

RE: P240957-01 - Roof - HT Lot 82

Site Information:

Project Customer: Clayton Properties Project Name: Somerset - Mediterranean
Lot/Block: 82 Subdivision: Hawthorne Ridge
Model:

Address: 1531 SW Arbor Valley Dr

City: Lee's Summit

State: MO

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

Design Code: IRC2018/TPI2014

Wind Code: ASCE 7-16 Wind Speed: 115 mph

Roof Load: 45.0 psf

Design Program: MiTek 20/20 8.6

Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16

Floor Load: N/A psf

Mean Roof Height (feet): 35

Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I68191243	A2	9/16/24	35	I68191277	J5	9/16/24
2	I68191244	A3	9/16/24	36	I68191278	J6	9/16/24
3	I68191245	A4	9/16/24	37	I68191279	J7	9/16/24
4	I68191246	A5	9/16/24	38	I68191280	J8	9/16/24
5	I68191247	A6	9/16/24	39	I68191281	J9	9/16/24
6	I68191248	A7	9/16/24	40	I68191282	J10	9/16/24
7	I68191249	A8	9/16/24	41	I68191283	LG1	9/16/24
8	I68191250	A9	9/16/24	42	I68191284	LG2	9/16/24
9	I68191251	A10	9/16/24	43	I68191285	LG3	9/16/24
10	I68191252	A11	9/16/24	44	I68191286	LG5	9/16/24
11	I68191253	A12	9/16/24	45	I68191287	LG6	9/16/24
12	I68191254	A13	9/16/24	46	I68191288	LG8	9/16/24
13	I68191255	A14	9/16/24	47	I68191289	LG9	9/16/24
14	I68191256	A15	9/16/24	48	I68191290	V1	9/16/24
15	I68191257	B1	9/16/24	49	I68191291	V2	9/16/24
16	I68191258	B2	9/16/24	50	I68191292	V3	9/16/24
17	I68191259	B3	9/16/24	51	I68191293	V4	9/16/24
18	I68191260	C1	9/16/24	52	I68191294	V5	9/16/24
19	I68191261	C2	9/16/24	53	I68191295	V6	9/16/24
20	I68191262	CG1	9/16/24	54	I68191296	V7	9/16/24
21	I68191263	CG2	9/16/24				
22	I68191264	CG3	9/16/24				
23	I68191265	CG4	9/16/24				
24	I68191266	D1	9/16/24				
25	I68191267	D2	9/16/24				
26	I68191268	D3	9/16/24				
27	I68191269	D4	9/16/24				
28	I68191270	E1	9/16/24				
29	I68191271	E2	9/16/24				
30	I68191272	E3	9/16/24				
31	I68191273	J1	9/16/24				
32	I68191274	J2	9/16/24				
33	I68191275	J3	9/16/24				
34	I68191276	J4	9/16/24				

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.



September 16, 2024

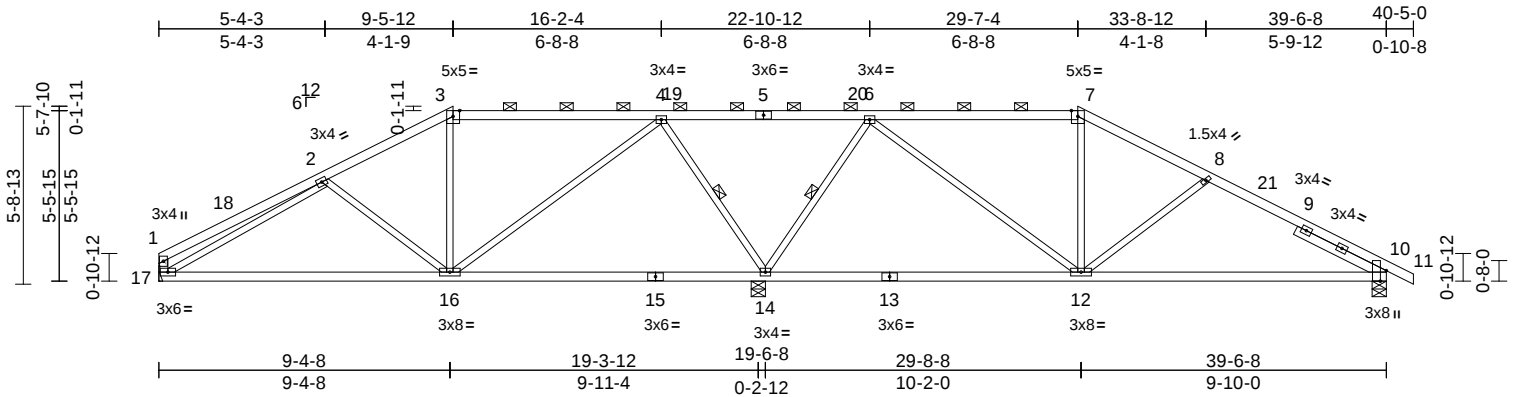
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A2	Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191243 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:26 Page: 1

ID:UmtYoCC9xVBvGd3RnaaoYzZXLW1-RfC?PsB70Hq3NSgPqnL8w3ulTXfGKWrcDm7J42JC?

09/30/2024



Scale = 1:74.2									
Plate Offsets (X, Y): [10:0-4-1,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Ver(LL)	-0.20 10-12	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Ver(CT)	-0.41 10-12	>588	180
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.03 10	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
Weight: 173 lb FT = 20%									
PLATES MT20 GRIP 244/190									

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 17-1:2x4 SP No.2
SLIDER Right 2x4 SP No.2 -- 3-2-10

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-11-3 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-14, 6-14

REACTIONS (size) 10=0-5-8, 14=0-5-8, 17= Mechanical
Max Horiz 17=-105 (LC 13)
Max Uplift 10=-170 (LC 13), 14=-310 (LC 9), 17=-122 (LC 12)
Max Grav 10=829 (LC 26), 14=2089 (LC 1), 17=731 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-369/80, 2-3=-744/176, 3-4=-611/181, 4-6=-48/585, 6-7=-662/192, 7-8=-800/182, 8-10=-1109/256, 10-11=0/6, 1-17=-301/102
BOT CHORD 16-17=-184/814, 14-16=-61/110, 12-14=-29/100, 10-12=-132/907
WEBS 3-16=-66/111, 4-16=-64/703, 7-12=-58/129, 2-17=-652/148, 2-16=-265/207, 8-12=-317/218, 4-14=-1108/281, 6-14=-1135/267, 6-12=-65/740

- 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 5-2-11, Interior (1) 5-2-11 to 9-5-12, Exterior(2R) 9-5-12 to 16-6-10, Interior (1) 16-6-10 to 29-7-4, Exterior(2R) 29-7-4 to 36-8-2, Interior (1) 36-8-2 to 40-5-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearings are assumed to be : Joint 14 SP No.2 crushing capacity of 565 psi, Joint 10 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 122 lb uplift at joint 17, 170 lb uplift at joint 10 and 310 lb uplift at joint 14.
- 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) 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

NOTES
1) Unbalanced roof live loads have been considered for this design.



September 16,2024

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

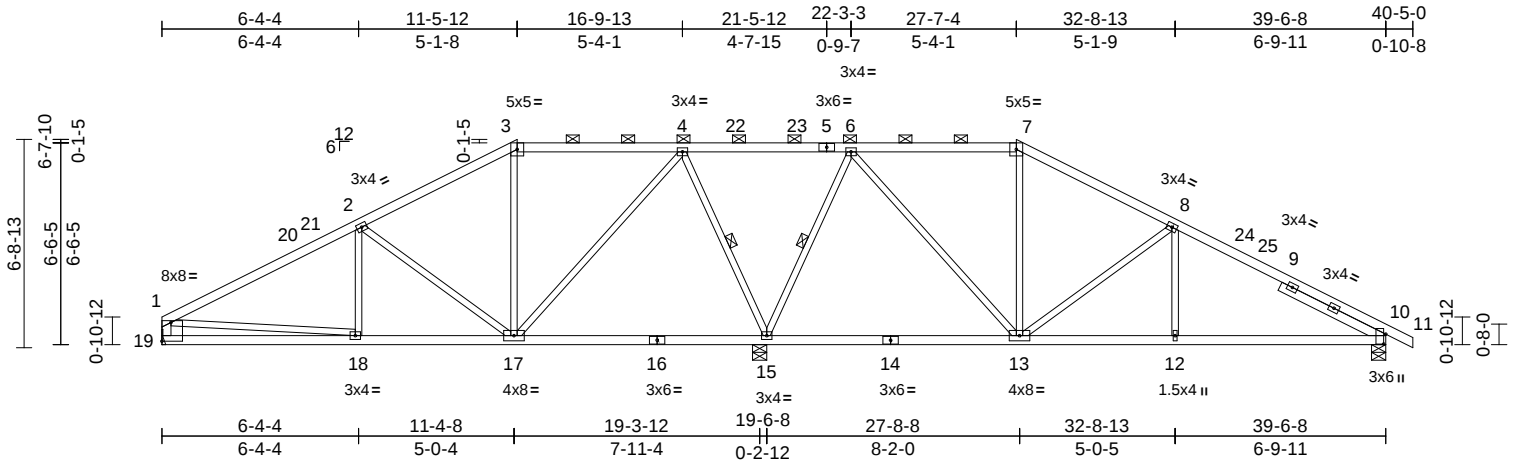
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A3	Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191244 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:27 Page: 1

ID:FIMaTxIA3yBmEsg_FFjgtfZXLVv-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCDoi7J42JC4f

09/30/2024



Scale = 1:74.4

Plate Offsets (X, Y): [1:Edge,0-7-4], [10:0-3-13,0-0-13]

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	0.53	Vert(LL)	-0.08	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.16	13-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 184 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 19-1:2x4 SP No.2
SLIDER Right 2x4 SP No.2 -- 3-9-4

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-0-6 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

WEBS 1 Row at midpt 4-15, 6-15

REACTIONS (size) 10=0-5-8, 15=0-5-8, 19= Mechanical
Max Horiz 19=-124 (LC 13)
Max Uplift 10=-192 (LC 13), 15=-230 (LC 9), 19=-140 (LC 12)
Max Grav 10=831 (LC 26), 15=2106 (LC 1), 19=726 (LC 25)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-993/207, 2-3=-559/192, 3-4=-422/206, 4-6=0/517, 6-7=-470/234, 7-8=-610/224, 8-10=-1117/267, 10-11=0/6, 1-19=-662/175
BOT CHORD 18-19=-152/291, 17-18=-192/808, 15-17=-130/124, 13-15=-124/93, 12-13=-131/904, 10-12=-131/904
WEBS 2-18=0/186, 2-17=-491/205, 3-17=-125/54, 7-13=-117/59, 8-13=-553/217, 8-12=0/239, 1-18=-59/545, 4-15=-1040/223, 4-17=-93/730, 6-15=-1062/220, 6-13=-83/757

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 5-1-12, Interior (1) 5-1-12 to 11-5-12, Exterior(2R) 11-5-12 to 18-6-10, Interior (1) 18-6-10 to 27-7-4, Exterior(2R) 27-7-4 to 34-8-2, Interior (1) 34-8-2 to 40-5-0 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 3x4 MT20 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) Bearings are assumed to be : , Joint 15 SP No.2 crushing capacity of 565 psi, Joint 10 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 140 lb uplift at joint 19, 192 lb uplift at joint 10 and 230 lb uplift at joint 15.
- 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



September 16, 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.sbcsccomponents.com)

MiTek®

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

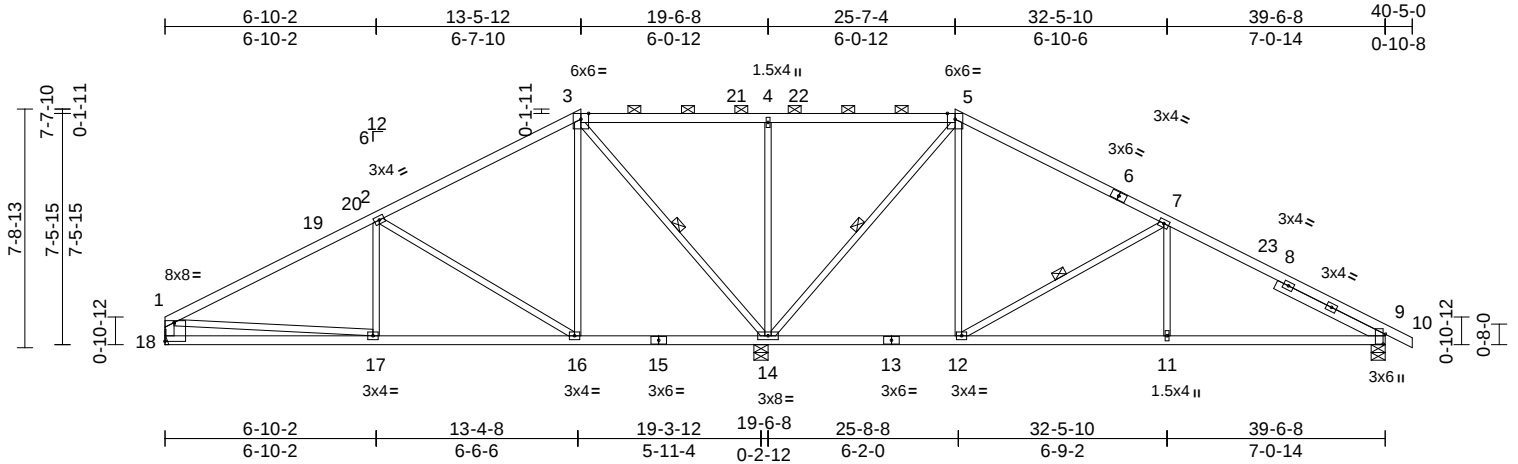
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A4	Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191245 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:27 Page: 1

ID: jVvyhHJqGKdr0FApzEvPsZXLVu-RfC?PsB70Hq3NSgPqnL8w3uITxbGHWrCDoi734z3C?

09/30/2024



Scale = 1:74.7

Plate Offsets (X, Y): [1:Edge,0-7-4], [9:0-3-13,0-0-13]

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)	-0.06	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.13	9-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 186 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 18-1:2x4 SP No.2
SLIDER Right 2x4 SP No.2 -- 3-11-0

BRACING

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

WEBS 1 Row at midpt 5-14, 7-12, 3-14

REACTIONS (size) 9=0-5-8, 14=0-5-8, 18= Mechanical
Max Horiz 18=-142 (LC 17)
Max Uplift 9=-191 (LC 13), 14=-170 (LC 9), 18=-138 (LC 12)
Max Grav 9=810 (LC 26), 14=2175 (LC 1), 18=706 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-956/199, 2-3=-365/156, 3-4=0/505, 4-5=0/505, 5-7=-410/193, 7-9=-1081/265, 9-10=0/6, 1-18=-642/174

BOT CHORD 17-18=-174/307, 16-17=-203/773, 14-16=-20/233, 12-14=0/255, 11-12=-130/876, 9-11=-130/876

WEBS 2-17=0/256, 2-16=-652/248, 3-16=-56/468, 5-14=-1044/154, 5-12=-54/483, 7-12=-717/263, 7-11=0/300, 1-17=-40/502, 3-14=-1017/166, 4-14=-478/224

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 5-1-12, Interior (1) 5-1-12 to 13-5-12, Exterior(2R) 13-5-12 to 20-6-10, Interior (1) 20-6-10 to 25-7-4, Exterior(2R) 25-7-4 to 32-5-10, Interior (1) 32-5-10 to 40-5-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearings are assumed to be: , Joint 14 SP No.2 crushing capacity of 565 psi, 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 138 lb uplift at joint 18, 191 lb uplift at joint 9 and 170 lb uplift at joint 14.
- 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) 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



September 16, 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

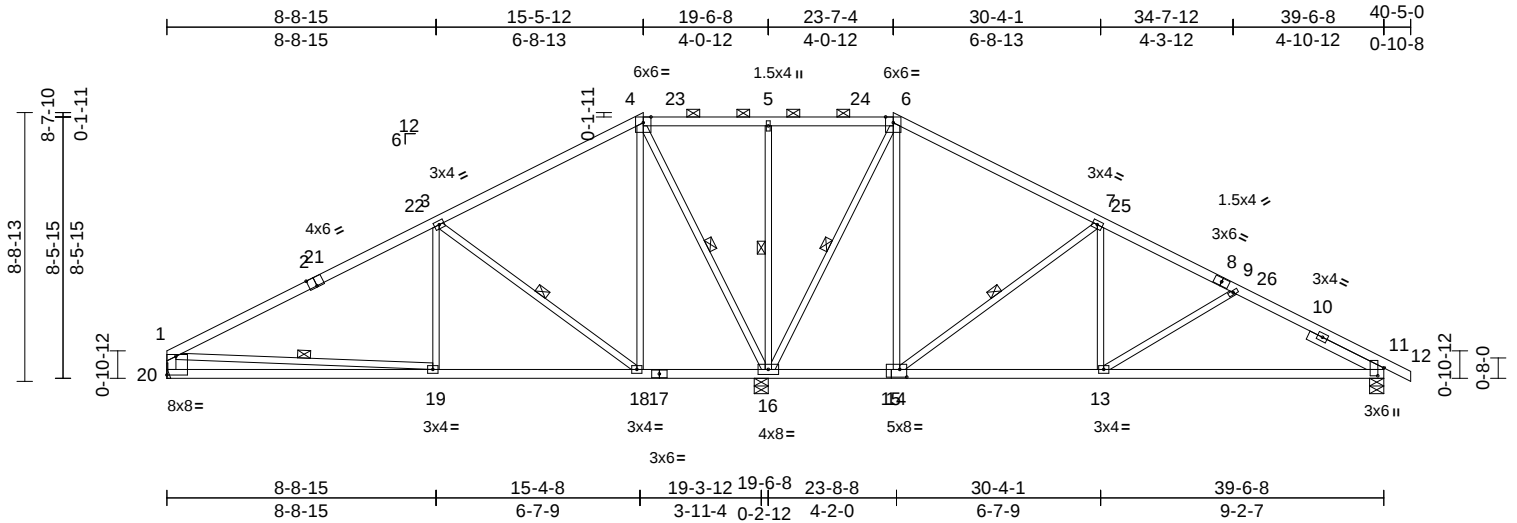
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A5	Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191246 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:27 Page: 1

ID:jVvyhHJqGKdr0FApzEvPSzXLVu-RfC?PsB70Hq3NSgPqnL8w3uITXbGhWrCD0i734202?

09/30/2024



Scale = 1:74.9									
Plate Offsets (X, Y): [2:0-3-0,Edge], [11:0-3-1,0-2-5], [14:0-2-12,0-3-0], [20:Edge,0-7-4]									
Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d
	TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.18	11-13
	TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.36	11-13
	BCLL	0.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03	11
	BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S				
					PLATES		GRIP		
					MT20		244/190		
					Weight: 195 lb		FT = 20%		

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 2-4,6-8:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 20-1:2x4 SP No.2
SLIDER Right 2x4 SP No.2 -- 2-8-6
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 3-18, 6-16, 7-14, 1-19, 5-16, 4-16
REACTIONS (size) 11=0-5-8, 16=0-5-8, 20= Mechanical
Max Horiz 20=161 (LC 13)
Max Uplift 11=179 (LC 13), 16=-189 (LC 12), 20=136 (LC 12)
Max Grav 11=786 (LC 26), 16=2238 (LC 1), 20=703 (LC 25)
FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-864/176, 3-4=-178/188, 4-5=0/541, 5-6=0/541, 6-7=-151/208, 7-9=-775/220, 9-11=-1050/281, 11-12=0/6, 1-20=-623/184
BOT CHORD 19-20=-250/459, 18-19=-175/664, 16-18=-141/258, 14-16=-113/178, 13-14=-26/649, 11-13=-163/858
WEBS 3-19=0/338, 3-18=-785/282, 4-18=-108/557, 6-16=-1053/187, 6-14=-93/546, 7-14=-773/253, 7-13=0/407, 1-19=-41/224, 5-16=-304/147, 4-16=-1023/189, 9-13=-255/160

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 5-1-12, Interior (1) 5-1-12 to 15-5-12, Exterior(2R) 15-5-12 to 22-6-10, Interior (1) 22-6-10 to 23-7-4, Exterior(2R) 23-7-4 to 30-8-2, Interior (1) 30-8-2 to 40-5-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearings are assumed to be : Joint 16 SP No.2 crushing capacity of 565 psi, Joint 11 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 136 lb uplift at joint 20, 179 lb uplift at joint 11 and 189 lb uplift at joint 16.
- 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) 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



September 16,2024

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 the 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

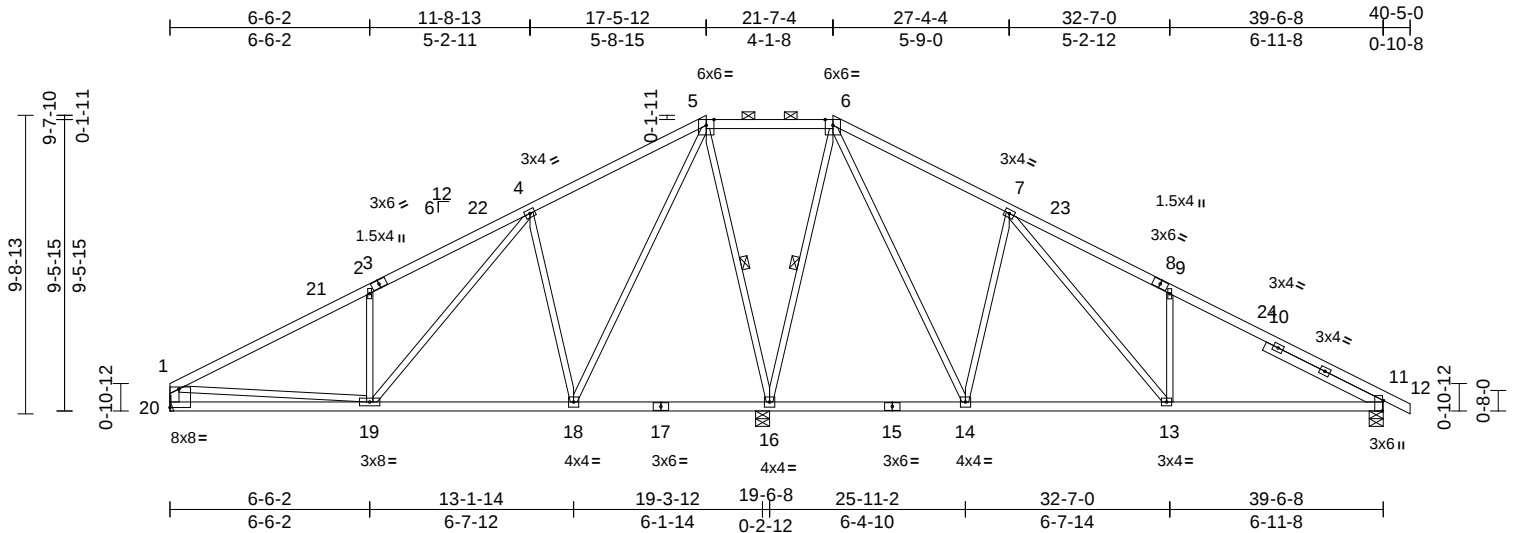
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A6	Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191247 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:27 Page: 1

ID:ChTKudKRbaSUT9qMNgI8ygZXLVt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDofJ423C#f

09/30/2024



Scale = 1:75.1									
Plate Offsets (X, Y): [11:0-4-1,Edge], [20:Edge,0-7-4]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.06 11-13	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.13 11-13	>999	180
BCLL	0.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.01 11	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
Weight: 198 lb FT = 20%									

LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2 *Except* 20-1:2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -- 4-3-5
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 4-9-6 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 6-16, 5-16
REACTIONS (size)	
	11=0-5-8, 16=0-5-8, 20= Mechanical
	Max Horiz 20=-180 (LC 17)
	Max Uplift 11=-205 (LC 13), 16=-215 (LC 12), 20=-141 (LC 12)
	Max Grav 11=796 (LC 26), 16=2249 (LC 1), 20=688 (LC 25)
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-918/194, 2-4=-907/338, 4-5=-304/252, 5-6=0/504, 6-7=-352/320, 7-9=-1010/426, 9-11=-1036/280, 11-12=0/6, 1-20=-627/174
BOT CHORD	19-20=-223/328, 18-19=-97/325, 16-18=-271/232, 14-16=-267/187, 13-14=-28/376, 11-13=-140/831
WEBS	1-19=-14/462, 6-16=-1091/220, 5-16=-1073/251, 7-14=-681/321, 6-14=-259/866, 7-13=-235/735, 9-13=-414/263, 2-19=-422/259, 4-19=-223/667, 4-18=-648/316, 5-18=-255/837

NOTES
1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=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 17-5-12, Exterior(2E) 17-5-12 to 21-7-4, Exterior(2R) 21-7-4 to 28-8-2, Interior (1) 28-8-2 to 40-5-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearings are assumed to be: , Joint 16 SP No.2 crushing capacity of 565 psi, Joint 11 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 141 lb uplift at joint 20, 205 lb uplift at joint 11 and 215 lb uplift at joint 16.
- 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) 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



September 16, 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

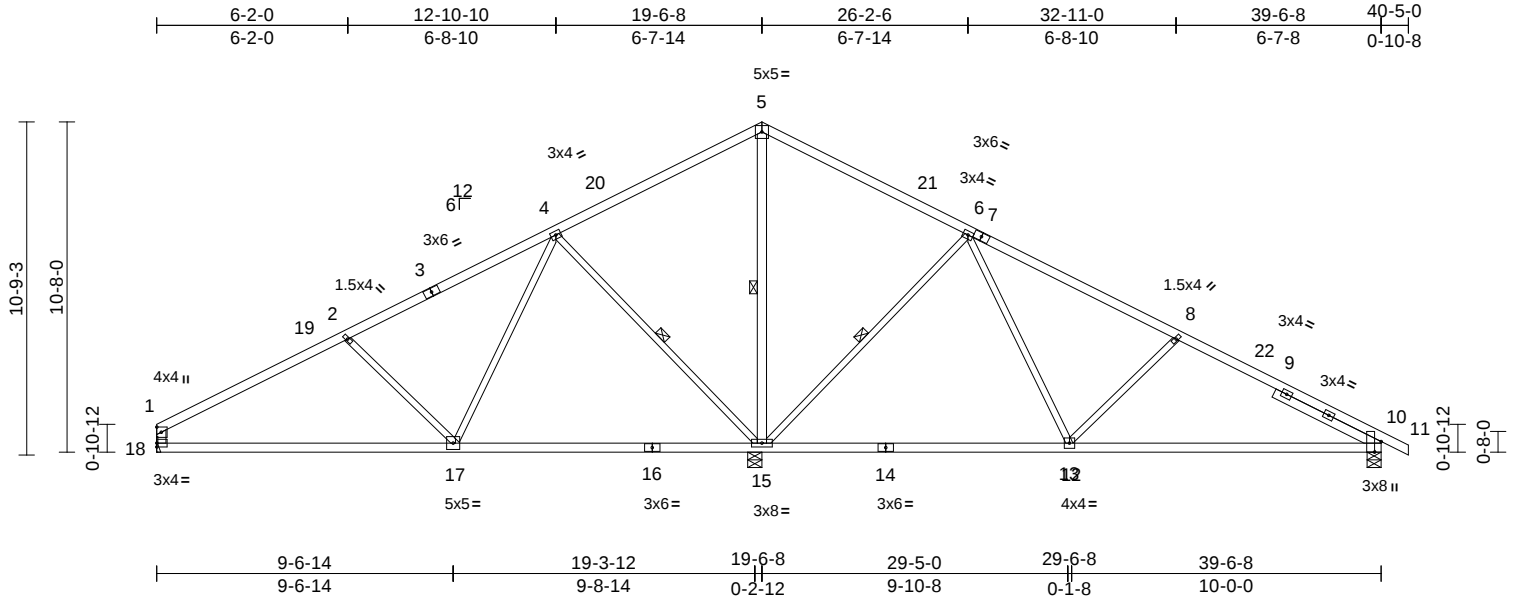
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A7	Common	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191248 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:27 Page: 1

ID:n60BGcHYIf3vci5nhYCRK1zXLVw-RfC?PsB70Hq3NSgPqnL8w3uITXbGhWrCD0i73420C?

09/30/2024



Scale = 1:74.4									
Plate Offsets (X, Y): [10:0-4-1,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.22 10-12	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.46 10-12	>516	180
BCLL	0.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.02 10	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	2x4 SP No.2
WEBS	2x3 SPF No.2 *Except* 18-1,5-15:2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -- 3-9-12
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 5-6-11 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 17-18.
WEBS	1 Row at midpt 5-15, 6-15, 4-15
REACTIONS (size)	
10=0-5-8, 15=0-5-8, 18= Mechanical	
Max Horiz 18=-201 (LC 13)	
Max Uplift 10=-164 (LC 13), 15=-353 (LC 12), 18=-87 (LC 12)	
Max Grav 10=777 (LC 26), 15=2530 (LC 1), 18=527 (LC 25)	
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-611/134, 2-4=-298/99, 4-5=-60/866, 5-6=-32/867, 6-8=-659/282, 8-10=-980/238, 10-11=0/6, 1-18=-434/136
BOT CHORD	17-18=-212/467, 15-17=-149/274, 13-15=-380/255, 12-13=-226/498, 10-12=-116/794
WEBS	6-13=-72/596, 5-15=-1107/156, 6-15=-858/338, 4-15=-839/335, 2-17=-421/262, 8-12=-451/266, 4-17=-66/548

NOTES
1) Unbalanced roof live loads have been considered for this design.

- 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) 0-7-4 to 5-7-4, Interior (1) 5-7-4 to 20-0-0, Exterior(2R) 20-0-0 to 25-0-0, Interior (1) 25-0-0 to 40-10-8 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 15 SP No.2 crushing capacity of 565 psi, Joint 10 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 18, 164 lb uplift at joint 10 and 353 lb uplift at joint 15.
- 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



September 16, 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.sbcsccomponents.com)

MiTek®

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

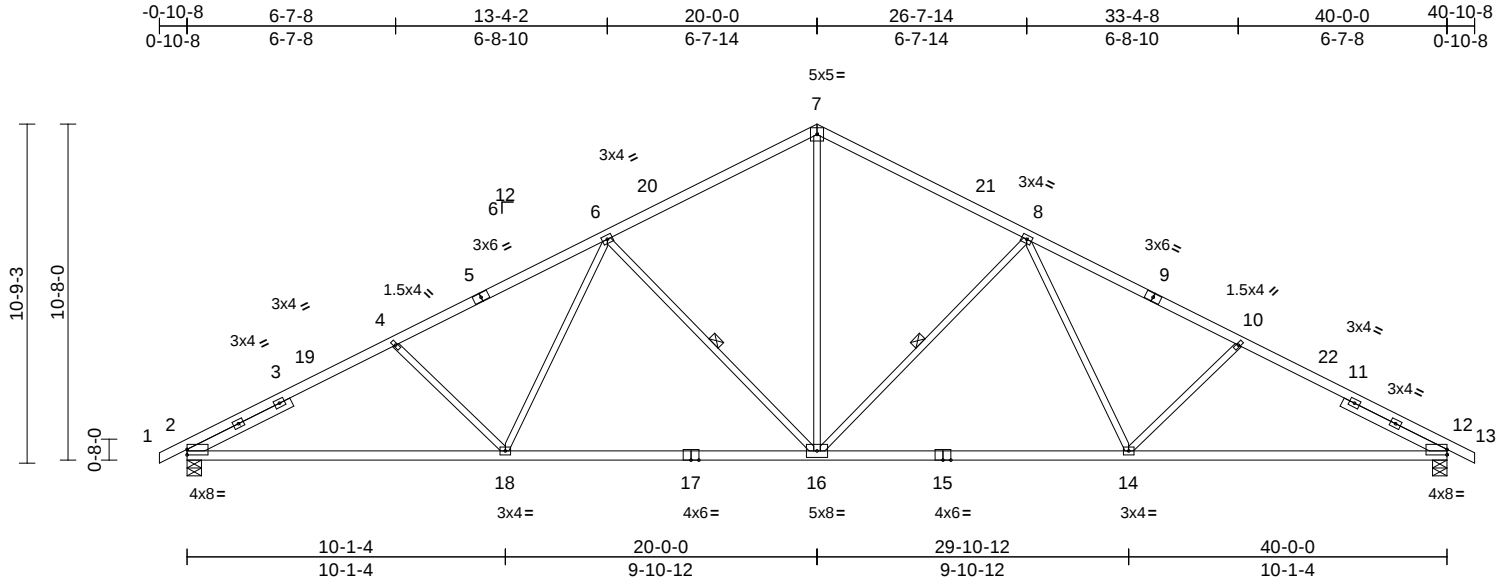
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A8	Common	7	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						168191249
						LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:28 Page: 1

ID:n6oBGcHYfI3vci5nhYCRK1zXLVw-RfC?PsB70Hq3NSgPqnL8w3uITXbGHWrCD0i73423C?

09/30/2024



Scale = 1:73.1

Plate Offsets (X, Y): [2:Edge,0-2-1], [12:Edge,0-2-1]												
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	0.83	Vert(LL)	-0.24	2-18	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.52	2-18	>920	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.16	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 184 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP 1650F 1.5E *Except* 17-15:2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-8-0, Right 2x4 SP No.2 -- 3-8-0

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 6-16, 8-16

REACTIONS (size) 2=0-5-8, 12=0-5-8
Max Horiz 2=-197 (LC 17)
Max Uplift 2=-296 (LC 12), 12=-296 (LC 13)
Max Grav 2=1861 (LC 1), 12=1861 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-3186/509, 4-6=-2895/488, 6-7=-2088/461, 7-8=-2088/461, 8-10=-2895/488, 10-12=-3186/509, 12-13=0/6
BOT CHORD 2-18=-540/2717, 16-18=-340/2311, 14-16=-225/2311, 12-14=-347/2717
WEBS 7-16=-212/1353, 4-18=-328/251, 6-18=-55/503, 6-16=-818/330, 8-16=-818/330, 8-14=-55/503, 10-14=-328/251

NOTES
1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=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 20-0-0, Exterior(2R) 20-0-0 to 25-0-0, Interior (1) 25-0-0 to 40-10-8 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) All plates are 3x4 MT20 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) All bearings are assumed to be SP 1650F 1.5E crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 296 lb uplift at joint 2 and 296 lb uplift at joint 12.
- 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



September 16, 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.sbcsccomponents.com)

MiTek®

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

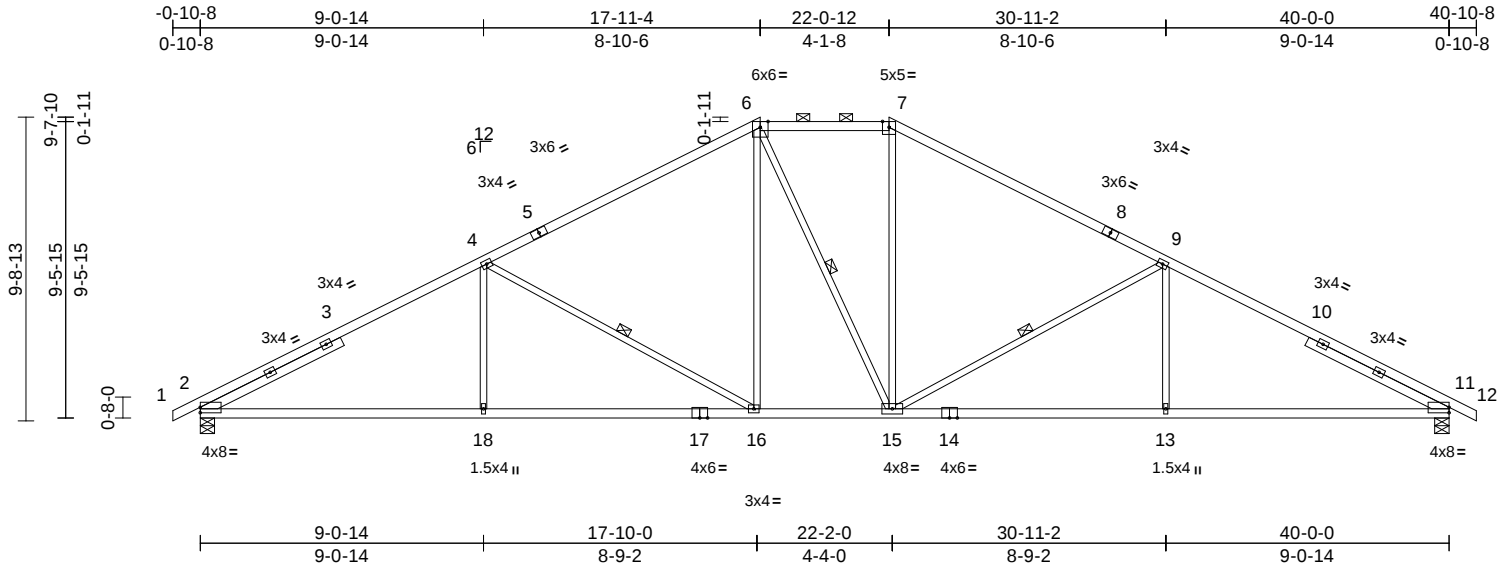
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A9	Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191250 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:15:28 Page: 1

ID:RgRnwGlm1pCMOxPa79zFcZXLVy-RfC?PsB70Hq3NSgPqnL8w3uITXBGWkWrCDof7423C#f

09/30/2024



Scale = 1:73.8									
Plate Offsets (X, Y): [2:Edge,0-2-1], [11:Edge,0-2-1]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.17 16-18	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.40 16-18	>999	180
BCLL	0.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.16 11	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
Weight: 190 lb FT = 20%									

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 6-7:2x4 SP No.2, 1-5,8-12:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 17-14:2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 5-0-7, Right 2x4 SP No.2 -- 5-0-7

BRACING
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-9-4 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 9-0-8 oc bracing.
WEBS 1 Row at midpt 4-16, 6-15, 9-15

REACTIONS (size) 2=0-5-8, 11=0-5-8
Max Horiz 2=176 (LC 12)
Max Uplift 2=280 (LC 12), 11=280 (LC 13)
Max Grav 2=1861 (LC 1), 11=1861 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-3155/479, 4-6=-2326/455, 6-7=-1947/467, 7-9=-2327/455, 9-11=-3154/479, 11-12=0/6
BOT CHORD 2-18=-425/2685, 16-18=-425/2685, 15-16=-133/1946, 13-15=-317/2685, 11-13=-317/2685
WEBS 4-18=0/392, 4-16=-865/333, 6-16=-87/540, 6-15=-248/253, 7-15=-71/531, 9-15=-863/333, 9-13=0/391

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 17-11-4, Exterior(2E) 17-11-4 to 22-0-12, Exterior(2R) 22-0-12 to 29-1-10, Interior (1) 29-1-10 to 40-10-8 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) 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) All bearings are assumed to be SP 1650F 1.5E crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 280 lb uplift at joint 2 and 280 lb uplift at joint 11.
- 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) 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



September 16,2024

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.sbcsccomponents.com)

MiTek®

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

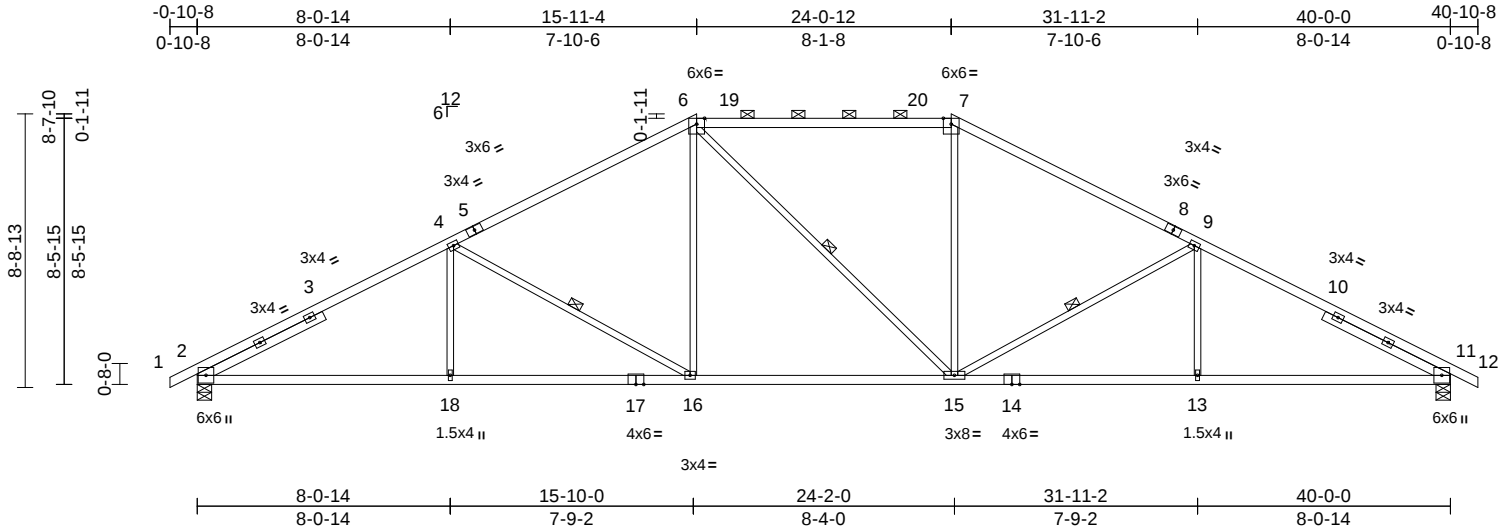
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A10	Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191251 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:28 Page: 1

ID:NX63eaFg?khLIEMCOPekiPzXLVz-RfC?PsB70Hq3NSgPqnL8w3uITXbGhWrCDoi734z3C??

09/30/2024



Scale = 1:73.5									
Plate Offsets (X, Y): [2:0-3-9,0-0-5], [11:0-3-9,0-0-5]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.17 16-18	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.38 15-16	>999	180
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.17 11	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
Weight: 184 lb FT = 20%									

LUMBER		
TOP CHORD	2x4 SP 2400F 2.0E *Except* 1-5,8-12:2x4 SP No.2	
BOT CHORD	2x4 SP No.2	
WEBS	2x3 SPF No.2	
SLIDER	Left 2x4 SP No.2 -- 4-5-11, Right 2x4 SP No.2 -- 4-5-11	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (4-1-3 max.): 6-7.	
BOT CHORD	Rigid ceiling directly applied or 9-3-11 oc bracing.	
WEBS	1 Row at midpt 4-16, 6-15, 9-15	
REACTIONS	(size)	2=0-5-8, 11=0-5-8
	Max Horiz	2=-157 (LC 17)
	Max Uplift	2=-263 (LC 12), 11=-263 (LC 13)
	Max Grav	2=1861 (LC 1), 11=1861 (LC 1)
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/6, 2-4=-3183/505, 4-6=-2500/482, 6-7=-2127/490, 7-9=-2500/481, 9-11=-3182/505, 11-12=0/6	
BOT CHORD	2-18=-394/2711, 16-18=-394/2711, 15-16=-185/2126, 13-15=-349/2710, 11-13=-349/2710	
WEBS	4-18=0/326, 4-16=-686/295, 6-16=-48/536, 6-15=-236/238, 7-15=-16/536, 9-15=-686/295, 9-13=0/325	

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 15-11-4, Exterior(2R) 15-11-4 to 23-0-2, Interior (1) 23-0-2 to 24-0-12, Exterior(2R) 24-0-12 to 31-1-10, Interior (1) 31-1-10 to 40-10-8 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) 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) 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 263 lb uplift at joint 2 and 263 lb uplift at joint 11.
- 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) 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



September 16,2024

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 the 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.sbcsccomponents.com)

MiTek®

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

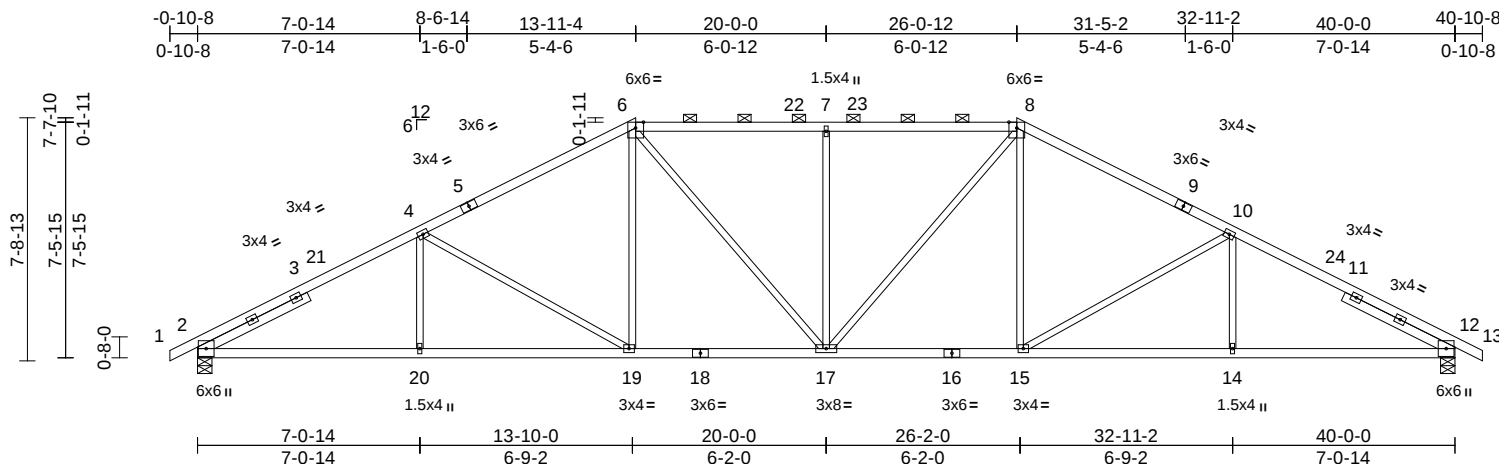
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191252 LEE'S SUMMIT, MISSOURI
P240957-01	A11	Hip	1	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:28 Page: 1

ID: vL Yh QEE2EQZU75n0Ti7VABzXLW_-RfC?PsB70Hq3NSgPqnL8w3uITxbgKwRCDwJ4ZJC?

09/30/2024



Scale = 1:73.3

Plate Offsets (X, Y): [2:0-3-9,0-0-5], [12:0-3-9,0-0-5]

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	0.84	Vert(LL)	-0.20	17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.38	15-17	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.17	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
Weight: 189 lb											FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 5-6,8-9:2x4 SP 1650F 1.5E
 BOT CHORD 2x4 SP No.2
 WEBS 2x3 SPF No.2
 SLIDER Left 2x4 SP No.2 -- 3-11-0, Right 2x4 SP No.2 -- 3-11-0

BRACING

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (3-0-9 max.): 6-8.
 BOT CHORD Rigid ceiling directly applied or 9-8-12 oc bracing.

REACTIONS

(size) 2=0-5-8, 12=0-5-8
 Max Horiz 2=138 (LC 16)
 Max Uplift 2=-243 (LC 12), 12=-243 (LC 13)
 Max Grav 2=1861 (LC 1), 12=1861 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-4=-3214/504, 4-6=-2650/486, 6-7=-2536/522, 7-8=-2536/522, 8-10=-2650/486, 10-12=-3214/504, 12-13=0/6

BOT CHORD 2-20=-362/2741, 19-20=-362/2741, 17-19=-213/2276, 15-17=-210/2276, 14-15=-358/2741, 12-14=-358/2741

WEBS 4-20=0/285, 4-19=-551/253, 6-19=-50/432, 6-17=-156/572, 7-17=-512/226, 8-17=-156/572, 8-15=-50/432, 10-15=-551/253, 10-14=0/285

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 13-11-4, Exterior(2R) 13-11-4 to 21-0-2, Interior (1) 21-0-2 to 26-0-12, Exterior(2R) 26-0-12 to 32-11-2, Interior (1) 32-11-2 to 40-10-8 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) Provide adequate drainage to prevent water ponding.
- 4) All plates are 3x4 MT20 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 243 lb uplift at joint 2 and 243 lb uplift at joint 12.
- 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) 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



September 16, 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 the 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.sbcsccomponents.com)

MiTek®

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

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

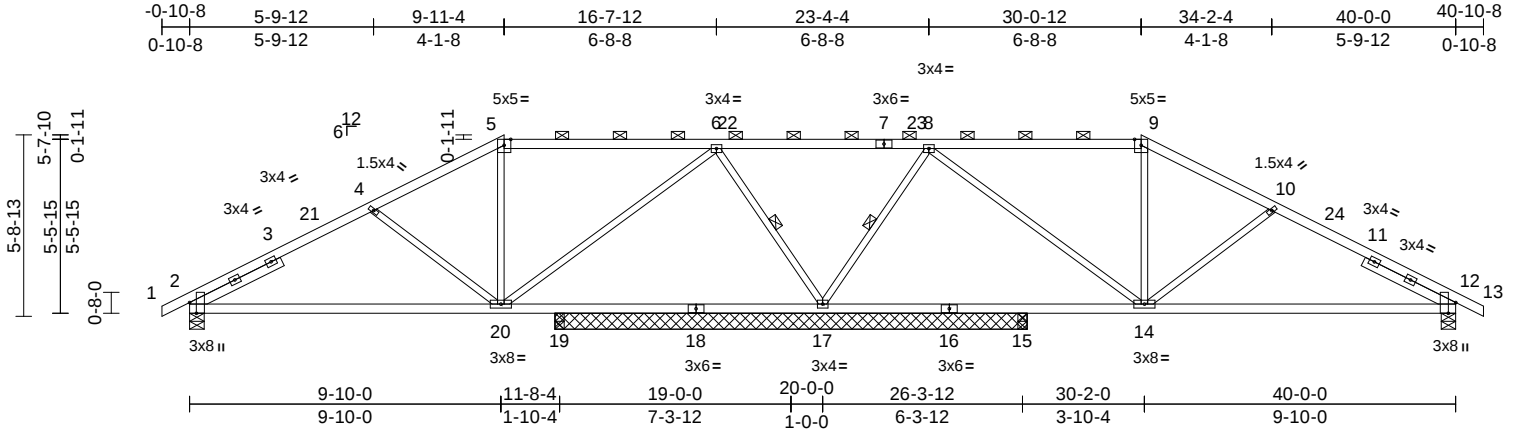
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A13	Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191254 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:28 Page: 1

ID:R9_IDuEPT6RdVxCqv?cGd_zXLW?RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCD0rJ42JC?r

09/30/2024



Scale = 1:72.8									
Plate Offsets (X, Y): [2:0-4-1,Edge], [12:0-4-1,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.24	12-14	>693
TCDL	10.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.49	12-14	>336
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.03	12	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					n/a
						PLATES		GRIP	
						MT20		197/144	
						Weight: 175 lb FT = 20%			

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-2-10, Right 2x4 SP No.2 -- 3-2-9

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

REACTIONS (size) 2=0-5-8, 12=0-5-8, 15=0-3-8, 17=14-11-0, 19=0-3-8
Max Horiz 2=-101 (LC 13)
Max Uplift 2=-163 (LC 12), 12=-176 (LC 13), 17=-351 (LC 9)
Max Grav 2=800 (LC 25), 12=820 (LC 26), 15=109 (LC 3), 17=1976 (LC 1), 19=136 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-1042/255, 4-5=-729/203, 5-6=-598/206, 6-8=-51/538, 8-9=-636/210, 9-10=-771/201, 10-12=-1083/273, 12-13=0/6
BOT CHORD 2-20=-223/850, 19-20=-56/103, 17-19=-56/103, 15-17=-24/111, 14-15=-24/111, 12-14=-147/885
WEBS 5-20=-80/89, 6-20=-85/654, 8-14=-76/686, 9-14=-65/107, 4-20=-326/218, 10-14=-321/215, 6-17=-1072/295, 8-17=-1095/281

- 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 9-11-4, Exterior(2R) 9-11-4 to 17-0-2, Interior (1) 17-0-2 to 30-0-12, Exterior(2R) 30-0-12 to 37-1-10, Interior (1) 37-1-10 to 40-10-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 2, 176 lb uplift at joint 12 and 351 lb uplift at joint 17.
- 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.
- 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

NOTES
1) Unbalanced roof live loads have been considered for this design.



September 16,2024

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.sbcsccomponents.com)

MiTek®

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

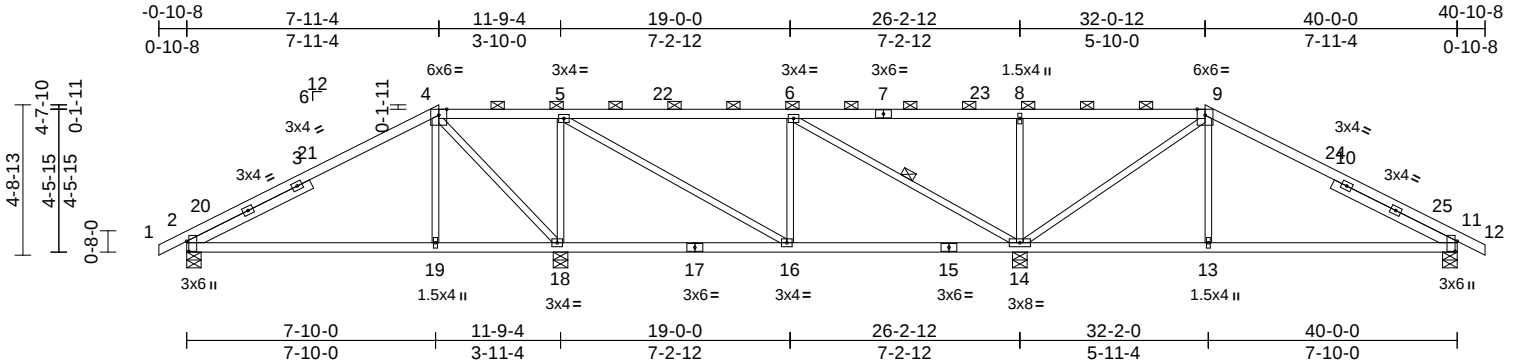
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A14	Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191255 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:39 Page: 1

ID:UmtYoCC9xVBvGd3RnaaoYzZXLW1-RfC?PsB70Hq3NSgPqnL8w3uITXfGKwRCDm7J4ZJC?

09/30/2024



Scale = 1:72.5															
Plate Offsets (X, Y): [2:0-3-13,0-0-13], [11:0-3-13,0-0-13]															
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		0.72	Vert(LL)	-0.10	2-19	>999	240	MT20	197/144
TCDL		10.0	Lumber DOL		1.15	BC		0.53	Vert(CT)	-0.22	2-19	>645	180		
BCLL		0.0	Rep Stress Incr		YES	WB		0.75	Horz(CT)	0.04	11	n/a	n/a		
BCDL		10.0	Code		IRC2018/TPI2014	Matrix-S								Weight: 177 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 4-7,7-9:2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-4-2, Right 2x4 SP No.2 -- 4-4-2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-9-4 oc purlins, except 2-0-0 oc purlins (5-7-1 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-14

REACTIONS (size) 2=0-5-8, 11=0-5-8, 14=0-5-8, 18=0-5-8
Max Horiz 2=-82 (LC 13)
Max Uplift 2=-213 (LC 12), 11=-197 (LC 13), 14=-265 (LC 9), 18=-161 (LC 8)
Max Grav 2=673 (LC 1), 11=697 (LC 1), 14=1321 (LC 25), 18=1077 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-713/291, 4-5=-288/345, 5-6=-793/360, 6-8=-148/294, 8-9=-149/295, 9-11=-766/245, 11-12=0/6
BOT CHORD 2-19=-207/532, 18-19=-208/528, 16-18=-225/286, 14-16=-188/793, 13-14=-95/576, 11-13=-93/580
WEBS 4-19=0/267, 4-18=-378/0, 9-14=-579/33, 9-13=0/301, 5-18=-782/270, 8-14=-488/222, 6-14=-880/227, 6-16=-206/169, 5-16=-147/711

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 7-11-4, Exterior(2R) 7-11-4 to 15-0-2, Interior (1) 15-0-2 to 32-0-12, Exterior(2R) 32-0-12 to 39-1-10, Interior (1) 39-1-10 to 40-10-8 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) Provide adequate drainage to prevent water ponding.
- 4) All plates are 3x4 MT20 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 213 lb uplift at joint 2, 161 lb uplift at joint 18, 265 lb uplift at joint 14 and 197 lb uplift at joint 11.
- 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) 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



September 16,2024

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.sbcsccomponents.com)

MiTek®

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

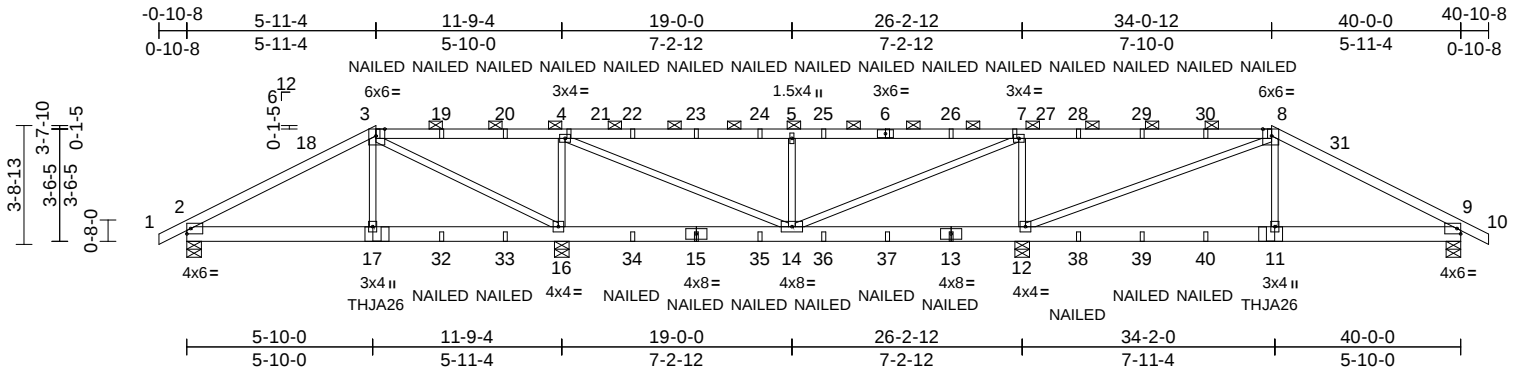
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	A15	Hip Girder	1	2	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191256 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:39 Page: 1

ID:84b4JJLh7BiCITzIU5nc15zXLVr-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWCD0i7J4z3C4

9/30/2024



Scale = 1:72.4

Plate Offsets (X, Y): [3:0-3-5,Edge], [8:0-3-5,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	0.74	Vert(LL)	0.03	14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.05	11-12	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.01	9	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* 6-8:2x4 SP 1650F 1.5E
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2

BRACING

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

REACTIONS

(size) 2=0-5-8, 9=0-5-8, 12=0-5-8, 16=0-5-8
Max Horiz 2=-63 (LC 17)
Max Uplift 2=-211 (LC 12), 9=-282 (LC 13), 12=-892 (LC 8), 16=-855 (LC 9)
Max Grav 2=760 (LC 1), 9=986 (LC 26), 12=2630 (LC 26), 16=2523 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/11, 2-3=-1009/289, 3-4=-117/432, 4-5=-918/332, 5-7=-918/332, 7-8=-83/313, 8-9=-1508/428, 9-10=0/11
BOT CHORD 2-17=-214/793, 16-17=-214/776, 14-16=-430/212, 12-14=-310/174, 11-12=-291/1221, 9-11=-290/1240
WEBS 3-17=-26/559, 8-11=0/670, 4-16=-1561/776, 3-16=-1375/432, 7-12=-1665/853, 8-12=-1651/502, 7-14=-436/1335, 5-14=-925/560, 4-14=-475/1467

NOTES

- 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: 2x3 - 1 row at 0-9-0 oc.

- 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.
- Unbalanced roof live loads have been considered for this design.
- 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 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 34-0-12, Exterior(2E) 34-0-12 to 40-10-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 211 lb uplift at joint 2, 855 lb uplift at joint 16, 892 lb uplift at joint 12 and 282 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 5-11-10 from the left end to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 34-0-6 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

- "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-8=-70, 8-10=-70, 2-9=-20
Concentrated Loads (lb)
Vert: 3=-131 (B), 6=-131 (B), 15=-39 (B), 17=-396 (B), 11=-396 (B), 4=-131 (B), 7=-131 (B), 8=-131 (B), 13=-39 (B), 19=-131 (B), 20=-131 (B), 22=-131 (B), 23=-131 (B), 24=-131 (B), 25=-131 (B), 26=-131 (B), 28=-131 (B), 29=-131 (B), 30=-131 (B), 32=-39 (B), 33=-39 (B), 34=-39 (B), 35=-39 (B), 36=-39 (B), 37=-39 (B), 38=-39 (B), 39=-39 (B), 40=-39 (B)



September 16, 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.sbcsccomponents.com)

MiTek®

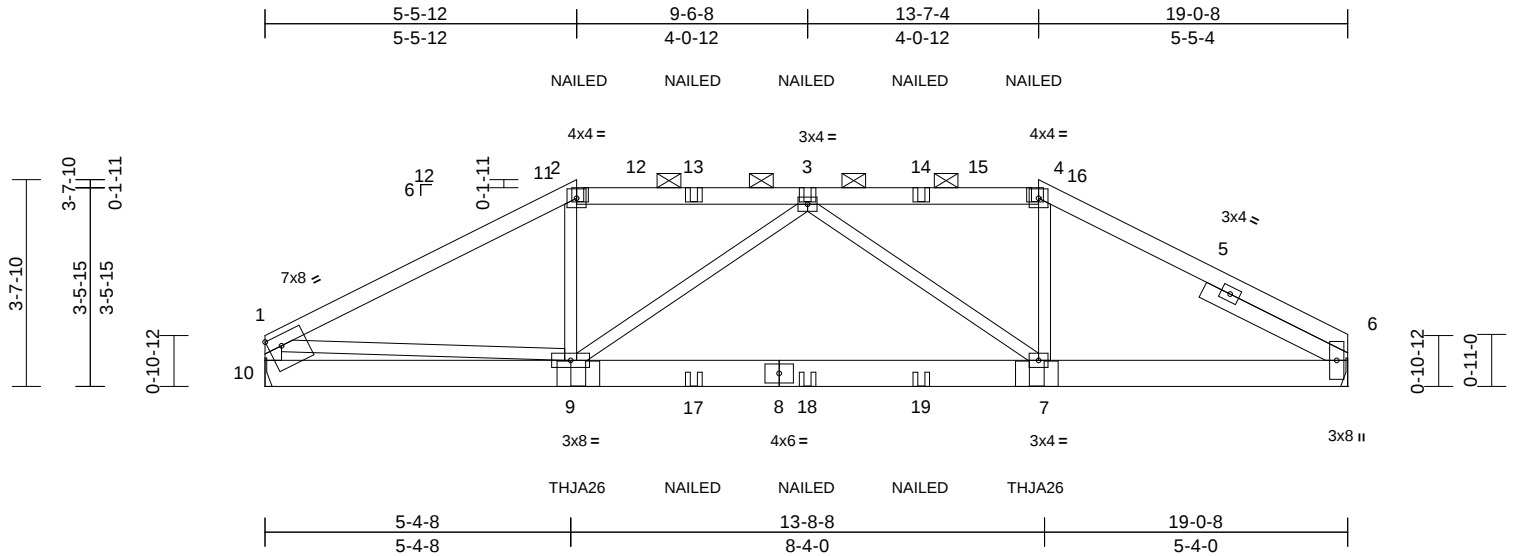
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	B1	Hip Girder	1	2	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191257 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:30 Page: 1
ID:ChTKudKRbaSUT9qMNgI8ygZXLVt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDof74423C#f

09/30/2024



Scale = 1:40.5

Plate Offsets (X, Y): [1:Edge,0-2-4], [6:0-5-9,0-0-13]

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)	0.06	7-9	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.14	7-9	>999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.02	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 172 lb FT = 20%											

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SPF No.2
WEBS	2x3 SPF No.2 *Except* 10-1:2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -- 2-10-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-8-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 6= Mechanical, 10= Mechanical
Max Horiz	10=-62 (LC 17)
Max Uplift	6=-479 (LC 13), 10=-482 (LC 12)
Max Grav	6=1652 (LC 1), 10=1661 (LC 1)

FORCES

TOP CHORD	(lb) - Maximum Compression/Maximum Tension
1-2=-2789/921, 2-3=-2407/869,	
3-4=-2383/869, 4-6=-2873/950,	
1-10=-1594/552	
BOT CHORD	9-10=-234/535, 7-9=-988/2865,
6-7=-728/2409	
WEBS	2-9=-140/787, 4-7=-192/970, 1-9=-552/1903,
3-9=-650/361, 3-7=-684/371	

NOTES

- 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: 2x3 - 1 row at 0-9-0 oc.
- 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.

- Unbalanced roof live loads have been considered for this design.
- 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 5-5-12, Exterior(2R) 5-5-12 to 12-6-10, Interior (1) 12-6-10 to 13-7-4, Exterior(2E) 13-7-4 to 19-0-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 479 lb uplift at joint 6 and 482 lb uplift at joint 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 5-6-2 from the left end to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 13-6-14 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

LOAD CASE(S)

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-4=-70, 4-6=-70, 6-10=-20

Concentrated Loads (lb)

Vert: 2=-131 (F), 4=-131 (F), 9=-420 (F), 7=-420 (F), 3=-131 (F), 13=-131 (F), 14=-131 (F), 17=-39 (F), 18=-39 (F), 19=-39 (F)



September 16, 2024

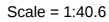
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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.sbcsccomponents.com)

MiTek®

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:53:30 Page: 1
ID:gt1i6zL3MtaL5JOYwOGNutzXLVs-RfC?PsB70Hq3NSGpqnL8w3uLTxBGWrCDoi734z3C?



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	0.65	Vent(LL)	-0.08	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vent(CT)	-0.16	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 83 lb	FT = 20%

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 9 and 110 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=35ft;
K=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 7-5-12, Exterior(2E) 7-5-12 to
18-10-12 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) 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) Refer to girder(s) for truss to truss connections.



September 16, 2024



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.tpinet.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

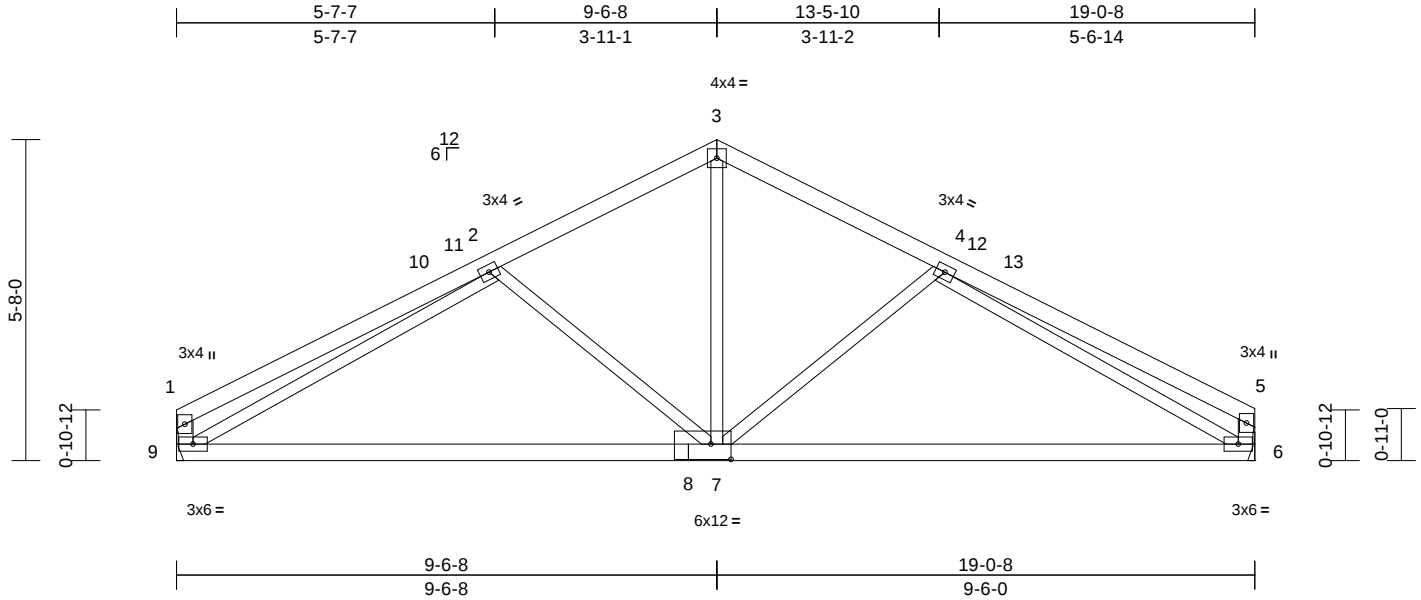
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	B3	Common	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						168191259
						LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:30 Page: 1

ID:JwEp3GHwXLx2_YWb8qgCoqzXLVx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDwJ4ZJC?

09/30/2024



Scale = 1:40.7									
Plate Offsets (X, Y): [8:0-4-4,0-3-4]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.15	7-9	>999
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.32	7-9	>712
BCLL	0.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.03	6	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					n/a
						PLATES		GRIP	
						MT20		244/190	
						Weight: 84 lb		FT = 20%	

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 9-1,6-5:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-8-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6= Mechanical, 9= Mechanical
Max Horiz 9=92 (LC 11)
Max Uplift 6=-126 (LC 13), 9=-126 (LC 12)
Max Grav 6=844 (LC 1), 9=844 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-407/119, 2-3=-944/299, 3-4=-944/299, 4-5=-391/116, 1-9=-326/134, 5-6=-318/131
BOT CHORD 7-9=-277/987, 6-7=-257/982
WEBS 3-7=-142/547, 2-9=-818/244, 4-6=-831/246, 2-7=-300/226, 4-7=-294/224

6) 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

- 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 5-1-12, Interior (1) 5-1-12 to 9-6-8, Exterior(2R) 9-6-8 to 14-6-8, Interior (1) 14-6-8 to 18-10-12 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint 9 and 126 lb uplift at joint 6.



September 16,2024

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.sbcsccomponents.com)

MiTek®

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

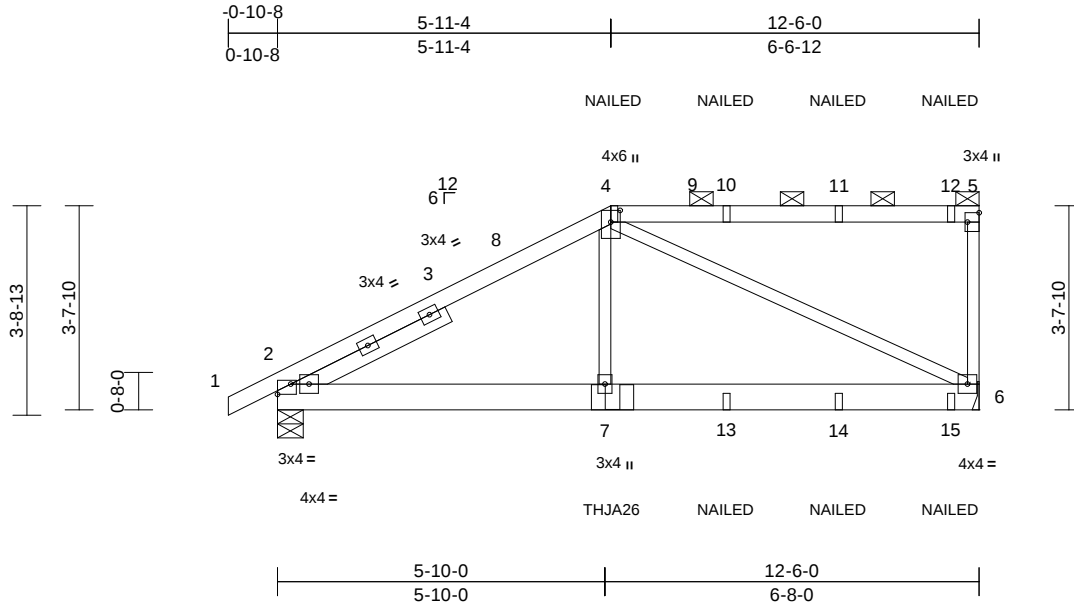
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	C1	Half Hip Girder	1	2	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						168191260
						LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:30 Page: 1

ID:qcbAPHHLdVulCuhUQ3lLgyswd?-RfC?PsB70Hq3NSgPqnL8w3uITXbGfWwCDol734ZC?

09/30/2024



Scale = 1:41

Plate Offsets (X, Y): [2:0-1-15,0-2-0], [2:Edge,0-2-3], [4:0-2-8,0-2-0], [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	0.81	Vert(LL)	-0.02	6-7	>999	240	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.05	6-7	>999	180	197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.01	6	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 2x6 SPF No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-0-14

BRACING

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

REACTIONS (size) 2=0-5-8, 6= Mechanical
Max Horiz 2=149 (LC 11)
Max Uplift 2=-281 (LC 12), 6=-408 (LC 9)
Max Grav 2=1013 (LC 1), 6=1223 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/11, 2-4=-1504/507, 4-5=-92/105, 5-6=-488/316
BOT CHORD 2-7=-558/1251, 6-7=-558/1233
WEBS 4-7=0/658, 4-6=-1305/532

NOTES

- 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: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
- 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.

- 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 5-11-4, Exterior(2E) 5-11-4 to 12-4-12 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 408 lb uplift at joint 6 and 281 lb uplift at joint 2.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 5-11-10 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-5=-70, 2-6=-20
Concentrated Loads (lb)
Vert: 7=-396 (B), 4=-131 (B), 10=-131 (B), 11=-131 (B), 12=-152 (B), 13=-39 (B), 14=-39 (B), 15=-45 (B)



September 16, 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.sbcsccomponents.com)

MiTek®

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

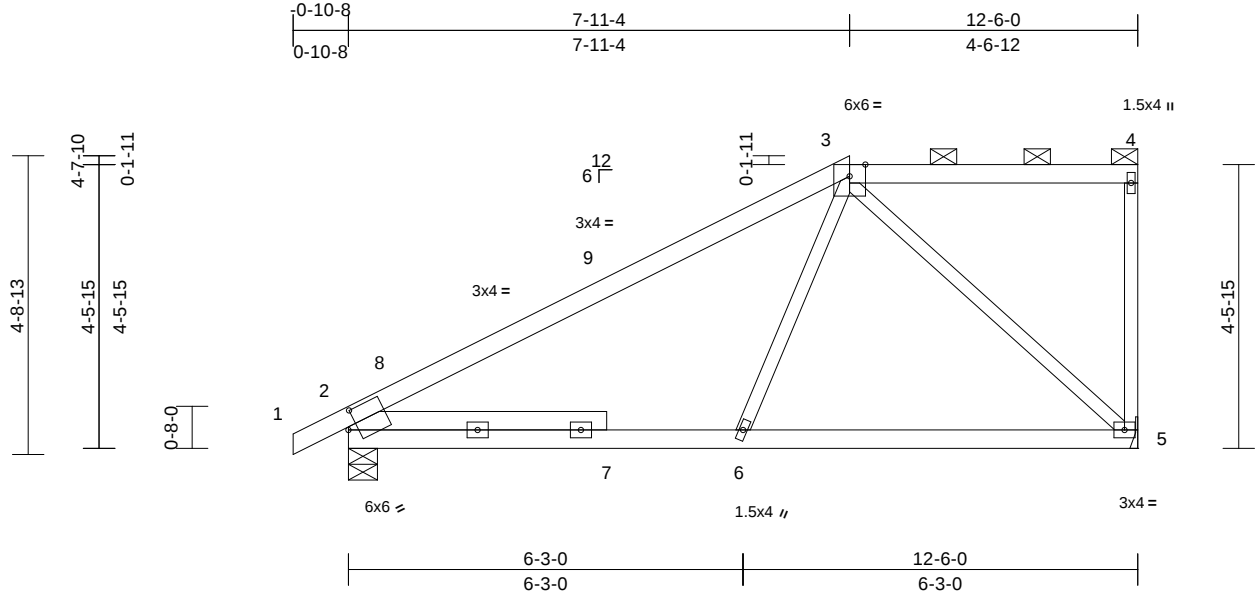
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	C2	Half Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						168191261
						LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:30 Page: 1

ID:n6oBGcHYIf3vci5nhYCRK1zXLVw-RfC?PsB70Hq3NSgPqnL8w3uITXbGhWrCDoi734z3C?

09/30/2024



Scale = 1:36.5

Plate Offsets (X, Y): [2'-0"-1'-12", 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	0.87	Vert(LL)	-0.04	5-6	>999	240	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.08	5-6	>999	180	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.01	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 58 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4'-1'-2

BRACING

TOP CHORD Structural wood sheathing directly applied or 2'-2'-0" oc purlins, except end verticals, and 2'-0'-0" oc purlins (6'-0'-0" max.): 3'-4'.
BOT CHORD Rigid ceiling directly applied or 10'-0'-0" oc bracing.

REACTIONS (size) 2=0-5-8, 5= Mechanical
Max Horiz 2=188 (LC 9)
Max Uplift 2=-113 (LC 12), 5=-110 (LC 9)
Max Grav 2=621 (LC 1), 5=556 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-710/174, 3-4=-94/96,
4-5=-146/86

BOT CHORD 2-6=-289/499, 5-6=-302/412
WEBS 3-6=0/335, 3-5=-560/336

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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'-11'-4", Exterior(2E) 7'-11'-4" to 12'-4'-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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.

- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 5 and 113 lb uplift at joint 2.
- 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.
- 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



September 16, 2024

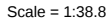
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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.sbcsccomponents.com)

MiTek®

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



[illegible]

WARNING – Verify design parameters and READ NOTES on this and INCLUDED WITH REFERENCE PAGE MP14743 rev. 12/2023 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.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

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

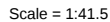


Plate Offsets (X, Y): [2:0-4-5,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plating Grip DOL	1.15	TC	0.95	Vert(LL)	-0.22	2-5	>454	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.43	2-5	>227	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 36 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-3-9

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=0-7-0, 5= Mechanical
Max Horiz 2=158 (LC 9)
Max Uplift 2=-152 (LC 8), 5=-141 (LC 12)
Max Grav 2=484 (LC 1), 5=410 (LC 1)

FORCES

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/5, 2-4=-210/113, 4-5=-315/344
BOT CHORD	2-5=-67/73

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) -1-2-14 to 5-10-0,
Exterior(2R) 5-10-0 to 8-2-0 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
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SP 2400F 2.0E
crushing capacity of 805 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 141 lb uplift at
joint 5 and 152 lb uplift at joint 2.
- 6) 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.

7) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

8) 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: 1-4=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 7=-53 (F=-26, B=-26), 10=-19 (F=-10, B=-10)



September 16, 2024



WARNING – Verify design parameters and READ NOTES ON THIS and INCLUDED MEMBER REFERENCE PAGE mmp14715 rev. 12/2023 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/TP1 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)

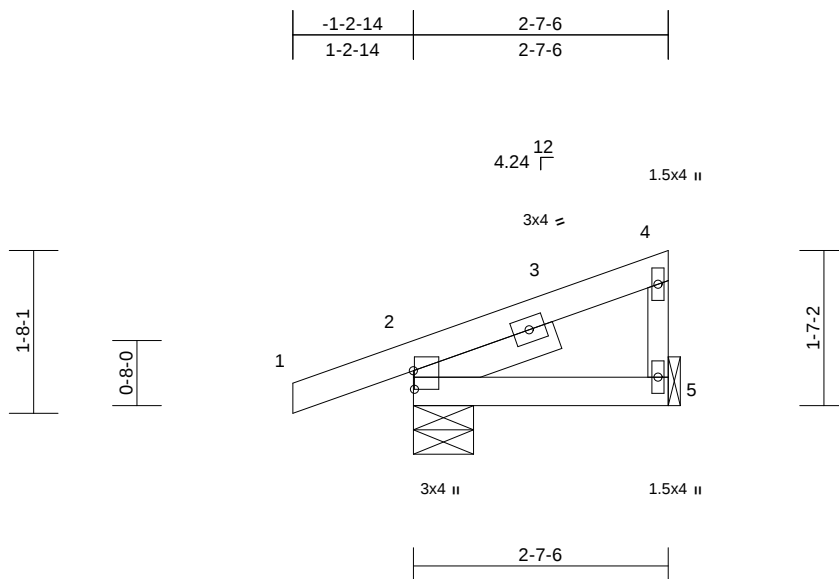
MiTek®

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

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:15:31
ID:n6oBGcHYIf3vci5nhYCRK1zXLVw-RfC?PsB70Hq3NSqPqnL8w3ulTXbGFWRcDdoi734z3C? 09/30/2024 Page: 1

09/30/2024



Scale = 1:23.6

Plate Offsets (X, Y): [2:0-2-5.0-0-2]

[illegible]

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-6-7

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-7-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-7-6, 5= Mechanical
Max Horiz 2=62 (LC 9)
Max Uplift 2=-89 (LC 8), 5=-24 (LC 12)
Max Grav 2=221 (LC 1), 5=92 (LC 1)

FORCES

(Ib) - Maximum Compression/Maximum Tension

TOP CHORD $1-2=0/5$, $2-4=-68/45$, $4-5=-85/113$

BOT CHORD 2-5=-26/28

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) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SP No.2 crushing
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 24 lb uplift at joint
5 and 89 lb uplift at joint 2.
- 6) 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.



September 16, 2024



WARNING – verify design parameters and READ NOTES on this and INCLUDED MITTER REFERENCE PAGE MITT-7475 REV. 3/2/2023 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.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	D1	Hip Girder	1	2	Job Reference (optional)

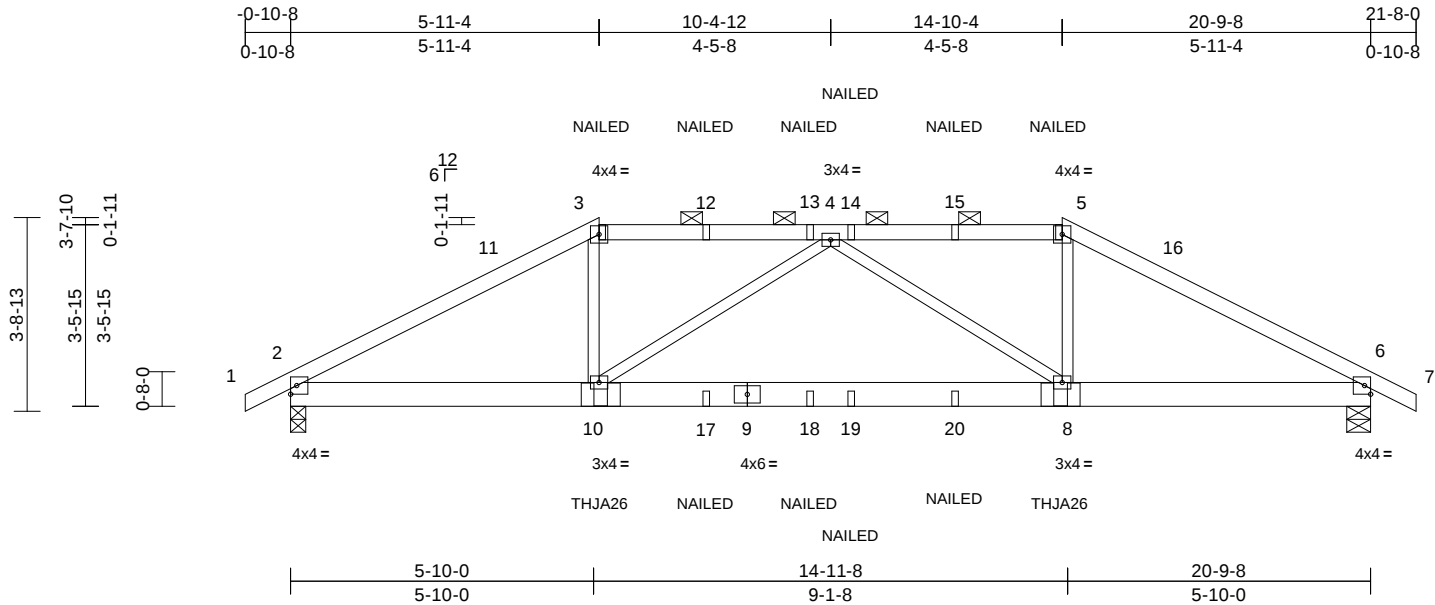
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168191266
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:31 Page: 1

ID:wdh_2W1wzvtV91QHvEt3zzX6Md-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoh7J423Cf

09/30/2024



Scale = 1:44.4

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	0.58	Vert(LL)	-0.07	8-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.16	8-10	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
											Weight: 174 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x3 SPF No.2

BRACING

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

REACTIONS

(size) 2=0-3-8, 6=0-5-8
Max Horiz 2=63 (LC 16)
Max Uplift 2=-560 (LC 12), 6=-565 (LC 13)
Max Grav 2=1877 (LC 1), 6=1891 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/11, 2-3=-3401/1070, 3-4=-2859/984, 4-5=-2835/977, 5-6=-3385/1065, 6-7=0/11
BOT CHORD 2-10=-847/2889, 8-10=-1180/3437, 6-8=-834/2867
WEBS 3-10=-230/1121, 5-8=-233/1134, 4-10=-790/464, 4-8=-815/470

NOTES

- 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: 2x3 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=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 5-11-4, Exterior(2R) 5-11-4 to 13-0-2, Interior (1) 13-0-2 to 14-10-4, Exterior(2E) 14-10-4 to 21-8-0 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 560 lb uplift at joint 2 and 565 lb uplift at joint 6.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 5-11-10 from the left end to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 14-9-14 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20
Concentrated Loads (lb)

Vert: 3=-131 (B), 5=-131 (B), 10=-420 (B), 8=-420 (B), 12=-131 (B), 13=-131 (B), 14=-131 (B), 15=-131 (B), 17=-39 (B), 18=-39 (B), 19=-39 (B), 20=-39 (B)



September 16, 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 the 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.sbcsccomponents.com)

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	D2	Hip	1	1	Job Reference (optional)

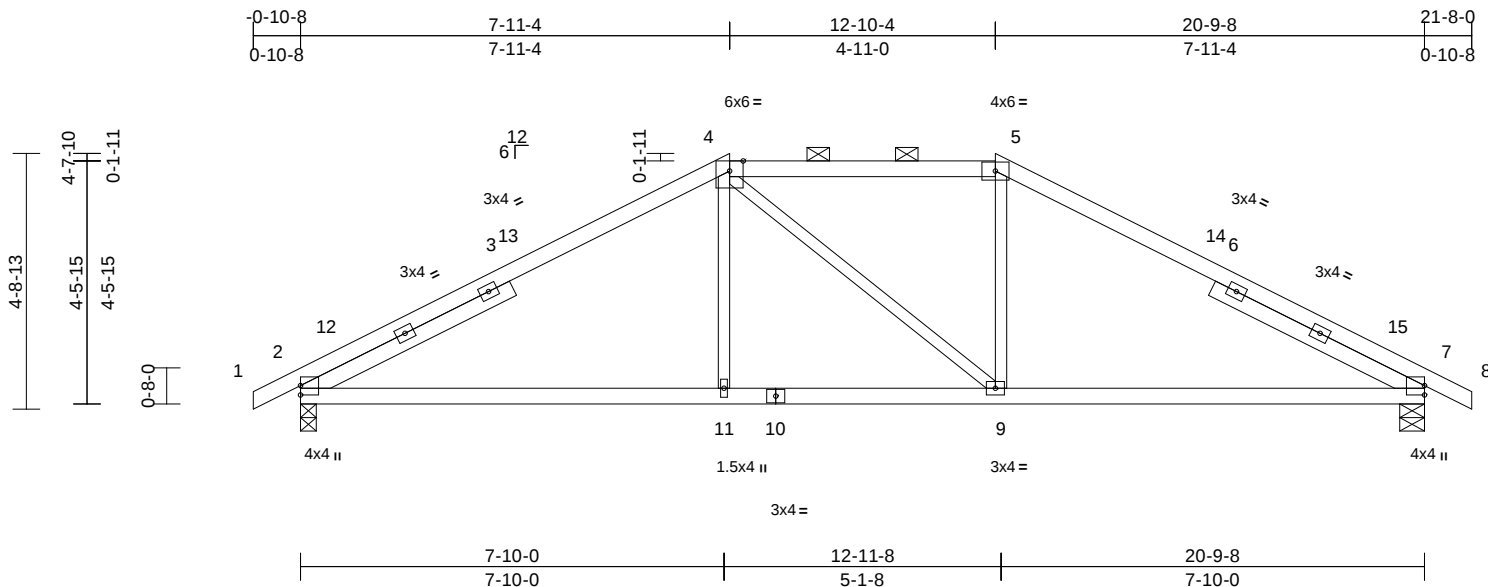
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168191267
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:31 Page: 1

ID:OpFMGs2YkDyk7JccrD96cAzX6Mc-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoh7J423C9f

09/30/2024



Scale = 1:42.6

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	0.63	Vert(LL)	-0.11	2-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.23	2-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 93 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 1650F 1.5E *Except* 4-5:2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-4-2, Right 2x4 SP No.2 -- 4-4-2

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-8-0 oc purlins, except 2-0-0 oc purlins (5-3-7 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 7=0-5-8

Max Horiz 2=82 (LC 12)
Max Uplift 2=-144 (LC 12), 7=-144 (LC 13)
Max Grav 2=997 (LC 1), 7=997 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-4=-1387/295, 4-5=-1124/332, 5-7=-1387/295, 7-8=0/6

BOT CHORD 2-11=-152/1127, 9-11=-154/1124, 7-9=-141/1127

WEBS 4-11=0/267, 4-9=-160/161, 5-9=0/267

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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 7-11-4, Exterior(2E) 7-11-4 to 12-10-4, Exterior(2R) 12-10-4 to 19-11-2, Interior (1) 19-11-2 to 21-8-0 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
- Provide adequate drainage to prevent water ponding.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 144 lb uplift at joint 2 and 144 lb uplift at joint 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.
- 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



September 16, 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.sbcsccomponents.com)

MiTek®

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

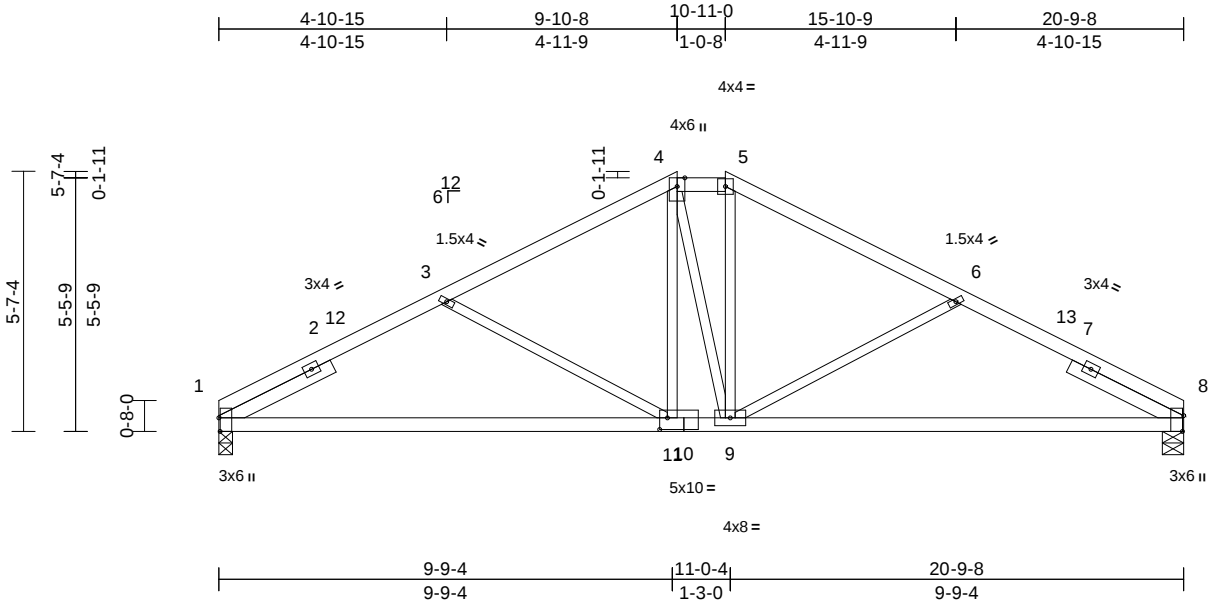
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	D3	Hip	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						168191268
						LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:31 Page: 1

ID:OpFMGs2YkDyk7JccrD96cAzX6Mc-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoh7J423Cf

09/30/2024



Scale = 1:49.7									
Plate Offsets (X, Y): [1:0-3-8,Edge], [8:0-4-1,Edge], [10:0-2-0,0-3-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.22	1-11	>999
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.45	1-11	>553
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.04	8	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					n/a
						PLATES		GRIP	
						MT20		244/190	
						Weight: 95 lb		FT = 20%	

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-8-7, Right 2x4 SP No.2 -- 2-8-7

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-7-14 oc purlins, except 2-0-0 oc purlins (5-8-7 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=0-3-8, 8=0-5-8
Max Horiz 1=-99 (LC 17)
Max Uplift 1=-138 (LC 12), 8=-138 (LC 13)
Max Grav 1=936 (LC 1), 8=936 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1495/354, 3-4=-1168/264, 4-5=-974/272, 5-6=-1170/264, 6-8=-1495/354
BOT CHORD 1-11=-254/1251, 9-11=-63/971, 8-9=-245/1251
WEBS 4-11=-38/271, 4-9=-153/173, 5-9=-59/302, 3-11=-339/231, 6-9=-336/232

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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 138 lb uplift at joint 1 and 138 lb uplift at joint 8.
- 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) 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

- 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) 0-0-0 to 4-9-0, Interior (1) 4-9-0 to 9-10-8, Exterior(2E) 9-10-8 to 10-11-0, Exterior(2R) 10-11-0 to 17-11-14, Interior (1) 17-11-14 to 20-9-8 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) Provide adequate drainage to prevent water ponding.



September 16, 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.sbcsccomponents.com)

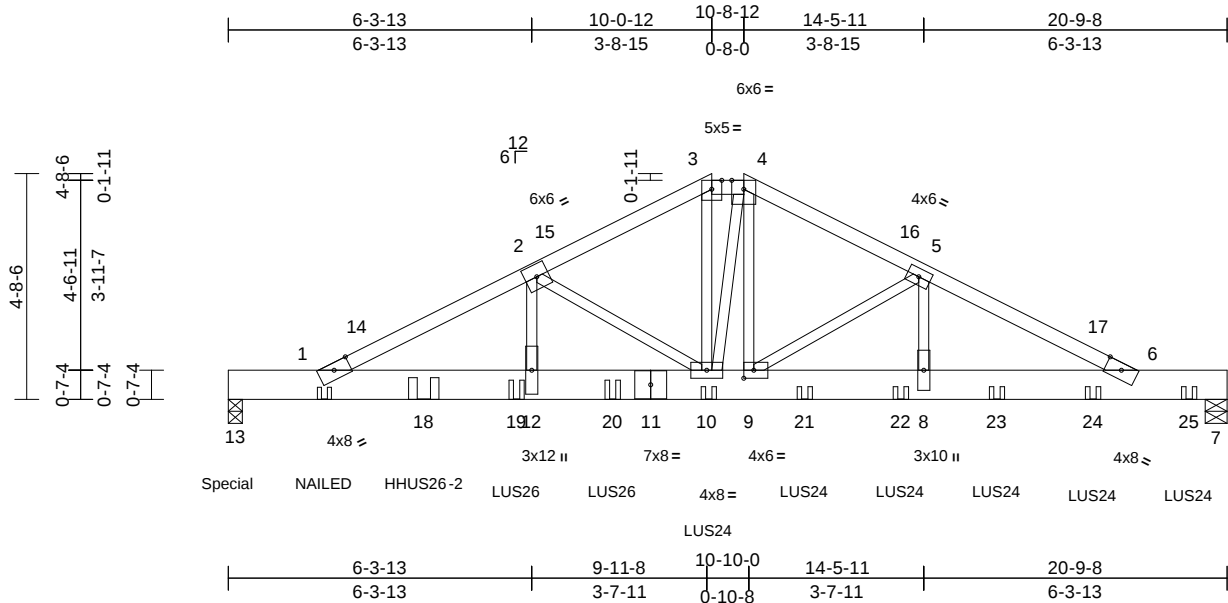
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	D4	Roof Special Girder	1	3	Job Reference (optional)

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:15:31 Page: 1
ID:PP5HR7sCGYwleDdY7JwlbEzX2zy-RfC?PsB70Hq3NSgPqnL8w3uITxBGKwRCDoI7J4Z5Czf

09/30/2024



Scale = 1:48

Plate Offsets (X, Y): [9:0-2-8,0-2-0]

[illegible]

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x3 SPF No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-9-6 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	7=0-5-8, 13=0-3-8
Max Horiz	13=79 (LC 12)
Max Uplift	7=-908 (LC 13), 13=-935 (LC 12)
Max Grav	7=4499 (LC 1), 13=4521 (LC 1)

FORCES

Tension

TOP CHORD 1-2=-11004/2498, 2-3=-6808/1568,
3-4=-6012/1417, 4-5=-6594/1522,
5-6=-10031/2264

BOT CHORD 1-13=-79/77, 1-12=-2166/9699,
10-12=-2166/9699, 9-10=-1217/5871,
8-9=-1949/8839, 6-8=-1949/8839, 6-7=0/0

WEBS 3-10=-729/3141, 4-10=-166/777,
4-9=-378/1579, 2-10=-4310/1076,
2-12=-920/4197, 5-9=-3489/869,
5-8=-728/3432

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 - 2 rows staggered at 0-5-0 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; TCDF=6.0psf; BCDF=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 1-10-8 to 6-10-8, Interior (1) 6-10-8 to 10-0-12, Exterior(2E) 10-0-12 to 10-8-12, Exterior(2R) 10-8-12 to 17-9-10, Interior (1) 17-9-10 to 18-11-0 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) 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 935 lb uplift at joint 13 and 908 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.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 4-0-13 from the left end to connect truss(es) to front face of bottom chord.
- 12) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 6-0-0 from the left end to 8-0-0 to connect truss(es) to front face of bottom chord.

- 13) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 10-0-0 from the left end to 20-0-0 to connect truss(es) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 52 lb down at 0-1-12 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: 1-3=-70, 3-4=-70, 4-6=-70, 1-13=-90, 1-6=-20,
6-7=-90
Concentrated Loads (lb)
Vert: 1=-92 (F), 13=-38 (F), 10=-691 (F), 18=-1621
(F), 19=-804 (F), 20=-804 (F), 21=-686 (F), 22=-666
(F), 23=-663 (F), 24=-646 (F), 25=-472 (F)



September 16, 2024



WARNING – Verify design parameters and READ NOTES on THIS and INCLUDED MEMBER REFERENCE PAGE mmp-7475 rev. 12/2023 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/TP1 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.sbcsccomponents.com)

MiTek®

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

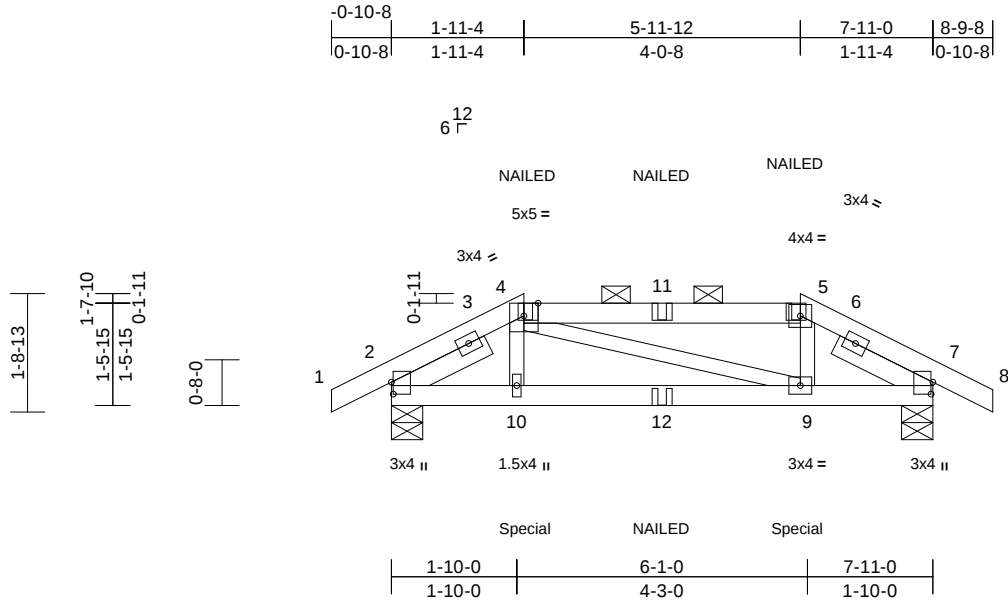
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	E1	Hip Girder	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191270 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:31 Page: 1

ID:gt1i6zL3MtaL5JOYwOGNutzXLVs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi734z3C??

09/30/2024



Scale = 1:33.7									
Plate Offsets (X, Y): [2:0-2-1,0-0-5], [7:0-2-1,0-0-5]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.01 9-10	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.02 9-10	>999	180
BCLL	0.0	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.01 7	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P					
								Weight: 37 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-6-7, Right 2x4 SP No.2 -- 1-6-7

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

REACTIONS (size) 2=0-5-8, 7=0-5-8
Max Horiz 2=-25 (LC 17)
Max Uplift 2=-135 (LC 12), 7=-135 (LC 13)
Max Grav 2=481 (LC 1), 7=481 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-648/297, 4-5=-492/277, 5-7=-648/296, 7-8=0/6
BOT CHORD 2-10=-185/502, 9-10=-186/491, 7-9=-186/503
WEBS 4-10=0/162, 4-9=-21/22, 5-9=0/162

- 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) 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) 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 135 lb uplift at joint 2 and 135 lb uplift at joint 7.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 41 lb up at 1-11-4, and 63 lb down and 41 lb up at 5-11-0 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: 1-4=-70, 4-5=-70, 5-8=-70, 2-7=-20
Concentrated Loads (lb)
Vert: 10=-63 (F), 9=-63 (F)



September 16,2024

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.sbcsccomponents.com)

MiTek®

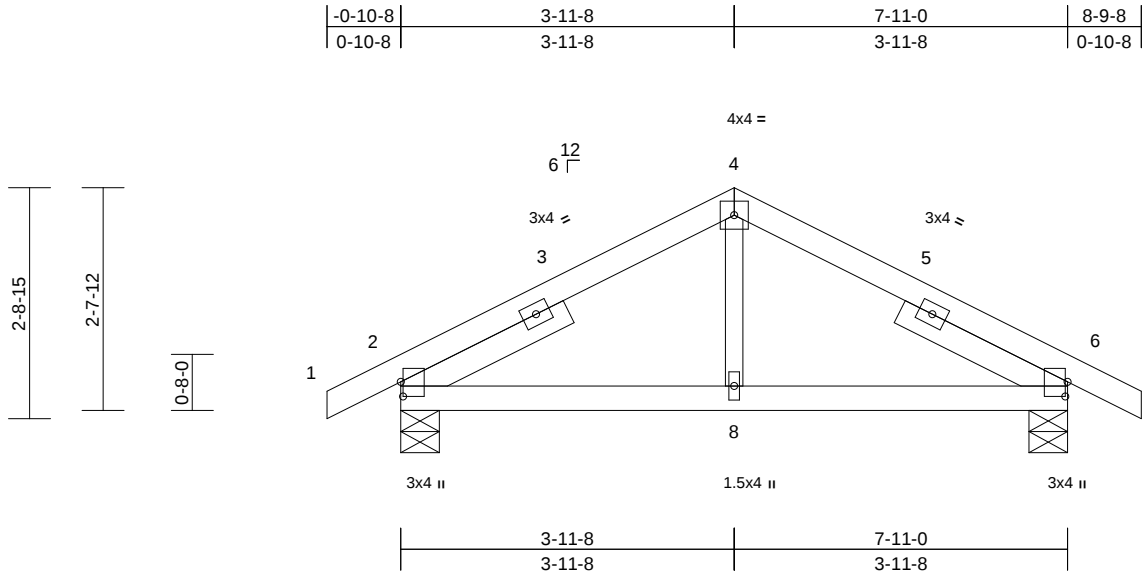
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191271 LEE'S SUMMIT, MISSOURI
P240957-01	E2	Common	1	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:32
ID:n6oBGcHYIf3vci5nhYCRK1zXLVw-RfC?PsB70Hq3NSgPqnL8w3uITXbGhWrCDoi734z3C? Page: 1

09/30/2024



Scale = 1:27.4

Plate Offsets (X, Y): [2:0-2-1,0-0-5], [6:0-2-1,0-0-5]												
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	0.31	Vert(LL)	-0.01	2-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	2-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 36 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-2-2, Right 2x4 SP No.2 -- 2-2-2

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 2 and 76 lb uplift at joint 6.
6) 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

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) 2=0-5-8, 6=0-5-8
Max Horiz 2=-46 (LC 17)
Max Uplift 2=-76 (LC 12), 6=-76 (LC 13)
Max Grav 2=417 (LC 1), 6=418 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-438/190, 4-6=-438/207, 6-7=0/6

BOT CHORD 2-8=-74/307, 6-8=-74/307
WEBS 4-8=0/195

- NOTES**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.



September 16,2024

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.sbcsccomponents.com)

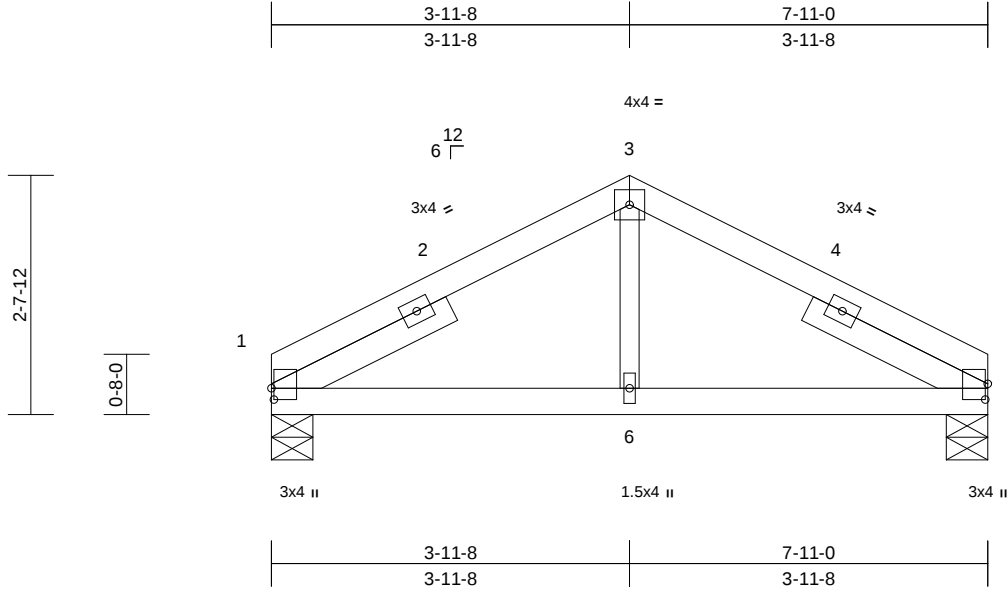
MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191272 LEE'S SUMMIT, MISSOURI
P240957-01	E3	Common	1	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:32
ID:n6oBGcHYIf3vci5nhYCRK1zXLVw-RfC?PsB70Hq3NSgPqnL8w3uITXbGhWrCDoi734z3C?Page:1



Scale = 1:25.5

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

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	0.33	Vert(LL)	-0.01	1-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.02	1-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 33 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-2-2, Right 2x4 SP No.2 -- 2-2-2

6) 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

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=0-5-8, 5=0-5-8
Max Horiz 1=-44 (LC 17)
Max Uplift 1=-53 (LC 12), 5=-53 (LC 13)
Max Grav 1=356 (LC 1), 5=356 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-433/200, 3-5=-432/217
BOT CHORD 1-6=-91/318, 5-6=-91/318
WEBS 3-6=0/195

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 1 and 53 lb uplift at joint 5.



September 16, 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.sbcsccomponents.com)

MiTek®

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

Page: 1

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)

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

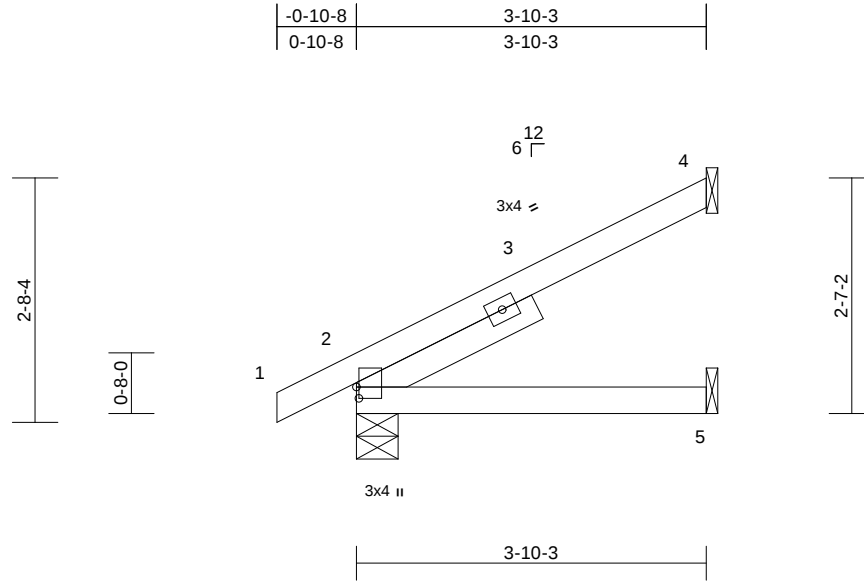
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	J2	Jack-Open	10	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168191274
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:32 Page: 1
ID:rgRwGlm1pCMOXPa79zFcZXLVY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoh74423C#f

09/30/2024



Scale = 1:25.3

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

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	0.31	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	2-5	>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-P							Weight: 17 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-2-1

6) 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

BRACING

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

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=101 (LC 12)
Max Uplift 2=-33 (LC 12), 4=-87 (LC 12)
Max Grav 2=239 (LC 1), 4=125 (LC 1), 5=76 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-95/49
BOT CHORD 2-5=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) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 4 and 33 lb uplift at joint 2.



September 16,2024

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.sbcsccomponents.com)

MiTek®

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

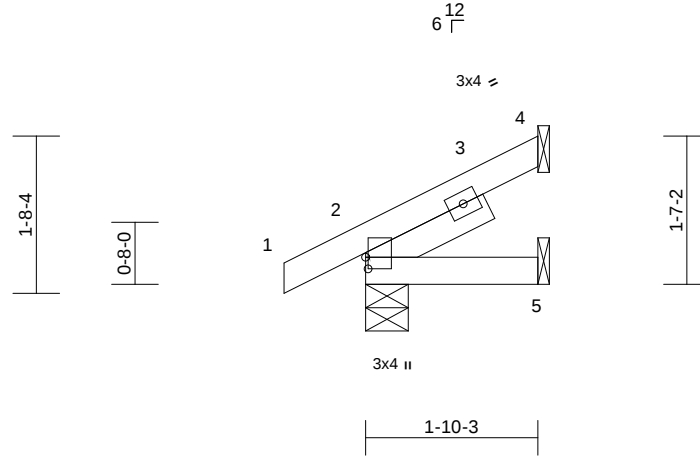
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191275 LEE'S SUMMIT, MISSOURI
P240957-01	J3	Jack-Open	11	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:32 Page: 1

ID:rkgrwGlm1pCMOXPa79zFcZXLVY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoh74423C#f

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



Scale = 1:24.7

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

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	0.06	Vert(LL)	0.00	2-5	>999	240	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-5	>999	180	244/190
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: 10 lb FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-5-2

6) 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

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-10-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=59 (LC 12)
Max Uplift 2=-26 (LC 12), 4=-43 (LC 12)
Max Grav 2=158 (LC 1), 4=50 (LC 1), 5=37 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-4=-53/25
BOT CHORD 2-5=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) Bearings are assumed to be: , Joint 2 SP No.2 crushing
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 26 lb uplift at joint
2 and 43 lb uplift at joint 4.



September 16,2024

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.sbcsccomponents.com)

MiTek®

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

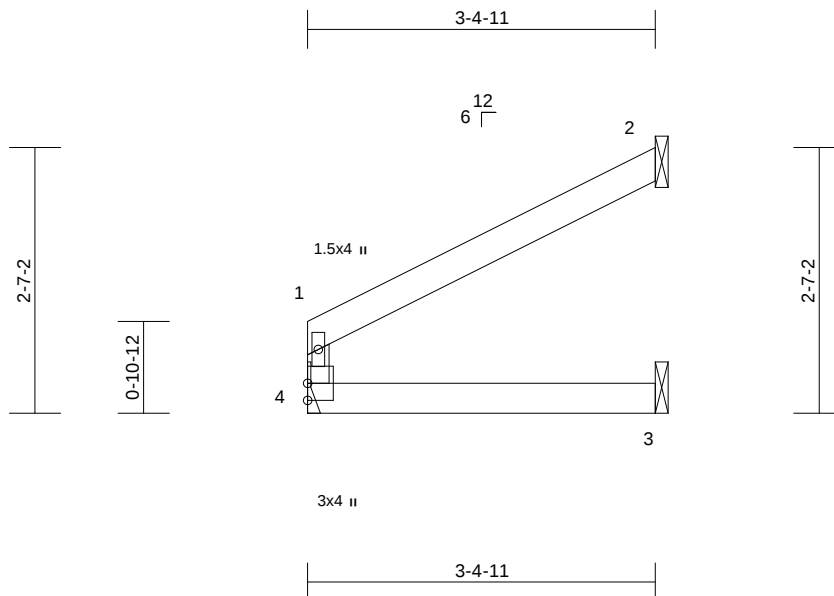
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:15:32 Page: 1

ID:rkpRwGIm1pCMQxPa79zFczXLVv-RfC?PsB70Hg3NSqPqnL8w3uITXbGKWCrCDol74zXC?

Page: 1

09/30/2024



Scale = 1:22.5

[illegible]

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 3-4-11 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2= Mechanical. 3= Mechanical. 4=

	Mechanical
Max Horiz	4=61 (LC 12)
Max Uplift	2=-69 (LC 12), 4=-1 (LC 12)
Max Grav	2=107 (LC 1), 3=63 (LC 3), 4=145 (LC 1)

FORCES

(Ib) - Maximum Compression/Maximum Tension

TOP CHORD 1-4=-119/73, 1-2=-76/40
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 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) Refer to girder(s) for truss to truss connections.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 1 lb uplift at joint 4
and 69 lb uplift at joint 2.
- 6) 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



September 16, 2024



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.tpinstitute.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-USA.com

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:53:32 Page: 1
ID: rkgRwGlm1pCMOXpA79zfCzXLVY-RfC?PsB70Hq3NSgPqnL8w3uITxbGwKrCDnJ425Cxf

Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and labels.

Dimensions:

- Top horizontal dimension: 1-4-11
- Left vertical dimension: 1-7-2
- Bottom vertical dimension: 0-10-12
- Right vertical dimension: 1-7-2
- Bottom horizontal dimension: 1-4-11
- Internal horizontal dimension: 6
- Internal vertical dimension: 12

Labels:

- 1: Top-left corner
- 2: Top-right corner
- 3: Bottom-right corner
- 4: Bottom-left corner

Material/Finish:

- 1.5x4 II (Top horizontal surface)
- 1.5x4 II (Bottom horizontal surface)

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	3-4 >999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	3-4 >999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2 n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 5 lb	FT = 20%

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

TOP CHORD	Structural wood sheathing directly applied or 1-4-11 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Horiz 4=32 (LC 9)
 Max Uplift 2=-32 (LC 12)
 Max Grav 2=43 (LC 1), 3=25 (LC 3), 4=57 (LC 1)

TOP CHORD 1-4=-46/21, 1-2=-35/18
BOT CHORD 3-4=0/0

- 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) Refer to girder(s) for truss to truss connections.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 32 lb uplift at joint
2.
- 6) 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.

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

WARNING – Verify design parameters and READ NOTES ON THIS and INCLUDED MITER REFERENCE PAGE mtf-7475 rev. 12/2023 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.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcscomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	J6	Jack-Open	1	1	Job Reference (optional)

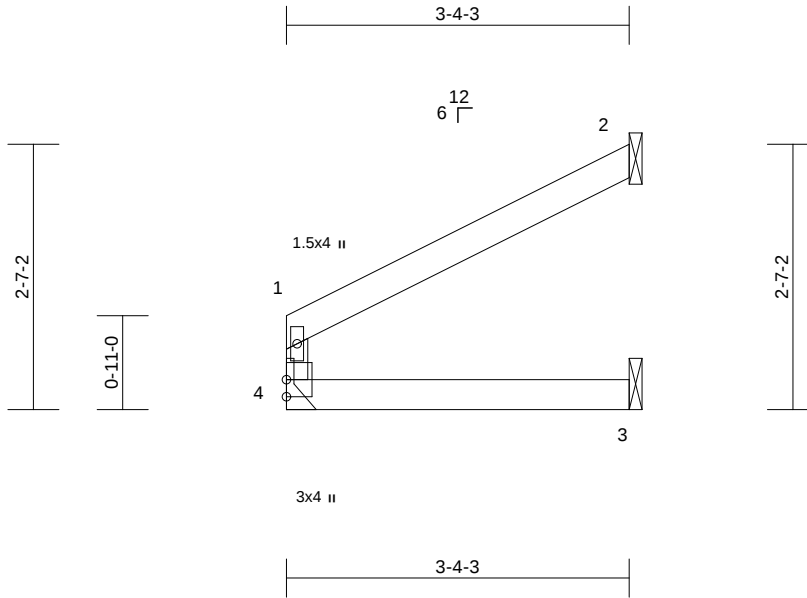
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168191278
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:32 Page: 1

ID:JwEp3GHwXLx2_YWb8qgCoqzXLVx-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDwJ4ZJC?

09/30/2024



Scale = 1:22.5

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	0.22	Vert(LL)	0.01	3-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	3-4	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 11 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 3-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2= Mechanical, 3= Mechanical, 4= Mechanical
Max Horiz 4=60 (LC 12)
Max Uplift 2=-68 (LC 12), 4=-1 (LC 12)
Max Grav 2=105 (LC 1), 3=62 (LC 3), 4=143 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-4=-117/71, 1-2=-76/39
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 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) Refer to girder(s) for truss to truss connections.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 4 and 68 lb uplift at joint 2.
- 6) 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



September 16, 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.sbcsccomponents.com)

MiTek®

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

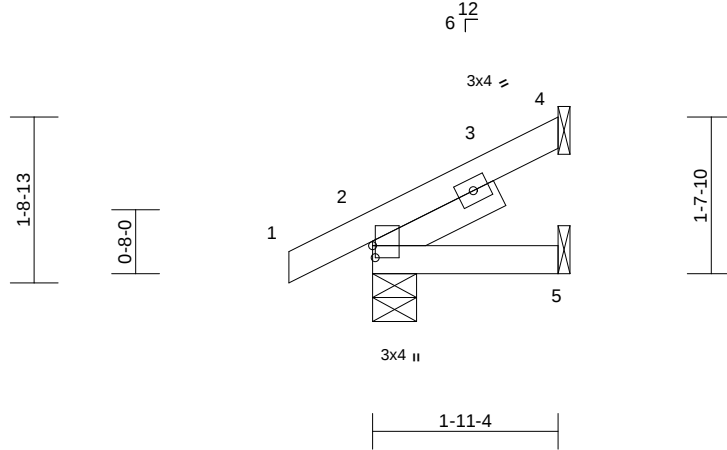
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191279 LEE'S SUMMIT, MISSOURI
P240957-01	J7	Jack-Open	3	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:33 Page: 1

ID:JwEp3GHwXLx2_YWb8qgCoqzXLVx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDwJ4ZJC?

-0-10-8	1-11-4
0-10-8	1-11-4



Scale = 1:24.1

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

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	0.06	Vert(LL)	0.00	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-5	>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: 10 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-5-3

6) 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

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=61 (LC 12)
Max Uplift 2=-26 (LC 12), 4=-45 (LC 12)
Max Grav 2=162 (LC 1), 4=53 (LC 1), 5=39 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-4=-55/27
BOT CHORD 2-5=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) Bearings are assumed to be: , Joint 2 SP No.2 crushing
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 26 lb uplift at joint
2 and 45 lb uplift at joint 4.



September 16,2024

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.sbcsccomponents.com)

MiTek®

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

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

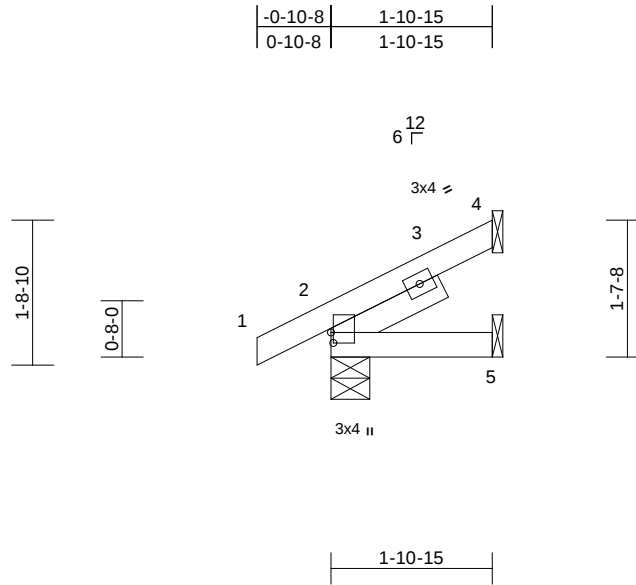
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	J9	Jack-Open	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191281 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:33 Page: 1

ID:XAZEfeNIHSRyIMS4XpS?osysweA-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDot3423Cf

09/30/2024



Scale = 1:27.3															
Plate Offsets (X, Y): [2:0-1-8,0-0-5]															
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		0.06	Vert(LL)	0.00	2-5	>999	240	MT20	244/190
TCDL		10.0	Lumber DOL		1.15	BC		0.04	Vert(CT)	0.00	2-5	>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: 10 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-5-3

6) 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

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=60 (LC 12)
Max Uplift 2=-26 (LC 12), 4=-45 (LC 12)
Max Grav 2=161 (LC 1), 4=52 (LC 1), 5=38 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-54/26
BOT CHORD 2-5=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) Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 2 and 45 lb uplift at joint 4.



September 16,2024

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.sbcsccomponents.com)

MiTek®

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

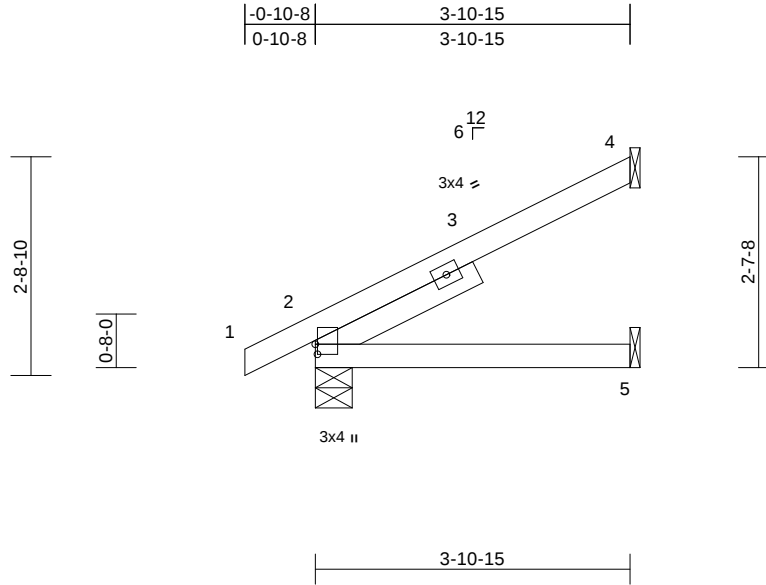
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	J10	Jack-Open	2	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168191282
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:33 Page: 1
ID:trh8XEm6mwfGWXmqIEBJKysweM-RfC?PsB70Hq3NSgPqnL8w3uITXbCKWwCD0rJ42JC?r

09/30/2024



Scale = 1:28.6

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

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	0.32	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	2-5	>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-P							Weight: 17 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 2-2-8

6) 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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-5-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=103 (LC 12)
Max Uplift 2=-33 (LC 12), 4=-88 (LC 12)
Max Grav 2=241 (LC 1), 4=128 (LC 1), 5=77 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-4=-96/49
BOT CHORD 2-5=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) Bearings are assumed to be: , Joint 2 SP No.2 crushing
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 88 lb uplift at joint
4 and 33 lb uplift at joint 2.



September 16,2024

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.sbcsccomponents.com)

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	LG1	Lay-In Gable	1	1	Job Reference (optional)

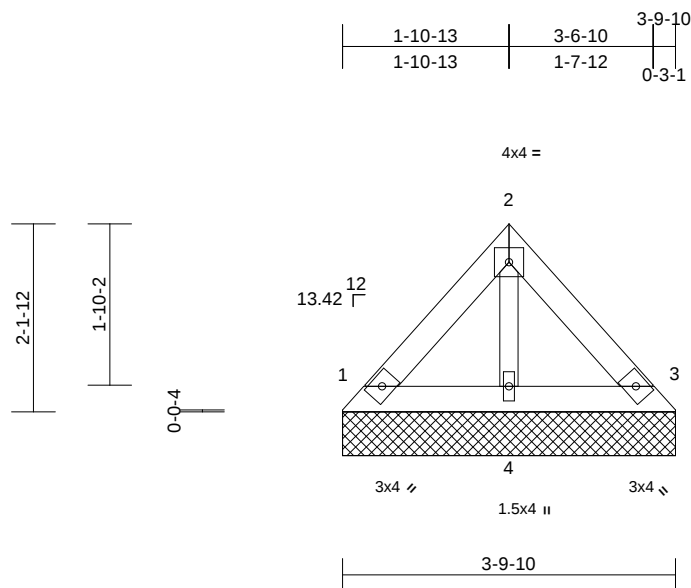
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168191283
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:33 Page: 1

ID:rkgrRwGlm1pCMOxPa79zFczXLVy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoh7423C#f

09/30/2024



Scale = 1:26.3

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)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.01	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=3-9-10, 3=3-9-10, 4=3-9-10
Max Horiz 1=-51 (LC 10)
Max Uplift 1=-27 (LC 13), 3=-23 (LC 13)
Max Grav 1=94 (LC 1), 3=94 (LC 1), 4=99 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-75/38, 2-3=-69/32
BOT CHORD 1-4=-17/38, 3-4=-17/38
WEBS 2-4=-59/17

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 1 and 23 lb uplift at joint 3.
- 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



September 16, 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.sbcsccomponents.com)

MiTek®

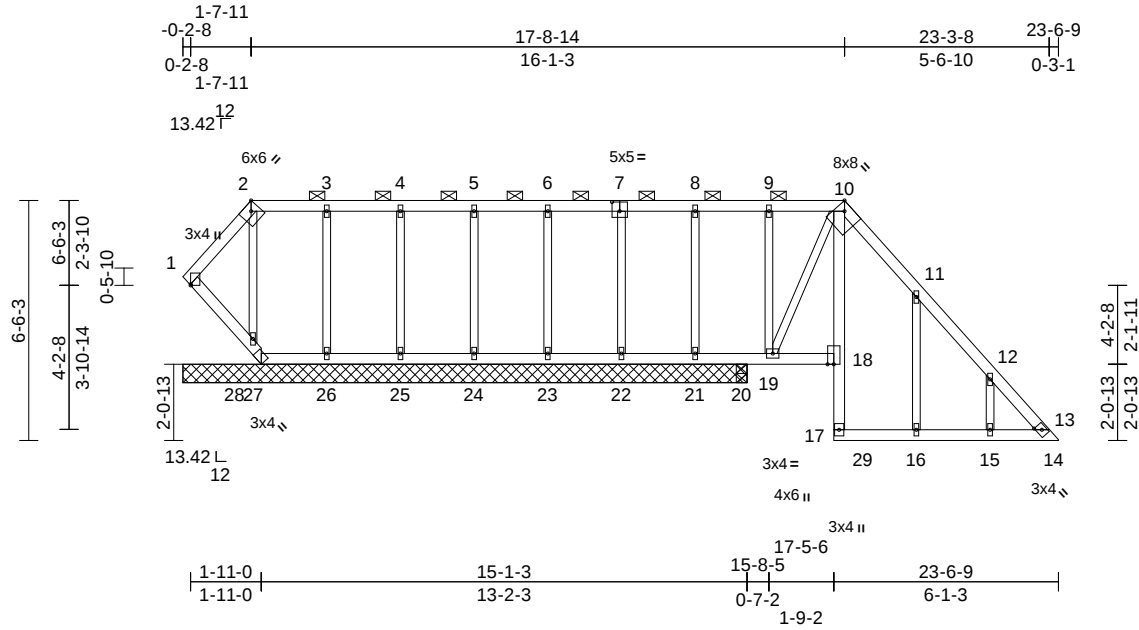
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	LG2	Lay-In Gable	1	1	Job Reference (optional)

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

Run: 8.93 E 8.63 Feb 9 2023 Print: 8.630 E Feb 9 2023 MiTek Industries, Inc. Mon Sep 16 17:08:24 Page: 1
ID:0aJAbtBXAC32eTUFES2Z?LzXLW2-y9L6ITPxILsbSVtB0ZMnd9HMArABChKc8aymgayUSFg

09/30/2024



Scale = 1:62.5

Plate Offsets (X, Y): [2:0-2-10,Edge], [7:0-2-8,0-3-0], [10:0-2-10,Edge], [13:0-2-0,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	0.56	Vert(LL)	0.00	20-21	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	0.00	20-21	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	-0.02	20	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 118 lb FT = 20%											

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 7-10:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2 *Except* 27-18:2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

BOT CHORD 1-28=-1010/772, 27-28=-1073/829, 26-27=-666/509, 25-26=-666/509, 24-25=-666/509, 23-24=-666/509, 22-23=-666/509, 21-22=-667/509, 20-21=-667/509, 19-20=-667/509, 18-19=-313/256, 10-18=-230/276
WEBS 2-28=-1007/473, 10-19=-934/569

11) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
LOAD CASE(S) Standard

BRACING
TOP CHORD Structural wood sheathing directly applied or 7-11-7 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 2-10.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 5-10-6 oc bracing: 1-28 5-8-8 oc bracing: 27-28 9-4-10 oc bracing: 17-18 10-0-0 oc bracing: 13-14.

REACTIONS All bearings 15-3-11. except 20-0-3-8
(lb) - Max Horiz 1=-218 (LC 13)
Max Uplift All uplift 100 (lb) or less at joint(s) 22, 23, 24, 25, 26, 28 except 1=-1647 (LC 26), 20=-134 (LC 13), 21=-160 (LC 1), 27=-426 (LC 13)
Max Grav All reactions 250 (lb) or less at joint (s) 21, 22, 23, 24, 25, 26 except 1=508 (LC 13), 20=1090 (LC 1), 27=850 (LC 26), 28=945 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-550/1164, 2-3=-281/668, 3-4=-280/666, 4-5=-280/666, 5-6=-280/666, 6-7=-280/666, 7-8=-280/667, 8-9=-280/667, 9-10=-280/668, 10-11=-156/477, 11-12=-135/326, 12-13=-224/302

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) 0-4-11 to 1-10-3, Exterior(2R) 1-10-3 to 8-11-1, Interior (1) 8-11-1 to 17-11-6, Exterior(2E) 17-11-6 to 23-5-6 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
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) Provide adequate drainage to prevent water ponding.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 26, 25, 24, 23, 22 except (jt=lb) 1=1646, 27=425, 21=160, 20=134.
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.



September 16, 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.sbcsccomponents.com)

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

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	LG3	Lay-In Gable	1	1	Job Reference (optional)

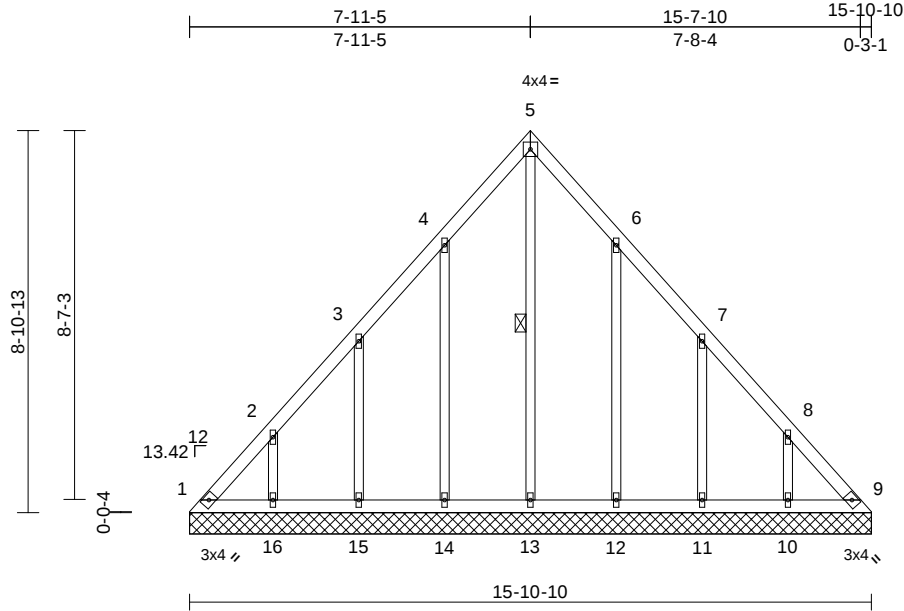
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:33 Page: 1

ID: rkgRrwGlm1pCMOXPa79zFcZXLVY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDof74423C#f

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168191285
LEE'S SUMMIT, MISSOURI

09/30/2024



Scale = 1:53.7

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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.01	9	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 83 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.
WEBS	1 Row at midpt 5-13

REACTIONS (size)	1=15-10-10, 9=15-10-10, 10=15-10-10, 11=15-10-10, 12=15-10-10, 13=15-10-10, 14=15-10-10, 15=15-10-10, 16=15-10-10
Max Horiz	1=-246 (LC 8)
Max Uplift	1=-110 (LC 10), 9=-76 (LC 11), 10=-148 (LC 13), 11=-152 (LC 13), 12=-146 (LC 13), 14=-148 (LC 12), 15=-151 (LC 12), 16=-148 (LC 12)
Max Grav	1=243 (LC 12), 9=221 (LC 13), 10=213 (LC 20), 11=211 (LC 20), 12=219 (LC 20), 13=186 (LC 13), 14=222 (LC 19), 15=210 (LC 19), 16=213 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-344/216, 2-3=-206/153, 3-4=-151/105, 4-5=-167/162, 5-6=-167/154, 6-7=-115/58, 7-8=-176/108, 8-9=-314/216
BOT CHORD	1-16=-161/239, 15-16=-162/239, 14-15=-162/239, 13-14=-162/239, 12-13=-162/239, 11-12=-162/239, 10-11=-162/239, 9-10=-161/238
WEBS	5-13=-162/115, 4-14=-196/172, 3-15=-205/177, 2-16=-194/165, 6-12=-196/170, 7-11=-205/178, 8-10=-194/165

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) 0-3-15 to 5-3-15, Interior (1) 5-3-15 to 7-11-9, Exterior(2R) 7-11-9 to 12-11-9, Interior (1) 12-11-9 to 15-7-3 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
- 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 1, 76 lb uplift at joint 9, 148 lb uplift at joint 14, 151 lb uplift at joint 15, 148 lb uplift at joint 16, 146 lb uplift at joint 12, 152 lb uplift at joint 11 and 148 lb uplift at joint 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



September 16, 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.sbcsccomponents.com)

MiTek®

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

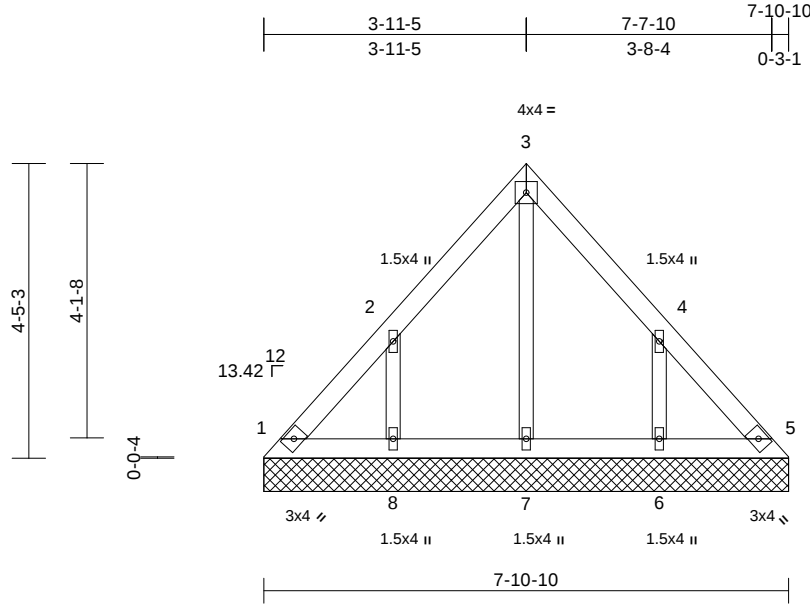
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	LG5	Lay-In Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						168191286
						LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:33 Page: 1

ID:rkG RrwGlm1pCMOXPa79zFcZXLVy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDof3423C#f

09/30/2024



Scale = 1:34.6

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	0.08	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	5	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P						Weight: 34 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=7-10-10, 5=7-10-10, 6=7-10-10, 7=7-10-10, 8=7-10-10
	Max Horiz	1=-117 (LC 8)
	Max Uplift	1=-27 (LC 8), 5=-11 (LC 9), 6=-169 (LC 13), 8=-169 (LC 12)
	Max Grav	1=108 (LC 21), 5=100 (LC 22), 6=234 (LC 20), 7=113 (LC 22), 8=234 (LC 19)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-133/95, 2-3=-106/80, 3-4=-98/75, 4-5=-119/84
BOT CHORD	1-8=-70/105, 7-8=-71/106, 6-7=-71/106, 5-6=-70/105
WEBS	2-8=-244/193, 3-7=-73/23, 4-6=-244/193

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 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) 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 27 lb uplift at joint 1, 11 lb uplift at joint 5, 169 lb uplift at joint 8 and 169 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.

LOAD CASE(S) Standard



September 16, 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.sbcsccomponents.com)

MiTek®

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

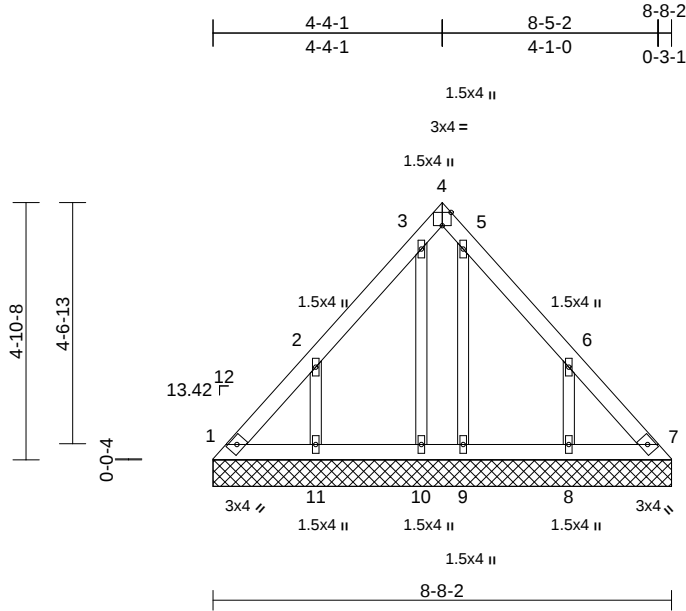
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	LG6	Lay-In Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						168191287
						LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:33 Page: 1

ID:dHmLa7yXcmxsA474NX0EHUzX6Mk-RfC?PsB70Hq3NSgPqnL8w3uITXfGKwRCDm7J4ZJC?

09/30/2024



Scale = 1:43.6

Plate Offsets (X, Y): [4:Edge,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	0.10	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	7	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 40 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 6-0-0 oc bracing.

REACTIONS	(size)	1=8-8-2, 7=8-8-2, 8=8-8-2, 9=8-8-2, 10=8-8-2, 11=8-8-2
	Max Horiz	1=-130 (LC 8)
	Max Uplift	1=-43 (LC 10), 7=-34 (LC 11), 8=-172 (LC 13), 9=-59 (LC 13), 10=-67 (LC 12), 11=-170 (LC 12)
	Max Grav	1=155 (LC 12), 7=149 (LC 13), 8=230 (LC 20), 9=138 (LC 20), 10=147 (LC 19), 11=228 (LC 19)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-227/206, 2-3=-76/75, 3-4=-21/18, 4-5=-21/19, 5-6=-69/64, 6-7=-218/206
BOT CHORD	1-11=-151/171, 10-11=-152/171, 9-10=-152/171, 8-9=-152/171, 7-8=-151/171
WEBS	2-11=-243/195, 3-10=-121/83, 5-9=-112/75, 6-8=-243/197

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) 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) 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 43 lb uplift at joint 1, 34 lb uplift at joint 7, 170 lb uplift at joint 11, 67 lb uplift at joint 10, 59 lb uplift at joint 9 and 172 lb uplift at joint 8.
- 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



September 16, 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 - HT Lot 82
P240957-01	LG8	Lay-In Gable	1	1	Job Reference (optional)

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:34 Page: 1

ID: rkgRrwGlm1pCMOXPa79zFcZXLVy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDof7423C#f

RELEASE FOR CONSTRUCTION

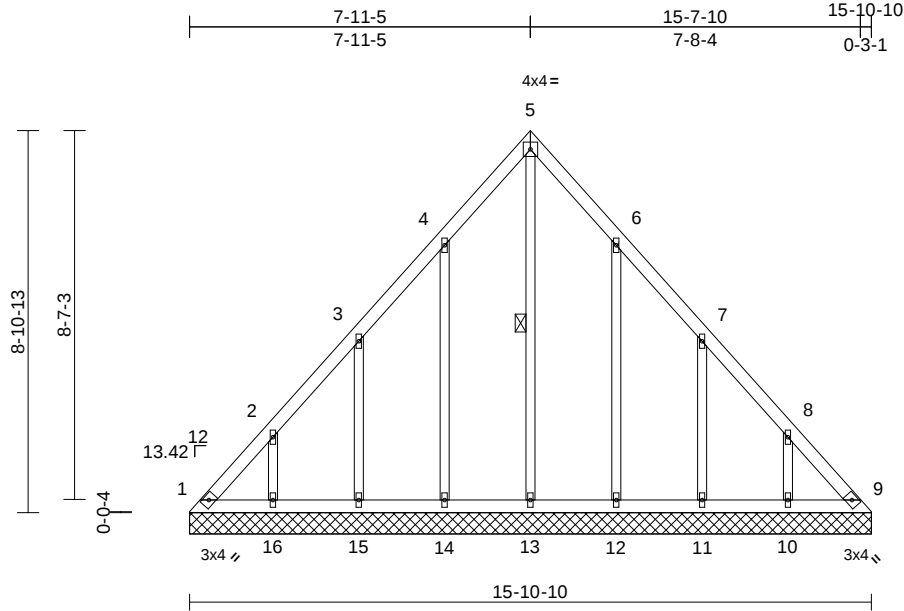
AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

168191288

LEE'S SUMMIT, MISSOURI

09/30/2024



Scale = 1:53.7

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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.01	9	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 83 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.
WEBS	1 Row at midpt 5-13

REACTIONS (size)	1=15-10-10, 9=15-10-10, 10=15-10-10, 11=15-10-10, 12=15-10-10, 13=15-10-10, 14=15-10-10, 15=15-10-10, 16=15-10-10
Max Horiz	1=-246 (LC 8)
Max Uplift	1=-110 (LC 10), 9=-76 (LC 11), 10=-148 (LC 13), 11=-152 (LC 13), 12=-146 (LC 13), 14=-148 (LC 12), 15=-151 (LC 12), 16=-148 (LC 12)
Max Grav	1=243 (LC 12), 9=221 (LC 13), 10=213 (LC 20), 11=211 (LC 20), 12=219 (LC 20), 13=186 (LC 13), 14=222 (LC 19), 15=210 (LC 19), 16=213 (LC 19)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-344/216, 2-3=-206/153, 3-4=-151/105, 4-5=-167/162, 5-6=-167/154, 6-7=-115/58, 7-8=-176/108, 8-9=-314/216
BOT CHORD	1-16=-161/239, 15-16=-162/239, 14-15=-162/239, 13-14=-162/239, 12-13=-162/239, 11-12=-162/239, 10-11=-162/239, 9-10=-161/238
WEBS	5-13=-162/115, 4-14=-196/172, 3-15=-205/177, 2-16=-194/165, 6-12=-196/170, 7-11=-205/178, 8-10=-194/165

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) 0-3-15 to 5-3-15, Interior (1) 5-3-15 to 7-11-9, Exterior(2R) 7-11-9 to 12-11-9, Interior (1) 12-11-9 to 15-7-3 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
- 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 1, 76 lb uplift at joint 9, 148 lb uplift at joint 14, 151 lb uplift at joint 15, 148 lb uplift at joint 16, 146 lb uplift at joint 12, 152 lb uplift at joint 11 and 148 lb uplift at joint 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



September 16, 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.sbcsccomponents.com)

MiTek®

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

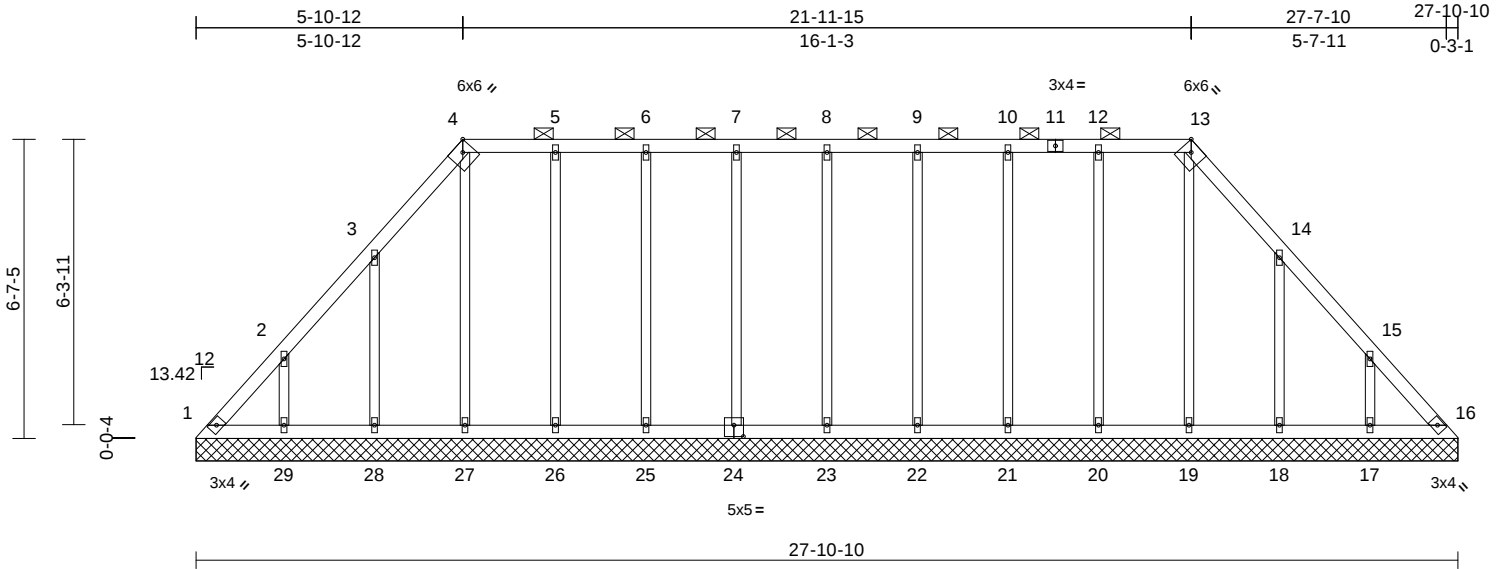
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	LG9	Lay-In Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191289 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:34 Page: 1

ID:AhyX61BIRcw5FD9yFQR5zX2CT-RfC?PsB70Hq3NSgPqnL8w3uITXGCKWrcDn7J42sC9f

09/30/2024



Scale = 1:50.9									
Plate Offsets (X, Y): [4:0-2-10,Edge], [13:0-2-10,Edge], [24:0-2-8,0-3-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horiz(TL)	0.01	16	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
PLATES MT20 GRIP 244/190									
Weight: 144 lb FT = 20%									

LUMBER		TOP CHORD		1-2=-225/175, 2-3=-148/122, 3-4=-143/159, 4-5=-118/127, 5-6=-118/128, 6-7=-118/128, 7-8=-119/128, 8-9=-119/128, 9-10=-119/128, 10-12=-119/128, 12-13=-119/128, 13-14=-144/133, 14-15=-94/50, 15-16=-177/106	7) Gable studs spaced at 2-0-0 oc.
TOP CHORD	2x4 SP No.2	BOT CHORD		1-29=-86/148, 28-29=-87/148, 27-28=-87/148, 26-27=-87/148, 25-26=-87/148, 23-25=-87/148, 22-23=-86/147, 21-22=-86/147, 20-21=-86/147, 19-20=-86/147, 18-19=-86/148, 17-18=-86/147, 16-17=-85/147	8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
BOT CHORD	2x4 SP No.2	WEBS		2-29=-182/166, 3-28=-194/182, 4-27=-125/56, 5-26=-151/66, 6-25=-139/64, 7-24=-140/63, 8-23=-140/63, 9-22=-140/63, 10-21=-139/64, 12-20=-151/70, 13-19=-104/4, 14-18=-194/181, 15-17=-182/167	9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
OTHERS	2x3 SPF No.2	NOTES		1) Unbalanced roof live loads have been considered for this design.	10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 1, 32 lb uplift at joint 16, 149 lb uplift at joint 29, 156 lb uplift at joint 28, 32 lb uplift at joint 27, 42 lb uplift at joint 26, 40 lb uplift at joint 25, 39 lb uplift at joint 24, 39 lb uplift at joint 23, 39 lb uplift at joint 22, 40 lb uplift at joint 21, 46 lb uplift at joint 20, 155 lb uplift at joint 18 and 150 lb uplift at joint 17.
BRACING		REACTIONS (size)		1=27-10-10, 16=27-10-10, 17=27-10-10, 18=27-10-10, 19=27-10-10, 20=27-10-10, 21=27-10-10, 22=27-10-10, 23=27-10-10, 24=27-10-10, 25=27-10-10, 26=27-10-10, 27=27-10-10, 28=27-10-10, 29=27-10-10	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.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-13.	Max Horiz		1=-181 (LC 8)	12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	Max Uplift		1=-86 (LC 10), 16=-32 (LC 11), 17=-150 (LC 13), 18=-155 (LC 13), 20=-46 (LC 9), 21=-40 (LC 8), 22=-39 (LC 9), 23=-39 (LC 9), 24=-39 (LC 8), 25=-40 (LC 8), 26=-42 (LC 8), 27=-32 (LC 9), 28=-156 (LC 12), 29=-149 (LC 12)	LOAD CASE(S) Standard
RECTIONS (size)		Max Grav		1=154 (LC 12), 16=129 (LC 22), 17=212 (LC 20), 18=220 (LC 20), 19=144 (LC 26), 20=191 (LC 25), 21=179 (LC 1), 22=180 (LC 26), 23=181 (LC 25), 24=180 (LC 26), 25=178 (LC 1), 26=191 (LC 26), 27=165 (LC 22), 28=221 (LC 19), 29=211 (LC 19)	
FORCES		(lb) - Maximum Compression/Maximum Tension			



September 16,2024

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.sbcsccomponents.com)

MiTek®

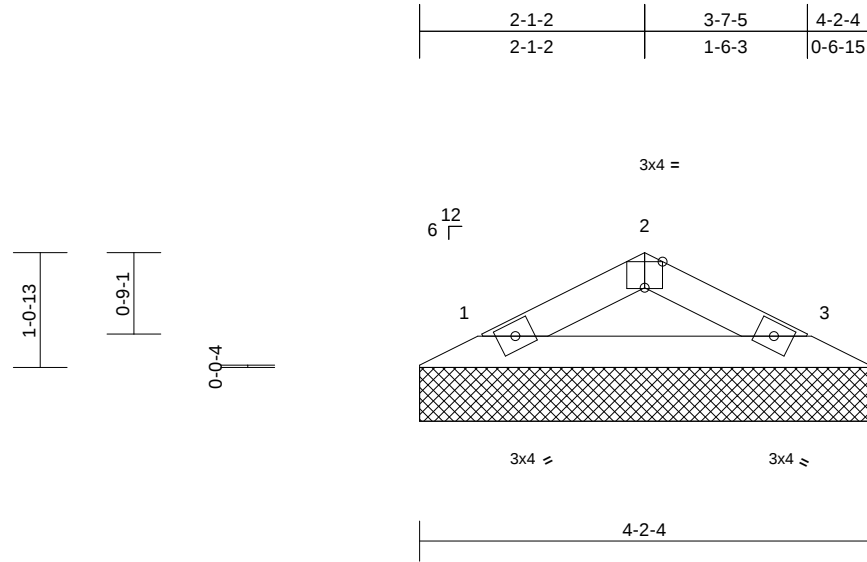
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	V1	Valley	1	1	Job Reference (optional)

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:56:34 Page: 1
ID:FIMaTxlA3yBmEsg_FFjgtzXLVv-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKVCrDci7J42JC?i

09/30/2024



Scale = 1:21.4

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	0.07	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	0.00	Horiz(TL)	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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-3-4 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=4-2-4, 3=4-2-4

Max Horiz 1=14 (LC 12)

Max Uplift 1=-21 (LC 12), 3=-21 (LC 13)

Max Grav 1=136 (LC 1), 3=136 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-136/121, 2-3=-136/129

BOT CHORD 1-3=-83/105

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
 Vasd=91mph; TCFL=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) 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 21 lb uplift at joint 1 and 21 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



September 16, 2024



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 Components Association (www.sbcsccomponents.com)

MiTek®

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

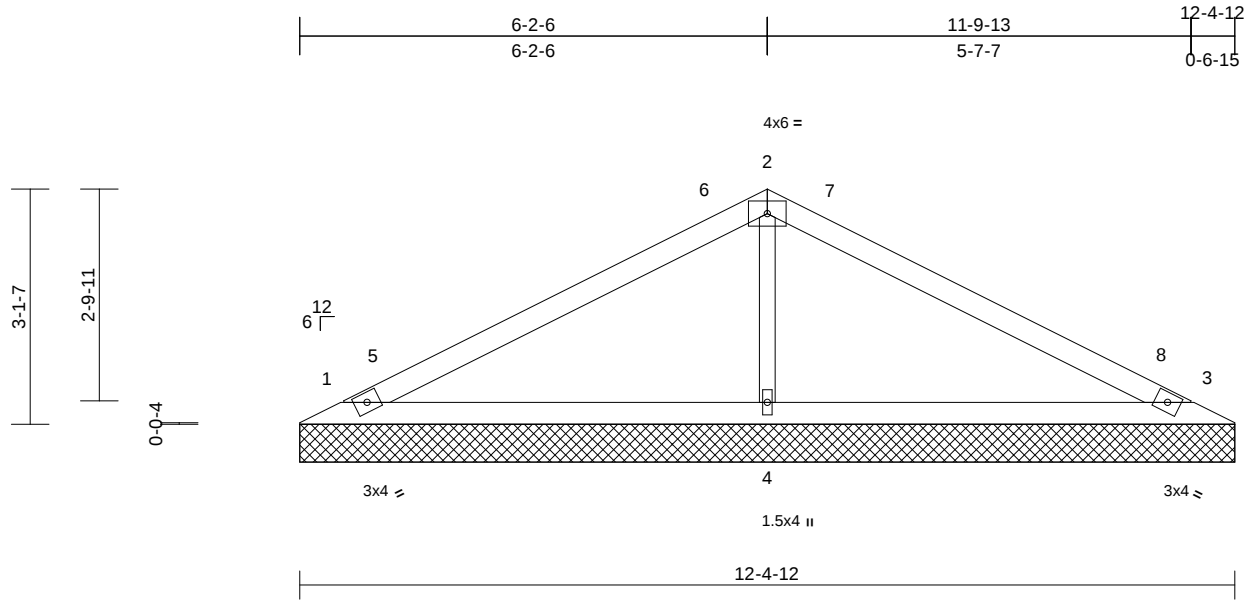
Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	V2	Valley	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 168191291 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:34 Page: 1

ID:yoaAy6sOvRt9cBOqYQpWYKzX2qv-RfC?PsB70Hq3NSgPqnL8w3uITXbCKWwCD0rJ42JC?r

09/30/2024



Scale = 1:30.6

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	0.54	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.31	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	3	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 39 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=12-4-12, 3=12-4-12, 4=12-4-12
	Max Horiz	1=53 (LC 16)
	Max Uplift	1=-56 (LC 12), 3=-66 (LC 13), 4=-42 (LC 12)
	Max Grav	1=238 (LC 25), 3=238 (LC 26), 4=536 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-145/101, 2-3=-145/92
BOT CHORD	1-4=-4/61, 3-4=-4/61
WEBS	2-4=-366/228

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 6-2-14, Exterior(2R) 6-2-14 to 11-2-14, Interior (1) 11-2-14 to 11-10-3 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 1, 66 lb uplift at joint 3 and 42 lb uplift at joint 4.
- 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



September 16, 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.sbcsccomponents.com)

MiTek®

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

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82
P240957-01	V3	Valley	1	1	Job Reference (optional)

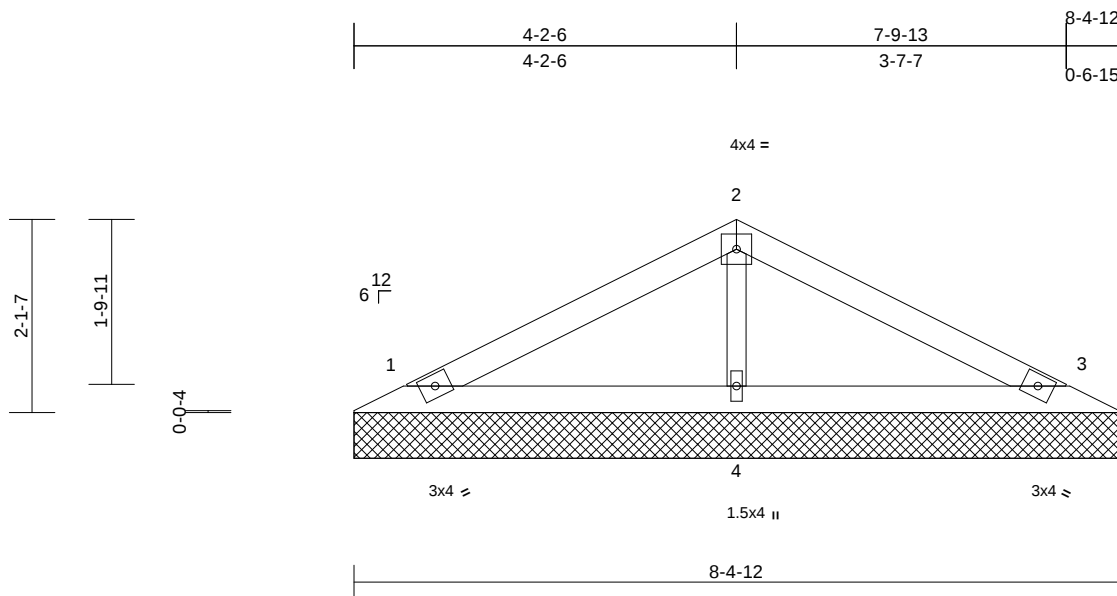
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
168191292
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:34 Page: 1

ID:yoaAy6sOvRt9cBQyQpWYKzX2qv-RfC?PsB70Hq3NSgPqnL8w3uITxbCKWrcDofJ422C?f

09/30/2024



Scale = 1:25.3

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	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	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=8-4-12, 3=8-4-12, 4=8-4-12
Max Horiz 1=-34 (LC 13)
Max Uplift 1=-44 (LC 12), 3=-50 (LC 13), 4=-11 (LC 12)
Max Grav 1=170 (LC 1), 3=170 (LC 1), 4=311 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-82/60, 2-3=-82/68
BOT CHORD 1-4=-1/37, 3-4=-1/37
WEBS 2-4=-220/171

NOTES

- Unbalanced roof live loads have been considered for this design.
- 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1, 50 lb uplift at joint 3 and 11 lb uplift at joint 4.
- 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

September 16, 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.sbcsccomponents.com)

MiTek®

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

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:53:34 Page: 1
ID: yoaAy6sOvRt9cBoQyQpWYKxZ2qv-RfC?PsbB70hq3NSgPqnL8w3uITxbGKWrCDn7J4zCG?i

09/30/2024

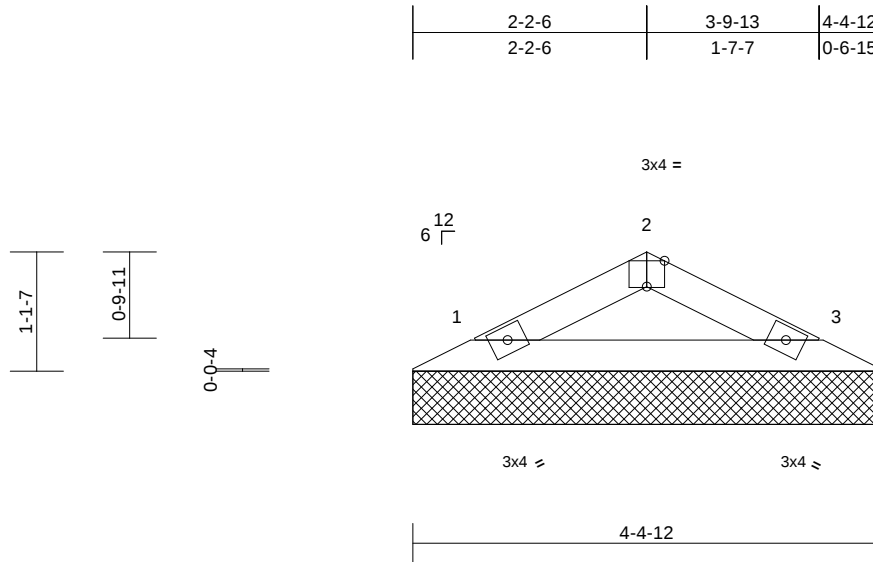


Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	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: 12 lb	FT = 20%

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

TOP CHORD	Structural wood sheathing directly applied or 4-5-12 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Horiz 1=-15 (LC 13)
Max Uplift 1=-22 (LC 12), 3=-22 (LC 13)
Max Grav 1=145 (LC 1), 3=145 (LC 1)

TOP CHORD 1-2=-146/130, 2-3=-146/138
BOT CHORD 1-3=-89/112

- 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) 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 22 lb uplift at joint 1 and 22 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



September 16, 2024



WARNING – Verify design parameters and READ NOTES ON THIS and INCLUDED WITHIN REFERENCE PAGE MIP-7473 (rev. 12/2023) 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.tpiinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Components Association (www.sbcsccomponents.com).

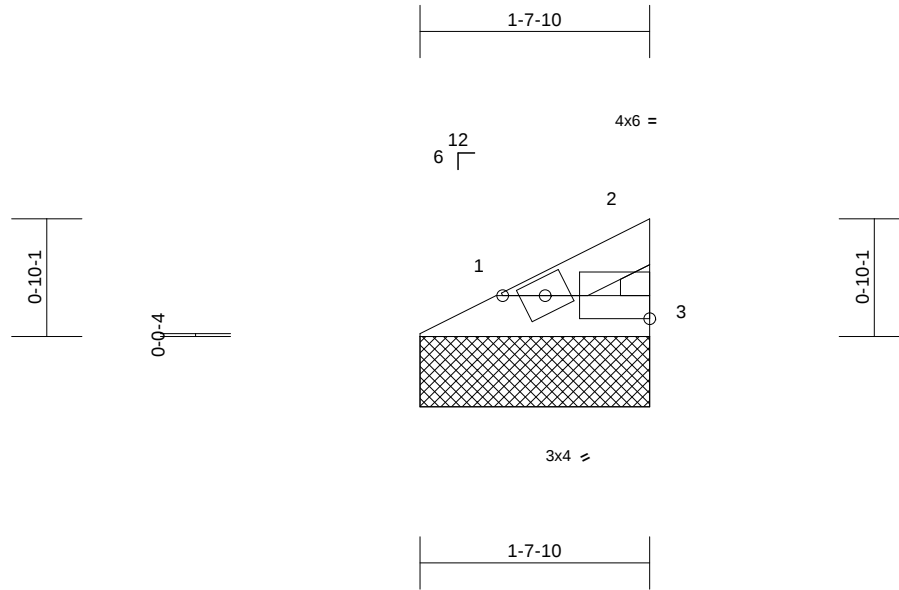
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - HT Lot 82	RELEASE FOR CONSTRUCTION
P240957-01	V5	Valley	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						168191294
						LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 15:45:34 Page: 1
ID:mtjM?L5uvaRz812eyGwNuytFbV-RfC?PsB70Hq3NSgPqnL8w3ulTXbGK?VrCDoi7J42JC41

09/30/2024



Scale = 1:16.4

Plate Offsets (X, Y): [2:Edge,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	0.02	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(TL)	n/a	-	n/a	999	244/190
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: 4 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 1-8-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=1-7-10, 3=1-7-10
Max Horiz 1=21 (LC 9)
Max Uplift 1=-7 (LC 12), 3=-12 (LC 12)
Max Grav 1=42 (LC 1), 3=42 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-30/20, 2-3=-33/43
BOT CHORD 1-3=-10/11

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) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.

- 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 7 lb uplift at joint 1
and 12 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



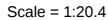
September 16, 2024

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.sbcsccomponents.com)

MiTek®

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



LUMBER

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.

BRACING

REACTIONS (size) 1=3-7-10, 3=3-7-10
 Max Horiz 1=66 (LC 9)
 Max Uplift 1=-21 (LC 12), 3=-37 (LC 12)
 Max Grav 1=132 (LC 1), 3=132 (LC 1)

FORCES

TOP CHORD 1-2=-93/63, 2-3=-103/133
BOT CHORD 1-3=-30/33

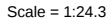
NOTES

-

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

WARNING – Verify design parameters and READ NOTES ON THIS and INCLUDED MITER REFERENCE PAGE mtf-7475 rev. 12/2023 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.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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



LUMBER

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

BRACING

REACTIONS (size) 1=5-7-10, 3=5-7-10

Max Horiz 1=110 (LC 9)
Max Uplift 1=-35 (LC 12), 3=-62 (LC 12)
Max Grav 1=222 (LC 1), 3=222 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-154/104, 2-3=-173/219
BOT CHORD 1-3=-51/55

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" o.c.
- 5) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 35 lb uplift at joint
1 and 62 lb uplift at joint 3.



WARNING – Verify design parameters and READ NOTES ON THIS and INCLUDED MITER REFERENCE PAGE mtf-7475 rev. 12/2023 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/TP1 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)

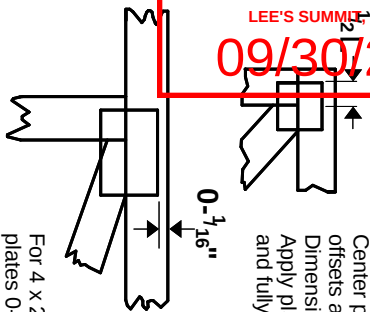
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

09/30/2024

24 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- $\frac{7}{16}$ " 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

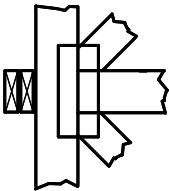
4 X 4

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

LATERAL BRACING LOCATION



BEARING



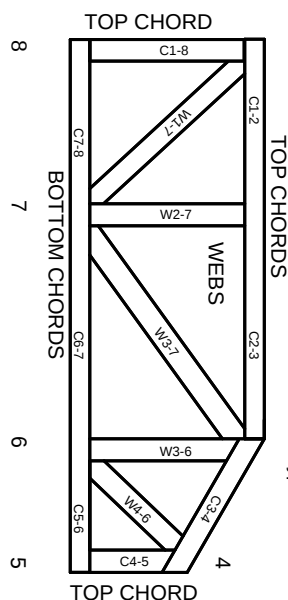
Industry Standards:

ANSI/FP1: 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

6-4-8 dimensions shown in ft-in-sixteenths
(Drawings not to scale)

1
2
3
typ.



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 ANS/TPP 1 section 6.3 These truss designs rely on lumber values established by others.

© 2023 MITek® All Rights Reserved



MITek Engineering Reference Sheet: MI-7473 rev. 1/2/2023

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 BCSP.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor 1 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 ware at joint locations are regulated by ANSI/TP1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
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/TP1.1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.