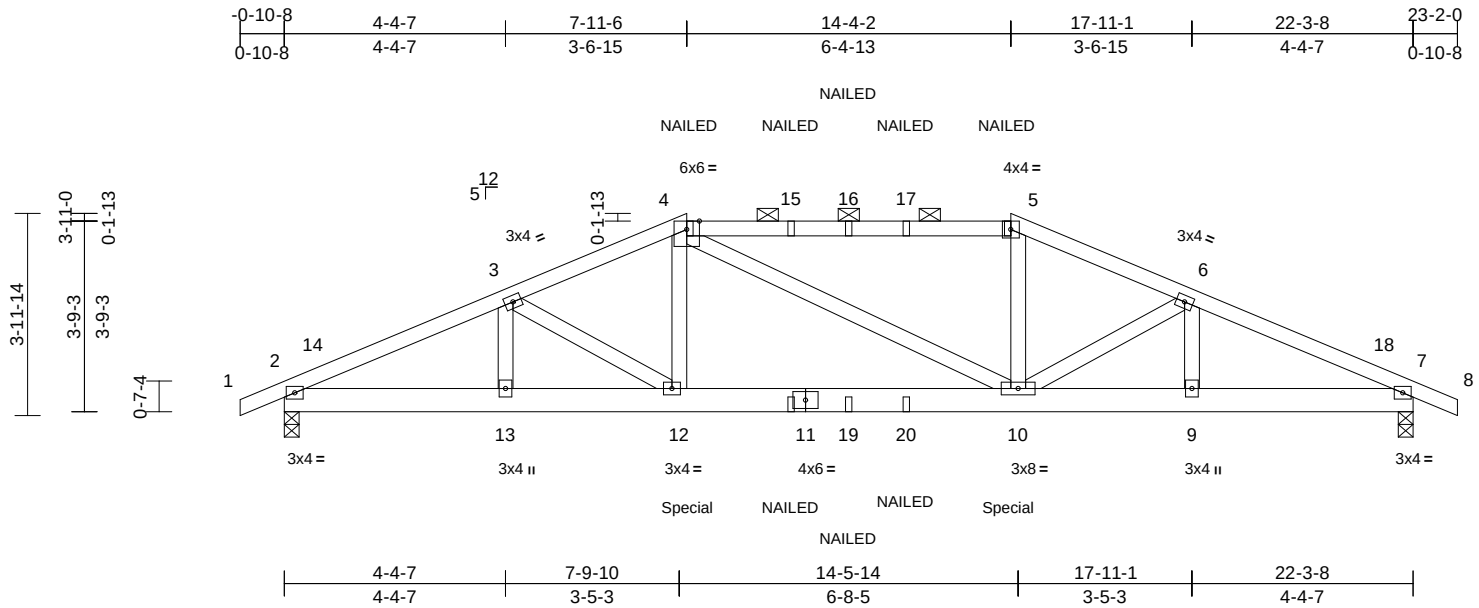


Scale = 1:45.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	0.06	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.12	10-12	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 228 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (4-3-12 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 7=0-3-8
Max Horiz 2=68 (LC 16)
Max Uplift 2=-535 (LC 12), 7=-535 (LC 13)
Max Grav 2=1658 (LC 1), 7=1658 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/10, 2-3=-3212/1157, 3-4=-3104/1201, 4-5=-2831/1143, 5-6=-3101/1196, 6-7=-3216/1158, 7-8=0/10
BOT CHORD 2-13=-987/2830, 12-13=-987/2830, 10-12=-1000/2834, 9-10=-984/2833, 7-9=-984/2833
WEBS 4-12=-87/569, 4-10=-133/126, 5-10=-73/570, 3-12=-253/353, 6-10=-244/353, 3-13=-15/61, 6-9=-15/64

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.
Web 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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-4-7, Interior (1) 4-4-7 to 7-11-6, Exterior(2E) 7-11-6 to 14-4-2, Exterior(2R) 14-4-2 to 21-5-0, Interior (1) 21-5-0 to 23-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 535 lb uplift at joint 2 and 535 lb uplift at joint 7.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 372 lb down and 177 lb up at 7-11-6, and 372 lb down and 177 lb up at 14-3-6 on bottom chord. The design/ selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-5=-70, 5-8=-70, 2-7=-20
Concentrated Loads (lb)
Vert: 4=-75 (F), 5=-75 (F), 11=-24 (F), 12=-372 (F), 10=-372 (F), 15=-75 (F), 16=-75 (F), 17=-75 (F), 19=-24 (F), 20=-24 (F)

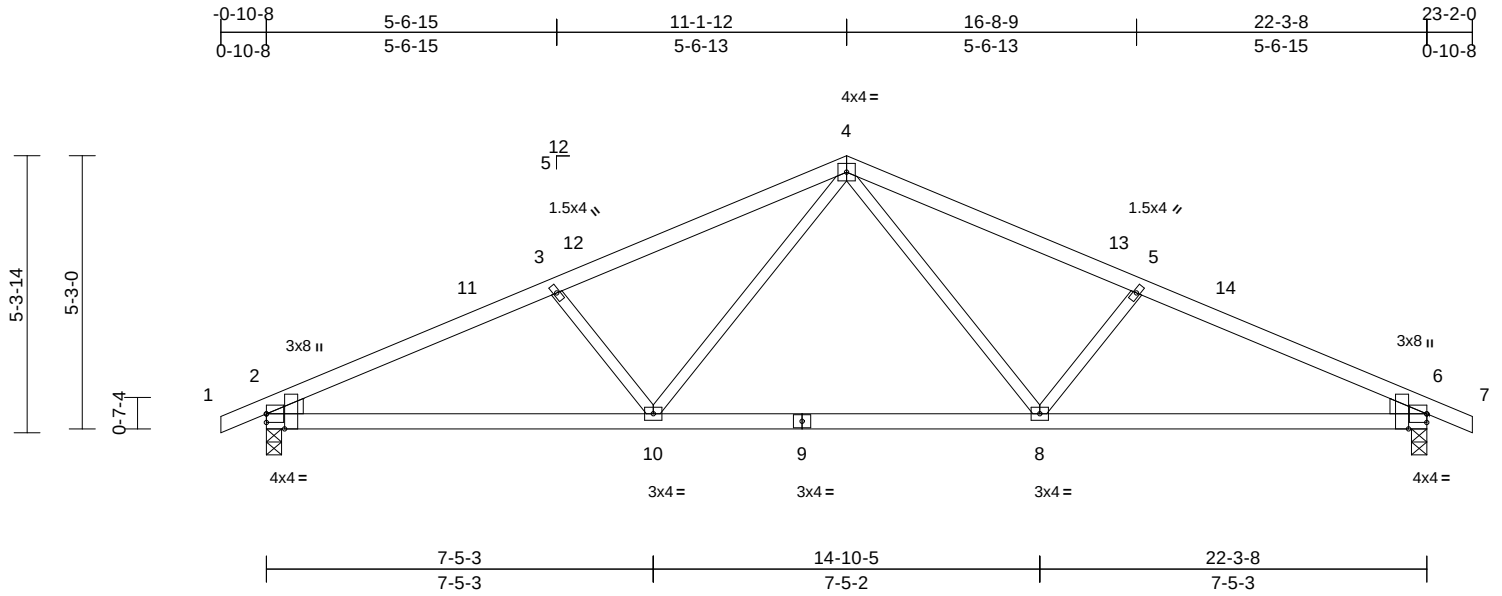
STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/03/2024 3:52:56

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	E02	Common	2	1	I65267731 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:00 Page: 1
ID:hDiyKToDmAvS9p7wcv40ZhzWww?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:44.3

Plate Offsets (X, Y): [2:0-3-7,Edge], [6:0-3-7,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.08	6-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.19	6-8	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.05	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 89 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-10-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=-94 (LC 13)
Max Uplift 2=-180 (LC 12), 6=-180 (LC 13)
Max Grav 2=1061 (LC 1), 6=1061 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/4, 2-3=-1847/412, 3-4=-1614/392, 4-5=-1614/392, 5-6=-1847/412, 6-7=0/4
BOT CHORD 2-10=-318/1601, 8-10=-141/1106, 6-8=-310/1601
WEBS 4-8=-106/541, 5-8=-340/219, 4-10=-105/541, 3-10=-340/219

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 11-1-12, Exterior(2R) 11-1-12 to 16-1-12, Interior (1) 16-1-12 to 23-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 180 lb uplift at joint 2 and 180 lb uplift at joint 6.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	E03	Common Girder	1	3	I65267732 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:01
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Page: 1

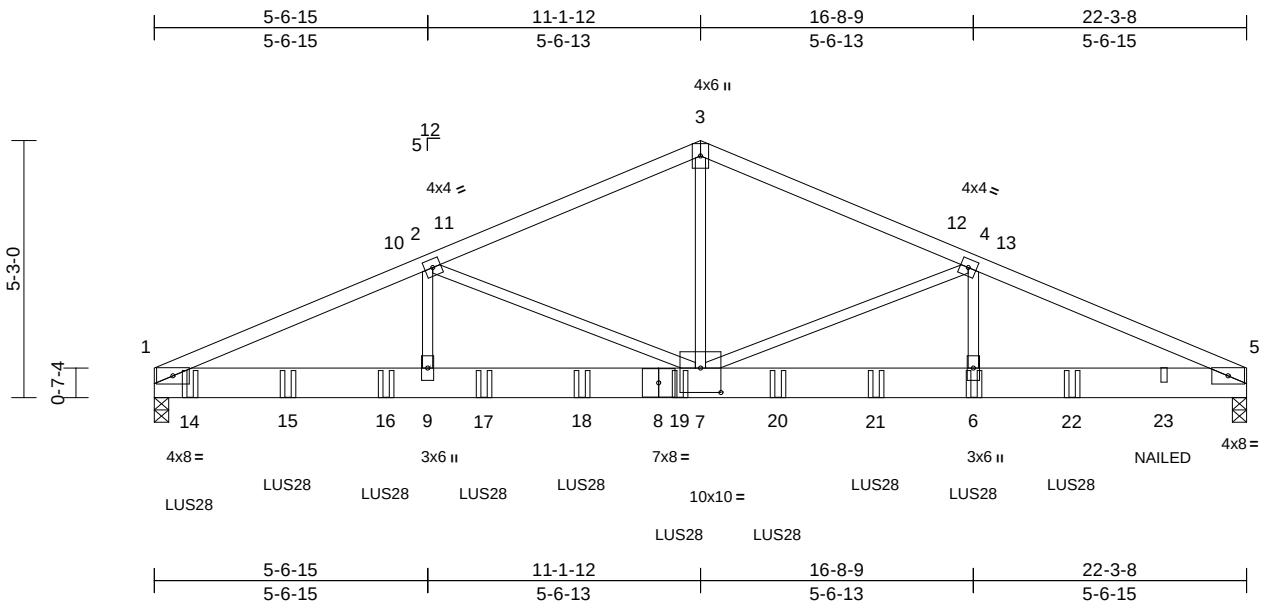

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Plate Offsets (X, Y): [7:0-5-0,0-6-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.13	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.23	6-7	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.05	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 315 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SPF No.2
WEBS 2x3 SPF No.2

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

REACTIONS (size) 1=0-3-8, 5=0-3-8
Max Horiz 1=-90 (LC 34)
Max Uplift 1=-914 (LC 12), 5=-734 (LC 13)
Max Grav 1=5891 (LC 1), 5=4885 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-10609/1756, 2-3=-7488/1296, 3-4=-7488/1295, 4-5=-10303/1698
BOT CHORD 1-9=-1553/9609, 7-9=-1553/9609, 6-7=-1490/9327, 5-6=-1490/9327
WEBS 2-9=-281/2355, 2-7=-3067/593, 3-7=-820/5309, 4-7=-2758/534, 4-6=-238/2110

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 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 4 rows staggered at 0-6-0 oc.
Web connected as follows: 2x3 - 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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 11-1-12, Exterior(2R) 11-1-12 to 16-1-12, Interior (1) 16-1-12 to 22-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 914 lb uplift at joint 1 and 734 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use Simpson Strong-Tie LUS28 (6-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-8-12 from the left end to 18-8-12 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 1-5=-20
Concentrated Loads (lb)
Vert: 6=-867 (B), 14=-869 (B), 15=-865 (B), 16=-865 (B), 17=-867 (B), 18=-867 (B), 19=-867 (B), 20=-867 (B), 21=-867 (B), 22=-867 (B), 23=-128 (B)

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/03/2024 3:52:56

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J01	Jack-Open	20	1	I65267733 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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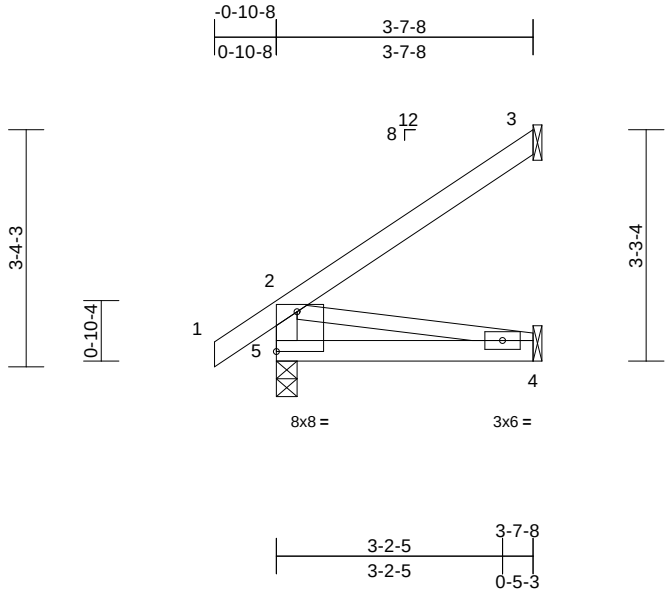

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Plate Offsets (X, Y): [5:Edge,0-6-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 4-2:2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=115 (LC 12)
Max Uplift 3=-81 (LC 12), 4=-1 (LC 12), 5=-11 (LC 12)
Max Grav 3=117 (LC 19), 4=70 (LC 3), 5=237 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-202/97, 1-2=0/40, 2-3=-94/59
BOT CHORD 4-5=-201/77
WEBS 2-4=-78/204

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 5, 81 lb uplift at joint 3 and 1 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J01A	Jack-Open	1	1	I65267734 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:01 Page: 1
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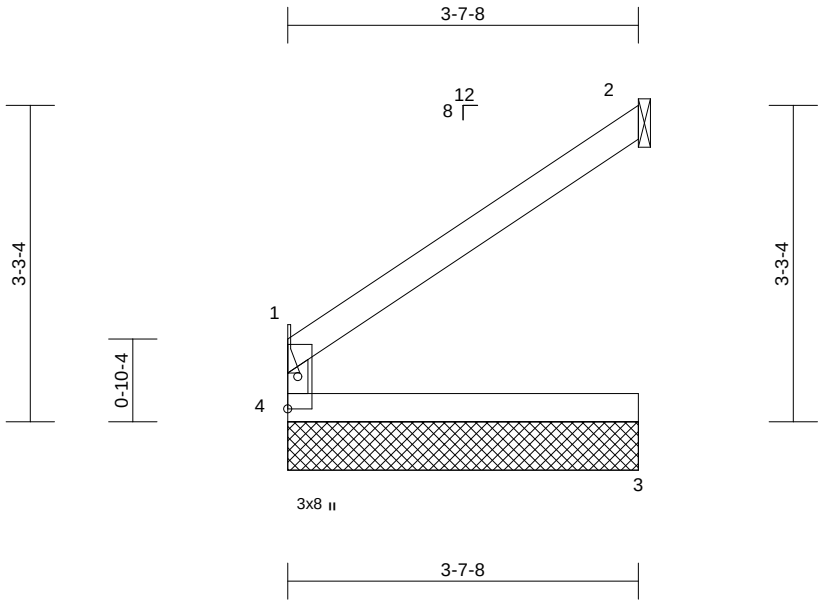

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	0.01	3-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	3-4	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 12 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1= Mechanical, 2= Mechanical, 3=3-7-8, 4=3-7-8
Max Horiz 1=92 (LC 12)
Max Uplift 1=-30 (LC 12), 2=-80 (LC 12)
Max Grav 1=128 (LC 1), 2=120 (LC 19), 3=68 (LC 3), 4=73 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=0/0, 1-2=-137/64
BOT CHORD 3-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 3 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1 and 80 lb uplift at joint 2.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J02	Jack-Open	8	1	I65267735 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:01 Page: 1
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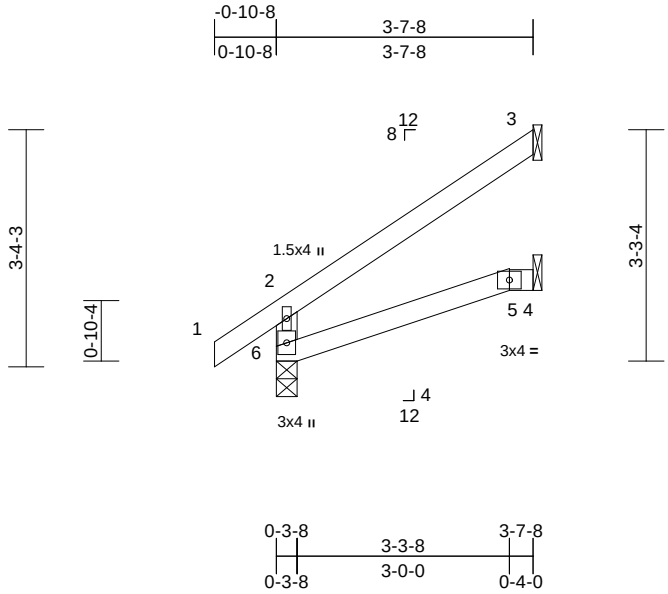

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.01	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 15 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 6=0-3-8
Max Horiz 6=115 (LC 12)
Max Uplift 3=-84 (LC 12), 6=-9 (LC 12)
Max Grav 3=115 (LC 19), 4=64 (LC 3), 6=236 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-6=-207/124, 1-2=0/40, 2-3=-95/57
BOT CHORD 5-6=-23/13, 4-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 6 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 6 and 84 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J03	Jack-Open	1	1	I65267736 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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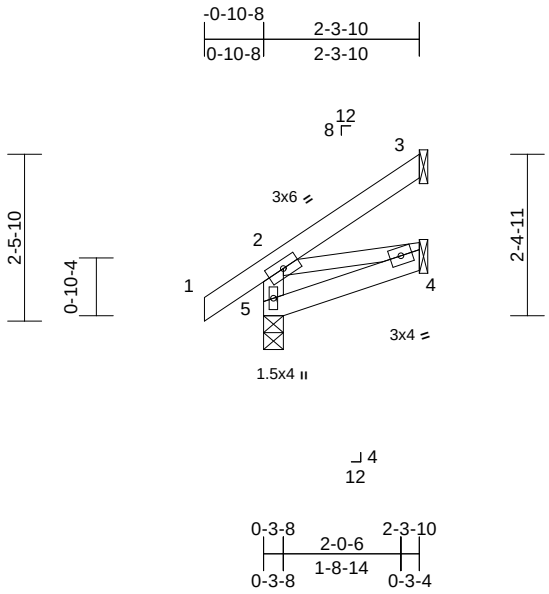

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 12 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 4-2:2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-3-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=76 (LC 12)
Max Uplift 3=-43 (LC 12), 4=-12 (LC 12), 5=-11 (LC 12)
Max Grav 3=61 (LC 19), 4=44 (LC 3), 5=184 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-162/142, 1-2=0/40, 2-3=-55/40
BOT CHORD 4-5=-163/62
WEBS 2-4=-54/152

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 5, 43 lb uplift at joint 3 and 12 lb uplift at joint 4.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J04	Jack-Open	1	1	I65267737 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:01 Page: 1

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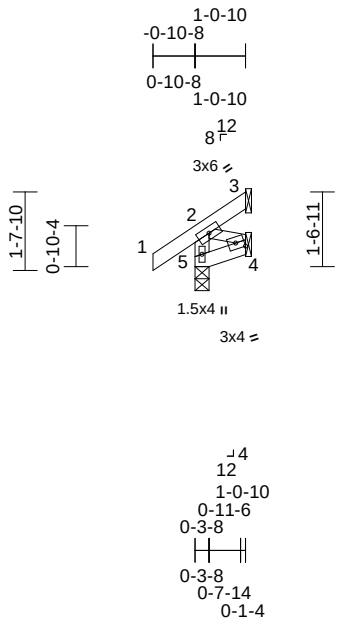

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Plate Offsets (X, Y): [4:Edge,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 4-2:2x3 SPF No.2

BRACING

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

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=40 (LC 11)
Max Uplift 3=-10 (LC 1), 4=-25 (LC 12), 5=-19 (LC 12)
Max Grav 3=10 (LC 8), 4=23 (LC 10), 5=153 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-144/143, 1-2=0/40, 2-3=-40/25
BOT CHORD 4-5=-106/34
WEBS 2-4=-32/105

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 5, 25 lb uplift at joint 4 and 10 lb uplift at joint 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J05	Jack-Open	1	1	I65267738 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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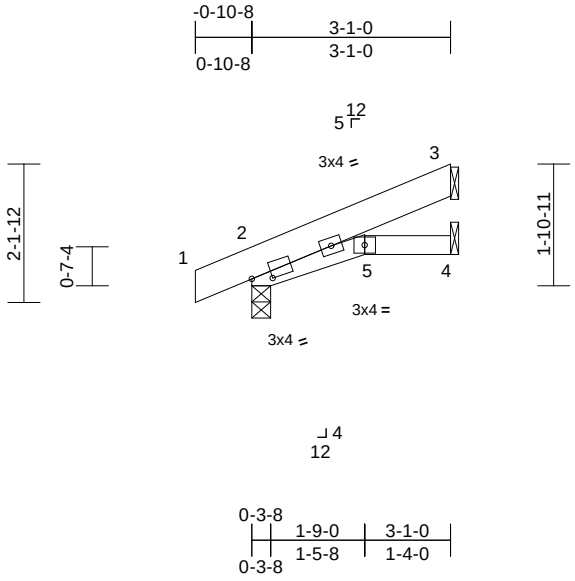

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Plate Offsets (X, Y): [2:0-3-12,0-1-1]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=70 (LC 12)
Max Uplift 2=-41 (LC 12), 3=-52 (LC 12)
Max Grav 2=213 (LC 1), 3=91 (LC 1), 4=47 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/8, 2-3=-64/38
BOT CHORD 2-5=-21/0, 4-5=0/0

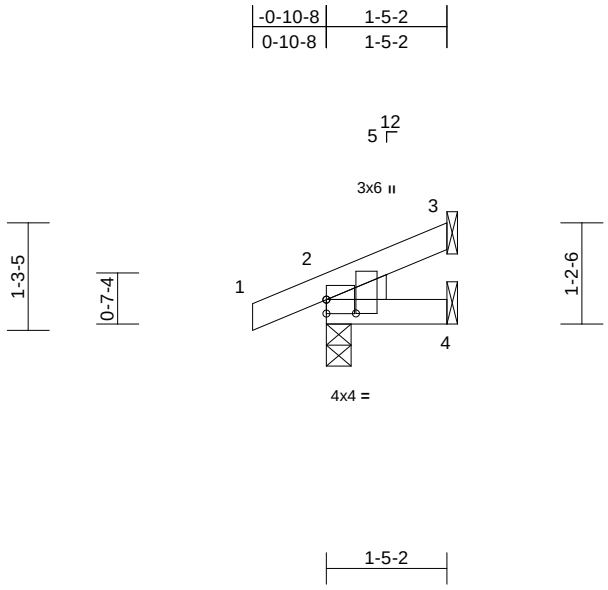
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 3 and 41 lb uplift at joint 2.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J06	Jack-Open	2	1	I65267739 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:01 Page: 1
ID:IsHWr?6HYmnhs4VhMLgsnazWx3x-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.3

Plate Offsets (X, Y): [2:0-1-15,0-4-3]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	0.00	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	2-4	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-5-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=41 (LC 12)
Max Uplift 2=-37 (LC 8), 3=-27 (LC 12)
Max Grav 2=146 (LC 1), 3=28 (LC 1), 4=28 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/4, 2-3=-39/23
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 2 and 27 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

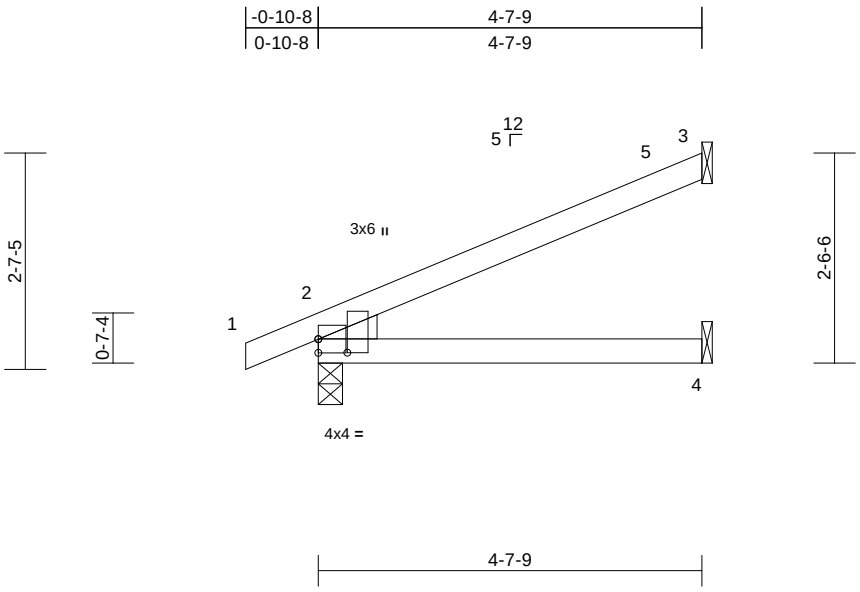
LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J07	Jack-Open	2	1	I65267740 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:01 Page: 1
ID:n2qv3L7vI3vYUE4tw2B5KnzWx3w-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.8

Plate Offsets (X, Y): [2:0-1-15,0-4-3]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.02	2-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.05	2-4	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEDGE Left: 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-7-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 3= Mechanical, 4= Mechanical
Max Horiz 2=99 (LC 12)
Max Uplift 2=-48 (LC 12), 3=-91 (LC 12)
Max Grav 2=279 (LC 1), 3=146 (LC 1), 4=88 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/4, 2-3=-100/54
BOT CHORD 2-4=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 4-6-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 3 and 48 lb uplift at joint 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

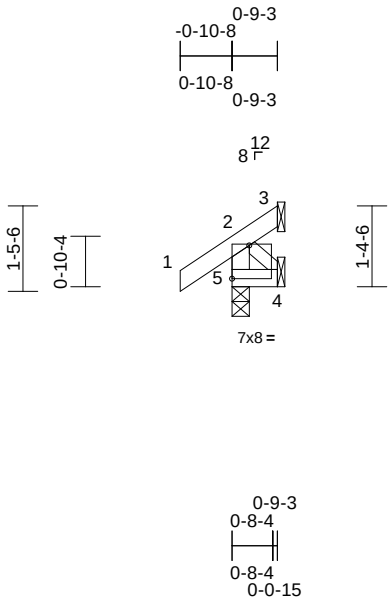
LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J08	Jack-Open	2	1	I65267741 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:01 Page: 1
ID:n2qv3L7vI3vYUE4tw2B5KnzWx3w-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38.9

Plate Offsets (X, Y): [5:Edge,0-6-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	0.00	5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 5 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 4-2:2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 0-9-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=37 (LC 11)
Max Uplift 3=-39 (LC 1), 4=-33 (LC 12), 5=-25 (LC 12)
Max Grav 3=21 (LC 16), 4=23 (LC 10), 5=159 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-153/125, 1-2=0/40, 2-3=-45/45
BOT CHORD 4-5=-86/24
WEBS 2-4=-34/122

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 5, 33 lb uplift at joint 4 and 39 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J09	Jack-Open	2	1	I65267742 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:01 Page: 1
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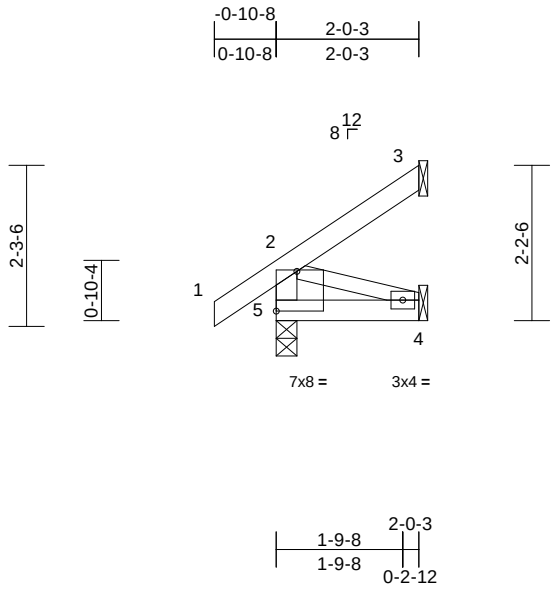

Scale = 1:32.6

Plate Offsets (X, Y): [5:Edge,0-6-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 4-2:2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-0-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=69 (LC 12)
Max Uplift 3=-34 (LC 12), 4=-13 (LC 12), 5=-13 (LC 12)
Max Grav 3=48 (LC 19), 4=37 (LC 3), 5=174 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-155/94, 1-2=0/40, 2-3=-48/36
BOT CHORD 4-5=-139/50
WEBS 2-4=-52/146

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 5, 34 lb uplift at joint 3 and 13 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J10	Jack-Open	2	1	I65267743 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:02
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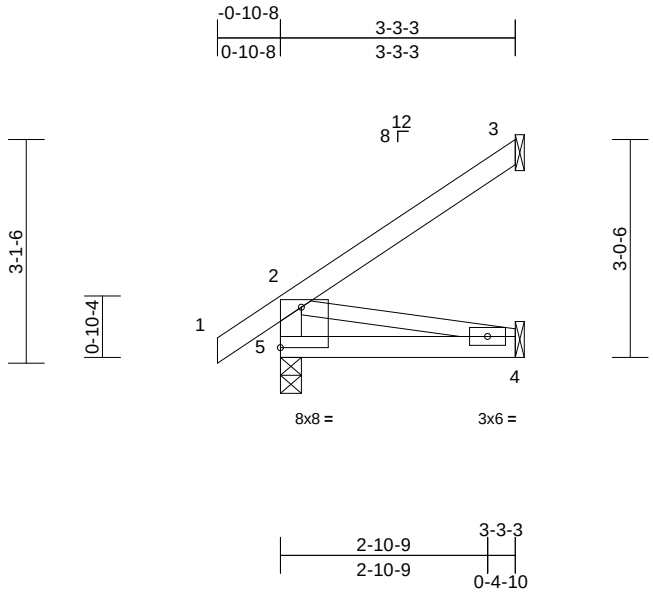


Scale = 1:32.1

Plate Offsets (X, Y): [5:Edge,0-6-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 4-2:2x3 SPF No.2

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

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=105 (LC 12)
Max Uplift 3=-71 (LC 12), 4=-3 (LC 12), 5=-11 (LC 12)
Max Grav 3=102 (LC 19), 4=62 (LC 3), 5=222 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-190/96, 1-2=0/40, 2-3=-84/54
BOT CHORD 4-5=-188/71
WEBS 2-4=-72/192

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 5, 71 lb uplift at joint 3 and 3 lb uplift at joint 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

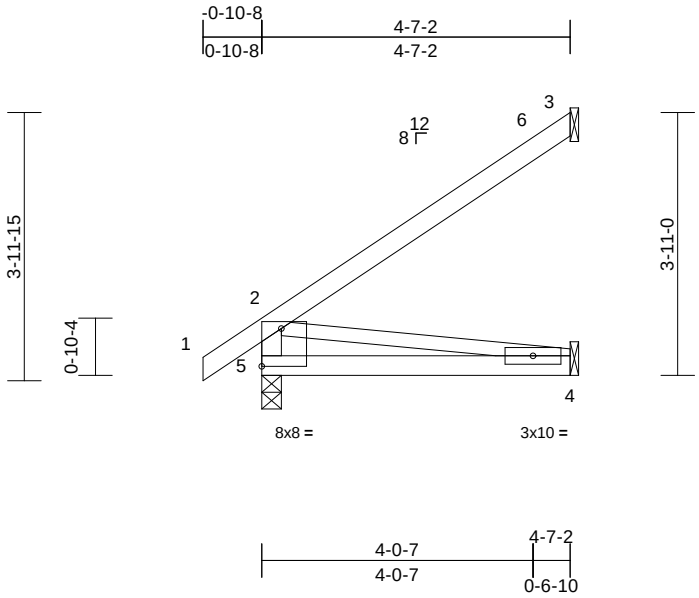
LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	J11	Jack-Open	5	1	I65267744 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:02 Page: 1
ID:n2qv3L7vI3vYUE4tw2B5KnzWx3w-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:34.3

Plate Offsets (X, Y): [5:Edge,0-6-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.02	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.05	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2 *Except* 4-2:2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-7-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3= Mechanical, 4= Mechanical, 5=0-3-8
Max Horiz 5=143 (LC 12)
Max Uplift 3=-107 (LC 12), 5=-10 (LC 12)
Max Grav 3=155 (LC 19), 4=89 (LC 3), 5=278 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-5=-233/104, 1-2=0/40, 2-3=-120/73
BOT CHORD 4-5=-235/92
WEBS 2-4=-93/237

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 4-6-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
4) Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 5 and 107 lb uplift at joint 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	LG01	Lay-In Gable	1	1	I65267745 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:02 Page: 1
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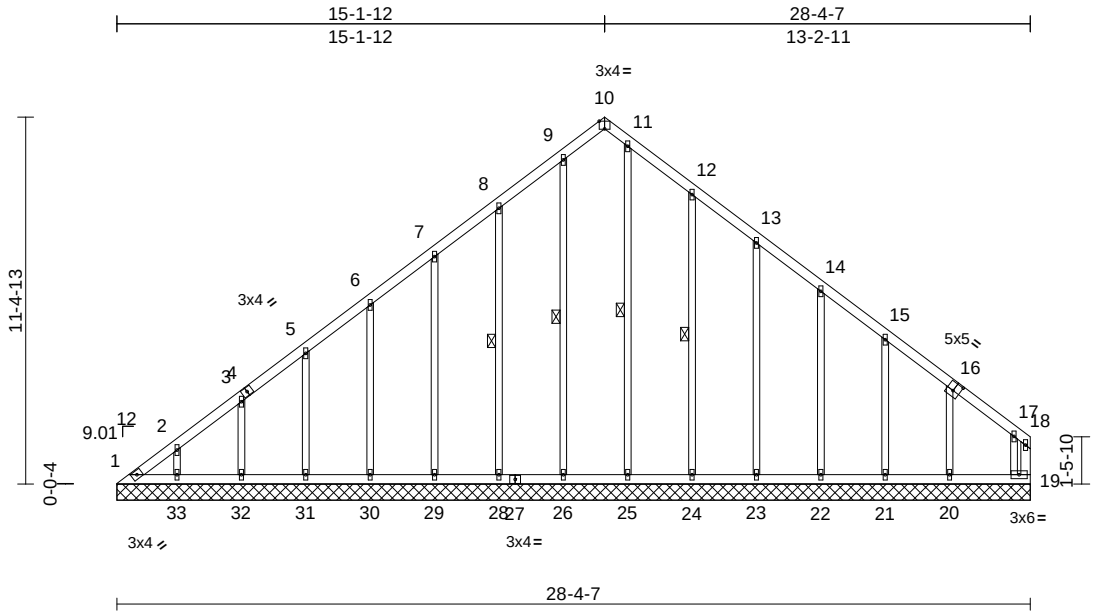

Scale = 1:71.6

Plate Offsets (X, Y): [10:0-2-0,Edge], [16:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.22	Horiz(TL)	0.01	19	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 159 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
OTHERS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-28, 9-26, 11-25, 12-24

REACTIONS (size) 1=28-4-7, 19=28-4-7, 20=28-4-7, 21=28-4-7, 22=28-4-7, 23=28-4-7, 24=28-4-7, 25=28-4-7, 26=28-4-7, 28=28-4-7, 29=28-4-7, 30=28-4-7, 31=28-4-7, 32=28-4-7, 33=28-4-7
Max Horiz 1=328 (LC 9)
Max Uplift 1=-144 (LC 10), 19=-22 (LC 11), 20=-229 (LC 13), 21=-55 (LC 13), 22=-98 (LC 13), 23=-83 (LC 13), 24=-137 (LC 13), 25=-10 (LC 11), 26=-33 (LC 9), 28=-117 (LC 12), 29=-85 (LC 12), 30=-89 (LC 12), 31=-88 (LC 12), 32=-89 (LC 12), 33=-85 (LC 12)
Max Grav 1=207 (LC 9), 19=182 (LC 22), 20=248 (LC 20), 21=189 (LC 1), 22=194 (LC 20), 23=190 (LC 20), 24=209 (LC 20), 25=243 (LC 13), 26=212 (LC 19), 28=188 (LC 19), 29=192 (LC 19), 30=192 (LC 19), 31=191 (LC 19), 32=194 (LC 19), 33=184 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-348/298, 2-3=-308/273, 3-5=-263/242, 5-6=-240/228, 6-7=-217/223, 7-8=-191/256, 8-9=-209/325, 9-10=-182/261, 10-11=-141/187, 11-12=-224/312, 12-13=-161/203, 13-14=-118/128, 14-15=-72/65, 15-17=-178/90, 17-18=-58/70, 18-19=-123/183
BOT CHORD 1-33=-98/148, 32-33=-98/148, 31-32=-98/148, 30-31=-98/148, 29-30=-98/148, 28-29=-98/148, 26-28=-98/148, 25-26=-98/148, 24-25=-98/148, 23-24=-98/148, 22-23=-98/148, 21-22=-98/148, 20-21=-98/148, 19-20=-87/137
WEBS 2-33=-142/104, 3-32=-154/115, 5-31=-151/112, 6-30=-152/113, 7-29=-152/109, 8-28=-148/141, 9-26=-172/62, 11-25=-219/98, 12-24=-169/161, 13-23=-150/107, 14-22=-152/119, 15-21=-151/90, 16-20=-188/217, 17-19=-297/130

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-4 to 5-5-4, Interior (1) 5-5-4 to 15-2-2, Exterior(2R) 15-2-2 to 19-10-12, Interior (1) 19-10-12 to 28-3-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 0-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 19, 144 lb uplift at joint 1, 85 lb uplift at joint 33, 89 lb uplift at joint 32, 88 lb uplift at joint 31, 89 lb uplift at joint 30, 85 lb uplift at joint 29, 117 lb uplift at joint 28, 33 lb uplift at joint 26, 10 lb uplift at joint 25, 137 lb uplift at joint 24, 83 lb uplift at joint 23, 98 lb uplift at joint 22, 55 lb uplift at joint 21 and 229 lb uplift at joint 20.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	LG02	Lay-In Gable	1	1	I65267746 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:02 Page: 1
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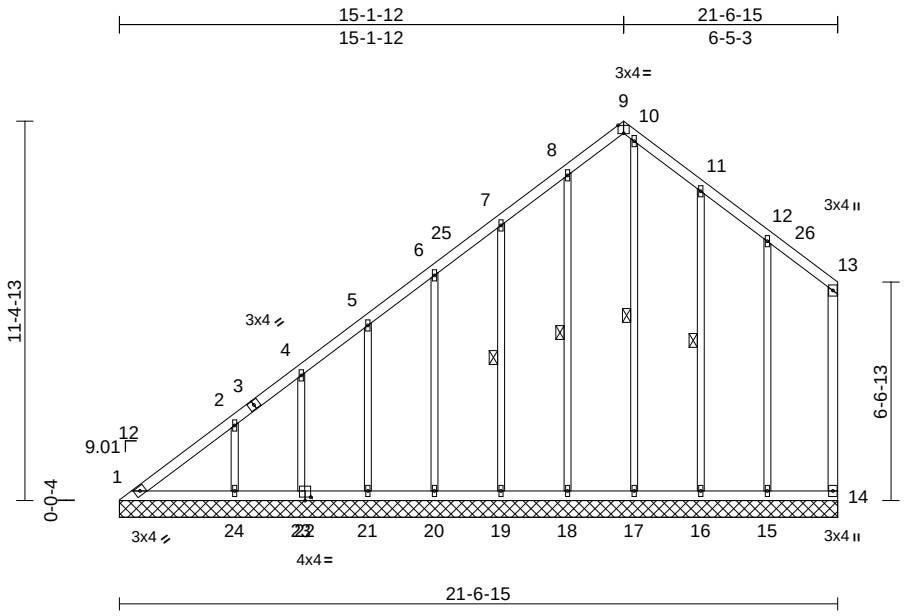

Scale = 1:69.2

Plate Offsets (X, Y): [9:0-2-0,Edge], [22:0-2-0,0-1-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.36	Horiz(TL)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 129 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SPF No.3
OTHERS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-19, 8-18, 10-17, 11-16

REACTIONS (size) 1=21-6-15, 14=21-6-15, 15=21-6-15, 16=21-6-15, 17=21-6-15, 18=21-6-15, 19=21-6-15, 20=21-6-15, 21=21-6-15, 23=21-6-15, 24=21-6-15
Max Horiz 1=402 (LC 9)
Max Uplift 1=-132 (LC 8), 14=-57 (LC 12), 15=-93 (LC 13), 16=-104 (LC 13), 17=-128 (LC 11), 18=-52 (LC 9), 19=-104 (LC 12), 20=-86 (LC 12), 21=-92 (LC 12), 23=-72 (LC 12), 24=-138 (LC 12)
Max Grav 1=255 (LC 11), 14=127 (LC 20), 15=219 (LC 20), 16=197 (LC 20), 17=254 (LC 8), 18=213 (LC 19), 19=187 (LC 19), 20=191 (LC 19), 21=201 (LC 19), 23=154 (LC 19), 24=300 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-409/331, 2-4=-347/274, 4-5=-321/269, 5-6=-301/263, 6-7=-274/261, 7-8=-261/339, 8-9=-263/345, 9-10=-142/174, 10-11=-292/376, 11-12=-234/282, 12-13=-211/232, 13-14=-183/180
BOT CHORD 1-24=-129/141, 23-24=-129/141, 21-23=-129/141, 20-21=-129/141, 19-20=-129/141, 18-19=-129/141, 17-18=-129/141, 16-17=-129/141, 15-16=-129/141, 14-15=-129/141
WEBS 2-24=-227/164, 4-23=-127/95, 5-21=-157/117, 6-20=-151/110, 7-19=-147/128, 8-18=-173/84, 10-17=-342/209, 11-16=-167/135, 12-15=-161/142

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-4 to 5-5-15, Interior (1) 5-5-15 to 15-2-2, Exterior(2R) 15-2-2 to 20-2-2, Interior (1) 20-2-2 to 21-5-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 0-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 14, 132 lb uplift at joint 1, 138 lb uplift at joint 24, 72 lb uplift at joint 23, 92 lb uplift at joint 21, 86 lb uplift at joint 20, 104 lb uplift at joint 19, 52 lb uplift at joint 18, 128 lb uplift at joint 17, 104 lb uplift at joint 16 and 93 lb uplift at joint 15.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	LG03	Lay-In Gable	1	1	I65267747 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:02 Page: 1
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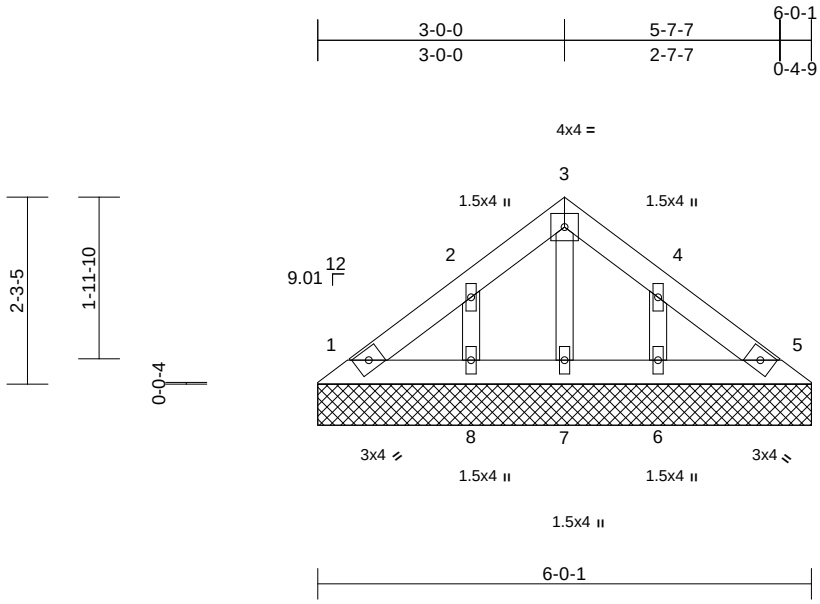

Scale = 1:28

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 1=6-0-1, 5=6-0-1, 6=6-0-1, 7=6-0-1, 8=6-0-1
Max Horiz 1=54 (LC 9)
Max Uplift 1=-5 (LC 13), 6=-70 (LC 13), 8=-70 (LC 12)
Max Grav 1=62 (LC 20), 5=61 (LC 1), 6=153 (LC 20), 7=62 (LC 22), 8=154 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-51/46, 2-3=-52/72, 3-4=-52/72, 4-5=-42/33
BOT CHORD 1-8=-25/53, 7-8=-25/53, 6-7=-25/53, 5-6=-25/53
WEBS 2-8=-123/146, 3-7=-45/7, 4-6=-123/145

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 0-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1, 70 lb uplift at joint 8 and 70 lb uplift at joint 6.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V01	Valley	1	1	I65267748 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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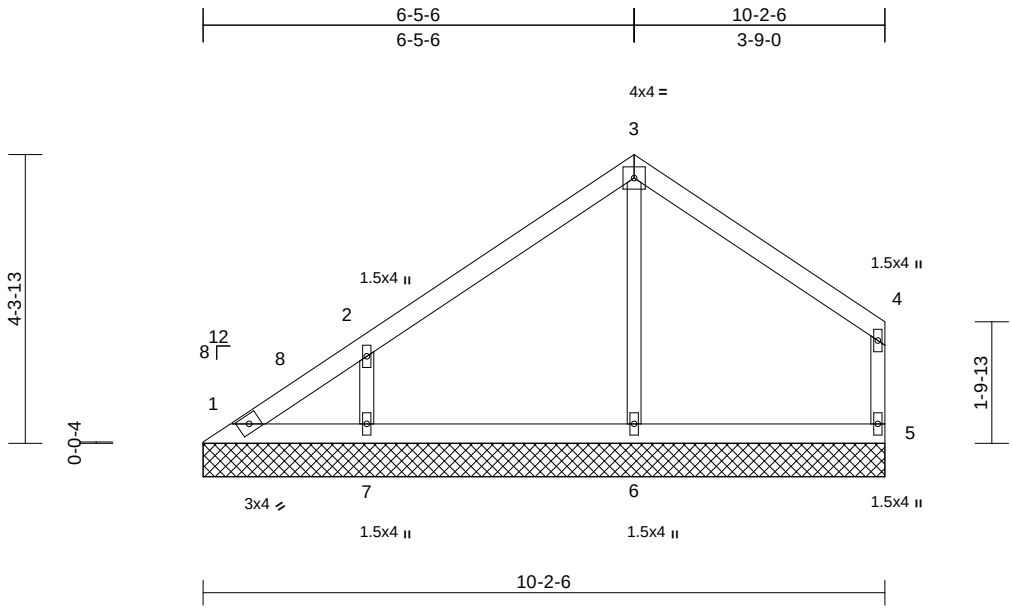

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 1=10-2-6, 5=10-2-6, 6=10-2-6, 7=10-2-6
Max Horiz 1=135 (LC 9)
Max Uplift 1=-53 (LC 8), 5=-72 (LC 13), 7=-154 (LC 12)
Max Grav 1=101 (LC 20), 5=190 (LC 20), 6=324 (LC 19), 7=351 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-153/130, 2-3=-164/140, 3-4=-124/138, 4-5=-159/135
BOT CHORD 1-7=-37/47, 6-7=-37/47, 5-6=-37/47
WEBS 3-6=-240/83, 2-7=-285/227

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 6-5-12, Exterior(2E) 6-5-12 to 10-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 1, 72 lb uplift at joint 5 and 154 lb uplift at joint 7.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

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	Roof - HR Lot 181
P240424-01	V02	Valley	1	1	I65267749 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:02 Page: 1
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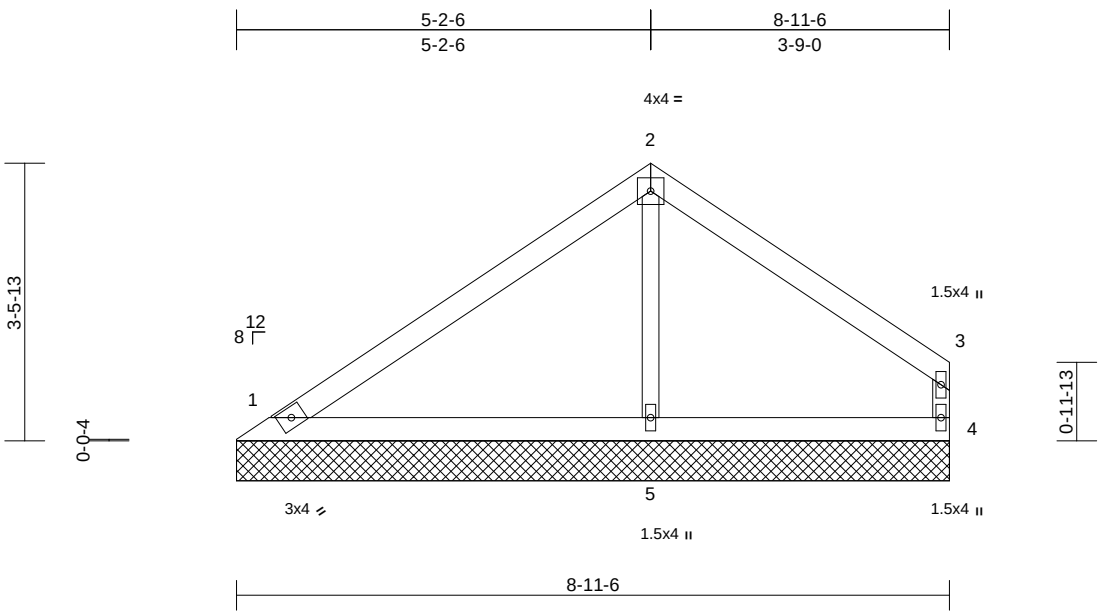

Scale = 1:28.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 32 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 8-11-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=8-11-6, 4=8-11-6, 5=8-11-6
Max Horiz 1=99 (LC 9)
Max Uplift 1=-52 (LC 12), 4=-75 (LC 13), 5=-10 (LC 12)
Max Grav 1=204 (LC 1), 4=165 (LC 20), 5=400 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-122/113, 2-3=-81/109, 3-4=-141/132
BOT CHORD 1-5=-15/16, 4-5=-15/16
WEBS 2-5=-294/117

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 1, 75 lb uplift at joint 4 and 10 lb uplift at joint 5.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V03	Valley	1	1	I65267750
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:02

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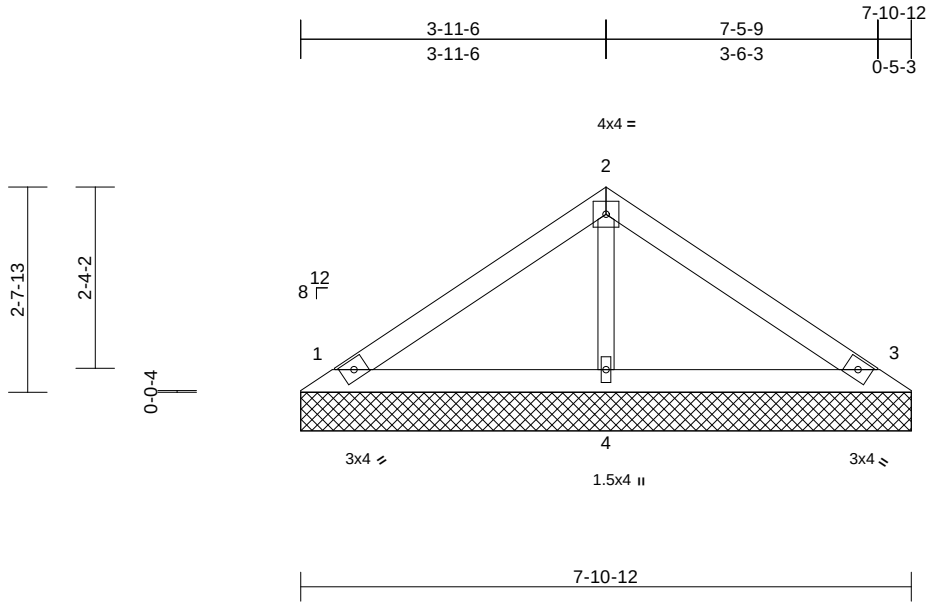
Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 26 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=7-10-12, 3=7-10-12, 4=7-10-12
Max Horiz 1=65 (LC 11)
Max Uplift 1=-45 (LC 12), 3=-53 (LC 13)
Max Grav 1=177 (LC 1), 3=177 (LC 1), 4=275 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-111/67, 2-3=-106/67
BOT CHORD 1-4=-14/52, 3-4=-14/52
WEBS 2-4=-188/100

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1 and 53 lb uplift at joint 3.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V04	Valley	1	1	I65267751 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:02
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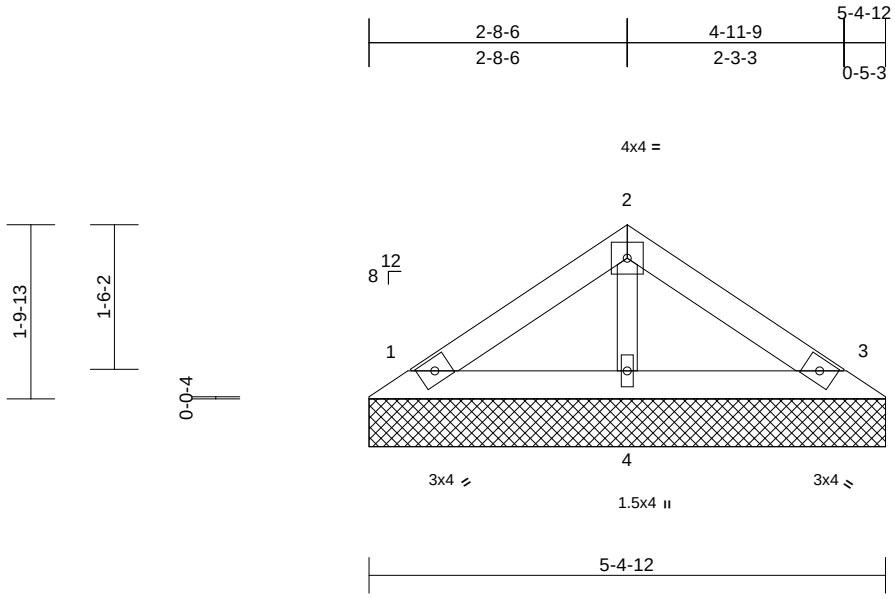

Scale = 1:24.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-4-12, 3=5-4-12, 4=5-4-12
Max Horiz 1=42 (LC 9)
Max Uplift 1=-29 (LC 12), 3=-34 (LC 13)
Max Grav 1=114 (LC 1), 3=114 (LC 1), 4=177 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-71/50, 2-3=-68/50
BOT CHORD 1-4=-9/34, 3-4=-9/34
WEBS 2-4=-121/77

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1 and 34 lb uplift at joint 3.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V05	Valley	1	1	I65267752
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:03 Page: 1
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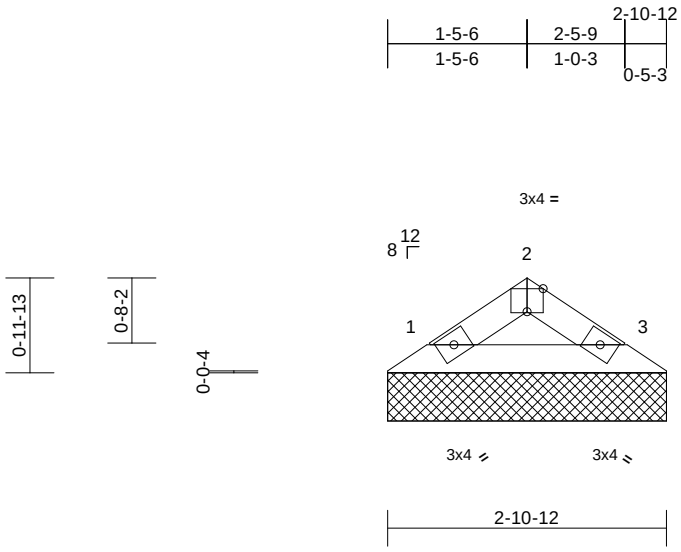

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Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-10-12, 3=2-10-12
Max Horiz 1=19 (LC 9)
Max Uplift 1=-13 (LC 12), 3=-13 (LC 13)
Max Grav 1=90 (LC 1), 3=90 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-78/54, 2-3=-78/54
BOT CHORD 1-3=-20/52

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1 and 13 lb uplift at joint 3.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/03/2024 3:52:57

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V06	Valley	1	1	I65267753
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:03 Page: 1
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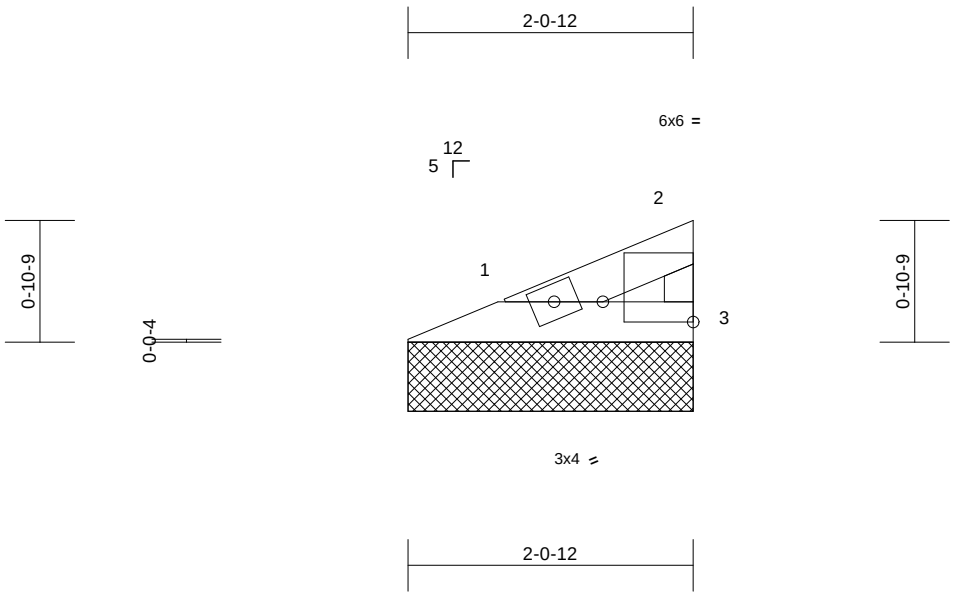

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Plate Offsets (X, Y): [2:Edge,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 5 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-1-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-0-12, 3=2-0-12
Max Horiz 1=25 (LC 9)
Max Uplift 1=-10 (LC 12), 3=-15 (LC 12)
Max Grav 1=56 (LC 1), 3=56 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-33/22, 2-3=-44/52
BOT CHORD 1-3=-11/12

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1 and 15 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V07	Valley	1	1	I65267754 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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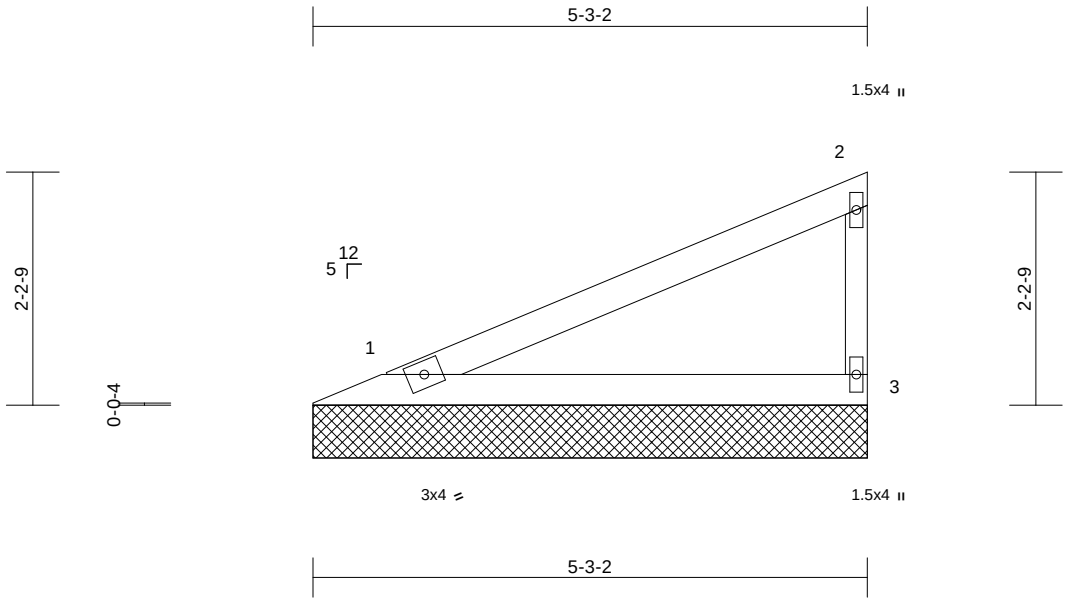

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-3-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-3-2, 3=5-3-2
Max Horiz 1=87 (LC 9)
Max Uplift 1=-35 (LC 12), 3=-52 (LC 12)
Max Grav 1=200 (LC 1), 3=200 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-114/77, 2-3=-156/182
BOT CHORD 1-3=-38/42

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 1 and 52 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

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

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V08	Valley	1	1	I65267755
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:03 Page: 1
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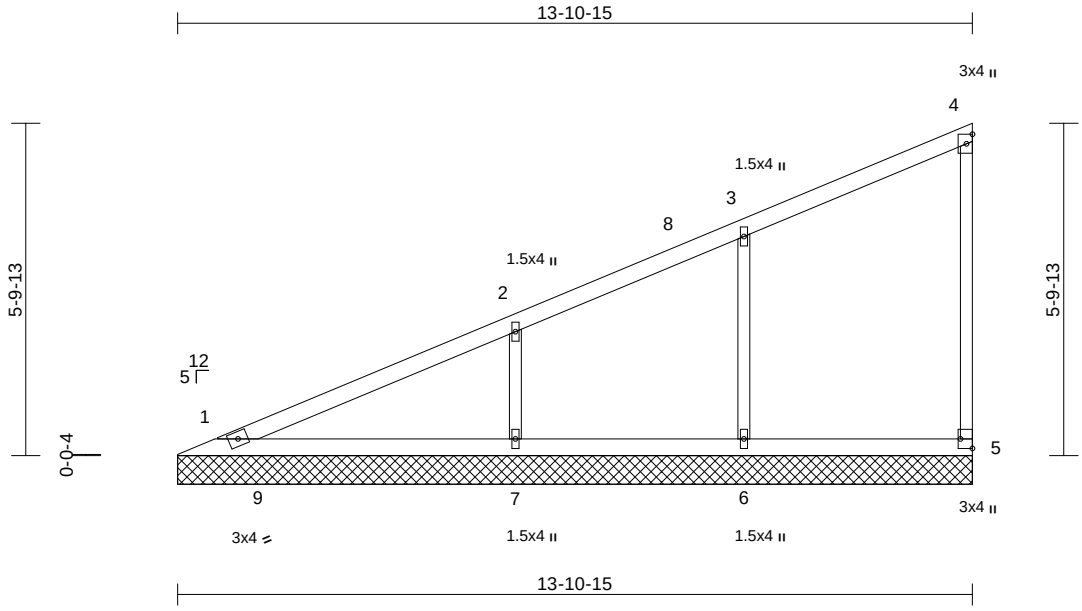

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Plate Offsets (X, Y): [5:Edge,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 1=13-10-15, 5=13-10-15, 6=13-10-15, 7=13-10-15
Max Horiz 1=256 (LC 9)
Max Uplift 5=-37 (LC 9), 6=-106 (LC 12), 7=-147 (LC 12)
Max Grav 1=212 (LC 20), 5=180 (LC 2), 6=398 (LC 2), 7=493 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-341/210, 2-3=-231/156, 3-4=-128/111, 4-5=-115/105
BOT CHORD 1-7=-110/120, 6-7=-110/120, 5-6=-110/120
WEBS 3-6=-278/220, 2-7=-366/258

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-9-1 to 5-11-9, Interior (1) 5-11-9 to 13-10-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 5, 106 lb uplift at joint 6 and 147 lb uplift at joint 7.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V09	Valley	1	1	I65267756
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:03 Page: 1
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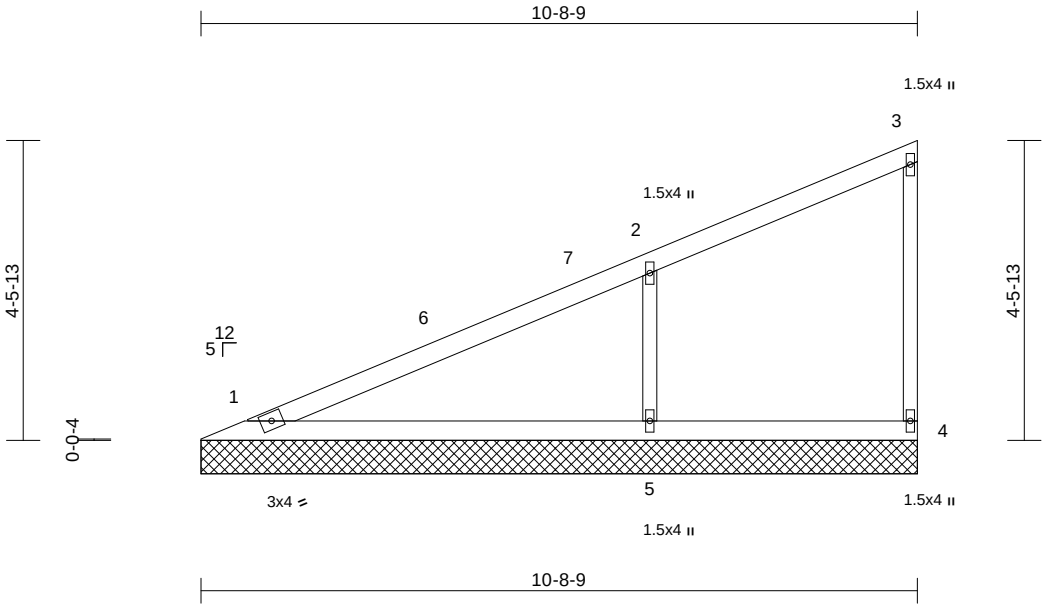

Scale = 1:34.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 37 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 1=10-8-9, 4=10-8-9, 5=10-8-9
Max Horiz 1=193 (LC 9)
Max Uplift 1=-9 (LC 12), 4=-26 (LC 9), 5=-174 (LC 12)
Max Grav 1=219 (LC 1), 4=96 (LC 1), 5=577 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-268/173, 2-3=-117/85, 3-4=-78/91
BOT CHORD 1-5=-85/93, 4-5=-85/93
WEBS 2-5=-434/347

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-9-1 to 5-9-1, Interior (1) 5-9-1 to 10-7-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 1, 26 lb uplift at joint 4 and 174 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V10	Valley	1	1	I65267757 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:03 Page: 1
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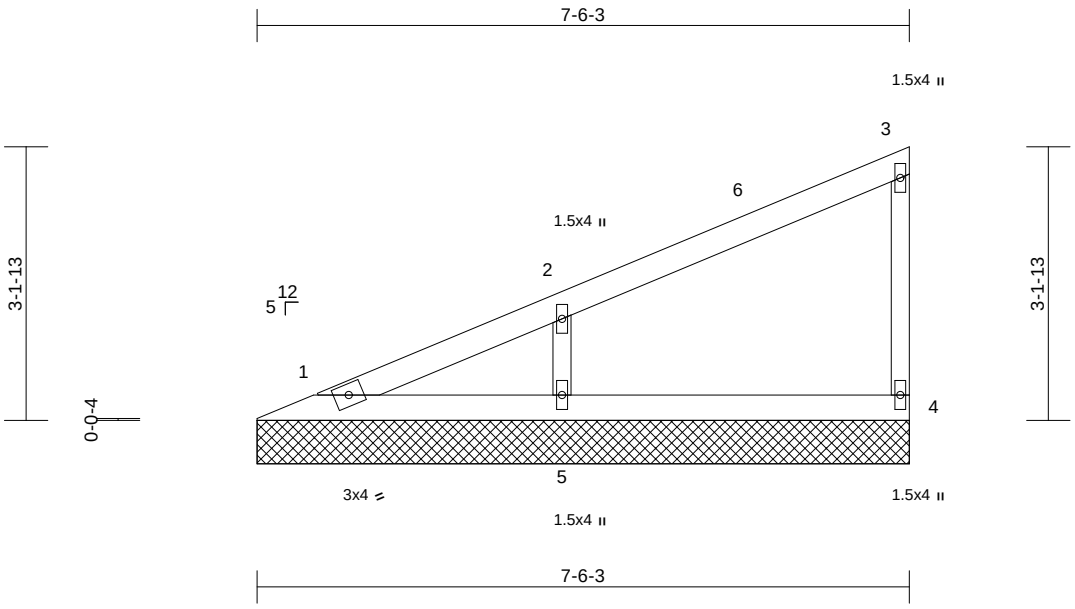

Scale = 1:26.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 1=7-6-3, 4=7-6-3, 5=7-6-3
Max Horiz 1=131 (LC 9)
Max Uplift 4=-30 (LC 12), 5=-117 (LC 12)
Max Grav 1=83 (LC 20), 4=140 (LC 1), 5=385 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-228/135, 2-3=-103/77, 3-4=-109/124
BOT CHORD 1-5=-58/63, 4-5=-58/63
WEBS 2-5=-299/295

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-9-1 to 5-9-1, Interior (1) 5-9-1 to 7-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 4 and 117 lb uplift at joint 5.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V11	Valley	1	1	I65267758
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:03

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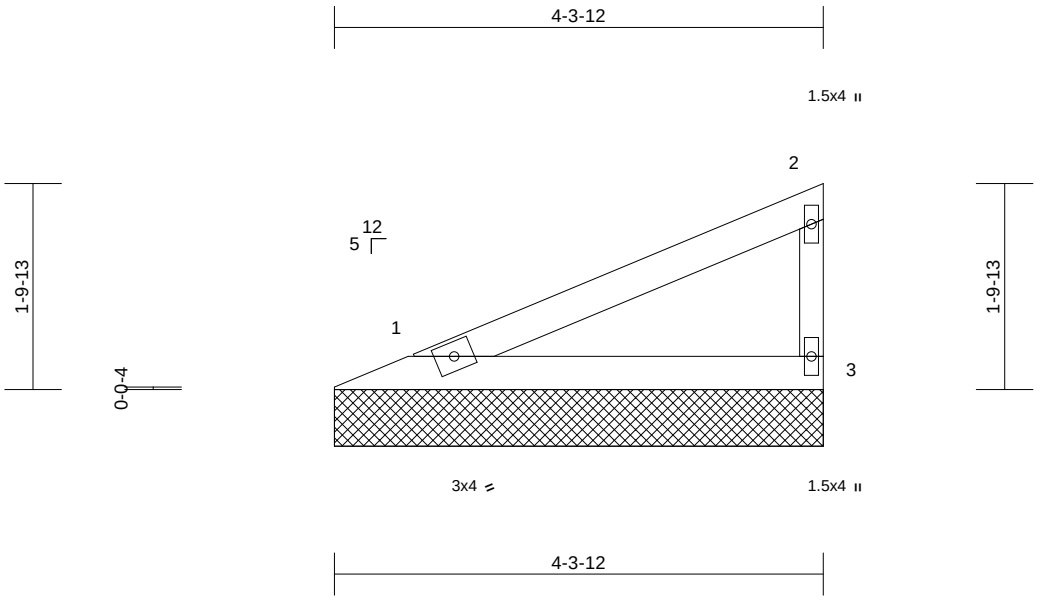
Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 13 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-4-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-3-12, 3=4-3-12
Max Horiz 1=69 (LC 9)
Max Uplift 1=-28 (LC 12), 3=-41 (LC 12)
Max Grav 1=158 (LC 1), 3=158 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-90/61, 2-3=-123/145
BOT CHORD 1-3=-30/33

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 1 and 41 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V12	Valley	1	1	I65267759 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:03 Page: 1
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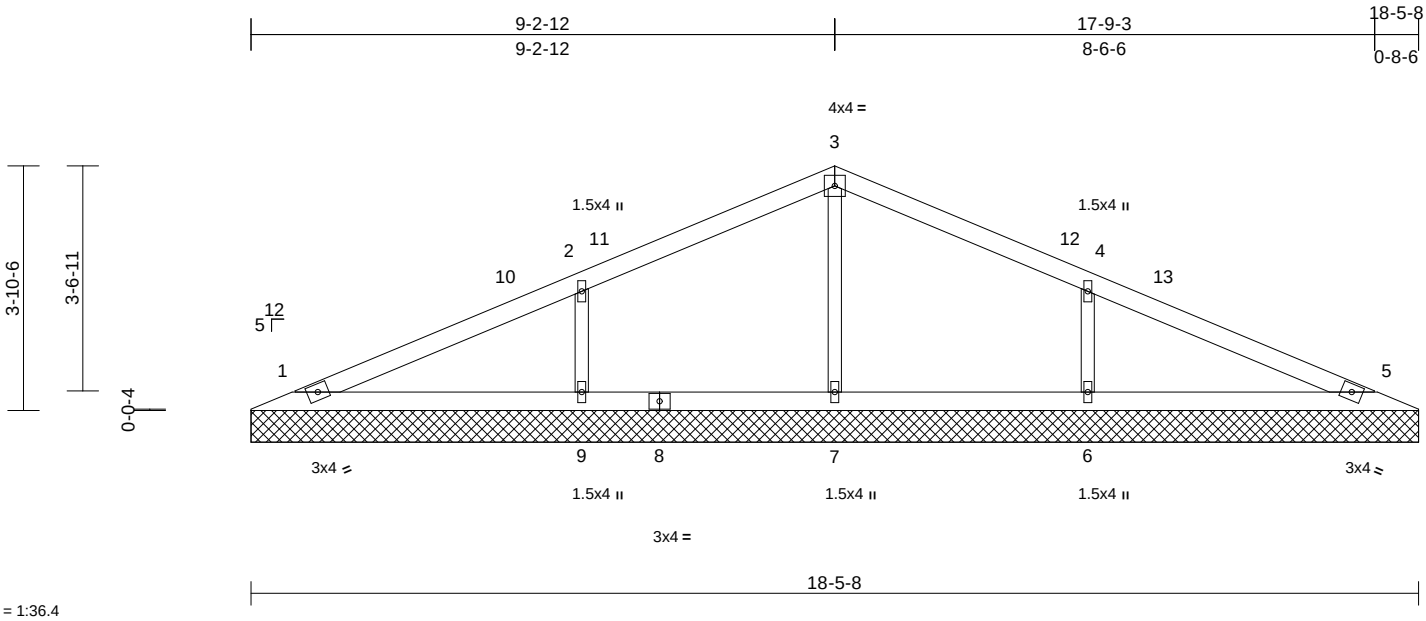

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 60 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 1=18-5-8, 5=18-5-8, 6=18-5-8, 7=18-5-8, 9=18-5-8
Max Horiz 1=67 (LC 16)
Max Uplift 1=-15 (LC 13), 5=-26 (LC 13), 6=-145 (LC 13), 9=-145 (LC 12)
Max Grav 1=170 (LC 1), 5=170 (LC 1), 6=466 (LC 26), 7=271 (LC 1), 9=466 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-85/71, 2-3=-89/115, 3-4=-89/110, 4-5=-63/56
BOT CHORD 1-9=-10/52, 7-9=-10/52, 6-7=-10/52, 5-6=-10/52
WEBS 3-7=-208/44, 2-9=-357/227, 4-6=-357/227

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-9-1 to 5-9-1, Interior (1) 5-9-1 to 9-3-6, Exterior(2R) 9-3-6 to 14-3-6, Interior (1) 14-3-6 to 17-9-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 1, 26 lb uplift at joint 5, 145 lb uplift at joint 9 and 145 lb uplift at joint 6.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/03/2024 3:52:58

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V13	Valley	1	1	I65267760 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:03 Page: 1
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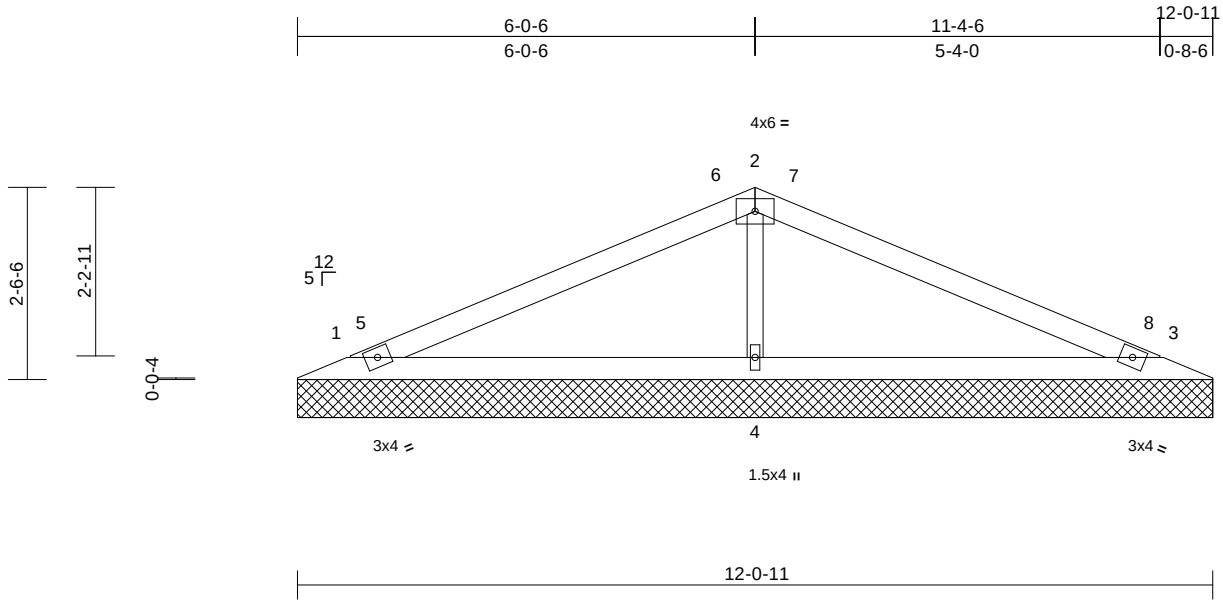

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 37 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2

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

REACTIONS (size) 1=12-0-11, 3=12-0-11, 4=12-0-11
Max Horiz 1=-42 (LC 17)
Max Uplift 1=-52 (LC 12), 3=-59 (LC 13), 4=-46 (LC 12)
Max Grav 1=220 (LC 25), 3=220 (LC 26), 4=527 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-112/81, 2-3=-112/72
BOT CHORD 1-4=-3/45, 3-4=-3/45
WEBS 2-4=-367/240

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-9-1 to 5-9-1, Interior (1) 5-9-1 to 6-0-15, Exterior(2R) 6-0-15 to 11-0-15, Interior (1) 11-0-15 to 11-4-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 1, 59 lb uplift at joint 3 and 46 lb uplift at joint 4.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

May 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 181
P240424-01	V14	Valley	1	1	I65267761 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue Apr 30 13:47:03
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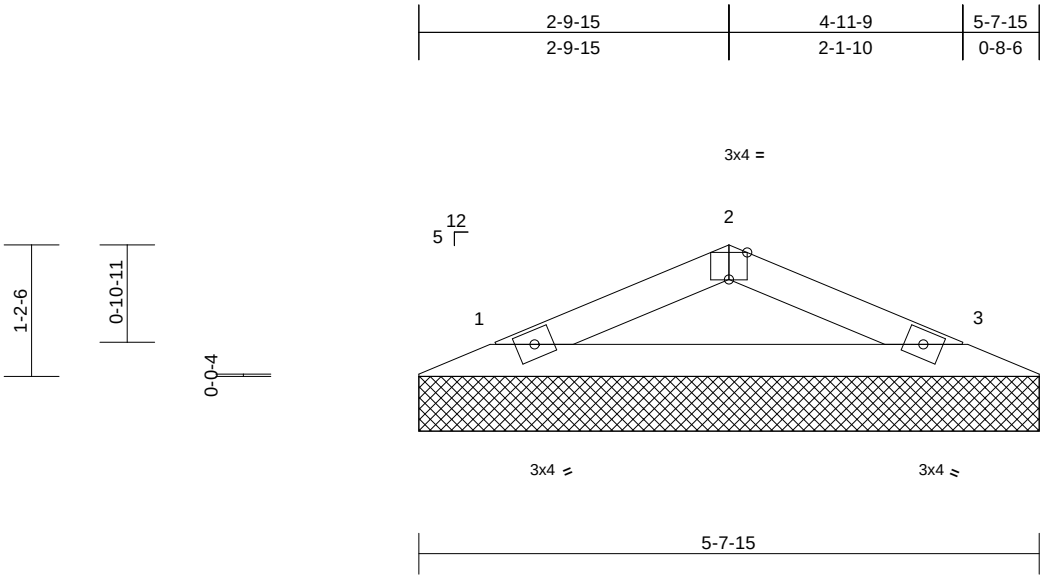

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Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-7-15, 3=5-7-15
Max Horiz 1=17 (LC 12)
Max Uplift 1=-30 (LC 12), 3=-30 (LC 13)
Max Grav 1=191 (LC 1), 3=191 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-215/194, 2-3=-215/203
BOT CHORD 1-3=-150/176

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=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
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 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1 and 30 lb uplift at joint 3.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

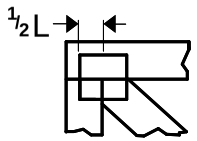
LOAD CASE(S) Standard

May 2,2024

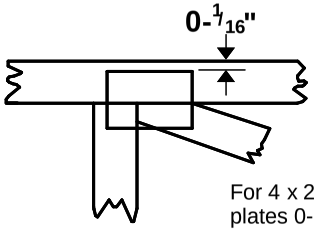
MiTek®
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

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.

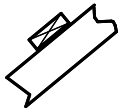
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

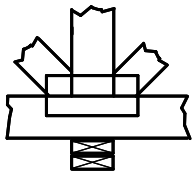
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

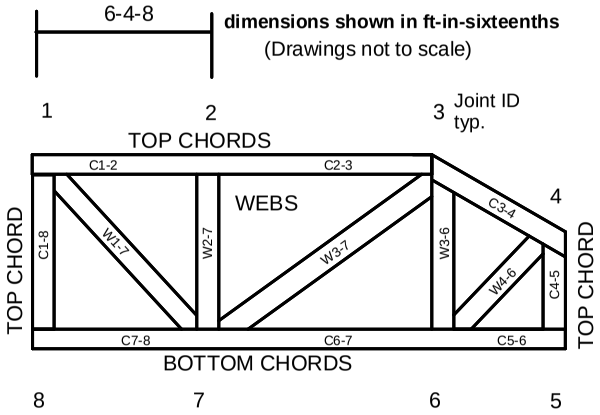


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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.

MiTek®

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.