MiTek®

RE: P240070-01 - Roof - HR Lot 201

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

Site Information:

Project Customer: Clayton Properties Project Name: Winfield - Farmhouse
Lot/Block: 201 Subdivision: Hawthorne Ridge
Model:
Address: 1617 SW Buckthorn 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 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 115 mph Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Roof Load: 45.0 psf Floor Load: N/A psf

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

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I63374210	A01	2/2/24	35	I63374244	V011	2/2/24
2	I63374211	A02	2/2/24	36	I63374245	V012	2/2/24
3	I63374212	A03	2/2/24	37	I63374246	V013	2/2/24
4	I63374213	A04	2/2/24				
5	I63374214	B01	2/2/24				
6	I63374215	C01	2/2/24				
7	I63374216	C02	2/2/24				
8	I63374217	C03	2/2/24				
9	I63374218	C04	2/2/24				
10	I63374219	CG1	2/2/24				
11	I63374220	D01	2/2/24				
12	I63374221	D2	2/2/24				
13	I63374222	D3	2/2/24				
14	I63374223	E01	2/2/24				
15	I63374224	E02	2/2/24				
16	I63374225	E03	2/2/24				
17	I63374226	HG1	2/2/24				
18	I63374227	J1	2/2/24				
19	I63374228	J2	2/2/24				
20	I63374229	M01	2/2/24				
21	I63374230	M02	2/2/24				
22	I63374231	M03	2/2/24				
23	I63374232	M04	2/2/24				
24	I63374233	M05	2/2/24				
25	I63374234	V01	2/2/24				
26	I63374235	V02	2/2/24				
27	I63374236	V03	2/2/24				
28	I63374237	V04	2/2/24				
29	I63374238	V05	2/2/24				
30	I63374239	V06	2/2/24				
31	I63374240	V07	2/2/24				
32	I63374241	V08	2/2/24				
33	I63374242	V09	2/2/24				
34	I63374243	V010	2/2/24				

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.

February 2,2024
Sevier, Scott

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	A01	Common Supported Gable	1	1	I63374210 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:29 Page: 1
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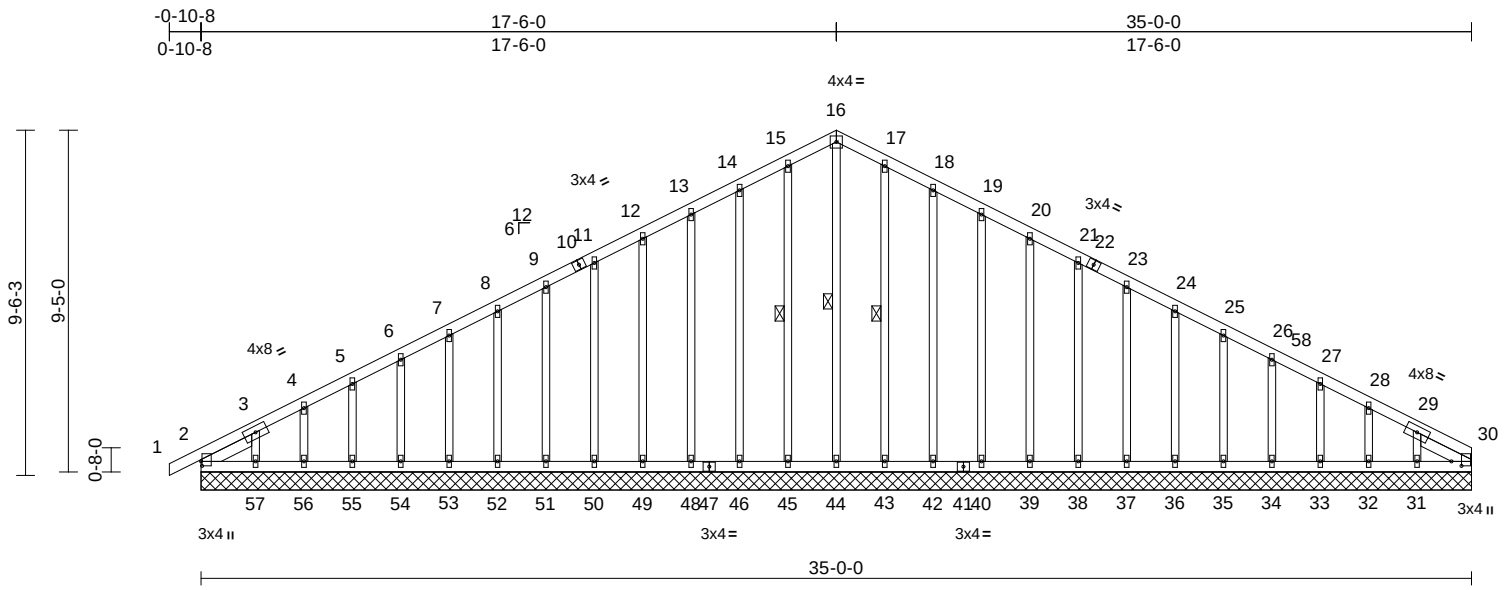

Scale = 1:63.5

Plate Offsets (X, Y): [2:0-1-8,0-0-5], [30:0-1-8,0-3-5]

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	30	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 212 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-7-0, Right 2x4 SP No.2 -- 1-7-0

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 16-44, 15-45, 17-43

REACTIONS (size) 2=35-0-0, 30=35-0-0, 31=35-0-0, 32=35-0-0, 33=35-0-0, 34=35-0-0, 35=35-0-0, 36=35-0-0, 37=35-0-0, 38=35-0-0, 39=35-0-0, 40=35-0-0, 42=35-0-0, 43=35-0-0, 44=35-0-0, 45=35-0-0, 46=35-0-0, 48=35-0-0, 49=35-0-0, 50=35-0-0, 51=35-0-0, 52=35-0-0, 53=35-0-0, 54=35-0-0, 55=35-0-0, 56=35-0-0, 57=35-0-0
Max Horiz 2=175 (LC 12)
Max Uplift 2=-30 (LC 8), 31=-84 (LC 13), 32=-41 (LC 13), 33=-40 (LC 13), 34=-41 (LC 13), 35=-41 (LC 13), 36=-41 (LC 13), 37=-41 (LC 13), 38=-41 (LC 13), 39=-40 (LC 13), 40=-41 (LC 13), 42=-50 (LC 13), 43=-11 (LC 13), 45=-20 (LC 12), 46=-48 (LC 12), 48=-41 (LC 12), 49=-40 (LC 12), 50=-41 (LC 12), 51=-41 (LC 12), 52=-41 (LC 12), 53=-41 (LC 12), 54=-41 (LC 12), 55=-40 (LC 12), 56=-43 (LC 12), 57=-91 (LC 12)
Max Grav 2=171 (LC 21), 30=101 (LC 22), 31=139 (LC 26), 32=117 (LC 26), 33=121 (LC 1), 34=120 (LC 26), 35=120 (LC 1), 36=120 (LC 1), 37=120 (LC 26), 38=120 (LC 26), 39=120 (LC 1), 40=120 (LC 1), 42=122 (LC 26), 43=122 (LC 1), 44=165 (LC 13), 45=122 (LC 1), 46=122 (LC 25), 48=120 (LC 1), 49=120 (LC 1), 50=120 (LC 25), 51=120 (LC 25), 52=120 (LC 1), 53=120 (LC 25), 54=120 (LC 25), 55=120 (LC 1), 56=120 (LC 25), 57=117 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-3=-260/82, 3-4=-193/75, 4-5=-159/84, 5-6=-127/93, 6-7=-101/104, 7-8=-80/123, 8-9=-64/141, 9-11=-56/160, 11-12=-64/182, 12-13=-76/218, 13-14=-89/254, 14-15=-103/295, 15-16=-109/314, 16-17=-109/314, 17-18=-103/295, 18-19=-89/254, 19-20=-76/218, 20-21=-64/182, 21-23=-51/146, 23-24=-39/111, 24-25=-35/75, 25-26=-43/39, 26-27=-60/21, 27-28=-87/23, 28-29=-120/36, 29-30=-202/63
BOT CHORD 2-57=-51/194, 56-57=-51/194, 55-56=-51/194, 54-55=-51/194, 53-54=-51/194, 52-53=-51/194, 51-52=-51/194, 50-51=-51/194, 49-50=-51/194, 48-49=-51/194, 46-48=-51/194, 45-46=-51/194, 44-45=-51/194, 43-44=-51/194, 42-43=-51/194, 40-42=-51/194, 39-40=-51/194, 38-39=-51/194, 37-38=-51/194, 36-37=-51/194, 35-36=-51/194, 34-35=-51/194, 33-34=-51/194, 32-33=-51/194, 31-32=-51/194, 30-31=-51/194
WEBS 16-44=-187/39, 15-45=-95/36, 14-46=-95/76, 13-48=-93/65, 12-49=-93/64, 11-50=-93/64, 9-51=-93/64, 8-52=-93/64, 7-53=-93/64, 6-54=-93/64, 5-55=-93/81, 4-56=-94/103, 3-57=-87/138, 17-43=-95/28, 18-42=-95/76, 19-40=-93/65, 20-39=-93/64, 21-38=-93/64, 23-37=-93/64, 24-36=-93/64, 25-35=-93/64, 26-34=-93/71, 27-33=-94/97, 28-32=-92/100, 29-31=-105/153

NOTES

February 2,2024

Continued on page 2

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-2-0, Exterior(2N) 4-2-0 to 17-6-0, Corner(3R) 17-6-0 to 22-6-0, Exterior(2N) 22-6-0 to 35-0-0 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) 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 1-4-0 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 30 lb uplift at joint 2, 20 lb uplift at joint 45, 48 lb uplift at joint 46, 41 lb uplift at joint 48, 40 lb uplift at joint 49, 41 lb uplift at joint 50, 41 lb uplift at joint 51, 41 lb uplift at joint 52, 41 lb uplift at joint 53, 41 lb uplift at joint 54, 40 lb uplift at joint 55, 43 lb uplift at joint 56, 91 lb uplift at joint 57, 11 lb uplift at joint 43, 50 lb uplift at joint 42, 41 lb uplift at joint 40, 40 lb uplift at joint 39, 41 lb uplift at joint 38, 41 lb uplift at joint 37, 41 lb uplift at joint 36, 41 lb uplift at joint 35, 41 lb uplift at joint 34, 40 lb uplift at joint 33, 41 lb uplift at joint 32 and 84 lb uplift at joint 31.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	A02	Common	7	1	I63374211 Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:34
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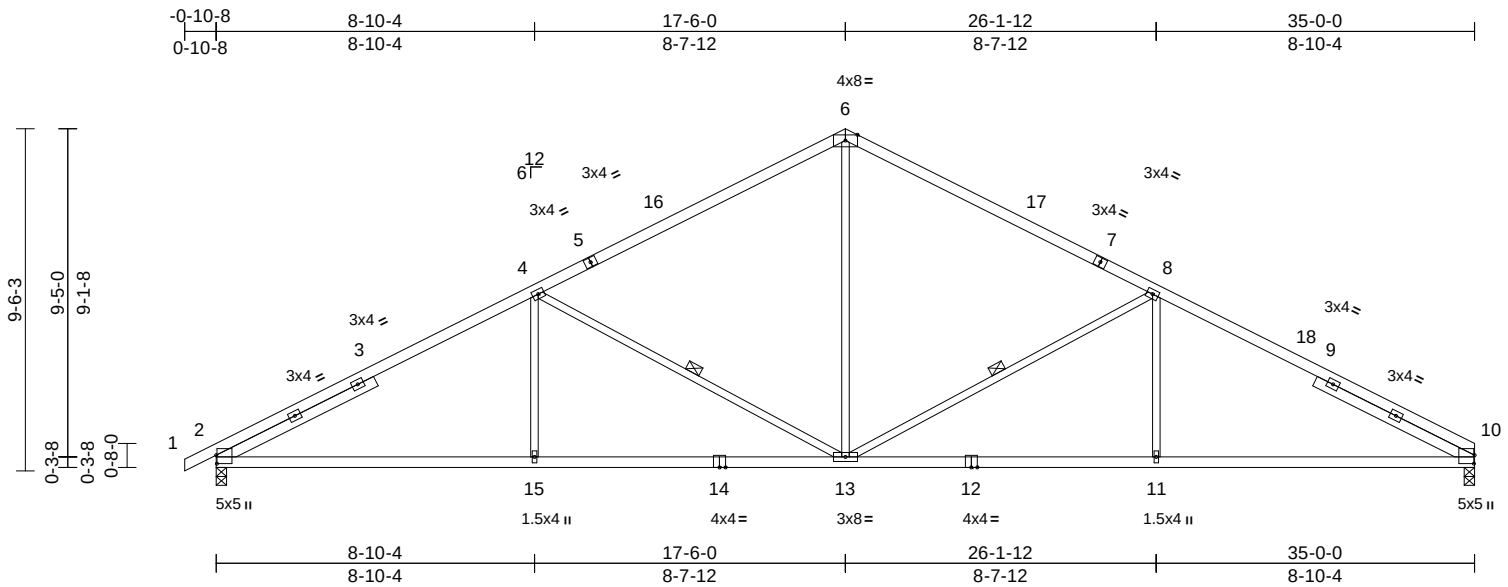

Scale = 1:64.1

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

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	0.92	Vert(LL)	-0.16	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.36	10-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.13	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 157 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-10-15, Right 2x4 SP No.2 -- 4-10-15

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-2-13 oc bracing.
WEBS 1 Row at midpt 8-13, 4-13

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=175 (LC 12)
Max Uplift 2=-261 (LC 12), 10=-239 (LC 13)
Max Grav 2=1637 (LC 1), 10=1574 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2699/424, 4-6=-1880/404, 6-8=-1880/407, 8-10=-2702/431
BOT CHORD 2-15=-397/2287, 13-15=-397/2287, 11-13=-265/2291, 10-11=-265/2291
WEBS 6-13=-111/984, 8-13=-885/337, 8-11=0/372, 4-13=-880/335, 4-15=0/370

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 17-6-0, Exterior(2R) 17-6-0 to 22-6-0, Interior (1) 22-6-0 to 35-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 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 No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 2 and 239 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	A03	Common	2	1	I63374212 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:36 Page: 1
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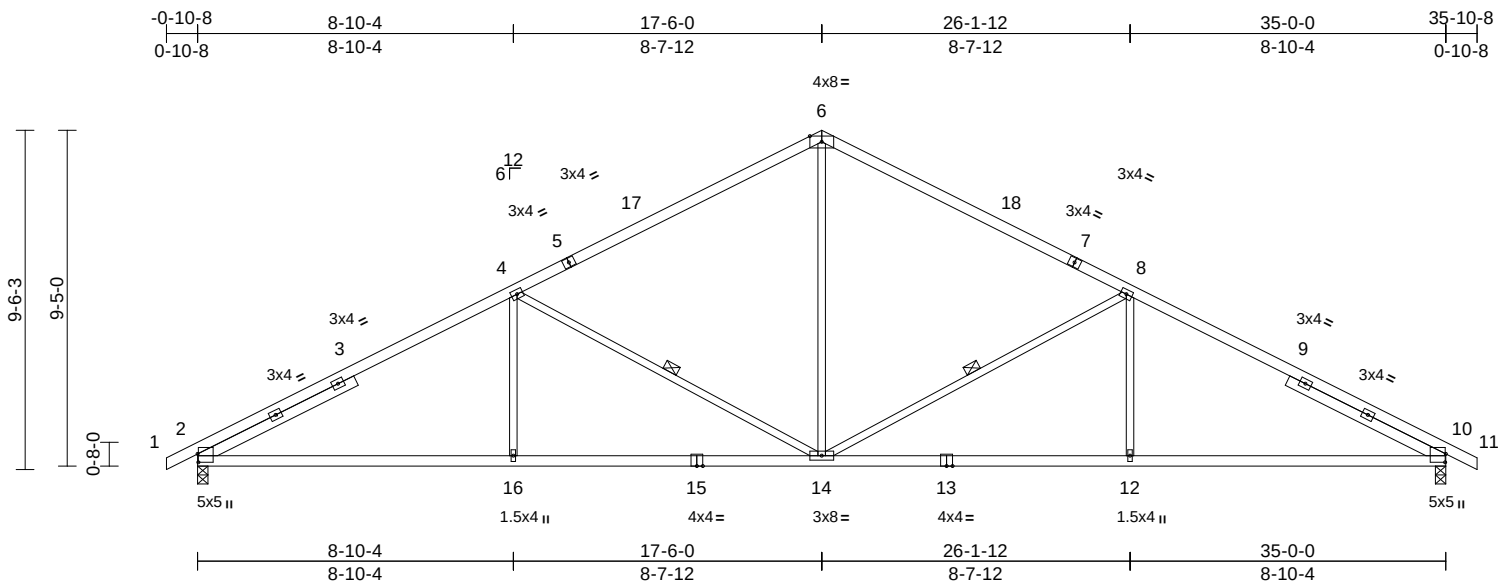

Scale = 1:64.6

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

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	0.92	Vert(LL)	-0.16	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.35	2-16	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.13	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 158 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-10-15, Right 2x4 SP No.2 -- 4-10-15

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-3-0 oc bracing.
WEBS 1 Row at midpt 8-14, 4-14

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=173 (LC 16)
Max Uplift 2=-261 (LC 12), 10=-261 (LC 13)
Max Grav 2=1636 (LC 1), 10=1636 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2698/423, 4-6=-1878/403, 6-8=-1878/403, 8-10=-2697/423, 10-11=0/6
BOT CHORD 2-16=-396/2286, 14-16=-396/2286, 12-14=-261/2286, 10-12=-261/2286
WEBS 6-14=-107/982, 8-14=-880/335, 8-12=0/370, 4-14=-880/335, 4-16=0/370

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 17-6-0, Exterior(2R) 17-6-0 to 22-6-0, Interior (1) 22-6-0 to 35-10-8 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 No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 2 and 261 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	A04	Common	9	1	I63374213 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:37 Page: 1
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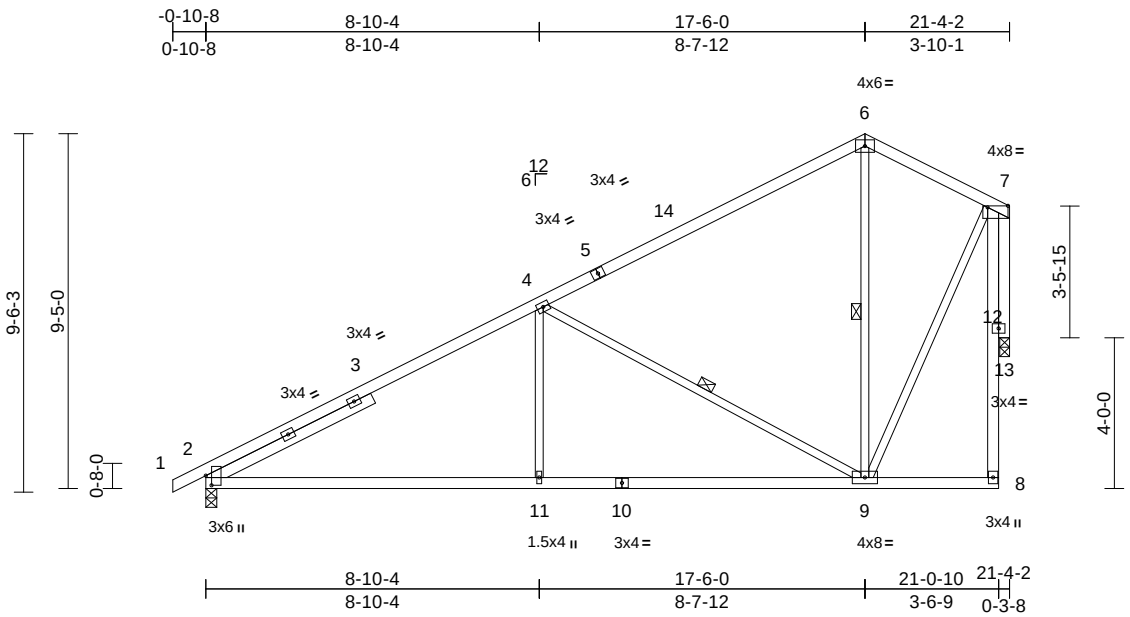


Scale = 1:61.2

Plate Offsets (X, Y): [2:0-3-1,0-1-13], [7:0-6-8,0-0-8]

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	0.80	Vert(LL)	-0.14	2-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.29	2-11	>867	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.13	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 117 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-5:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 8-7:2x4 SP No.2
OTHERS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 4-10-15

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-2-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-7-8 oc bracing.
WEBS 1 Row at midpt 6-9, 4-9

REACTIONS (size) 2=0-3-8, 13=0-3-2
Max Horiz 2=291 (LC 9)
Max Uplift 2=-163 (LC 12), 13=-205 (LC 12)
Max Grav 2=1017 (LC 1), 13=926 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-1420/217, 4-6=-542/142, 6-7=-404/167, 8-12=-16/35, 7-12=-16/35
BOT CHORD 2-11=-456/1164, 9-11=-456/1164, 8-9=-90/115
WEBS 6-9=-100/146, 4-9=-936/344, 4-11=0/386, 7-9=-213/740, 7-13=-929/265

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 17-6-0, Exterior(2E) 17-6-0 to 20-10-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 2 and 205 lb uplift at joint 13.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

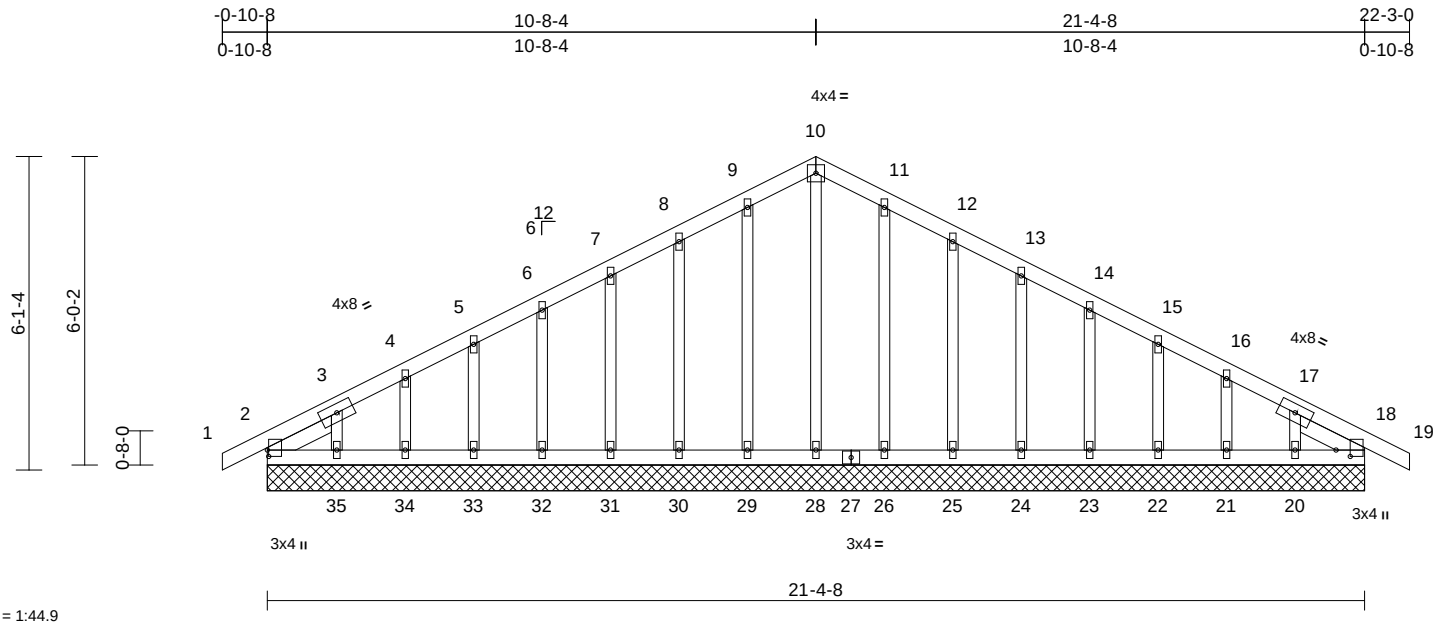
LOAD CASE(S) Standard

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	B01	Common Supported Gable	1	1	I63374214 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:37 ID:ofkAe91AcdHkXeM5YVbkvKzIZe4-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:44.9

Plate Offsets (X, Y): [2:0-1-8,0-0-5], [18:0-1-8,0-3-5]

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)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 111 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-5-0, Right 2x4 SP No.2 -- 1-5-0

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=21-4-8, 18=21-4-8, 20=21-4-8, 21=21-4-8, 22=21-4-8, 23=21-4-8, 24=21-4-8, 25=21-4-8, 26=21-4-8, 28=21-4-8, 29=21-4-8, 30=21-4-8, 31=21-4-8, 32=21-4-8, 33=21-4-8, 34=21-4-8, 35=21-4-8
Max Horiz 2=109 (LC 12)
Max Uplift 2=-26 (LC 8), 18=-4 (LC 9), 20=-61 (LC 13), 21=-42 (LC 13), 22=-40 (LC 13), 23=-41 (LC 13), 24=-40 (LC 13), 25=-46 (LC 13), 26=-28 (LC 13), 29=-32 (LC 12), 30=-45 (LC 12), 31=-40 (LC 12), 32=-41 (LC 12), 33=-40 (LC 12), 34=-42 (LC 12), 35=-71 (LC 12)
Max Grav 2=143 (LC 1), 18=143 (LC 1), 20=107 (LC 26), 21=121 (LC 26), 22=120 (LC 1), 23=120 (LC 26), 24=120 (LC 1), 25=121 (LC 26), 26=123 (LC 26), 28=128 (LC 22), 29=123 (LC 25), 30=121 (LC 25), 31=120 (LC 1), 32=120 (LC 25), 33=120 (LC 1), 34=121 (LC 25), 35=107 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-155/53, 3-4=-99/56, 4-5=-74/65, 5-6=-57/83, 6-7=-46/101, 7-8=-48/136, 8-9=-62/174, 9-10=-72/202, 10-11=-72/202, 11-12=-62/174, 12-13=-48/136, 13-14=-36/100, 14-15=-35/65, 15-16=-40/21, 16-17=-57/15, 17-18=-110/36, 18-19=0/6
BOT CHORD 2-35=-31/132, 34-35=-31/132, 33-34=-31/132, 32-33=-31/132, 31-32=-31/132, 30-31=-31/132, 29-30=-31/132, 28-29=-31/132, 26-28=-31/132, 25-26=-31/132, 24-25=-31/132, 23-24=-31/132, 22-23=-31/132, 21-22=-31/132, 20-21=-31/132, 18-20=-31/132
WEBS 10-28=-111/14, 9-29=-97/48, 8-30=-94/71, 7-31=-93/64, 6-32=-93/64, 5-33=-93/81, 4-34=-95/103, 3-35=-80/120, 11-26=-97/48, 12-25=-94/71, 13-24=-93/64, 14-23=-93/64, 15-22=-93/81, 16-21=-95/103, 17-20=-80/115

NOTES

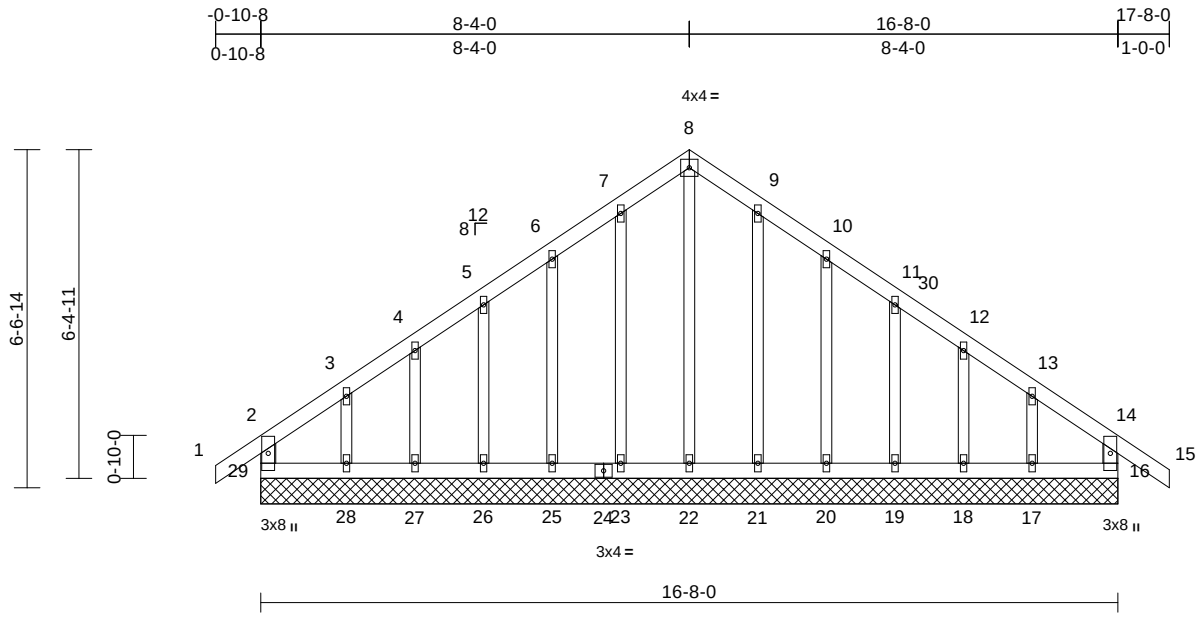
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-0-4, Exterior(2N) 4-0-4 to 10-8-4, Corner(3R) 10-8-4 to 15-8-4, Exterior(2N) 15-8-4 to 22-3-0 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) 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 1-4-0 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 26 lb uplift at joint 2, 32 lb uplift at joint 29, 45 lb uplift at joint 30, 40 lb uplift at joint 31, 41 lb uplift at joint 32, 40 lb uplift at joint 33, 42 lb uplift at joint 34, 71 lb uplift at joint 35, 28 lb uplift at joint 26, 46 lb uplift at joint 25, 40 lb uplift at joint 24, 41 lb uplift at joint 23, 40 lb uplift at joint 22, 42 lb uplift at joint 21, 61 lb uplift at joint 20 and 4 lb uplift at joint 18.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	C01	Common Supported Gable	1	1	I63374215 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:38 Page: 1
ID:6_dGSi4hmZ14h?trOWcjT_zIa9b-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:44.8

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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 90 lb	FT = 20%

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

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

REACTIONS (size) 16=16-8-0, 17=16-8-0, 18=16-8-0, 19=16-8-0, 20=16-8-0, 21=16-8-0, 22=16-8-0, 23=16-8-0, 25=16-8-0, 26=16-8-0, 27=16-8-0, 28=16-8-0, 29=16-8-0
Max Horiz 29=-198 (LC 10)
Max Uplift 16=-44 (LC 9), 17=-101 (LC 13), 18=-39 (LC 13), 19=-54 (LC 13), 20=-60 (LC 13), 21=-33 (LC 13), 23=-35 (LC 12), 25=-59 (LC 12), 26=-55 (LC 12), 27=-35 (LC 12), 28=-114 (LC 12), 29=-76 (LC 8)
Max Grav 16=170 (LC 26), 17=148 (LC 20), 18=125 (LC 26), 19=127 (LC 20), 20=127 (LC 20), 21=129 (LC 20), 22=158 (LC 22), 23=132 (LC 19), 25=125 (LC 19), 26=129 (LC 19), 27=123 (LC 25), 28=171 (LC 19), 29=183 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-29=-150/80, 1-2=0/40, 2-3=-127/120, 3-4=-92/91, 4-5=-83/103, 5-6=-74/153, 6-7=-103/212, 7-8=-122/250, 8-9=-122/250, 9-10=-103/212, 10-11=-74/153, 11-12=-48/99, 12-13=-58/60, 13-14=-89/79, 14-15=0/44, 14-16=-152/96
BOT CHORD 28-29=-87/108, 27-28=-87/108, 26-27=-87/108, 25-26=-87/108, 23-25=-87/108, 22-23=-87/108, 21-22=-87/108, 20-21=-87/108, 19-20=-87/108, 18-19=-87/108, 17-18=-87/108, 16-17=-87/108
WEBS 8-22=-195/58, 7-23=-105/51, 6-25=-99/92, 5-26=-100/89, 4-27=-96/96, 3-28=-119/111, 9-21=-102/51, 10-20=-100/92, 11-19=-99/85, 12-18=-98/97, 13-17=-104/102

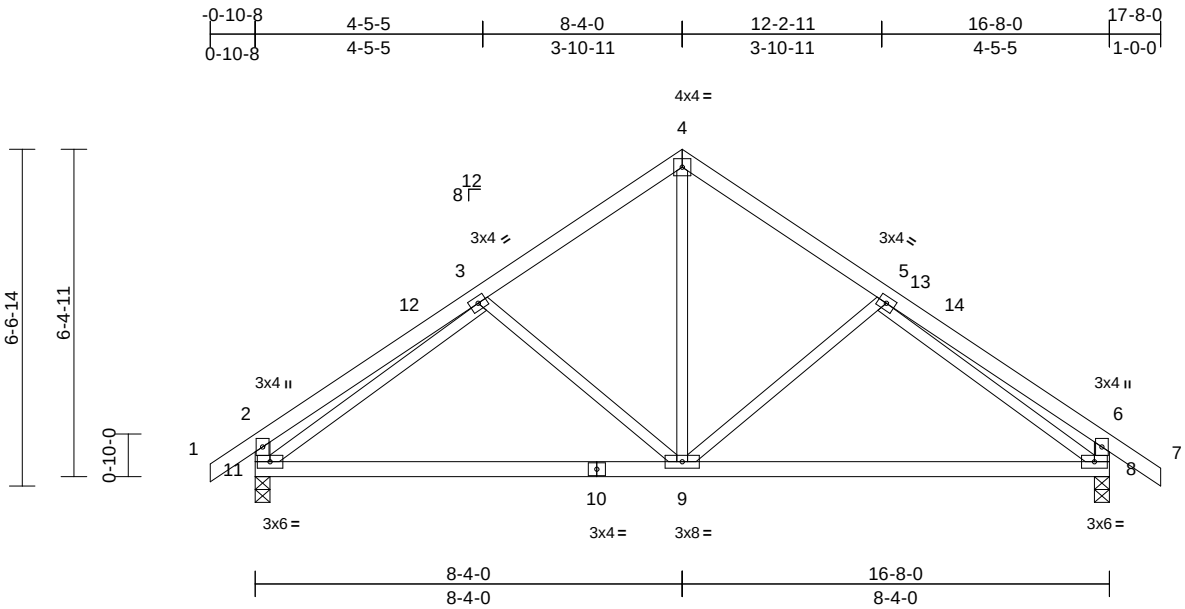
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-4-0, Exterior(2N) 4-4-0 to 8-4-0, Corner(3R) 8-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 17-8-0 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 76 lb uplift at joint 29, 44 lb uplift at joint 16, 35 lb uplift at joint 23, 59 lb uplift at joint 25, 55 lb uplift at joint 26, 35 lb uplift at joint 27, 114 lb uplift at joint 28, 33 lb uplift at joint 21, 60 lb uplift at joint 20, 54 lb uplift at joint 19, 39 lb uplift at joint 18 and 101 lb uplift at joint 17.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	C02	Common	1	1	I63374216 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:39 Page: 1
ID:2eHSRCIcHPROTwqV?0SBk_zIa9I-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:45

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	0.25	Vert(LL)	-0.09	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.18	9-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 81 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 11-2,8-6:2x4 SP No.2

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

REACTIONS (size) 8=0-3-8, 11=0-3-8
Max Horiz 11=-198 (LC 10)
Max Uplift 8=-131 (LC 13), 11=-128 (LC 12)
Max Grav 8=818 (LC 1), 11=808 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/40, 2-3=-368/118, 3-4=-709/181, 4-5=-709/180, 5-6=-357/113, 6-7=0/44, 2-11=-379/145, 6-8=-382/146
BOT CHORD 9-11=-135/706, 8-9=-64/669
WEBS 4-9=-85/432, 3-11=-563/103, 5-8=-574/109, 3-9=-232/195, 5-9=-231/194

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 4-3-14, Interior (1) 4-3-14 to 8-4-0, Exterior(2R) 8-4-0 to 13-4-0, Interior (1) 13-4-0 to 17-8-0 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
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 128 lb uplift at joint 11 and 131 lb uplift at joint 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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	C03	Roof Special	5	1	I63374217 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:39 Page: 1
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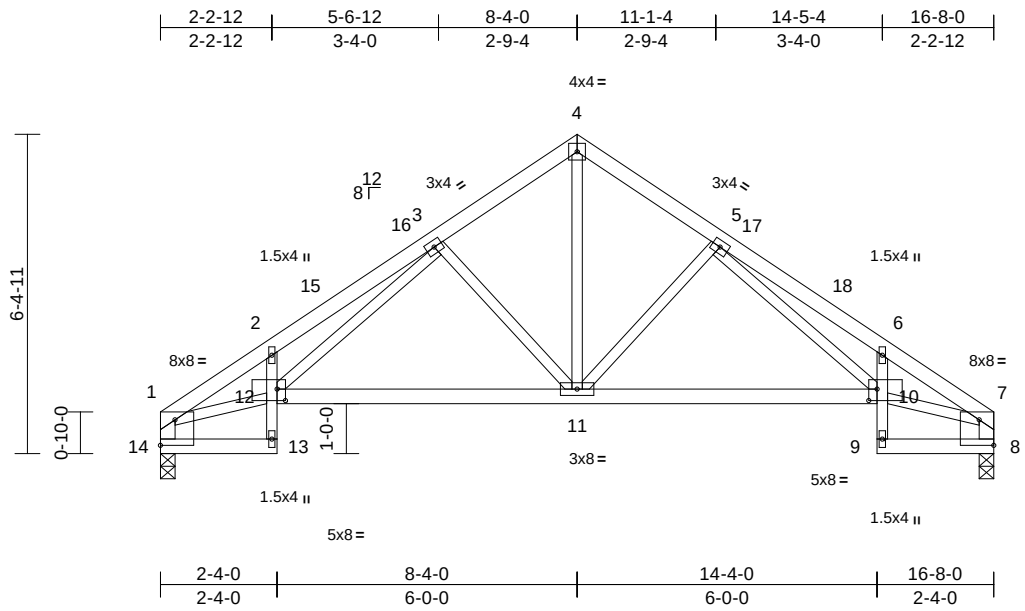


Scale = 1:46.1

Plate Offsets (X, Y): [1:Edge,0-6-2], [6:0-0-0,Edge], [7:Edge,0-6-2], [10:0-2-0,0-2-12], [12:0-2-0,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.05	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.12	10-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 13-2,6-9:2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except* 14-1,8-7:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 4-5-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-3-8, 14=0-3-8
Max Horiz 14=-177 (LC 10)
Max Uplift 8=-102 (LC 13), 14=-102 (LC 12)
Max Grav 8=737 (LC 1), 14=737 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1562/277, 2-3=-1603/381, 3-4=-810/198, 4-5=-810/204, 5-6=-1603/331, 6-7=-1562/258, 1-14=-718/130, 7-8=-718/129
BOT CHORD 13-14=-55/104, 12-13=-18/52, 2-12=-194/140, 11-12=-136/866, 10-11=-106/849, 9-10=0/44, 6-10=-174/128, 8-9=-20/68
WEBS 4-11=-148/661, 1-12=-249/1236, 7-10=-185/1204, 3-11=-373/192, 3-12=-222/730, 5-11=-351/179, 5-10=-156/640

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 8-4-0, Exterior(2R) 8-4-0 to 13-4-0, Interior (1) 13-4-0 to 16-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) 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 102 lb uplift at joint 14 and 102 lb uplift at joint 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.

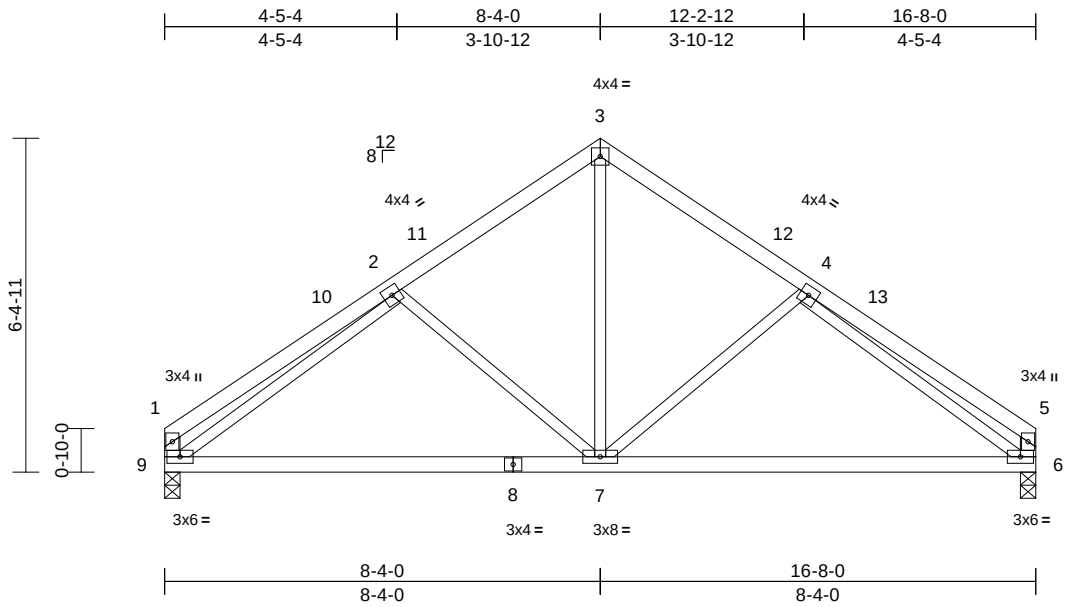
LOAD CASE(S) Standard

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	C04	Common	1	1	I63374218 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:39 Page: 1
ID:hiY_3hNUL1FKHnRPklNHSRzIZyI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:44.1

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

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	0.24	Vert(LL)	-0.09	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.18	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 77 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6=0-3-8, 9=0-3-8
Max Horiz 9=-177 (LC 8)
Max Uplift 6=-102 (LC 13), 9=-102 (LC 12)
Max Grav 6=737 (LC 1), 9=737 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-334/82, 2-3=-719/184, 3-4=-719/183, 4-5=-333/82, 1-9=-284/95, 5-6=-283/95
BOT CHORD 7-9=-152/709, 6-7=-116/686
WEBS 3-7=-90/449, 2-9=-608/133, 4-6=-608/133, 2-7=-244/199, 4-7=-244/199

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 8-4-0, Exterior(2R) 8-4-0 to 13-4-0, Interior (1) 13-4-0 to 16-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) 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 102 lb uplift at joint 9 and 102 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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	CG1	Diagonal Hip Girder	2	1	I63374219 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:40 Page: 1
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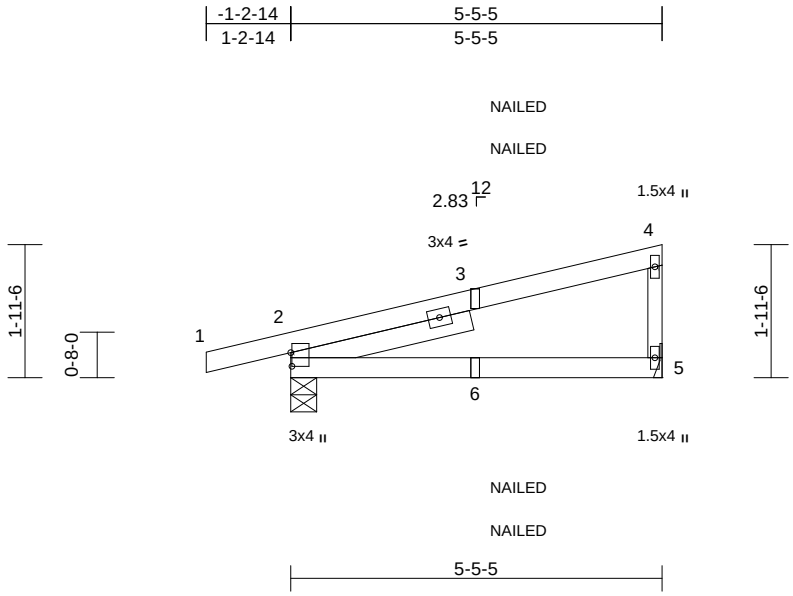


Scale = 1:33.8

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

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	0.68	Vert(LL)	-0.05	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.10	2-5	>657	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: 24 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 -- 2-8-8

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

REACTIONS (size) 2=0-4-9, 5= Mechanical
Max Horiz 2=73 (LC 9)
Max Uplift 2=-111 (LC 8), 5=-54 (LC 12)
Max Grav 2=337 (LC 1), 5=230 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6/0, 2-4=-95/60, 4-5=-177/225
BOT CHORD 2-5=-34/36

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 54 lb uplift at joint 5 and 111 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).

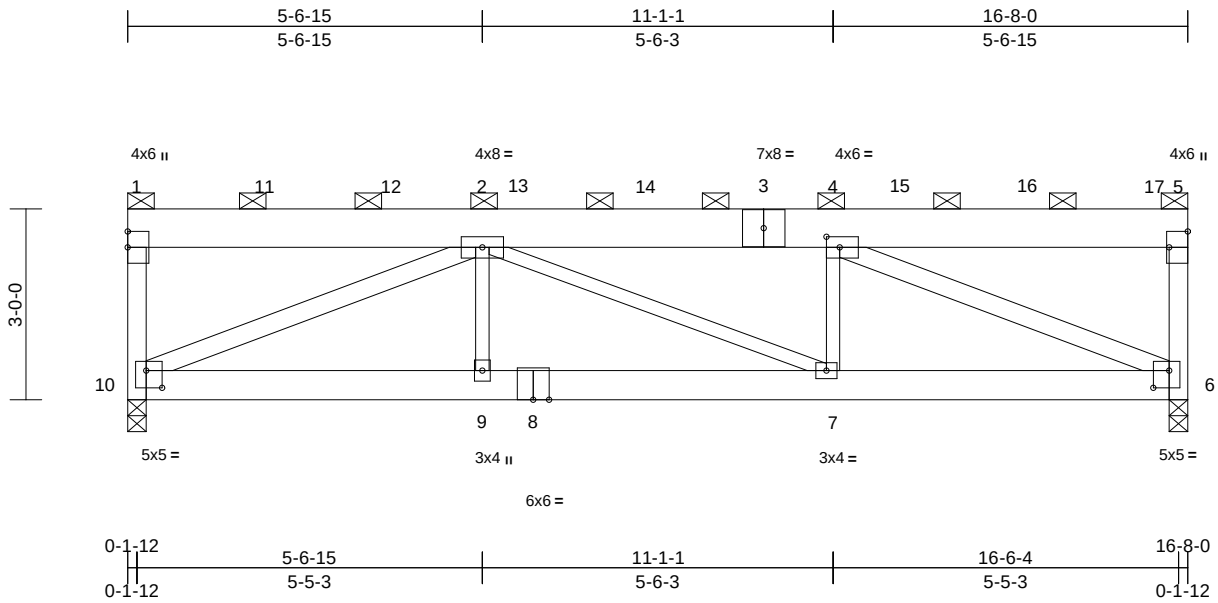
LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 2-5=-20

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	D01	Flat Girder	1	2	I63374220 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:43 Page: 1
ID:hiY_3hNUL1FKHnRPklNHSRzIZyI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36.2

Plate Offsets (X, Y): [4:0-2-8,0-2-0], [5:Edge,0-3-8], [6:0-3-0,0-3-4], [10:0-3-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.10	7-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.19	7-9	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 199 lb	FT = 20%

LUMBER
TOP CHORD 2x8 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SP No.2 *Except* 9-2,7-2,7-4:2x3 SPF No.2

BRACING
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6=0-3-8, 10=0-3-8
Max Horiz 10=-101 (LC 27)
Max Uplift 6=-940 (LC 9), 10=-982 (LC 8)
Max Grav 6=4514 (LC 1), 10=4718 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-10=-1715/440, 1-2=-154/92, 2-4=-6535/1616, 4-5=-158/93, 5-6=-1504/399
BOT CHORD 9-10=-1677/6507, 7-9=-1677/6507, 6-7=-1656/6535
WEBS 4-6=-7005/1741, 2-9=0/186, 2-10=-6980/1738, 2-7=-36/44, 4-7=0/184

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, 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) 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
4) Provide adequate drainage to prevent water ponding.
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) Bearing at joint(s) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 982 lb uplift at joint 10 and 940 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 891 lb down and 187 lb up at 0-1-12, 856 lb down and 174 lb up at 2-1-13, 856 lb down and 174 lb up at 4-1-13, 856 lb down and 174 lb up at 6-1-13, 856 lb down and 174 lb up at 8-1-13, 856 lb down and 174 lb up at 10-1-13, 856 lb down and 174 lb up at 12-1-13, and 856 lb down and 174 lb up at 14-1-13, and 878 lb down and 184 lb up at 16-1-13 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-5=-70, 6-10=-20
Concentrated Loads (lb)
Vert: 1=-891, 3=-856, 11=-856, 12=-856, 13=-856, 14=-856, 15=-856, 16=-856, 17=-878

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	D2	Common	3	1	I63374221 Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:41

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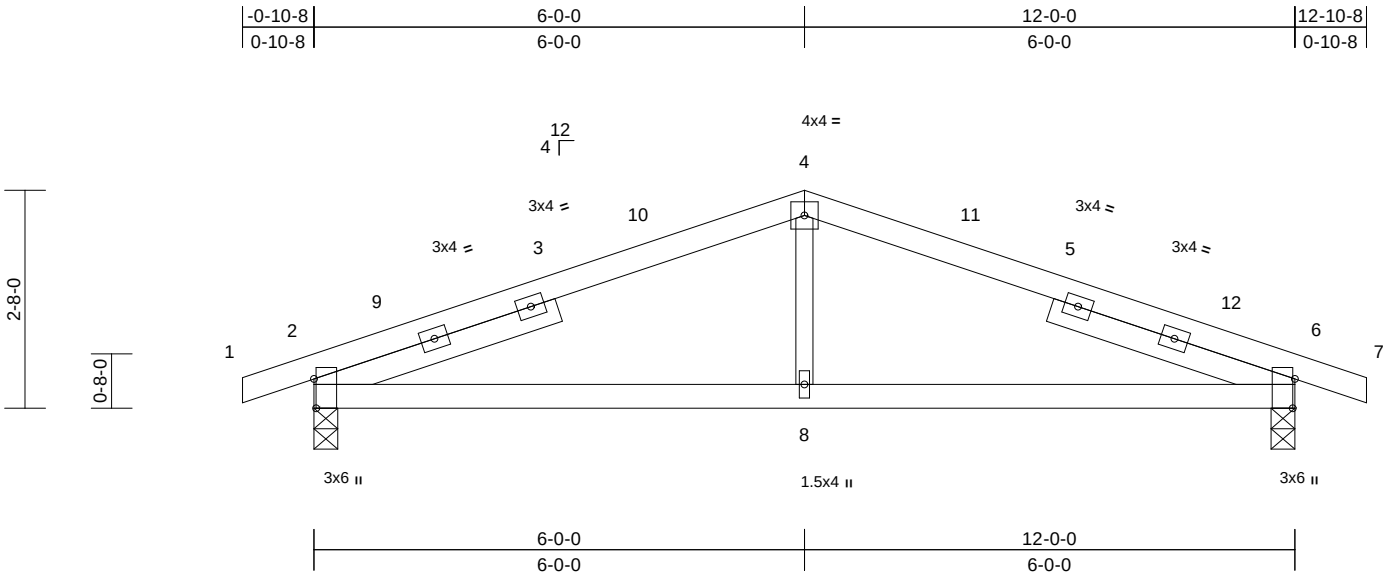


Scale = 1:28.2

Plate Offsets (X, Y): [2:0-4-5,Edge], [6:0-4-5,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	0.50	Vert(LL)	-0.03	6-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.06	6-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 3-1-9, Right 2x4 SP No.2 -- 3-1-9

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-9-6 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 6=0-3-8
Max Horiz 2=-43 (LC 13)
Max Uplift 2=-135 (LC 8), 6=-135 (LC 9)
Max Grav 2=601 (LC 1), 6=601 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-870/438, 4-6=-870/438, 6-7=-5/0
BOT CHORD	2-8=-306/748, 6-8=-306/748
WEBS	4-8=0/272

NOTES

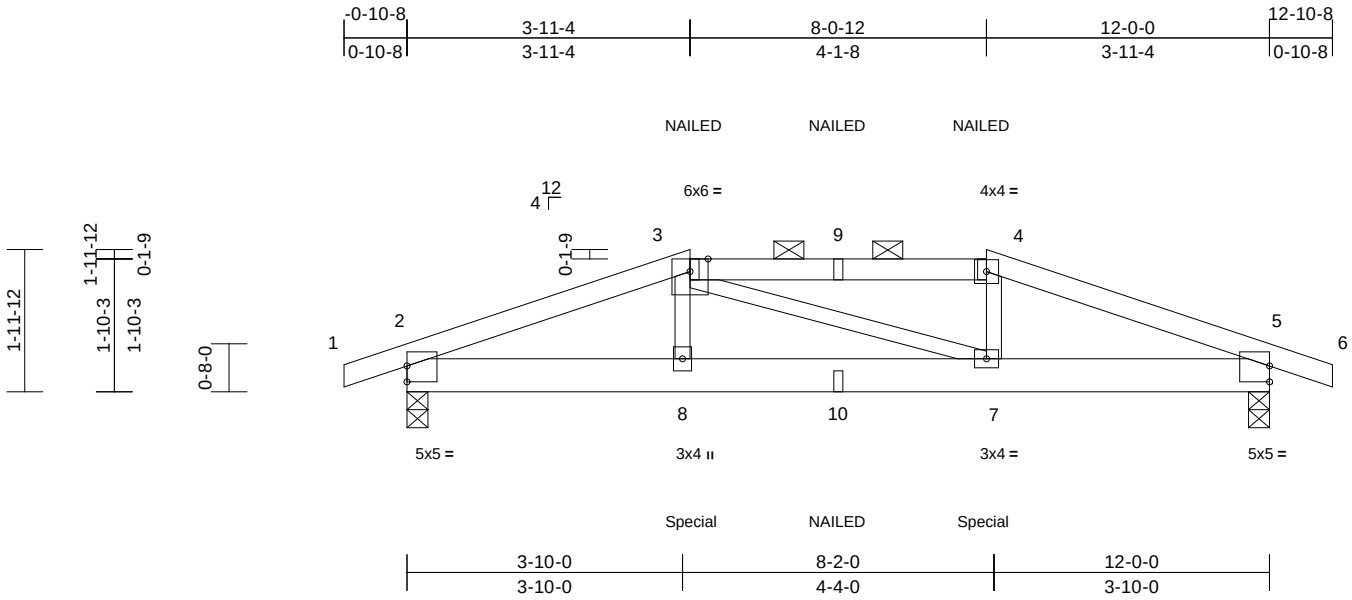
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 11-0-0, Interior (1) 11-0-0 to 12-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) 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 135 lb uplift at joint 2 and 135 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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	D3	Hip Girder	1	1	I63374222 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:41 Page: 1
ID:aNkfF4qxx3_wjTbiuuyPpIzpaOn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:32.1

Plate Offsets (X, Y): [2:Edge,0-2-10], [5:Edge,0-2-10]

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)	-0.05	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.08	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 48 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 4-1-13 oc purlins, except 2-0-0 oc purlins (3-10-14 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 9-6-9 oc bracing.

REACTIONS (size) 2=0-3-8, 5=0-3-8
Max Horiz 2=-29 (LC 17)
Max Uplift 2=-274 (LC 8), 5=-274 (LC 9)
Max Grav 2=916 (LC 1), 5=916 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/1, 2-3=-1837/717, 3-4=-1623/708, 4-5=-1824/713, 5-6=0/1
BOT CHORD 2-8=-596/1656, 7-8=-595/1635, 5-7=-592/1644
WEBS 3-8=-11/326, 3-7=-83/60, 4-7=-9/322

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 SPF No.2 crushing capacity of 425 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 274 lb uplift at joint 2 and 274 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.
9) "NAILED" indicates Girder: 3-12d (0.148" x 3.25") toe-nails per NDS guidelines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 221 lb down and 60 lb up at 3-11-4, and 221 lb down and 60 lb up at 8-0-0 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: 1-3=-70, 3-4=-70, 4-6=-70, 2-5=-20
Concentrated Loads (lb)
Vert: 3=-59 (B), 4=-59 (B), 8=-221 (B), 7=-221 (B), 9=-59 (B), 10=-19 (B)

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	E01	Common	1	1	I63374223 Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:44 Page: 1
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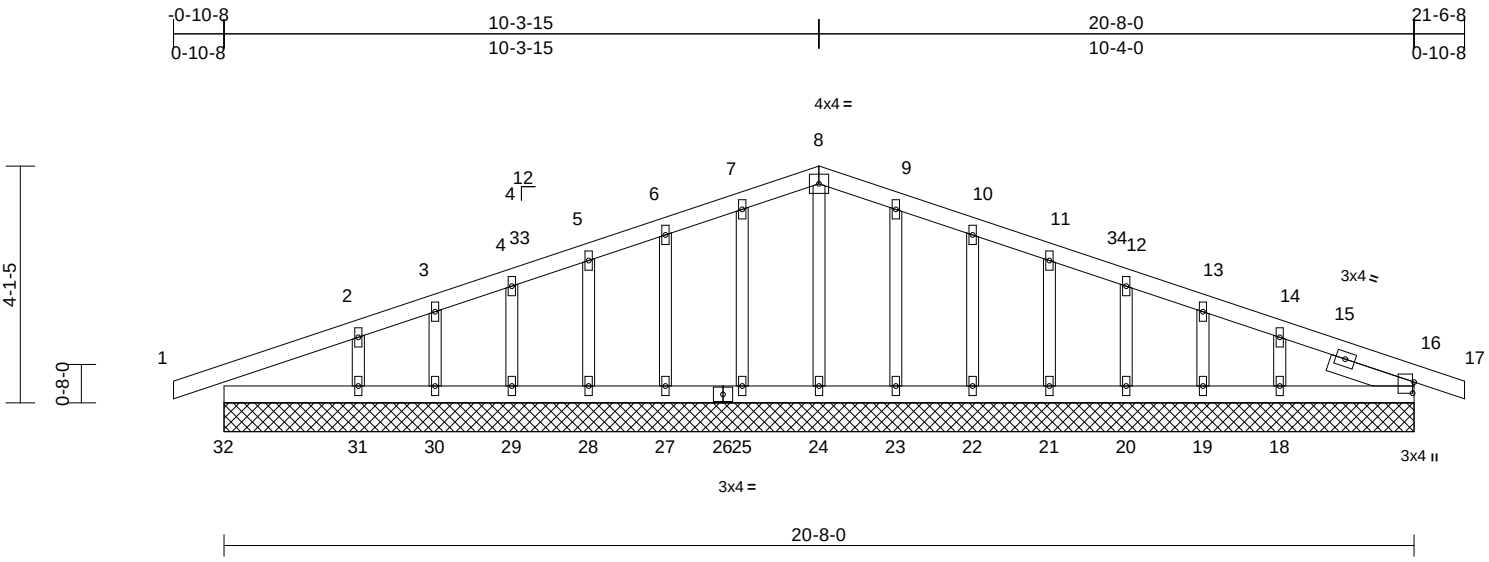

Scale = 1:40

Plate Offsets (X, Y): [16:0-2-5,0-0-5]

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	0.89	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 91 lb	FT = 20%

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

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

REACTIONS (size) 16=20-8-0, 18=20-8-0, 19=20-8-0, 20=20-8-0, 21=20-8-0, 22=20-8-0, 23=20-8-0, 24=20-8-0, 25=20-8-0, 27=20-8-0, 28=20-8-0, 29=20-8-0, 30=20-8-0, 31=20-8-0, 32=20-8-0
Max Horiz 32=-78 (LC 13)
Max Uplift 16=-60 (LC 8), 18=-63 (LC 13), 19=-28 (LC 9), 20=-34 (LC 13), 21=-32 (LC 9), 22=-35 (LC 9), 23=-30 (LC 13), 25=-26 (LC 12), 27=-37 (LC 8), 28=-28 (LC 12), 29=-87 (LC 8), 30=-271 (LC 25), 31=-406 (LC 8)
Max Grav 16=165 (LC 26), 18=182 (LC 1), 19=101 (LC 26), 20=124 (LC 26), 21=119 (LC 1), 22=120 (LC 26), 23=125 (LC 26), 24=129 (LC 21), 25=125 (LC 25), 27=121 (LC 25), 28=109 (LC 1), 29=196 (LC 25), 30=252 (LC 8), 31=637 (LC 1), 32=38 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/71, 2-3=-115/184, 3-4=-19/98, 4-5=-37/145, 5-6=-43/167, 6-7=-52/193, 7-8=-59/216, 8-9=-59/219, 9-10=-52/197, 10-11=-43/171, 11-12=-36/146, 12-13=-27/128, 13-14=-32/114, 14-16=-72/103, 16-17=-5/0
BOT CHORD 31-32=-78/78, 30-31=-78/78, 29-30=-78/78, 28-29=-78/78, 27-28=-78/78, 25-27=-78/78, 24-25=-78/78, 23-24=-78/78, 22-23=-78/78, 21-22=-78/78, 20-21=-78/78, 19-20=-78/78, 18-19=-78/78, 16-18=-78/78
WEBS 8-24=-103/0, 7-25=-98/78, 6-27=-94/92, 5-28=-83/80, 4-29=-167/131, 3-30=-289/290, 2-31=-590/529, 9-23=-99/79, 10-22=-93/91, 11-21=-93/86, 12-20=-95/71, 13-19=-82/59, 14-18=-136/92

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 10-3-15, Corner(3R) 10-3-15 to 15-3-15, Exterior(2N) 15-3-15 to 21-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 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 60 lb uplift at joint 16, 26 lb uplift at joint 25, 37 lb uplift at joint 27, 28 lb uplift at joint 28, 87 lb uplift at joint 29, 271 lb uplift at joint 30, 406 lb uplift at joint 31, 30 lb uplift at joint 23, 35 lb uplift at joint 22, 32 lb uplift at joint 21, 34 lb uplift at joint 20, 28 lb uplift at joint 19 and 63 lb uplift at joint 18.
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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	E02	Common	4	1	I63374224 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:45 Page: 1
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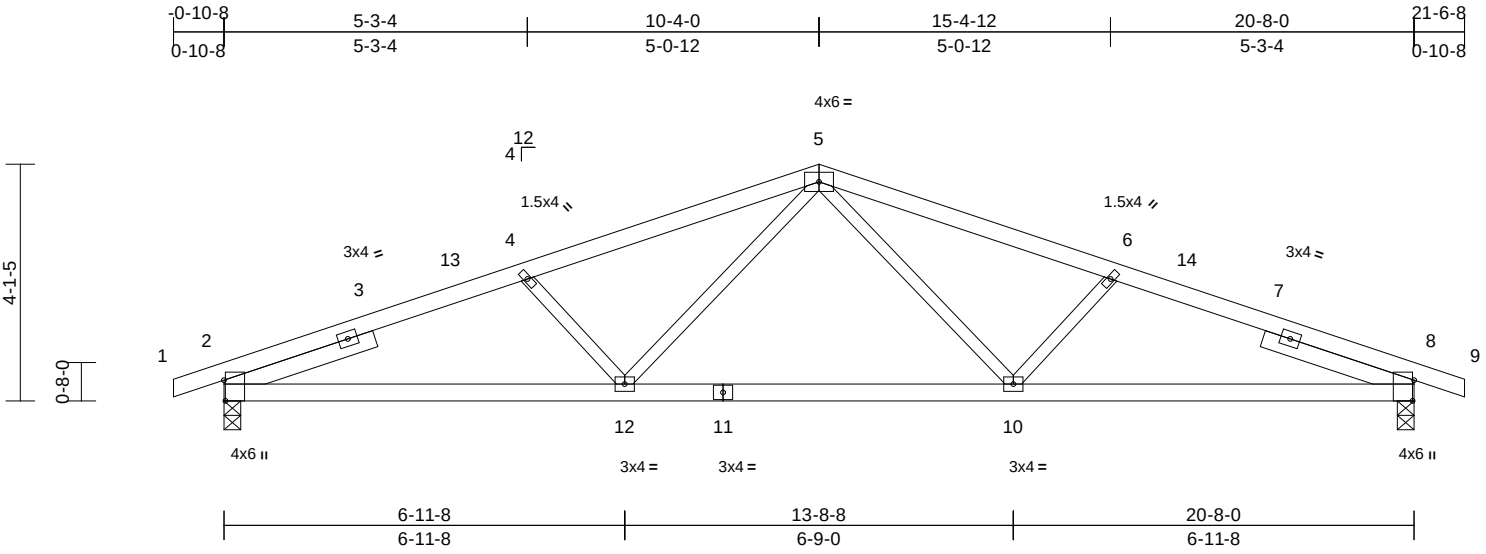


Scale = 1:40

Plate Offsets (X, Y): [2:0-4-5,Edge], [8:0-4-5,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	0.51	Vert(LL)	-0.10	10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.19	10-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 86 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 -- 2-8-14, Right 2x4 SP No.2 -- 2-8-14

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-8-0 oc bracing.

REACTIONS (size) 2=0-3-8, 8=0-3-8
Max Horiz 2=-70 (LC 17)
Max Uplift 2=-203 (LC 8), 8=-203 (LC 9)
Max Grav 2=991 (LC 1), 8=991 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-1918/548, 4-5=-1703/497, 5-6=-1703/497, 6-8=-1918/548, 8-9=-5/0
BOT CHORD 2-12=-453/1730, 10-12=-266/1271, 8-10=-456/1730
WEBS 5-10=-87/485, 6-10=-295/203, 5-12=-87/485, 4-12=-295/203

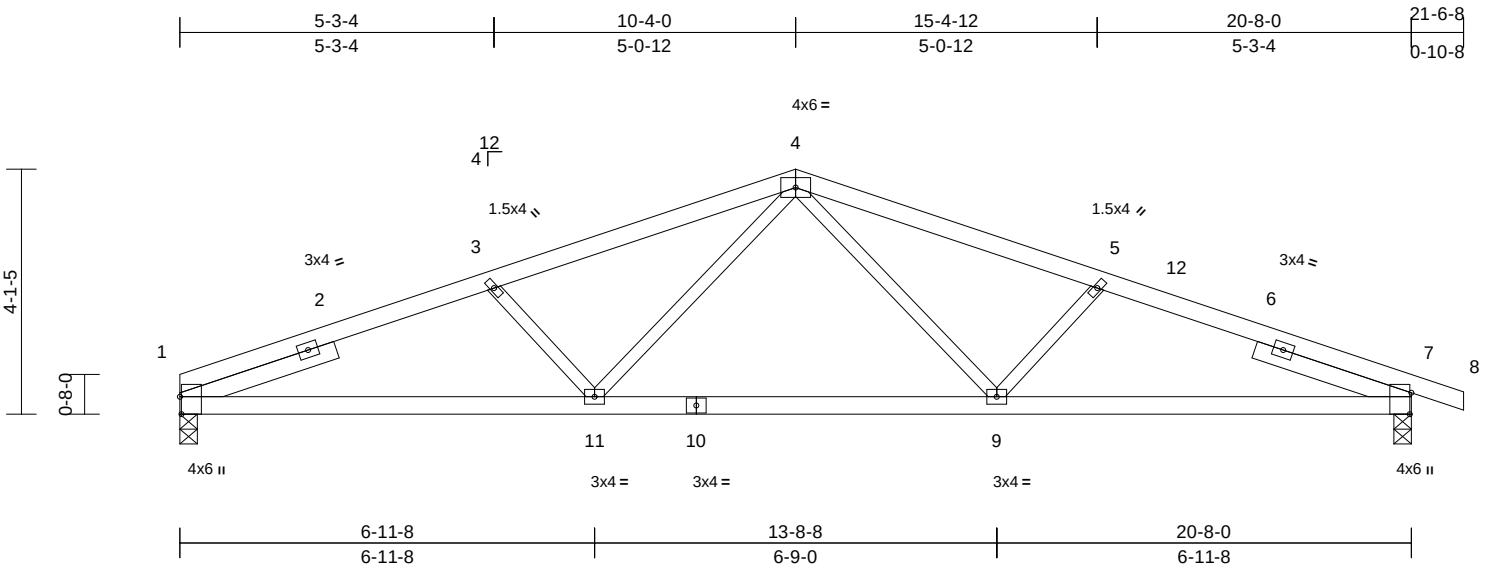
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 10-4-0, Exterior(2R) 10-4-0 to 15-6-1, Interior (1) 15-6-1 to 21-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) 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 203 lb uplift at joint 2 and 203 lb uplift at joint 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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	E03	Common	1	1	I63374225 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:45 Page: 1
ID:PVvYvzSLjeE03pUCgMc6F4zIbDX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38.7

Plate Offsets (X, Y): [1:0-3-8,Edge], [7:0-4-5,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	0.51	Vert(LL)	-0.10	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.19	9-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 85 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 -- 2-8-14, Right 2x4 SP No.2 -- 2-8-14

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-4-12 oc bracing.

REACTIONS (size) 1=0-3-8, 7=0-3-8
Max Horiz 1=73 (LC 12)
Max Uplift 1=-162 (LC 8), 7=-204 (LC 9)
Max Grav 1=929 (LC 1), 7=993 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-1930/593, 3-4=-1712/533, 4-5=-1707/508, 5-7=-1921/565, 7-8=-5/0
BOT CHORD 1-11=-488/1741, 9-11=-283/1274, 7-9=-471/1733
WEBS 4-9=-86/484, 5-9=-295/202, 4-11=-102/491, 3-11=-300/212

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 5-1-15, Interior (1) 5-1-15 to 10-4-0, Exterior(2R) 10-4-0 to 15-6-1, Interior (1) 15-6-1 to 21-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) 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 162 lb uplift at joint 1 and 204 lb uplift at joint 7.
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.

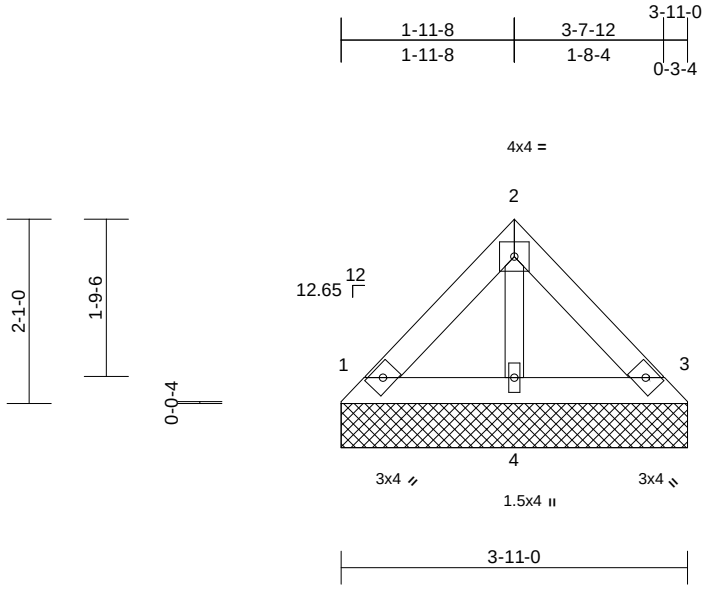
LOAD CASE(S) Standard

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	HG1	Lay-In Gable	1	1	I63374226 Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:45 Page: 1
ID:6BAH2kpJAms35J0WKBRAH4zpaOo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:26.1

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	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
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 SPF No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-11-0, 3=3-11-0, 4=3-11-0
Max Horiz 1=-49 (LC 8)
Max Uplift 1=-26 (LC 13), 3=-25 (LC 13)
Max Grav 1=95 (LC 1), 3=95 (LC 1), 4=105 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-74/38, 2-3=-69/31
BOT CHORD 1-4=-15/37, 3-4=-15/37
WEBS 2-4=-64/19

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 26 lb uplift at joint 1 and 25 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

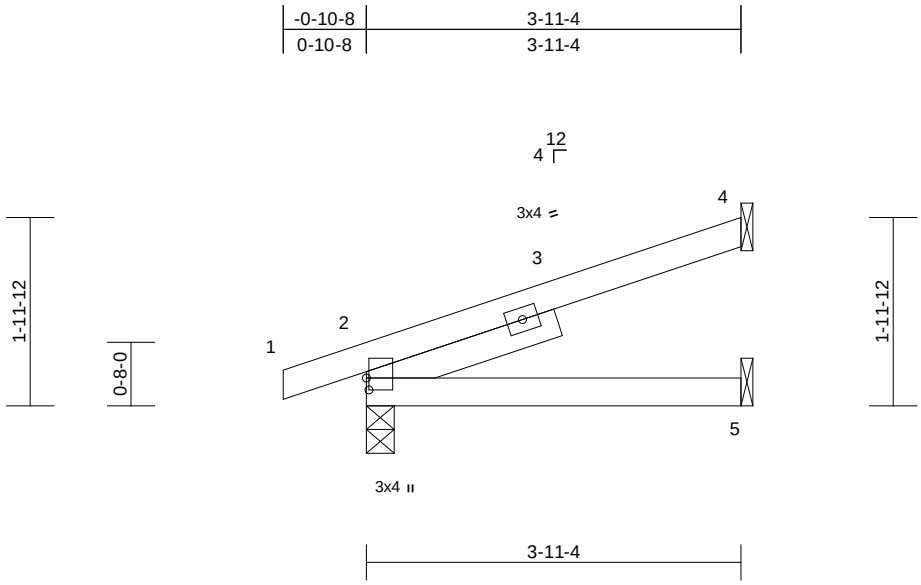
LOAD CASE(S) Standard

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	J1	Jack-Open	3	1	I63374227 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:46 Page: 1
ID:aNkfF4qxx3_wjTbiuuyPpIzpaOn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:24.2

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	0.34	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 -- 2-1-3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=70 (LC 12)
Max Uplift 2=-68 (LC 8), 4=-74 (LC 12)
Max Grav 2=243 (LC 1), 4=129 (LC 1), 5=77 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-76/32
BOT CHORD 2-5=0/0

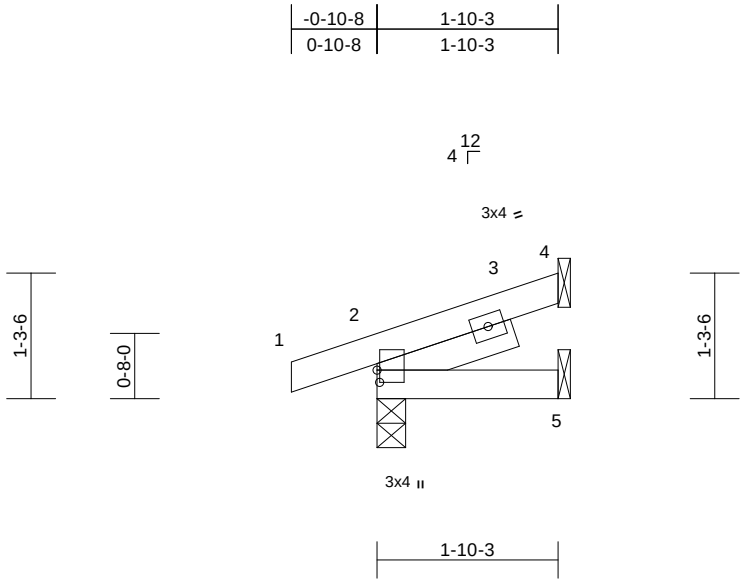
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for 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 74 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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	J2	Jack-Open	4	1	I63374228 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:46 Page: 1
ID:aNkfF4qxx3_wjTbiuuyPpIzpaOn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:23.5

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: 9 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 1-5-8

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=0-3-8, 4= Mechanical, 5= Mechanical
Max Horiz 2=40 (LC 12)
Max Uplift 2=-57 (LC 8), 4=-35 (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=-5/0, 2-4=-43/16
BOT CHORD 2-5=0/0

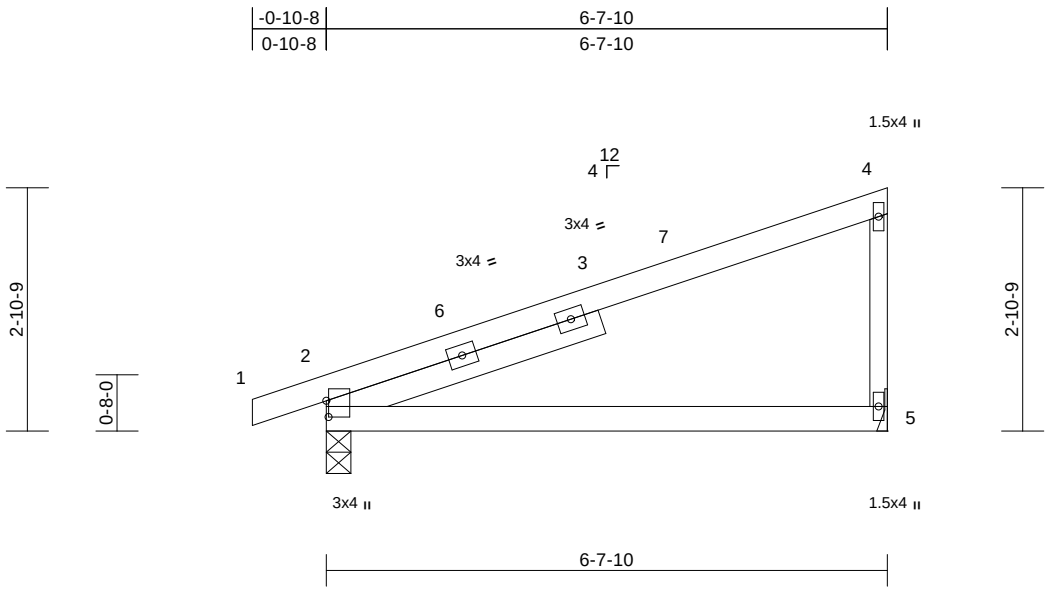
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for 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 57 lb uplift at joint 2 and 35 lb uplift at joint 4.
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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	M01	Monopitch	9	1	I63374229 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:46 Page: 1
ID:txvbfPVL6FsIklv7oU63ZUzIaa9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.2

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

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	0.67	Vert(LL)	-0.11	2-5	>718	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.22	2-5	>359	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-4-14

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=0-3-8, 5= Mechanical
Max Horiz 2=119 (LC 9)
Max Uplift 2=-97 (LC 8), 5=-74 (LC 12)
Max Grav 2=359 (LC 1), 5=290 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-158/94, 4-5=-224/313
BOT CHORD 2-5=-52/57

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 6-6-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) 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 74 lb uplift at joint 5 and 97 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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	M02	Monopitch	1	1	I63374230 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:47 Page: 1
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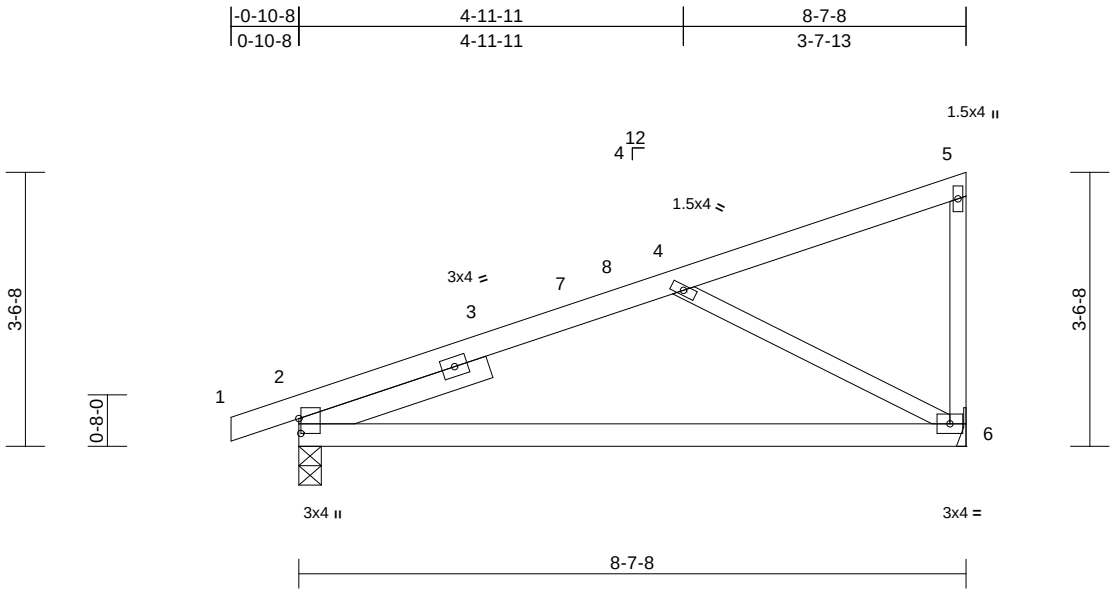

Scale = 1:29.8

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

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	0.21	Vert(LL)	-0.22	2-6	>462	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.44	2-6	>231	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 37 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-6-13

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=0-3-8, 6= Mechanical
Max Horiz 2=151 (LC 9)
Max Uplift 2=-114 (LC 8), 6=-96 (LC 12)
Max Grav 2=448 (LC 1), 6=380 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-465/347, 4-5=-99/73, 5-6=-100/131
BOT CHORD 2-6=-482/371
WEBS 4-6=-419/493

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 8-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 96 lb uplift at joint 6 and 114 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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	M03	Monopitch Structural Gable	1	1	I63374231 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:47 Page: 1
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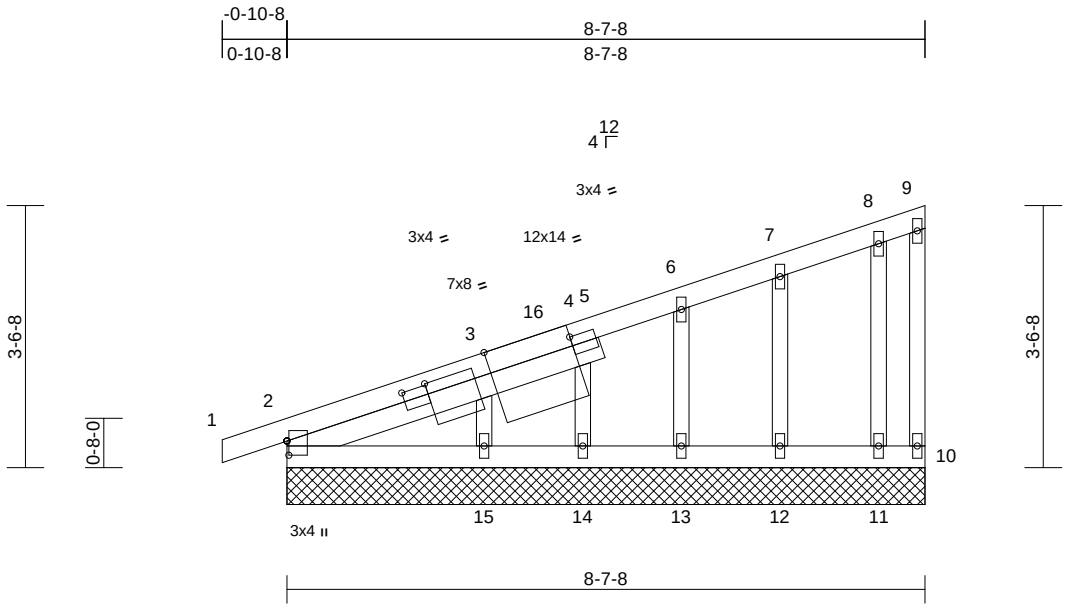


Scale = 1:31.2

Plate Offsets (X, Y): [2:0-2-5,0-0-5], [2:1-8-2,0-1-8], [2:4-0-14,0-1-8], [3:2-0-2,0-1-12], [4:2-10-14,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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 44 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-5-8

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=8-7-8, 10=8-7-8, 11=8-7-8, 12=8-7-8, 13=8-7-8, 14=8-7-8, 15=8-7-8
Max Horiz 2=151 (LC 9)
Max Uplift 2=-37 (LC 8), 10=-13 (LC 11), 11=-19 (LC 12), 12=-37 (LC 8), 13=-31 (LC 12), 14=-37 (LC 8), 15=-58 (LC 12)
Max Grav 2=174 (LC 1), 10=12 (LC 1), 11=89 (LC 1), 12=127 (LC 1), 13=120 (LC 1), 14=94 (LC 1), 15=212 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-3=-286/142, 3-4=-217/107, 4-6=-165/93, 6-7=-126/81, 7-8=-84/68, 8-9=-70/71, 9-10=-23/27
BOT CHORD 2-15=-66/72, 14-15=-66/72, 13-14=-66/72, 12-13=-66/72, 11-12=-66/72, 10-11=-66/72
WEBS 3-15=-158/196, 4-14=-79/104, 6-13=-91/115, 7-12=-100/114, 8-11=-66/80

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-0-0, Interior (1) 4-0-0 to 8-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) All plates are 1.5x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 1-4-0 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 13 lb uplift at joint 10, 37 lb uplift at joint 2, 58 lb uplift at joint 15, 37 lb uplift at joint 14, 31 lb uplift at joint 13, 37 lb uplift at joint 12 and 19 lb uplift at joint 11.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

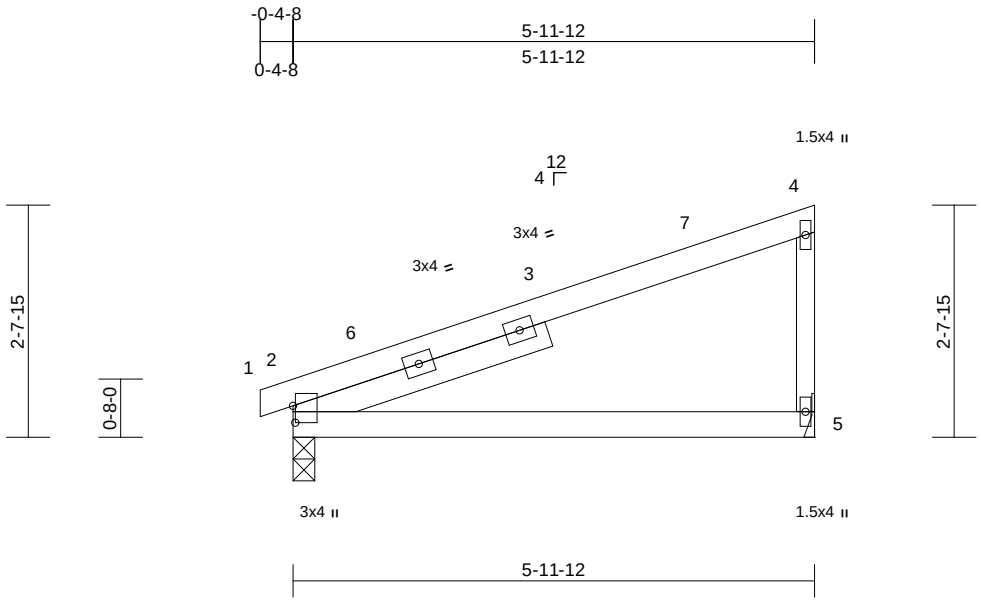
LOAD CASE(S) Standard

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	M04	Monopitch	8	1	I63374232 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:47 Page: 1
ID:TMgSxTJAyw1RuWYTE2lyCLzIIeb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:26.4

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

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	0.86	Vert(LL)	-0.07	2-5	>987	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.14	2-5	>494	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 3-0-12

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

REACTIONS (size) 2=0-3-0, 5= Mechanical
Max Horiz 2=105 (LC 9)
Max Uplift 2=-66 (LC 8), 5=-67 (LC 12)
Max Grav 2=291 (LC 1), 5=263 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-14/0, 2-4=-148/87, 4-5=-205/297
BOT CHORD 2-5=-48/52

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-4-8 to 4-7-8, Interior (1) 4-7-8 to 5-10-8 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
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 67 lb uplift at joint 5 and 66 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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	M05	Monopitch Supported Gable	1	1	I63374233 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:48 Page: 1
ID:mWBO7I0ZHkKDrR_deDoZYazIldh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

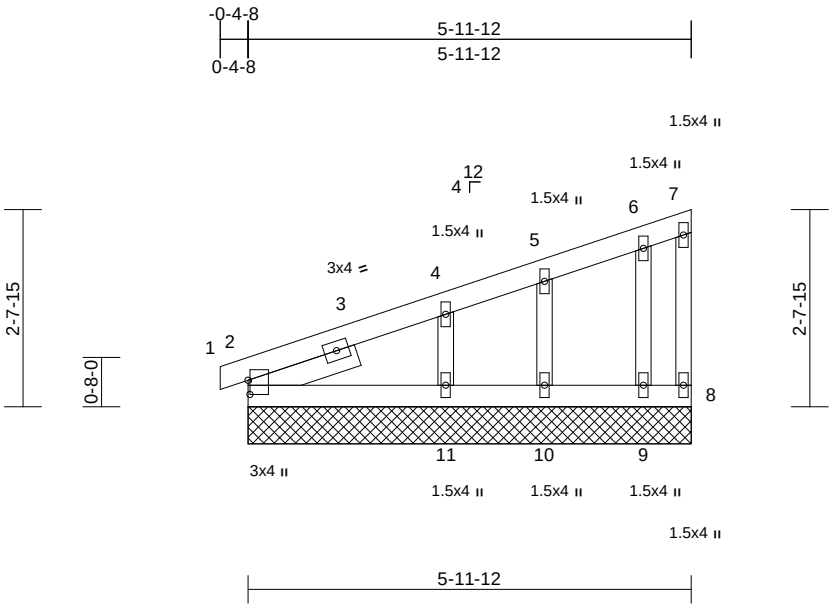


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Plate Offsets (X, Y): [2:0-2-5,0-0-5]

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	8	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
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-6-6

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=5-11-12, 8=5-11-12, 9=5-11-12, 10=5-11-12, 11=5-11-12
Max Horiz 2=105 (LC 9)
Max Uplift 2=-18 (LC 8), 8=-11 (LC 11), 9=-22 (LC 12), 10=-25 (LC 8), 11=-73 (LC 12)
Max Grav 2=130 (LC 1), 8=9 (LC 1), 9=101 (LC 1), 10=88 (LC 1), 11=227 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-14/0, 2-4=-240/117, 4-5=-118/75, 5-6=-84/69, 6-7=-51/62, 7-8=-22/23
BOT CHORD 2-11=-48/64, 10-11=-48/64, 9-10=-48/64, 8-9=-48/64
WEBS 4-11=-173/323, 5-10=-73/101, 6-9=-74/119

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-4-8 to 4-7-8, Exterior(2N) 4-7-8 to 5-10-8 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
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) All plates are 1.5x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 1-4-0 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 11 lb uplift at joint 8, 18 lb uplift at joint 2, 73 lb uplift at joint 11, 25 lb uplift at joint 10 and 22 lb uplift at joint 9.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

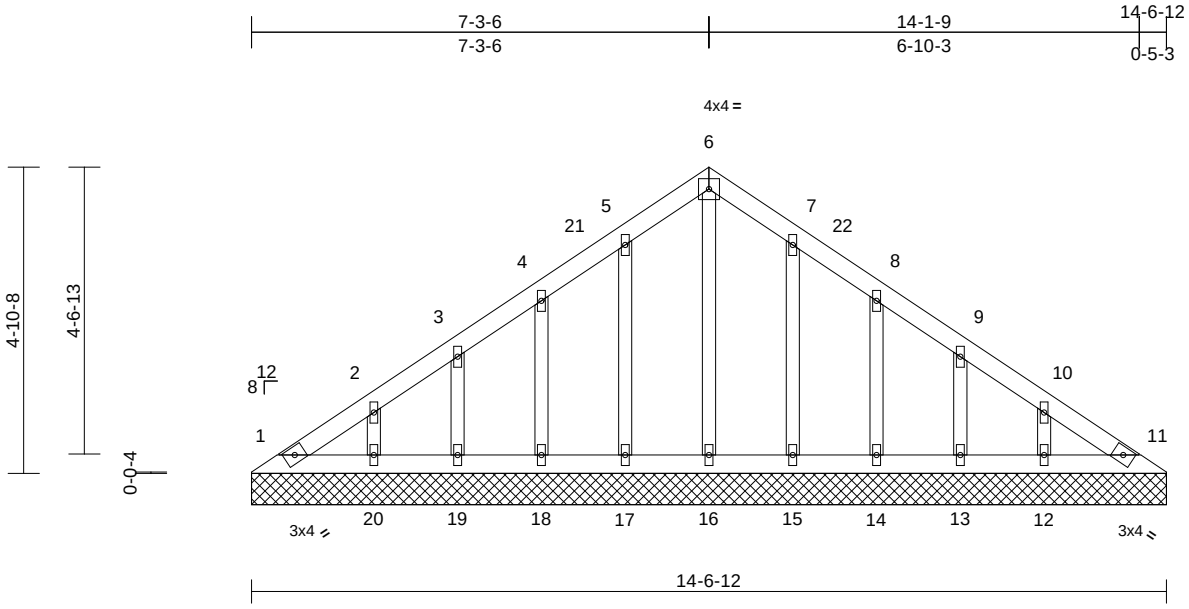
LOAD CASE(S) Standard

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V01	Valley	1	1	I63374234 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:48 Page: 1
ID:m8tdFaMYfjR5Whyd5b7vSjzIZhX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 63 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=14-6-12, 11=14-6-12, 12=14-6-12, 13=14-6-12, 14=14-6-12, 15=14-6-12, 16=14-6-12, 17=14-6-12, 18=14-6-12, 19=14-6-12, 20=14-6-12
Max Horiz 1=127 (LC 11)
Max Uplift 1=-23 (LC 8), 12=-63 (LC 13), 13=-49 (LC 13), 14=-57 (LC 13), 15=-43 (LC 13), 17=-46 (LC 12), 18=-56 (LC 12), 19=-49 (LC 12), 20=-63 (LC 12)
Max Grav 1=87 (LC 20), 11=69 (LC 22), 12=154 (LC 20), 13=118 (LC 20), 14=129 (LC 20), 15=127 (LC 20), 16=117 (LC 22), 17=131 (LC 19), 18=127 (LC 19), 19=119 (LC 19), 20=154 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-124/98, 2-3=-93/76, 3-4=-82/68, 4-5=-72/112, 5-6=-84/161, 6-7=-84/161, 7-8=-59/110, 8-9=-49/39, 9-10=-60/32, 10-11=-113/54
BOT CHORD 1-20=-44/118, 19-20=-44/118, 18-19=-44/118, 17-18=-44/118, 16-17=-44/118, 15-16=-44/118, 14-15=-44/118, 13-14=-44/118, 12-13=-44/118, 11-12=-44/118
WEBS 6-16=-107/20, 5-17=-104/77, 4-18=-100/112, 3-19=-95/102, 2-20=-116/122, 7-15=-101/76, 8-14=-101/112, 9-13=-95/101, 10-12=-117/122

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-5-12 to 5-5-12, Exterior(2N) 5-5-12 to 7-3-12, Corner(3R) 7-3-12 to 12-3-12, Exterior(2N) 12-3-12 to 14-1-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 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 23 lb uplift at joint 1, 46 lb uplift at joint 17, 56 lb uplift at joint 18, 49 lb uplift at joint 19, 63 lb uplift at joint 20, 43 lb uplift at joint 15, 57 lb uplift at joint 14, 49 lb uplift at joint 13 and 63 lb uplift at joint 12.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V02	Valley	1	1	I63374235 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:48 Page: 1
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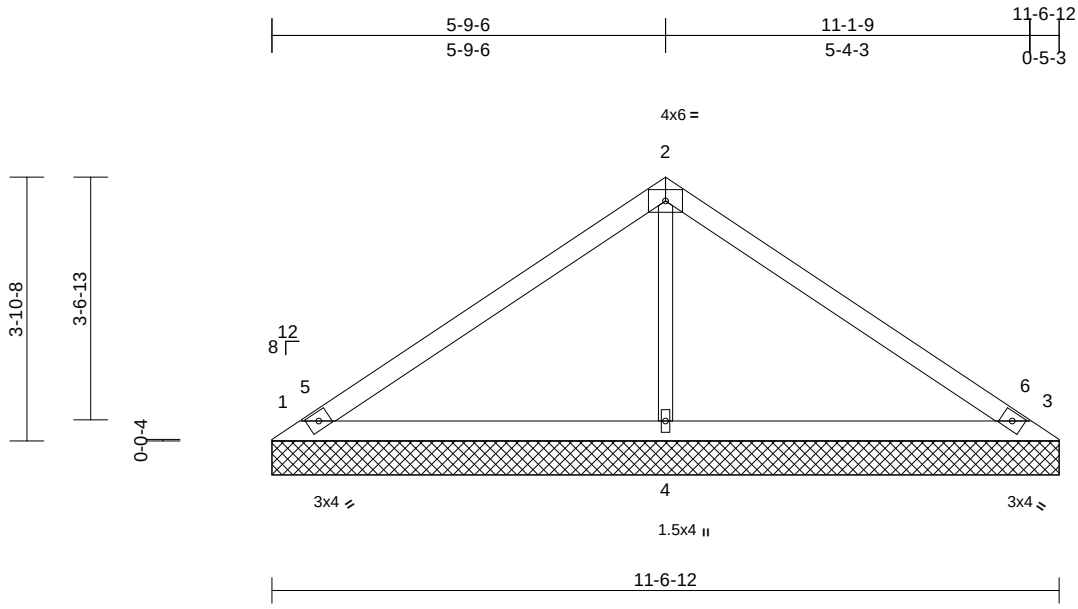

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	3	n/a	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=11-6-12, 3=11-6-12, 4=11-6-12
Max Horiz 1=99 (LC 11)
Max Uplift 1=-54 (LC 12), 3=-67 (LC 13), 4=-29 (LC 12)
Max Grav 1=247 (LC 1), 3=247 (LC 1), 4=466 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-186/94, 2-3=-184/88
BOT CHORD 1-4=-20/87, 3-4=-20/87
WEBS 2-4=-304/125

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 5-9-12, Exterior(2R) 5-9-12 to 10-9-12, Interior (1) 10-9-12 to 11-1-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) 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 54 lb uplift at joint 1, 67 lb uplift at joint 3 and 29 lb uplift at joint 4.
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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V03	Valley	1	1	I63374236 Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:49

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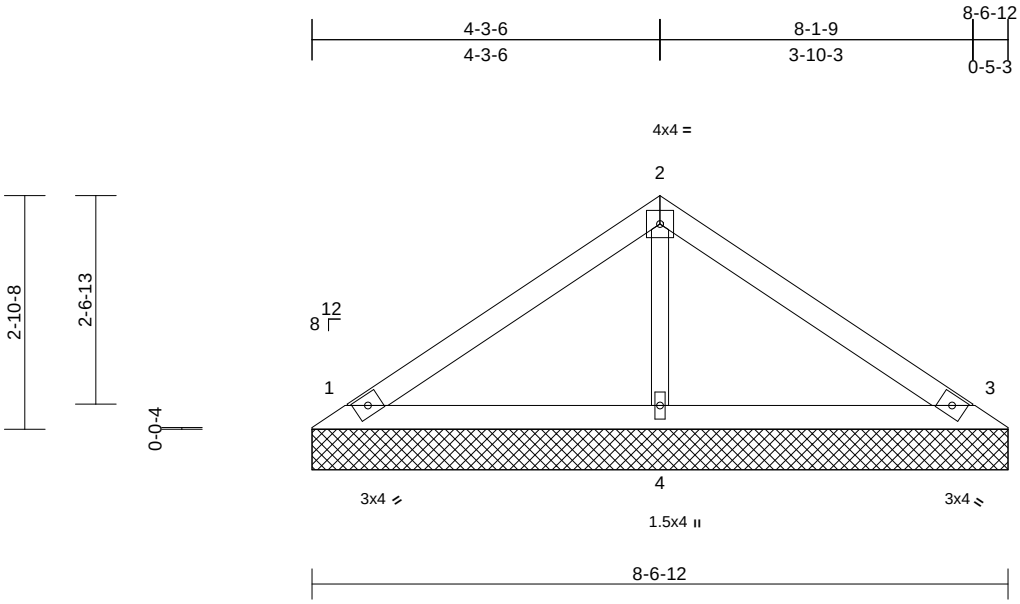

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 28 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=8-6-12, 3=8-6-12, 4=8-6-12
Max Horiz 1=-71 (LC 8)
Max Uplift 1=-49 (LC 12), 3=-58 (LC 13), 4=-1 (LC 12)
Max Grav 1=194 (LC 1), 3=194 (LC 1), 4=301 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-122/69, 2-3=-116/69
BOT CHORD 1-4=-15/57, 3-4=-15/57
WEBS 2-4=-206/102

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) 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 49 lb uplift at joint 1, 58 lb uplift at joint 3 and 1 lb uplift at joint 4.
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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V04	Valley	1	1	I63374237 Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:49

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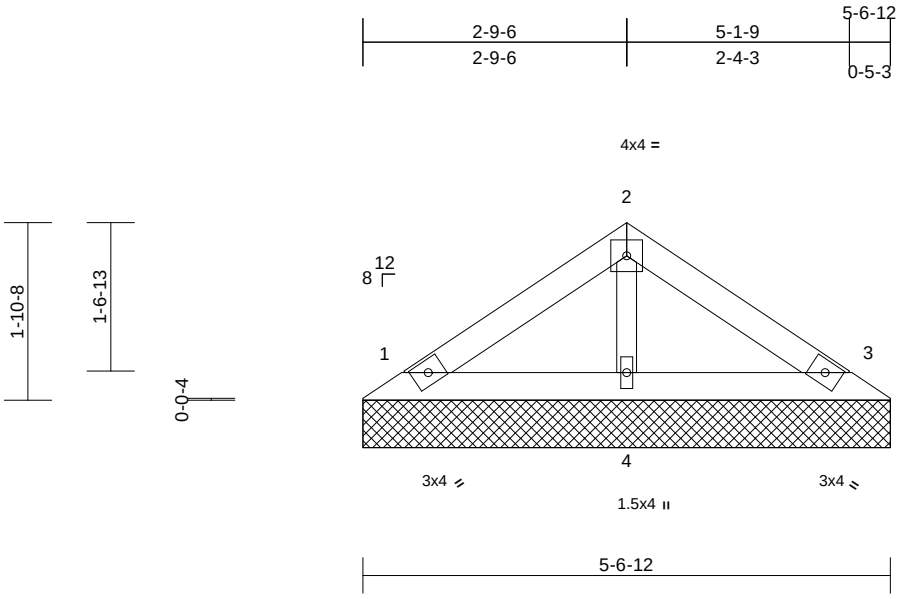
Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-6-12, 3=5-6-12, 4=5-6-12
Max Horiz 1=-43 (LC 8)
Max Uplift 1=-30 (LC 12), 3=-35 (LC 13)
Max Grav 1=118 (LC 1), 3=118 (LC 1), 4=183 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-74/51, 2-3=-70/51
BOT CHORD 1-4=-9/35, 3-4=-9/35
WEBS 2-4=-125/80

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1 and 35 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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V05	Valley	1	1	I63374238 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:49 Page: 1
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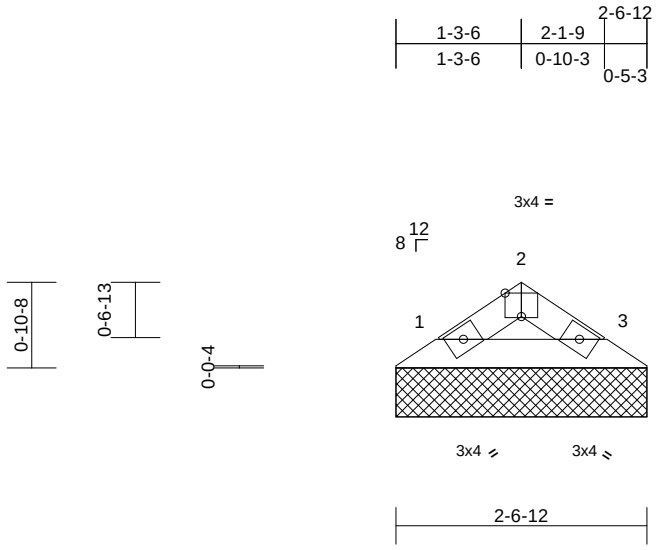


Scale = 1:23.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	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: 7 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-7-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-6-12, 3=2-6-12
Max Horiz 1=15 (LC 9)
Max Uplift 1=-11 (LC 12), 3=-11 (LC 13)
Max Grav 1=75 (LC 1), 3=75 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-65/45, 2-3=-65/45
BOT CHORD 1-3=-16/44

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) 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 11 lb uplift at joint 1 and 11 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

February 2,2024

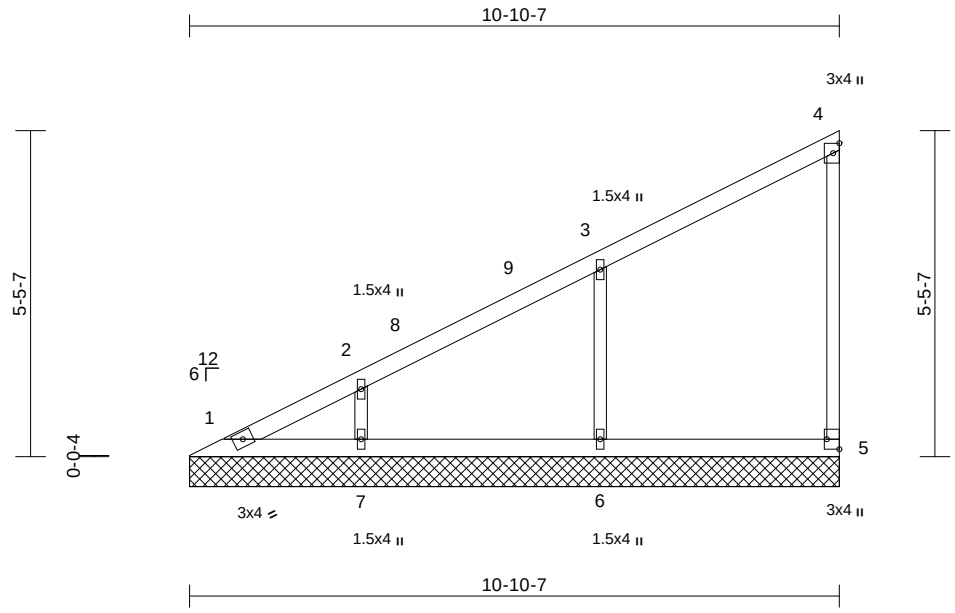
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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

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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/26/2024 3:29:10

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V06	Valley	1	1	I63374239 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:49 Page: 1
ID:c0qiU7fouT1IeHg8qO80xky962q-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	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	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 40 lb	FT = 20%

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

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

REACTIONS (size) 1=10-10-7, 5=10-10-7, 6=10-10-7, 7=10-10-7
Max Horiz 1=227 (LC 9)
Max Uplift 5=-38 (LC 9), 6=-137 (LC 12), 7=-105 (LC 12)
Max Grav 1=103 (LC 20), 5=140 (LC 1), 6=404 (LC 1), 7=307 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-378/220, 2-3=-294/185, 3-4=-139/113, 4-5=-108/123
BOT CHORD 1-7=-103/113, 6-7=-103/113, 5-6=-103/113
WEBS 3-6=-315/298, 2-7=-237/225

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 10-9-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 38 lb uplift at joint 5, 137 lb uplift at joint 6 and 105 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V07	Valley	1	1	I63374240
					Job Reference (optional)

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

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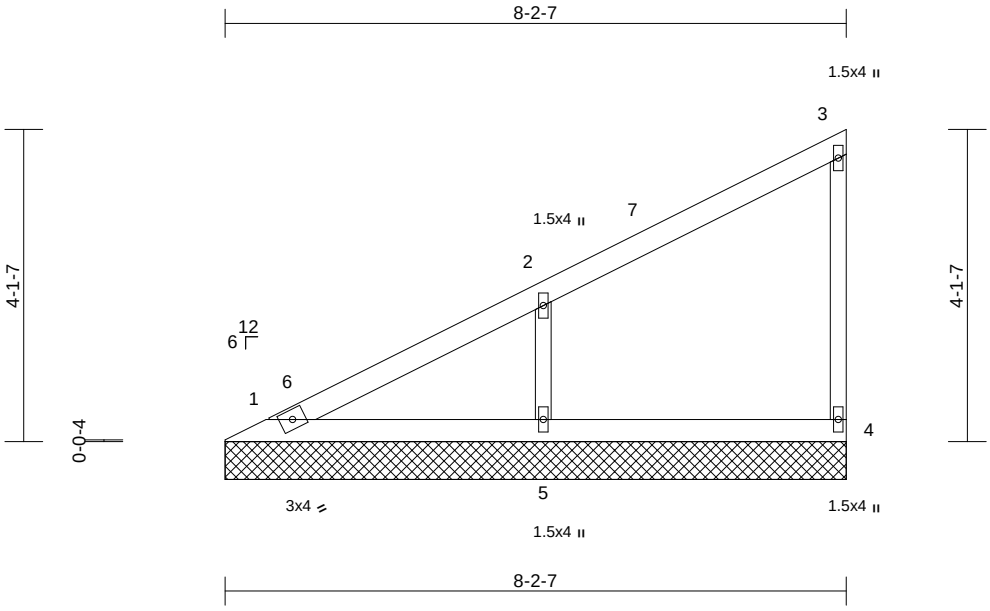

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=8-2-7, 4=8-2-7, 5=8-2-7
Max Horiz 1=167 (LC 9)
Max Uplift 4=-31 (LC 9), 5=-143 (LC 12)
Max Grav 1=126 (LC 20), 4=135 (LC 1), 5=423 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-296/178, 2-3=-129/99, 3-4=-108/134
BOT CHORD 1-5=-77/84, 4-5=-77/84
WEBS 2-5=-329/335

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 8-1-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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 31 lb uplift at joint 4 and 143 lb uplift at joint 5.
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

February 2,2024

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

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V08	Valley	1	1	I63374241
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:50 Page: 1
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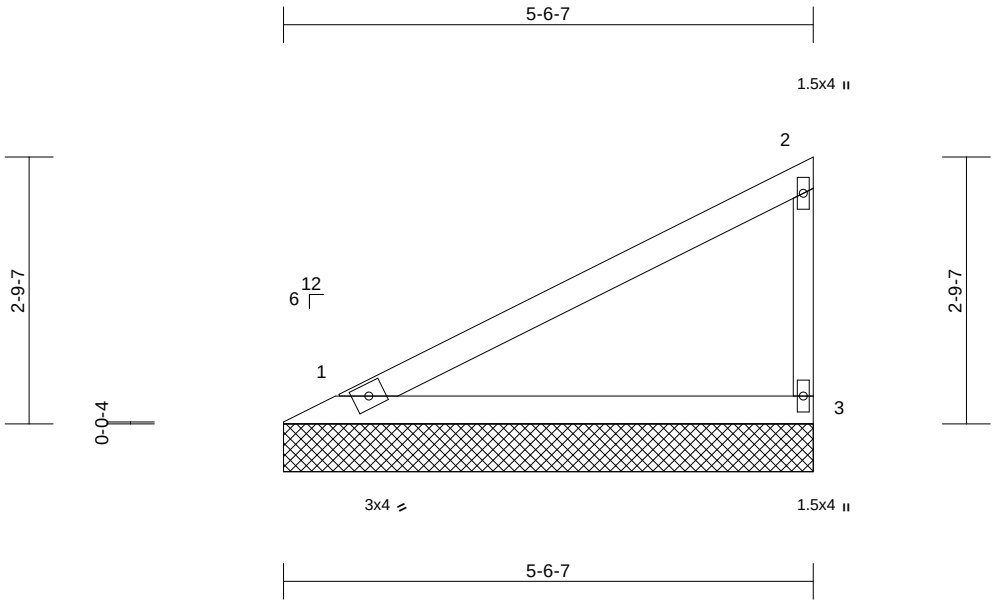

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-6-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-6-7, 3=5-6-7
Max Horiz 1=108 (LC 9)
Max Uplift 1=-34 (LC 12), 3=-61 (LC 12)
Max Grav 1=218 (LC 1), 3=218 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-151/102, 2-3=-170/215
BOT CHORD 1-3=-50/54

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 34 lb uplift at joint 1 and 61 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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V09	Valley	1	1	I63374242
					Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:50

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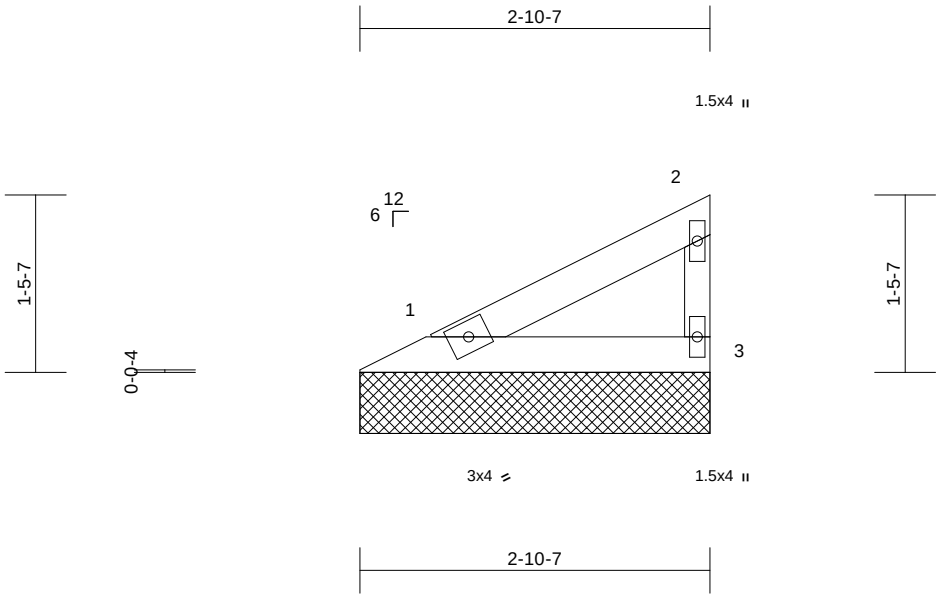

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=2-10-7, 3=2-10-7
Max Horiz 1=49 (LC 9)
Max Uplift 1=-15 (LC 12), 3=-28 (LC 12)
Max Grav 1=98 (LC 1), 3=98 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-69/46, 2-3=-76/99
BOT CHORD 1-3=-23/24

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 15 lb uplift at joint 1 and 28 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

February 2,2024

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

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V010	Valley	1	1	I63374243 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:50 Page: 1
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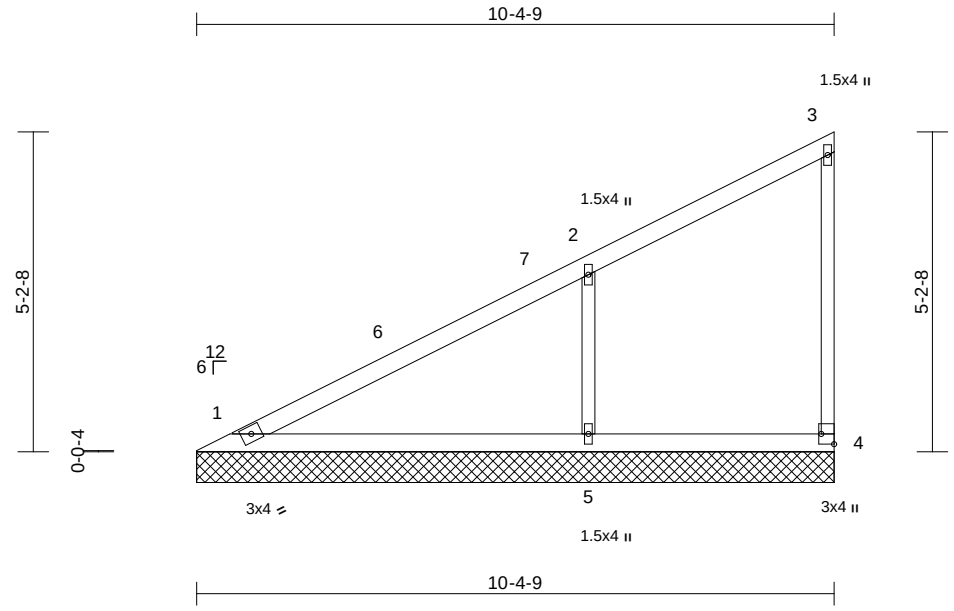

Scale = 1:37.5

Plate Offsets (X, Y): [4: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	0.50	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%

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

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

REACTIONS (size) 1=10-4-9, 4=10-4-9, 5=10-4-9
Max Horiz 1=216 (LC 9)
Max Uplift 4=-32 (LC 9), 5=-190 (LC 12)
Max Grav 1=211 (LC 1), 4=101 (LC 1), 5=560 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-328/209, 2-3=-136/103, 3-4=-85/107
BOT CHORD 1-5=-99/109, 4-5=-99/109
WEBS 2-5=-422/374

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 10-3-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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 32 lb uplift at joint 4 and 190 lb uplift at joint 5.
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

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V011	Valley	1	1	I63374244 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:51 Page: 1
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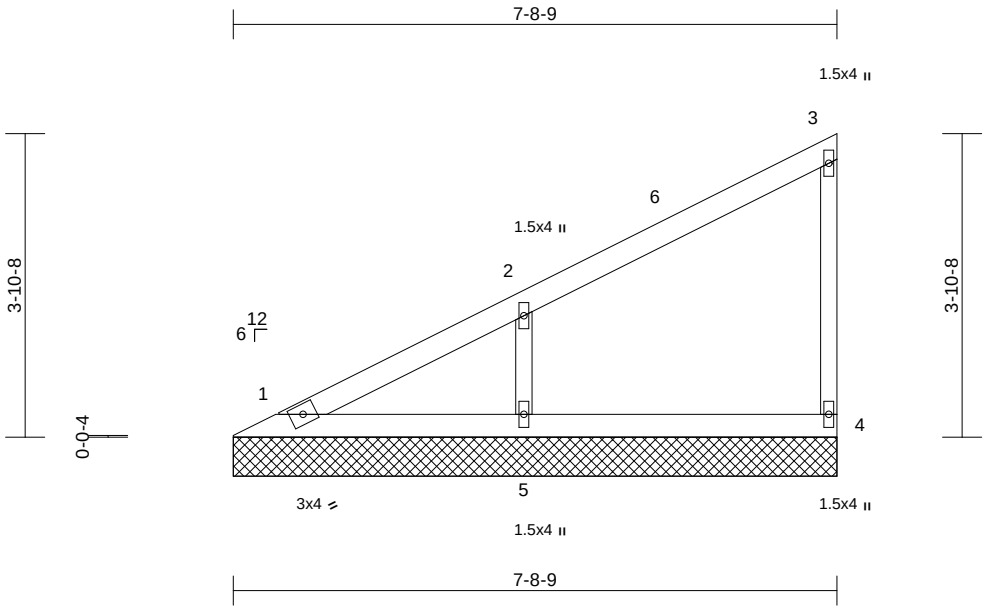


Scale = 1:29.4

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	0.25	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	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

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

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

REACTIONS (size) 1=7-8-9, 4=7-8-9, 5=7-8-9
Max Horiz 1=157 (LC 9)
Max Uplift 4=-30 (LC 9), 5=-135 (LC 12)
Max Grav 1=107 (LC 20), 4=139 (LC 1), 5=398 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-288/171, 2-3=-128/96, 3-4=-110/138
BOT CHORD 1-5=-72/79, 4-5=-72/79
WEBS 2-5=-310/324

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 7-7-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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 30 lb uplift at joint 4 and 135 lb uplift at joint 5.
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.

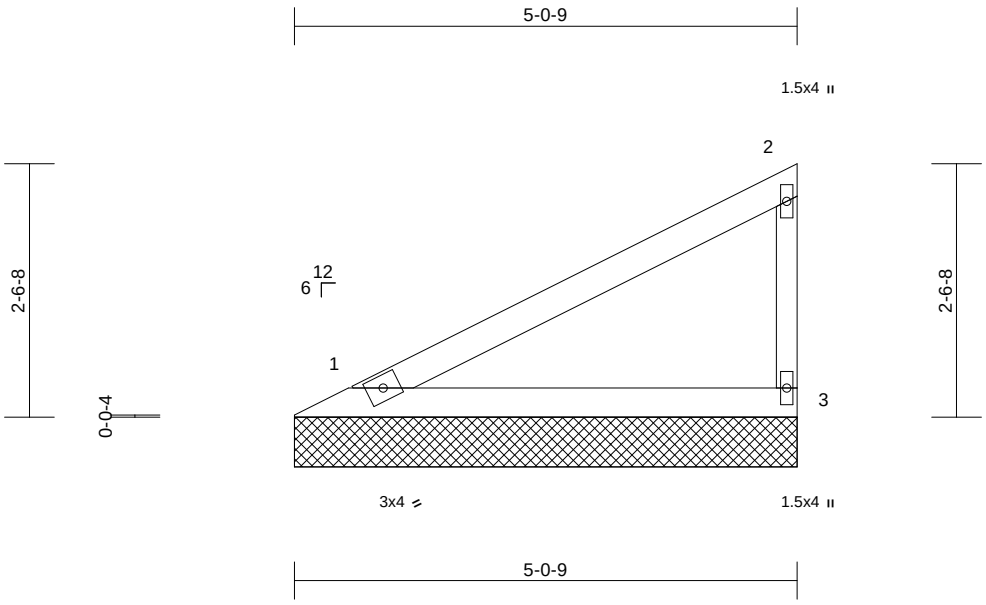
LOAD CASE(S) Standard

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V012	Valley	1	1	I63374245
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:52 Page: 1
ID:c0qiU7fouT1IeHg8qO80xky962q-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:23.1

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	0.43	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%

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

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

REACTIONS (size) 1=5-0-9, 3=5-0-9
Max Horiz 1=97 (LC 9)
Max Uplift 1=-31 (LC 12), 3=-55 (LC 12)
Max Grav 1=196 (LC 1), 3=196 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-137/92, 2-3=-152/197
BOT CHORD 1-3=-45/49

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 31 lb uplift at joint 1 and 55 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

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

February 2,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 201
P240070-01	V013	Valley	1	1	I63374246
					Job Reference (optional)

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Thu Feb 01 07:58:52

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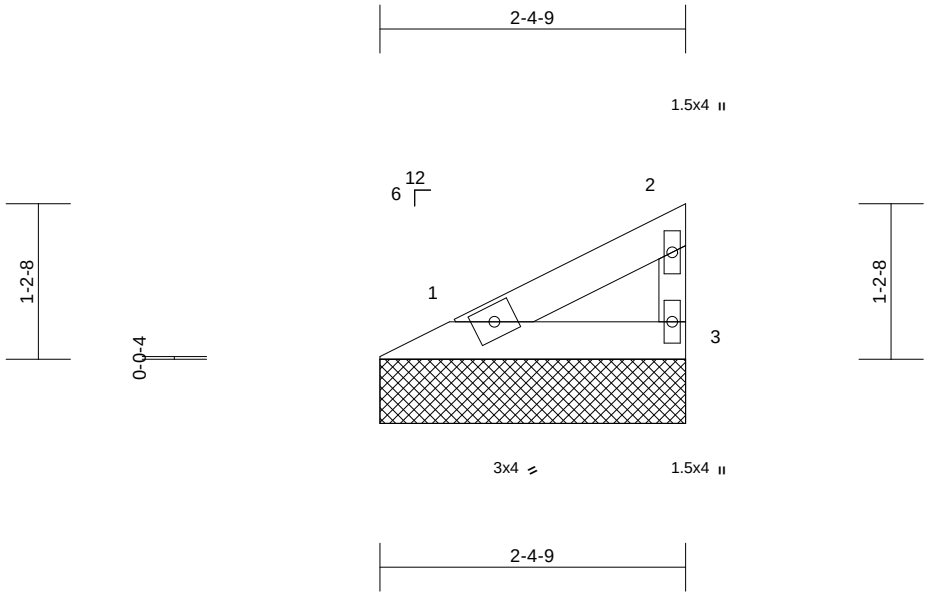


Scale = 1:17.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	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: 7 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=2-4-9, 3=2-4-9
Max Horiz 1=38 (LC 9)
Max Uplift 1=-12 (LC 12), 3=-21 (LC 12)
Max Grav 1=76 (LC 1), 3=76 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-53/36, 2-3=-59/76
BOT CHORD 1-3=-18/19

NOTES

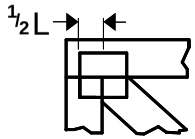
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions 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 12 lb uplift at joint 1 and 21 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

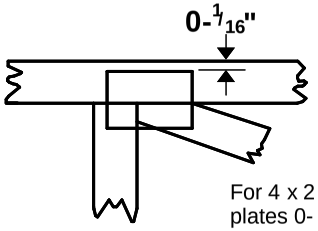
February 2,2024

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

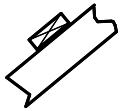
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

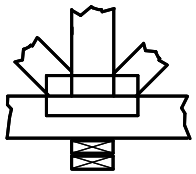
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

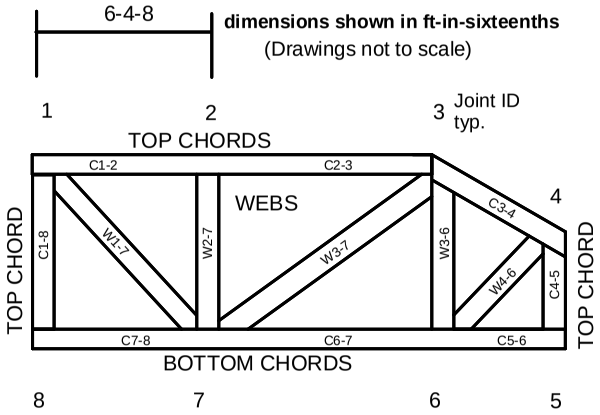


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.