

MiTek, Inc. RE: P240421 -

16023 Swingley Ridge Rd. Site Information: Project Customer: Clayton Properties Project Name: Basswood - Farmhouse 3Carl 4.434.1200

Subdivision: Hawthorne Ridge Lot/Block: 178

Model:

Roof Load: 45.0 psf

Address: 1633 SW Arborway Ter

City: Lee's Summit State: MO

General Truss Engineering Criteria & Design Loads (Individual Truss Design

Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6

Wind Code: ASCE 7-16 Wind Speed: 115 mph Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16

Floor Load: N/A psf

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

No.	Seal#	Truss Name	Date 5/1/24 5/1/24 5/1/24
1	165245275	A1	
2	165245276	A2	
3	165245277	A3	
1 2 3 4 5 6 7 8 9 10	165245278 165245279 165245280 165245281 165245282 165245283 165245284	B1 B2 B3 C1 C2 C3 D1 D2	5/1/24 5/1/24 5/1/24 5/1/24 5/1/24 5/1/24
11	165245285	D3	5/1/24
12	165245286	E1	5/1/24
13	165245287	E2	5/1/24
14	165245289	E3	5/1/24
15	165245289	E4	5/1/24
16	165245291	E5	5/1/24
17	165245292	R1	5/1/24
18	165245293	V1	5/1/24
20	165245294	V2	5/1/24
21	165245295	V3	5/1/24
22	165245296	V4	5/1/24
23	165245297	V5	5/1/24
24	165245298	V6	5/1/24
25	165245299	V7	5/1/24
26	165245300	V8	5/1/24

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.

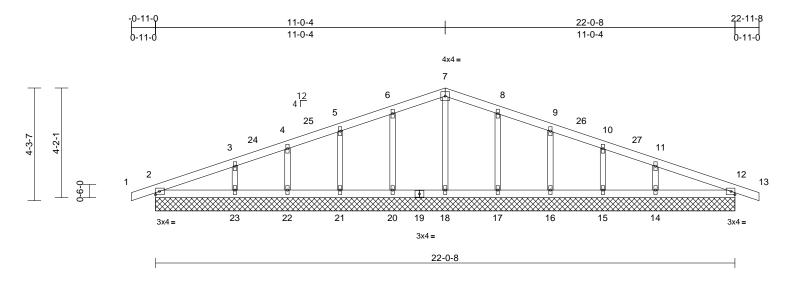


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Job	Truss	Truss Type	Qty	Ply	
P240421	A1	Common Supported Gable	1	1	Job Reference (optional)

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:47 ID:NyJzGF_AVBEWjEq853nDjfzfLAh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 86 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)

2=22-0-8, 12=22-0-8, 14=22-0-8, 15=22-0-8, 16=22-0-8, 17=22-0-8, 18=22-0-8, 20=22-0-8, 21=22-0-8,

22=22-0-8, 23=22-0-8

Max Horiz 2=75 (LC 20)

Max Uplift 2=-53 (LC 12), 12=-63 (LC 13), 14=-74 (LC 17), 15=-43 (LC 13),

16=-51 (LC 17), 17=-52 (LC 17), 17=-52 (LC 17), 17=-52 (LC 17), 17=-52 (LC 16), 17=-52 (LC 16)

20=-52 (LC 16), 21=-50 (LC 16), 22=-43 (LC 12), 23=-76 (LC 16)

Max Grav 2=192 (LC 1), 12=192 (LC 1),

14=267 (LC 24), 15=216 (LC 24), 16=251 (LC 24), 17=260 (LC 24),

18=161 (LC 1), 20=260 (LC 23), 21=251 (LC 23), 22=216 (LC 23),

23=267 (LC 23)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/13, 2-3=-84/56, 3-4=-50/62,

4-5=-42/87, 5-6=-42/124, 6-7=-55/159, 7-8=-55/154, 8-9=-42/110, 9-10=-42/74, 10-11=-39/42, 11-12=-58/34, 12-13=0/13

BOT CHORD 2-23=-16/68, 22-23=-16/68, 21-22=-16/68

20-21=-16/68, 18-20=-16/68, 17-18=-16/68,

16-17=-16/68, 15-16=-16/68, 14-15=-16/68, 12-14=-16/68

WEBS 7-18=-121/2, 6-20=-221/135, 5-21=-209/129,

4-22=-186/80, 3-23=-201/126, 8-17=-221/135, 9-16=-209/129, 10-15=-186/80, 11-14=-201/125

NOTES

- 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) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 11-0-4, Corner(3R) 11-0-4 to 16-0-4, Exterior(2N) 16-0-4 to 22-11-8 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 1.5x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 2, 52 lb uplift at joint 20, 50 lb uplift at joint 21, 43 lb uplift at joint 22, 76 lb uplift at joint 23, 52 lb uplift at joint 17, 51 lb uplift at joint 16, 43 lb uplift at joint 15, 74 lb uplift at joint 14 and 63 lb uplift at joint 12.

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024

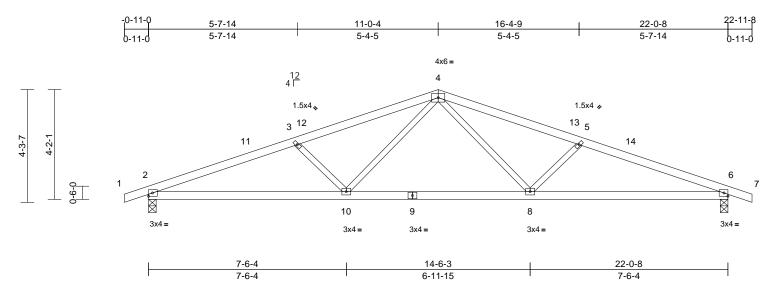




Job	Truss	Truss Type	Qty	Ply		
P240421	A2	Common	4	1	Job Reference (optional)	165245276

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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	0.66	Vert(LL)	-0.11	8-10	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.23	6-8	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.06	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 83 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 2x3 SPF No.2 WFBS

BRACING

TOP CHORD Structural wood sheathing directly applied or

2-11-6 oc purlins.

BOT CHORD Rigid ceiling directly applied or 8-4-1 oc

bracing.

REACTIONS (size) 2=0-3-8, 6=0-3-8

Max Horiz 2=-75 (LC 21)

Max Uplift 2=-221 (LC 12), 6=-221 (LC 13)

Max Grav 2=1116 (LC 23), 6=1116 (LC 24)

FORCES (lb) - Maximum Compression/Maximum Tension

1-2=0/13, 2-3=-2377/583, 3-4=-2009/510, TOP CHORD

4-5=-2009/510, 5-6=-2377/583, 6-7=0/13

BOT CHORD 2-10=-485/2171, 8-10=-266/1378,

6-8=-493/2171

WFBS 4-8=-101/707, 5-8=-517/229, 4-10=-101/707,

3-10=-517/229

NOTES

- 1) Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 11-0-4, Exterior(2R) 11-0-4 to 16-0-4, Interior (1) 16-0-4 to 22-11-8 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 221 lb uplift at joint 2 and 221 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

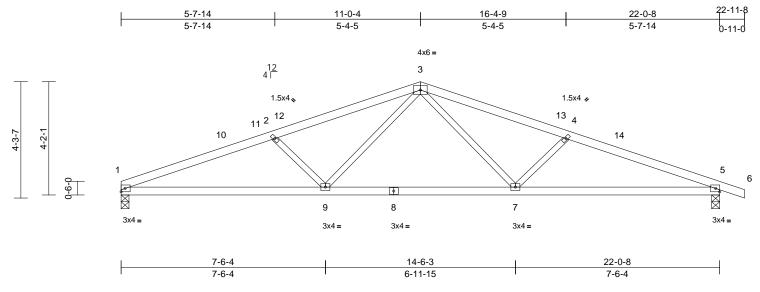
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply		
P240421	A3	Common	1	1	Job Reference (optional)	245277

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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	0.66	Vert(LL)	-0.11	7-9	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.24	1-9	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.06	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 81 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 2x3 SPF No.2 WFBS

BRACING

TOP CHORD Structural wood sheathing directly applied or

2-11-6 oc purlins.

BOT CHORD Rigid ceiling directly applied or 8-0-12 oc

bracing.

REACTIONS (size) 1=0-3-8, 5=0-3-9

Max Horiz 1=-77 (LC 21)

Max Uplift 1=-171 (LC 12), 5=-221 (LC 13)

Max Grav 1=1040 (LC 23), 5=1117 (LC 24) (lb) - Maximum Compression/Maximum

FORCES Tension

TOP CHORD 1-2=-2380/631, 2-3=-2022/553,

3-4=-2011/528, 4-5=-2379/602, 5-6=0/13

BOT CHORD 1-9=-531/2189, 7-9=-284/1383,

5-7=-511/2173

WFBS 3-7=-101/706, 4-7=-517/229, 3-9=-118/718,

2-9=-525/242

NOTES

- 1) Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 11-0-4, Exterior(2R) 11-0-4 to 16-0-4, Interior (1) 16-0-4 to 22-11-8 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 171 lb uplift at joint 1 and 221 lb uplift at joint 5.
- 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



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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

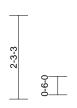


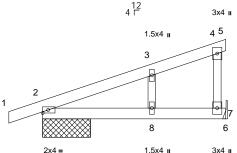
Job	Truss	Truss Type	Qty	Ply		
P240421	B1	Monopitch Supported Gable	1	1	Job Reference (optional)	165245278

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4-8-12 4-8-12



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Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.04	2-8	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.06	2-8	>955	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 19 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

> 5-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc

BOT CHORD bracing.

REACTIONS (size) 2=1-3-8, 7= Mechanical

Max Horiz 2=84 (LC 12)

Max Uplift 2=-75 (LC 12), 7=-61 (LC 16)

Max Grav 2=382 (LC 23), 7=301 (LC 23) (lb) - Maximum Compression/Maximum

FORCES Tension

TOP CHORD 1-2=0/12, 2-3=-155/0, 3-4=-83/21, 4-5=-7/0,

4-7=-167/156

BOT CHORD 2-8=-67/78, 7-8=-67/78, 6-7=0/0

WEBS 3-8=-108/168

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) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 4-11-8 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable. or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 7 and 75 lb uplift at joint 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



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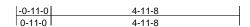


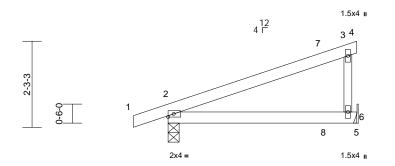


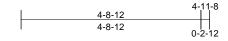
Job	Truss	Truss Type	Qty	Ply	
P240421	B2	Monopitch	3	1	Job Reference (optional)

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	0.10	2-6	>549	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	0.08	2-6	>651	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 18 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 2x3 SPF No.2 WFBS

BRACING

TOP CHORD Structural wood sheathing directly applied or

5-0-0 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=87 (LC 12)

Max Uplift 2=-131 (LC 12), 6=-106 (LC 12)

Max Grav 2=404 (LC 23), 6=299 (LC 23) (lb) - Maximum Compression/Maximum

FORCES Tension

1-2=0/13, 2-3=-105/64, 3-4=-7/0,

3-6=-248/242

BOT CHORD 2-6=0/0, 5-6=0/0

NOTES

TOP CHORD

- 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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 4-11-8 zone; cantilever left and right exposed; end vertical left exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 6 and 131 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

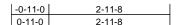


May 1,2024

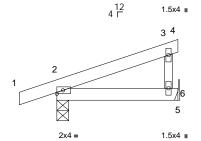
Job	Truss	Truss Type	Qty	Ply		
P240421	B3	Monopitch	7	1	I65245 Job Reference (optional)	5280

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:48 ID: Of YMtcmLQLDnS dia 9 popoFylfC8-RfC? PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC? figure for the property of t

Page: 1









Scale = 1:28.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	0.00	2-6	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.01	2-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 11 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 2x3 SPF No.2 WFBS

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-0 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=57 (LC 13)

Max Uplift 2=-78 (LC 12), 6=-30 (LC 16)

Max Grav 2=281 (LC 23), 6=161 (LC 23) (lb) - Maximum Compression/Maximum

FORCES Tension

TOP CHORD 1-2=0/13, 2-3=-83/47, 3-4=-7/0, 3-6=-131/144

BOT CHORD 2-6=-23/25, 5-6=0/0

NOTES

- 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 6) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 6 and 78 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024



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

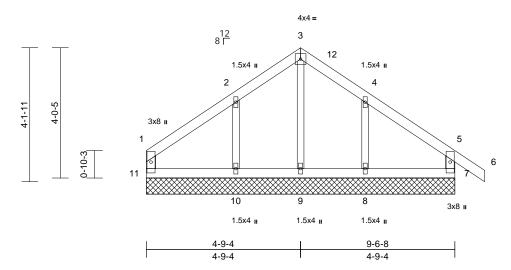
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply		
P240421	C1	Common Structural Gable	1	1	Job Reference (optional)	l65245281

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:48 ID:gfrsVxpQoNOr6dkbbQOWdoylfDM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Scale = 1:35.6

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R								
BCDL	10.0										Weight: 41 lb	FT = 20%

LUMBER

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

2x4 SP No.2 *Except* 9-3:2x3 SPF No.2 WFBS

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)

7=9-6-8, 8=9-6-8, 9=9-6-8, 10=9-6-8, 11=9-6-8

Max Horiz 11=-121 (LC 12)

Max Uplift 7=-49 (LC 16), 8=-110 (LC 17)

10=-114 (LC 16), 11=-41 (LC 17)

7=260 (LC 24), 8=337 (LC 24), Max Grav

9=123 (LC 28), 10=364 (LC 23),

11=175 (LC 23)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-115/105, 2-3=-133/229, 3-4=-133/234,

4-5=-118/117, 5-6=0/69, 1-11=-155/112, 5-7=-238/213

BOT CHORD 10-11=-51/76, 9-10=-51/76, 8-9=-51/76, 7-8=-51/76

WFBS 3-9=-158/54, 2-10=-308/253, 4-8=-284/231

NOTES

- Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-1-12 to 4-9-4, Corner(3R) 4-9-4 to 9-9-4, Exterior(2N) 9-9-4 to 10-5-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 11, 49 lb uplift at joint 7, 114 lb uplift at joint 10 and 110 lb uplift at joint 8.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502 11 1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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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



Job	Truss	Truss Type	Qty	Ply		
P240421	C2	Common	1	1	Job Reference (optional)	165245282

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:48 ID:GfKth5P1324Gzx3gv2th0YylfKL-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

4-9-4

Page: 1

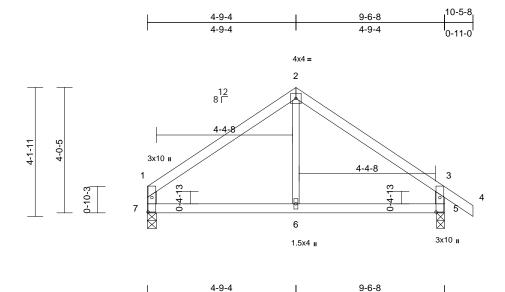


Plate Offsets (X, Y): [1:0-5-9,0-1-8], [5:0-5-9,0-1-8]

		1		1								-
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	0.03	5-6	>999	240	MT20	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.03	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R								
BCDL	10.0										Weight: 37 lb	FT = 20%

4-9-4

LUMBER

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

WEBS 2x4 SP No.2 *Except* 6-2:2x3 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) 5=0-3-0, 7=0-3-8

Max Horiz 7=-114 (LC 12)

Max Uplift 5=-83 (LC 17), 7=-56 (LC 16) Max Grav 5=613 (LC 24), 7=537 (LC 23)

(lb) - Maximum Compression/Maximum

FORCES Tension

1-2=-515/449, 2-3=-516/453, 3-4=0/71,

TOP CHORD 1-7=-485/338, 3-5=-567/411

BOT CHORD 6-7=-238/296, 5-6=-238/296

WEBS 2-6=-310/185

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 4-9-4, Exterior(2R) 4-9-4 to 9-9-4, Interior (1) 9-9-4 to 10-5-8 zone; cantilever left and right exposed; end vertical right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this

- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 7 and 83 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024



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

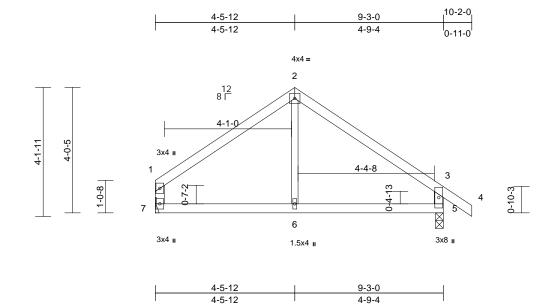
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	
P240421	C3	Common	1	1	I65245283 Job Reference (optional)

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:48 ID:bBOxdUdBwZQGDBIEEzD_0KylfMf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:37

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	0.04	5-6	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.04	5-6	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R								
BCDL	10.0										Weight: 37 lb	FT = 20%

LUMBER

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

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

BRACING

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

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

bracing.

REACTIONS (size) 5=0-3-0, 7= Mechanical

Max Horiz 7=-113 (LC 12)

Max Uplift 5=-82 (LC 17), 7=-53 (LC 16)

Max Grav 5=597 (LC 24), 7=514 (LC 23) (lb) - Maximum Compression/Maximum

FORCES

Tension

1-2=-475/433, 2-3=-488/427, 3-4=0/71, 1-7=-454/330, 3-5=-549/400

BOT CHORD 6-7=-215/270, 5-6=-215/270

WEBS 2-6=-293/171

NOTES

TOP CHORD

- Unbalanced roof live loads have been considered for
- 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 4-5-12, Exterior(2R) 4-5-12 to 9-5-12, Interior (1) 9-5-12 to 10-2-0 zone; cantilever left and right exposed; end vertical right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 5 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 7 and 82 lb uplift at joint 5.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024

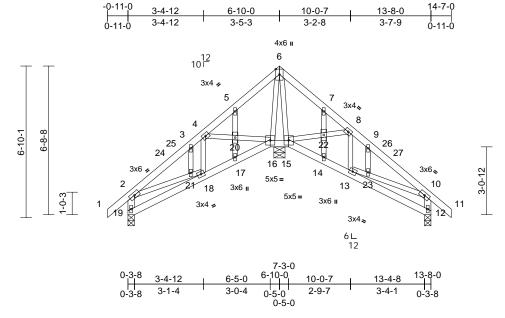




Job	Truss	Truss Type	Qty	Ply		
P240421	D1	Roof Special Structural Gable	1	1	I65245284 Job Reference (optional)	

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:49 ID:ZbQgzf7wzm0H2n9hpnXDoOylfRA-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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Scale = 1:52

Loading TCLL (roof)	(psf) 25.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.20	DEFL Vert(LL)	in -0.01	(loc) 17-18	l/defl >999		PLATES MT20	GRIP 197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.02	17-18	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 79 lb	FT = 20%

LUMBER

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

WEBS 2x3 SPF No.2 *Except* 19-2,12-10:2x4 SP

No.2 OTHERS 2x3 SPF No.2

BRACING

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc

bracing.

REACTIONS (size) 12=0-3-8, 15=0-6-0, 16=0-6-0,

19=0-3-8

Max Horiz 19=-215 (LC 14) Max Uplift 12=-106 (LC 17), 15=-55 (LC 17),

16=-112 (LC 16), 19=-84 (LC 17)

Max Grav 12=354 (LC 24), 15=588 (LC 24)

16=603 (LC 23), 19=354 (LC 23)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/82, 2-3=-400/78, 3-4=-234/107,

4-5=-64/229, 5-6=-8/310, 6-7=0/312,

7-8=-38/222, 8-9=-233/107, 9-10=-379/76, 10-11=0/82, 2-19=-354/157, 10-12=-357/155

BOT CHORD 18-19=-217/270, 17-18=-149/262

16-17=-153/301, 15-16=-219/266,

14-15=0/274, 13-14=0/229, 12-13=-40/97

WEBS 6-16=-274/38, 6-15=-276/36, 2-21=0/193,

18-21=0/185, 13-23=-16/153, 10-23=-19/157,

4-20=-412/211, 16-20=-418/213, 4-18=-37/100, 15-22=-407/200,

8-22=-399/197, 8-13=-28/120, 5-20=-122/75,

17-20=-81/57, 3-21=-15/46, 7-22=-104/60,

14-22=-70/46, 9-23=-23/37

NOTES

 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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 6-10-0, Exterior(2R) 6-10-0 to 11-10-0, Interior (1) 11-10-0 to 14-7-0 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
- 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.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00: Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 1.5x4 MT20 unless otherwise indicated.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 9) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Bearing at joint(s) 19, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 19, 112 lb uplift at joint 16, 55 lb uplift at joint 15 and 106 lb uplift at joint 12.

14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024

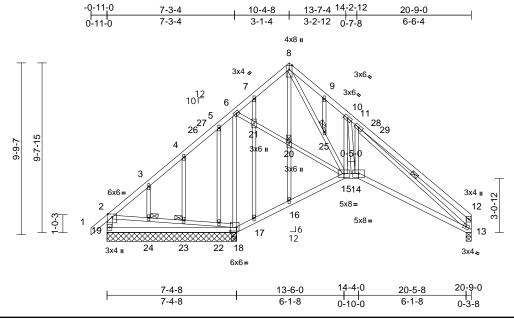




ſ	Job	Truss	Truss Type	Qty	Ply		
	P240421	D2	Roof Special Structural Gable	1	1	Job Reference (optional)	165245285

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:49 ID:DWJnveVQ7oN6jltbUjayQQylfPO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:65.6

Plate Offsets (X	, Y):	[18:0-4-4,0-2-8]
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Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.08	18-19	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.17	18-19	>525	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.05	13	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0	1		1							Weight: 137 lb	FT = 20%

LUMBER

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

WEBS 2x3 SPF No.2 *Except* 19-2,13-12:2x4 SP

No.2

OTHERS 2x3 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or

5-7-3 oc purlins, except end verticals. Rigid ceiling directly applied or 6-0-0 oc

BOT CHORD bracing.

WEBS 1 Row at midpt **JOINTS** 1 Brace at Jt(s): 20,

23, 24, 25

REACTIONS (size) 13=0-3-8. 18=7-4-8. 19=7-4-8

Max Horiz 19=280 (LC 15)

Max Uplift 13=-75 (LC 17), 18=-166 (LC 16),

19=-99 (LC 24)

Max Grav 13=476 (LC 24), 18=1326 (LC 24),

19=262 (LC 36)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/79, 2-3=-85/409, 3-4=-69/453,

4-5=-37/486, 5-6=-19/446, 6-7=-342/125 7-8=-314/115, 8-9=-479/207, 9-10=-593/192,

10-11=-778/386, 11-12=-423/240,

2-19=-192/167, 12-13=-401/225 **BOT CHORD** 18-19=-338/516, 17-18=-423/175,

16-17=-394/201, 15-16=-393/195,

14-15=0/402, 13-14=0/574

WEBS 6-18=-883/177, 6-21=0/660, 20-21=0/664,

15-20=0/663, 8-25=-205/267, 15-25=-204/263, 10-15=-674/212, 10-14=-435/774, 11-14=-560/544, 2-24=-645/361, 23-24=-645/360,

22-23=-649/365, 18-22=-665/368 11-13=-390/28, 8-20=0/100, 16-20=0/103,

7-21=-58/15 17-21=-52/0 5-22=-93/15 4-23=-66/59, 3-24=-9/15, 9-25=-16/3

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-4-8, Interior (1) 4-4-8 to 10-4-8, Exterior(2R) 10-4-8 to 15-4-8, Interior (1) 15-4-8 to 20-7-4 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
- 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.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 12) 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.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 19, 166 lb uplift at joint 18 and 75 lb uplift at joint 13.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024

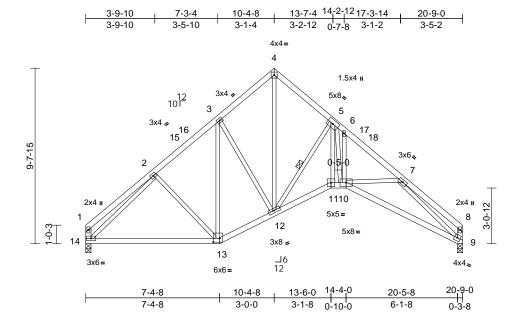


M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE



Job	Truss	Truss Type	Qty	Ply	
P240421	D3	Roof Special	7	1	I65245286 Job Reference (optional)

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:49 ID:IFehQ2g8Nbhuyi5Lxjrm7tylfQT-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:63.4

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

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	0.26	Vert(LL)	-0.10	13-14	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.21	13-14	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.16	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 119 lb	FT = 20%

LUMBER

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

WEBS 2x3 SPF No.2 *Except* 14-1,9-8:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-10-12 oc purlins, except end verticals.

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

bracing.

WEBS 1 Row at midpt 5-12 REACTIONS (size) 9=0-3-8, 14=0-3-8

Max Horiz 14=272 (LC 15)

Max Uplift 9=-114 (LC 17), 14=-113 (LC 16)

Max Grav 9=976 (LC 23), 14=976 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-295/81, 2-3=-1000/225, 3-4=-934/260,

4-5=-938/266, 5-6=-1848/328,

6-7=-1991/277, 7-8=-304/81, 1-14=-266/90,

8-9=-268/80

BOT CHORD 13-14=-197/796, 12-13=-98/796,

11-12=-89/1489, 10-11=-71/1309,

9-10=-244/1521

WEBS 3-13=-181/20, 5-11=-41/662, 5-10=-110/808, 6-10=-80/83, 2-14=-882/158, 7-9=-1754/282,

7-10=-44/198, 3-12=-170/180, 4-12=-246/804, 5-12=-1334/187,

2-13=-144/171

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 10-4-8, Exterior(2R) 10-4-8 to 15-4-8. Interior (1) 15-4-8 to 20-7-4 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 113 lb uplift at joint 14 and 114 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024

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

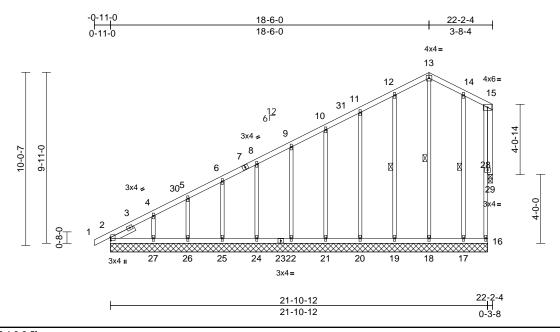
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply		
P240421	E1	Roof Special Supported Gable	1	1	Job Reference (optional)	165245287

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:49 ID:gsITprHaUqlqDiJ2ZYuBGkylfYi-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:66.9

Plate Offsets (X, Y): [2:0-2-1,0-0	-5	
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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	0.13	Vert(LL)	0.00	2-27	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-27	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	29	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R								
BCDL	10.0	1		1							Weight: 132 lb	FT = 20%

_	U	M	В	E	F	₹	

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

OTHERS 2x3 SPF No.2 *Except* 28-15:2x4 SP No.2

SLIDER Left 2x4 SP No.2 -- 1-6-7

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 10-0-0 oc

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

bracing.

WEBS 1 Row at midpt 13-18, 12-19, 14-17 **REACTIONS** (size) 2=21-10-12, 16=21-10-12, 17=21-10-12. 18=21-10-12.

19=21-10-12, 20=21-10-12, 21=21-10-12, 22=21-10-12, 24=21-10-12. 25=21-10-12.

26=21-10-12, 27=21-10-12, 29=0-3-2

Max Horiz 2=382 (LC 16)

Max Uplift 16=-9 (LC 17), 17=-50 (LC 17), 10=-60 (LC 17), 10=-60 (LC 18), 20=-62 (LC 18)

19=-64 (LC 16), 20=-62 (LC 16), 21=-61 (LC 16), 22=-61 (LC 16), 24=-60 (LC 16), 25=-65 (LC 16),

26=-42 (LC 16), 27=-147 (LC 16), 29=-11 (LC 16)

Max Grav 2=218 (LC 28), 16=43 (LC 24), 17=240 (LC 24), 18=180 (LC 24),

19=261 (LC 23), 20=233 (LC 23), 21=183 (LC 23), 22=180 (LC 36), 24=180 (LC 23), 25=182 (LC 36), 26=171 (LC 1), 27=215 (LC 36),

29=22 (LC 24)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/12, 2-4=-412/153, 4-5=-318/115,

5-6=-278/100, 6-8=-227/80, 8-9=-179/62, 9-10=-130/43, 10-11=-81/44, 11-12=-48/54, 12-13=-52/106, 13-14=-54/94, 14-15=-25/38,

16-28=-32/21. 15-28=-32/21

BOT CHORD 2-27=-1/1, 26-27=-1/1, 25-26=-1/1,

24-25=-1/1, 22-24=-1/1, 21-22=-1/1, 20-21=-1/1, 19-20=-1/1, 18-19=-1/1,

17-18=-1/1, 16-17=-1/1

WEBS 13-18=-139/20, 12-19=-222/96,

11-20=-193/98, 10-21=-143/96, 9-22=-140/97, 8-24=-140/96, 6-25=-141/100,

5-26=-135/93, 4-27=-162/241,

14-17=-206/128, 15-29=-22/20

NOTES

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: AŠCE 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) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 18-6-0, Corner(3E) 18-6-0 to 21-9-8 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 11) Bearing at joint(s) 29 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 16, 64 lb uplift at joint 19, 62 lb uplift at joint 20, 61 lb uplift at joint 21, 61 lb uplift at joint 22, 60 lb uplift at joint 24, 65 lb uplift at joint 25, 42 lb uplift at joint 26, 147 lb uplift at joint 27, 50 lb uplift at joint 17 and 11 lb uplift at joint 29.
- 13) This truss is designed in accordance with the 2018
 International Residential Code sections R502.11.1 and
 R802.10.2 and referenced standard ANSI/TPI 1.



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Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply		
P240421	E1	Roof Special Supported Gable	1	1	Job Reference (optional)	165245287

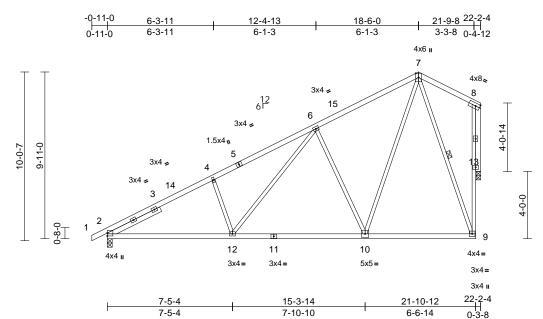
Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:49 ID: gsITprHaUglgDiJ2ZYuBGkylfYi-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?ff

Page: 2

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	
P240421	E2	Roof Special	8	1	I65245288 Job Reference (optional)

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:49 ID:g2jB6PgaV0svctvF4KTDi_ylfZV-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Loading 2-0-0 CSI **DEFL** I/defI L/d **PLATES** GRIP (psf) Spacing in (loc) TCLL (roof) 25.0 Plate Grip DOL 1.15 TC 0.73 Vert(LL) -0.07 2-12 >999 240 MT20 244/190 25.0 BC Snow (Pf) Lumber DOL 1 15 0.60 Vert(CT) -0.1610-12 >999 180 **TCDL** 10.0 Rep Stress Incr YES WB 0.96 Horz(CT) 0.03 13 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S BCDL 10.0 Weight: 120 lb FT = 20%

LUMBER

Scale = 1:68.5

2x4 SP No.2 TOP CHORD

2x4 SP No.2 *Except* 9-8:2x3 SPF No.2 BOT CHORD 2x3 SPF No.2 *Except* 13-8:2x4 SP No.2 WFBS

SLIDER Left 2x4 SP No.2 -- 3-5-15

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 8-7-5 oc

bracing. WEBS 1 Row at midpt

REACTIONS 2=0-3-8, 13=0-3-2 (size)

Max Horiz 2=382 (LC 16)

Max Uplift 2=-157 (LC 16), 13=-232 (LC 16)

7-9

Max Grav 2=1079 (LC 23), 13=990 (LC 23)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/12, 2-4=-1626/202, 4-6=-1481/268,

6-7=-802/177, 7-8=-91/72, 9-13=-220/961, 8-13=-185/65

BOT CHORD 2-12=-463/1352, 10-12=-283/900,

9-10=-86/315

WEBS 4-12=-334/241, 6-12=-169/601,

6-10=-753/326, 7-10=-213/888, 7-9=-960/264

NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 18-6-0, Exterior(2E) 18-6-0 to 21-9-8 zone; cantilever left and right exposed; end vertical left exposed:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- All plates are 3x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 2 and 232 lb uplift at joint 13.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024

Page: 1



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

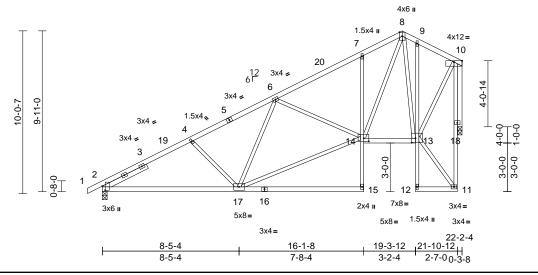
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply		
P240421	E3	Roof Special	2	1	Job Reference (optional)	

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:50 ID:HXyS?ajf9Rc8qbAhrG?Jw7ylfVZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





Scale = 1:71.1

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

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	0.43	Vert(LL)	-0.11	2-17	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.23	2-17	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.05	18	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 139 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No 2

2x4 SP No.2 *Except* 15-7,9-12,11-10:2x3 **BOT CHORD**

SPF No.2 2x3 SPF No.2

OTHERS 2x4 SP No.2 SLIDER Left 2x4 SP No.2 -- 3-0-10

BRACING

WEBS

TOP CHORD Structural wood sheathing directly applied or

4-7-14 oc purlins.

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

bracing, Except: 8-3-12 oc bracing: 2-17 6-0-0 oc bracing: 11-12.

REACTIONS (size) 2=0-3-8, 18=0-3-2

> Max Horiz 2=382 (LC 16) Max Uplift 2=-157 (LC 16), 18=-232 (LC 16)

> Max Grav 2=1079 (LC 23), 18=990 (LC 23)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/12, 2-4=-1636/223, 4-6=-1390/188,

6-7=-1075/235, 7-8=-1056/334,

8-9=-428/183. 9-10=-421/139 **BOT CHORD** 2-17=-490/1365, 15-17=0/22, 14-15=0/123,

7-14=-411/199, 13-14=-114/447, 12-13=0/46,

9-13=-222/87, 11-12=-4/0, 11-18=0/43,

10-18=-970/289

4-17=-279/211, 6-17=-103/141, 14-17=-420/1286, 6-14=-405/161,

11-13=-1/9. 10-13=-217/837.

8-14=-374/1214. 8-13=-591/171

NOTES

WEBS

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 18-6-0, Exterior(2E) 18-6-0 to 21-9-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 2 and 232 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



May 1,2024

Page: 1



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

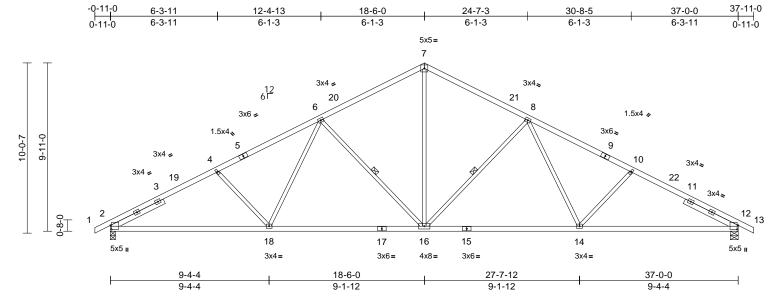
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply		
P240421	E4	Common	7	1	Job Reference (optional)	165245290

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:50 ID:8Oa_xmr2iWnAyeeW9D9b2FylfSp-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:67.9

Plate Offsets (X, Y): [2:0-2-13,0-0-12], [12:0-2-13,0-0-12]

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	0.90	Vert(LL)	-0.19	2-18	>999	240	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.42	2-18	>999	180	1	
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.14	12	n/a	n/a	1	
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 171 lb	FT = 20%

LUMBER

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

SLIDER Left 2x4 SP No.2 -- 3-5-15, Right 2x4 SP

No.2 -- 3-5-15

BRACING

TOP CHORD Structural wood sheathing directly applied. **BOT CHORD** Rigid ceiling directly applied or 2-2-0 oc

bracing. WEBS

1 Row at midpt 8-16, 6-16

REACTIONS (size) 2=0-3-8, 12=0-5-8 Max Horiz 2=183 (LC 16)

Max Uplift 2=-276 (LC 16), 12=-276 (LC 17)

Max Grav 2=1729 (LC 1), 12=1729 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/12, 2-4=-2919/471, 4-6=-2659/458,

6-7=-1924/432, 7-8=-1924/432,

8-10=-2659/458, 10-12=-2918/471,

12-13=0/12

BOT CHORD 2-18=-488/2482, 16-18=-309/2122,

14-16=-210/2122, 12-14=-315/2482

WEBS 7-16=-200/1249, 8-16=-864/303, 8-14=-58/461, 10-14=-294/230,

6-16=-864/303, 6-18=-57/461, 4-18=-294/230

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 18-6-0. Exterior(2R) 18-6-0 to 23-6-0. Interior (1) 23-6-0 to 37-11-0 zone: cantilever left and right exposed; end vertical left and right exposed:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- All plates are 3x4 MT20 unless otherwise indicated
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 276 lb uplift at joint 2 and 276 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



May 1,2024

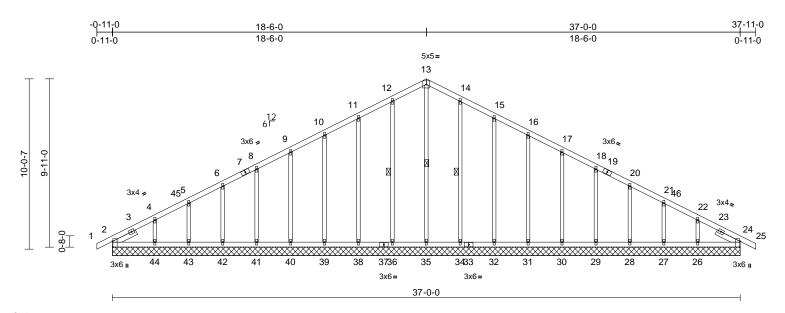


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply		
P240421	E5	Common Supported Gable	1	1	Job Reference (optional)	165245291

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:50 ID:WUXtsnQTcg5xShQIN2gNrTylfdh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:67.9

Plate Offsets (X, Y):	[2:0-4-1,Edge], [24:0-4-1,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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.01	24	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 195 lb	FT = 20%

L	U	М	В	E	I	₹

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

SLIDER Left 2x4 SP No.2 -- 1-6-7, Right 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

WEBS 13-35, 12-36, 14-34 1 Row at midpt REACTIONS (size)

2=37-0-0, 24=37-0-0, 26=37-0-0, 27=37-0-0, 28=37-0-0, 29=37-0-0, 30=37-0-0. 31=37-0-0. 32=37-0-0.

34=37-0-0, 35=37-0-0, 36=37-0-0, 38=37-0-0, 39=37-0-0, 40=37-0-0, 41=37-0-0, 42=37-0-0, 43=37-0-0,

44=37-0-0

Max Horiz 2=183 (LC 16)

Max Uplift 2=-27 (LC 17), 26=-105 (LC 17), 27=-51 (LC 17), 28=-63 (LC 17),

29=-61 (LC 17), 30=-61 (LC 17), 31=-60 (LC 17), 32=-67 (LC 17),

34=-50 (LC 17), 36=-55 (LC 16), 38=-65 (LC 16), 39=-60 (LC 16),

40=-61 (LC 16), 41=-60 (LC 16), 42=-64 (LC 16), 43=-48 (LC 16),

44=-118 (LC 16)

Max Grav 2=188 (LC 1), 24=188 (LC 1), 26=211 (LC 37), 27=172 (LC 1),

28=182 (LC 37), 29=180 (LC 24), 30=180 (LC 37), 31=221 (LC 24), 32=265 (LC 24), 34=274 (LC 24),

35=208 (LC 29), 36=274 (LC 23), 38=265 (LC 23), 39=221 (LC 23).

40=180 (LC 36), 41=180 (LC 23), 42=182 (LC 36), 43=172 (LC 1),

44=211 (LC 36)

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/12, 2-4=-243/84, 4-5=-162/90, 5-6=-128/105, 6-8=-102/131, 8-9=-82/159,

9-10=-73/187, 10-11=-91/237, 11-12=-111/294, 12-13=-128/341,

13-14=-128/341, 14-15=-111/294, 15-16=-91/237. 16-17=-73/184.

17-18=-58/130, 18-20=-58/76, 20-21=-73/31,

21-22=-98/22, 22-24=-165/50, 24-25=0/12 2-44=-48/193, 43-44=-48/193,

42-43=-48/193, 41-42=-48/193 40-41=-48/193, 39-40=-48/193,

38-39=-48/193, 36-38=-48/193, 35-36=-48/193, 34-35=-48/193,

32-34=-48/193, 31-32=-48/193, 30-31=-48/193, 29-30=-48/193,

28-29=-48/193, 27-28=-48/193, 26-27=-48/193, 24-26=-48/193

WEBS 13-35=-213/42, 12-36=-234/82, 11-38=-225/104, 10-39=-181/95

9-40=-140/97, 8-41=-140/96, 6-42=-141/98, 5-43=-136/100, 4-44=-159/205,

14-34=-234/82, 15-32=-225/104, 16-31=-181/95, 17-30=-140/97,

18-29=-140/96, 20-28=-141/98 21-27=-136/101, 22-26=-159/202

NOTES

FORCES

BOT CHORD

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

Page: 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) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 18-6-0, Corner(3R) 18-6-0 to 23-6-0, Exterior(2N) 23-6-0 to 37-11-0 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.



Continued on page 2

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



Job	Truss	Truss Type	Qty	Ply		
P240421	E5	Common Supported Gable	1	1	Job Reference (optional)	65245291

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:50 ID:WUXtsnQTcg5xShQIN2gNrTylfdh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 2

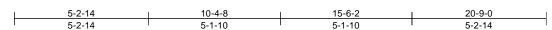
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 25.0 psf on overhangs non-concurrent with other live loads.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 2, 55 lb uplift at joint 36, 65 lb uplift at joint 38, 60 lb uplift at joint 39, 61 lb uplift at joint 40, 60 lb uplift at joint 41, 64 lb uplift at joint 42, 48 lb uplift at joint 43, 118 lb uplift at joint 44, 50 lb uplift at joint 34, 67 lb uplift at joint 32, 60 lb uplift at joint 31, 61 lb uplift at joint 29, 63 lb uplift at joint 28, 51 lb uplift at joint 27 and 105 lb uplift at joint 26.
- 13) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 14) 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.

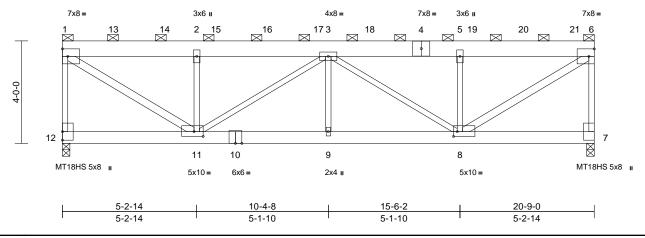
LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply		
P240421	R1	Flat Girder	1	2	Job Reference (optional)	165245292

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:50 ID:p1ILYtHBqmZt0HL5osFBZ7ylfON-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





Scale = 1:44.9

Plate Offsets (X, Y): [8:0-1-12,0-2-4], [11:0-4-4,0-2-4]

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	0.80	Vert(LL)	-0.11	9	>999	240	MT18HS	197/144
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.21	9	>999	180	MT20	197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.03	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 272 lb	FT = 20%

LUMBER

TOP CHORD 2x8 SPF No 2 BOT CHORD 2x6 SP 2400F 2.0E

WEBS 2x3 SPF No.2 *Except* 11-1,8-6:2x4 SP 1650F 1.5E

BRACING

TOP CHORD 2-0-0 oc purlins (5-10-6 max.): 1-6, except

end verticals.

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

bracing

REACTIONS (size) 7=0-3-8, 12=0-3-8 Max Horiz 12=-105 (LC 14)

Max Uplift 7=-1277 (LC 13), 12=-1149 (LC 12)

Max Grav 7=5816 (LC 1), 12=5244 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-12=-5151/1335, 1-2=-6512/1664,

2-3=-6512/1664, 3-5=-6543/1633,

5-6=-6543/1633, 6-7=-5720/1456 11-12=-86/87, 9-11=-2151/8551,

BOT CHORD 8-9=-2151/8551, 7-8=-9/38

1-11=-1944/7816, 2-11=-2940/830,

3-11=-2460/625, 3-9=0/199, 3-8=-2423/625,

5-8=-2985/834, 6-8=-1959/7851

NOTES

WEBS

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x3 - 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.
- 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 exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 6) Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1149 lb uplift at joint 12 and 1277 lb uplift at joint 7.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 18 lb down and 20 lb up at 0-1-4, 970 lb down and 200 lb up at 2-0-0, 970 lb down and 200 lb up at 4-0-0, 970 lb down and 200 lb up at 6-0-0, 970 lb down and 200 lb up at 8-0-0, 970 lb down and 200 lb up at 10-0-0, 970 lb down and 200 lb up at 12-0-0, 970 lb down and 200 lb up at 14-0-0, 970 lb down and 200 lb up at 16-0-0, and 970 lb down and 200 lb up at 18-0-0, and 973 lb down and 206 lb up at 20-0-0 on top chord. The design/ selection of such connection device(s) is the responsibility of others.

Page: 1

LOAD CASE(S) Standard

Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-6=-70, 7-12=-20

Concentrated Loads (lb)

Vert: 4=-920, 13=-920, 14=-920, 15=-920, 16=-920,

17=-920, 18=-920, 19=-920, 20=-920, 21=-932



May 1,2024



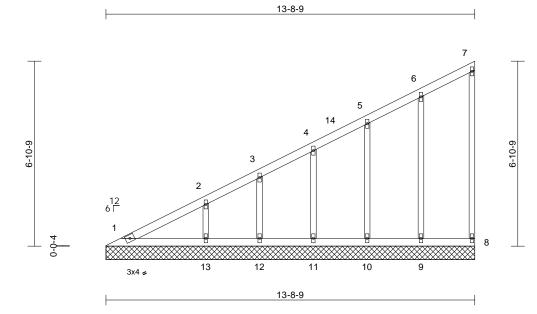
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply		
P240421	V1	Valley	1	1	Job Reference (optional)	165245293

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:50 ID:znOG5Q?SPPEgIYP3TGYi3bylffX-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale	_	1	.12	Ω
Scale	=	- 1	.42	٠o

Loading	(psf)	Spacing	1-11-4	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 61 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals.

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

REACTIONS (size)

1=13-8-9, 8=13-8-9, 9=13-8-9, 10=13-8-9, 11=13-8-9, 12=13-8-9,

13=13-8-9 Max Horiz 1=276 (LC 16)

Max Uplift 8=-24 (LC 16), 9=-62 (LC 16),

10=-59 (LC 16), 11=-62 (LC 16), 12=-47 (LC 16), 13=-95 (LC 16)

Max Grav 1=134 (LC 27), 8=98 (LC 22),

9=270 (LC 22), 10=254 (LC 22), 11=224 (LC 22), 12=136 (LC 1),

13=280 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=-329/139, 2-3=-249/97, 3-4=-204/83, TOP CHORD 4-5=-149/60, 5-6=-91/48, 6-7=-54/28,

7-8=-83/42

1-13=0/1, 12-13=0/1, 11-12=0/1, 10-11=0/1, BOT CHORD

9-10=0/1, 8-9=0/1 6-9=-228/116, 5-10=-216/107,

4-11=-181/100, 3-12=-110/83, 2-13=-209/165

NOTES

WFBS

- 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 5-9-1, Interior (1) 5-9-1 to 13-7-13 zone; cantilever left and right exposed :C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 8, 62 lb uplift at joint 9, 59 lb uplift at joint 10, 62 lb uplift at joint 11, 47 lb uplift at joint 12 and 95 lb uplift at joint 13
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024



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

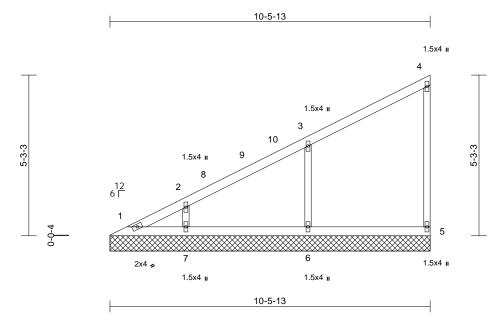
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	
P240421	V2	Valley	1	1	Job Reference (optional)

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:51 ID:CFvEQhvRHyDpKJoX?bPqkvylfff-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:37.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0			1							Weight: 39 lb	FT = 20%

LUMBER

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

BRACING

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or

> 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size)

1=10-5-13, 5=10-5-13, 6=10-5-13,

7=10-5-13 Max Horiz 1=214 (LC 16)

Max Uplift 5=-48 (LC 16), 6=-137 (LC 16),

7=-101 (LC 16)

1=93 (LC 16), 5=206 (LC 22), Max Grav

6=569 (LC 22), 7=302 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-299/129, 2-3=-214/95, 3-4=-120/54,

4-5=-174/99

BOT CHORD 1-7=-2/5. 6-7=-2/5. 5-6=-2/5

3-6=-480/289, 2-7=-236/218 WFBS

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 10-5-1 zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this desian.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 5, 137 lb uplift at joint 6 and 101 lb uplift at joint 7.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024



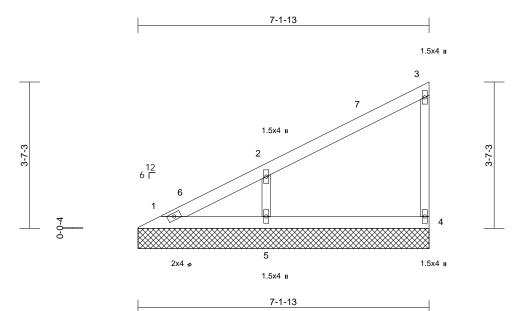
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	
P240421	V3	Valley	1	1	Job Reference (optional)

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:51 ID:RiRCkypQAVDxN5B_XvGyPDylffn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:28.3

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	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0			1							Weight: 25 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc

BOT CHORD bracing.

REACTIONS (size)

1=7-1-13, 4=7-1-13, 5=7-1-13

Max Horiz 1=141 (LC 16)

Max Uplift 4=-48 (LC 16), 5=-128 (LC 16) Max Grav 1=72 (LC 27), 4=206 (LC 22),

5=541 (LC 22)

FORCES

(lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=-227/105, 2-3=-115/59, 3-4=-175/119

BOT CHORD 1-5=0/0, 4-5=0/0

WEBS 2-5=-458/315

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 7-1-1 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable. or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 4 and 128 lb uplift at joint 5.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024

Page: 1



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

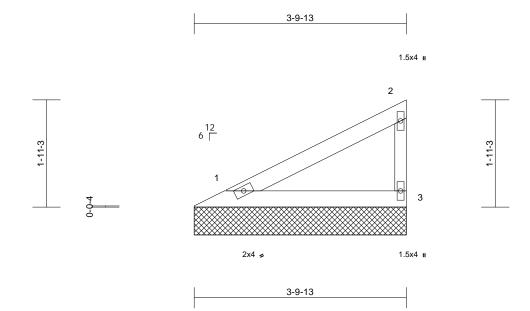
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	
P240421	V4	Valley	1	1	l65245296 Job Reference (optional)

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:51 ID:GbG2QBgWm6qVZPrtO5ZNTuylffy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:20.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	n/a	-	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 12 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 2x3 SPF No.2 WFBS

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-10-5 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 1=3-9-13, 3=3-9-13

Max Horiz 1=68 (LC 16)

Max Uplift 1=-14 (LC 16), 3=-48 (LC 16) Max Grav 1=191 (LC 22), 3=191 (LC 22)

(lb) - Maximum Compression/Maximum

FORCES Tension

TOP CHORD 1-2=-74/57, 2-3=-160/130

BOT CHORD 1-3=0/0

NOTES

- 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 ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 1 and 48 lb uplift at joint 3.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024



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

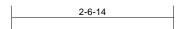
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



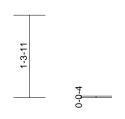
Truss Type Job Truss Qty Ply 165245297 P240421 V5 Valley Job Reference (optional)

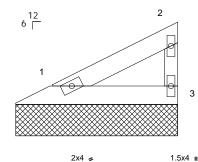
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:51 ID:zFLPyob7PzyVDKpXU7xkgQylfg3-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



1.5x4 II







Page: 1

2-6-14

Scale = 1:18.3

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	n/a	-	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 8 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 2x3 SPF No.2 WFBS

BRACING

TOP CHORD Structural wood sheathing directly applied or

2-7-6 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

1=2-6-14, 3=2-6-14 REACTIONS (size)

Max Horiz 1=41 (LC 16) Max Uplift 1=-8 (LC 16), 3=-29 (LC 16)

Max Grav 1=108 (LC 22), 3=108 (LC 22) (lb) - Maximum Compression/Maximum

Tension TOP CHORD 1-2=-44/32, 2-3=-89/78

BOT CHORD 1-3=0/0

NOTES

FORCES

- 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 ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1 and 29 lb uplift at joint 3.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024



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

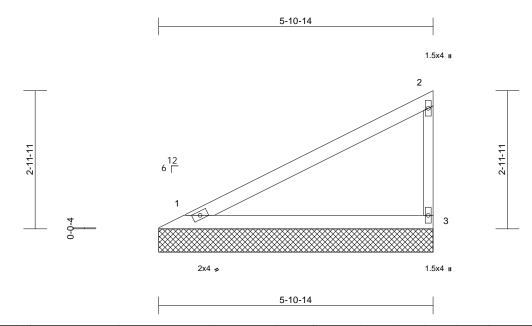
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	
P240421	V6	Valley	1	1	l65245298 Job Reference (optional)

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:51 ID: gvQmUPVk3p3UtFmBZ9J5uxylfgA-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?fd

Page: 1



Scale = 1:24.8

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

LUMBER

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 2x3 SPF No.2 WFBS

BRACING

Structural wood sheathing directly applied, TOP CHORD

except end verticals.

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

bracing.

REACTIONS (size) 1=5-10-14, 3=5-10-14

Max Horiz 1=114 (LC 16) Max Uplift 1=-23 (LC 16), 3=-80 (LC 16)

Max Grav 1=341 (LC 22), 3=341 (LC 22) (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=-120/103, 2-3=-289/211

BOT CHORD 1-3=0/0

NOTES

FORCES

- 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 ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 1 and 80 lb uplift at joint 3.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024

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

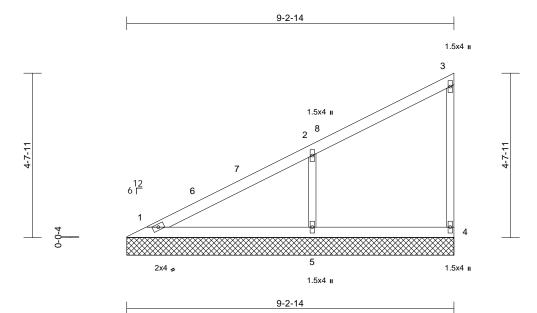
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply		
P240421	V7	Valley	1	1	Job Reference (optional)	5299

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:51 $ID: rl3UEMR_TzJL9KJ1DuChfgylfgG-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?ff$

Page: 1



Scale = 1:32.5	Scal	le	=	1	:32	.5
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Loading TCLL (roof)	(psf) 25.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.46	DEFL Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 33 lb	FT = 20%

LUMBER

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

BRACING

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or

> 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size)

1=9-2-14, 4=9-2-14, 5=9-2-14

Max Horiz 1=187 (LC 16)

Max Uplift 4=-42 (LC 16), 5=-162 (LC 16) Max Grav 1=171 (LC 22), 4=190 (LC 22),

5=645 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=-240/112, 2-3=-125/49, 3-4=-163/98 TOP CHORD

BOT CHORD 1-5=-2/5, 4-5=-2/5 WEBS 2-5=-529/341

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 9-2-2 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable. or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

- 4) Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 4 and 162 lb uplift at joint 5.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



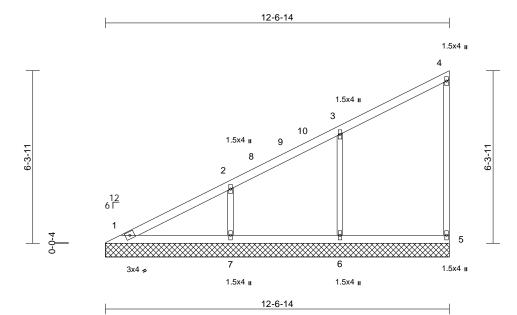
May 1,2024





Job	Truss	Truss Type	Qty	Ply	
P240421	V8	Valley	1	1	Job Reference (optional)

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Mon Apr 29 19:25:51 ID:UFCl20yWf_Ot_KqXRC?XaSylfgt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:42.1

Loading TCLL (roof)	(psf) 25.0	Spacing Plate Grip DOL	2-0-0 1.15	CSI TC	0.36	DEFL Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 244/190
Snow (Pf)	25.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999	-	
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S								
BCDL	10.0										Weight: 48 lb	FT = 20%

LUMBER

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

BRACING

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size)

1=12-6-14, 5=12-6-14, 6=12-6-14,

7=12-6-14 Max Horiz 1=259 (LC 16)

Max Uplift 5=-49 (LC 16), 6=-129 (LC 16),

7=-136 (LC 16)

1=147 (LC 27), 5=210 (LC 22), Max Grav

6=547 (LC 22), 7=405 (LC 22)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-310/137, 2-3=-193/90, 3-4=-118/56,

4-5=-176/94

BOT CHORD 1-7=-2/4, 6-7=-2/4, 5-6=-2/4

3-6=-465/247, 2-7=-308/243 WFBS

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 12-6-2 zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=25.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this desian.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 5, 129 lb uplift at joint 6 and 136 lb uplift at joint 7.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



May 1,2024

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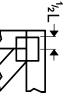
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

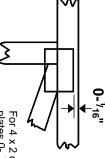


Symbols

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 × 4

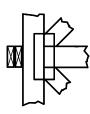
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

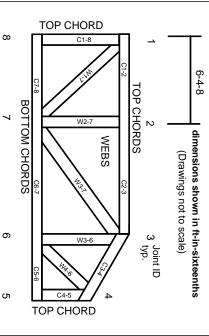
Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction Design Standard for Bracing.

Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-22:

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

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- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.