MiTek®

RE: P240541-01 - Roof - HM Lot 172

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

Site Information:

Project Customer: Clayton Properties Project Name: Sunflower - Farmhouse
Lot/Block: 172 Subdivision: Highland Meadows
Model:
Address: 2778 SW 11th Terr
City: Lee's Summit State: MO

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

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

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

No.	Seal#	Truss Name	Date
1	I65719426	A1	5/22/24
2	I65719427	A2	5/22/24
3	I65719428	B1	5/22/24
4	I65719429	B2	5/22/24
5	I65719430	B3	5/22/24
6	I65719431	B4	5/22/24
7	I65719432	C1	5/22/24
8	I65719433	C2	5/22/24
9	I65719434	D1	5/22/24
10	I65719435	D2	5/22/24
11	I65719436	G1	5/22/24
12	I65719437	G2	5/22/24
13	I65719438	H1	5/22/24
14	I65719439	H2	5/22/24
15	I65719440	H3	5/22/24
16	I65719441	H4	5/22/24
17	I65719442	H5	5/22/24
18	I65719443	I1	5/22/24
19	I65719444	I2	5/22/24
20	I65719445	K1	5/22/24
21	I65719446	K2	5/22/24
22	I65719447	VI1	5/22/24
23	I65719448	VI2	5/22/24
24	I65719449	VI3	5/22/24
25	I65719450	VI4	5/22/24
26	I65719451	VI5	5/22/24
27	I65719452	VK1	5/22/24
28	I65719453	VK2	5/22/24
29	I65719454	VK3	5/22/24
30	I65719455	VK4	5/22/24

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: Nathan Fox
My license renewal date for the state of Missouri is December 31, 2024.

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

May 22,2024

Nathan Fox

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/12/2024 10:57:35

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	A1	Monopitch Structural Gable	1	1	I65719426 Job Reference (optional)

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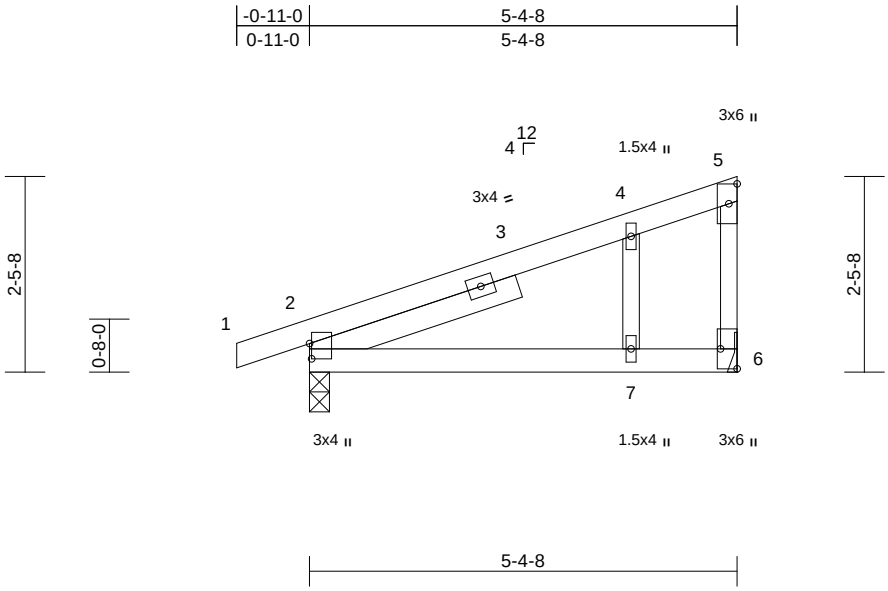

Scale = 1:29

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

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	0.55	Vert(LL)	0.11	2-7	>581	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	0.09	2-7	>686	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 25 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-8-15

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-0, 6= Mechanical
Max Horiz 2=88 (LC 12)
Max Uplift 2=-130 (LC 8), 6=-118 (LC 8)
Max Grav 2=297 (LC 1), 6=224 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4/0, 2-4=-107/27, 4-5=-40/33, 5-6=-105/240
BOT CHORD 2-7=-113/49, 6-7=-113/49
WEBS 4-7=-103/87

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) -0-11-0 to 4-0-8, Interior (1) 4-0-8 to 5-3-4 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 DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 1-4-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 6 and 130 lb uplift at joint 2.
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 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	A2	Monopitch	8	1	I65719427 Job Reference (optional)

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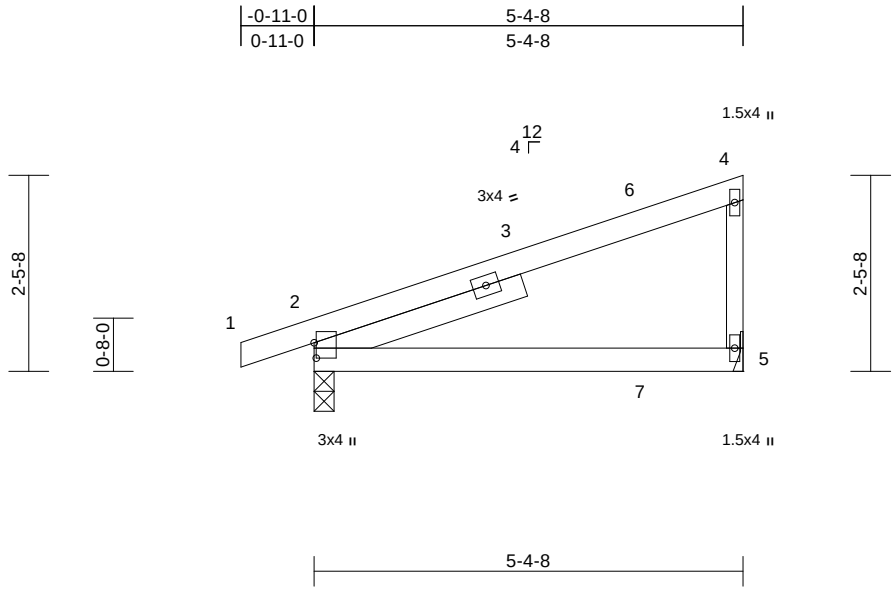

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Plate Offsets (X, Y): [2:0-2-5,0-0-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	0.17	2-5	>363	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	0.15	2-5	>431	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-8-15

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-0, 5= Mechanical
Max Horiz 2=90 (LC 12)
Max Uplift 2=-134 (LC 8), 5=-121 (LC 8)
Max Grav 2=307 (LC 1), 5=232 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4/0, 2-4=-102/44, 4-5=-179/258
BOT CHORD 2-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 5-3-4 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 DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 5 and 134 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	B1	Monopitch Supported Gable	1	1	I65719428
					Job Reference (optional)

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

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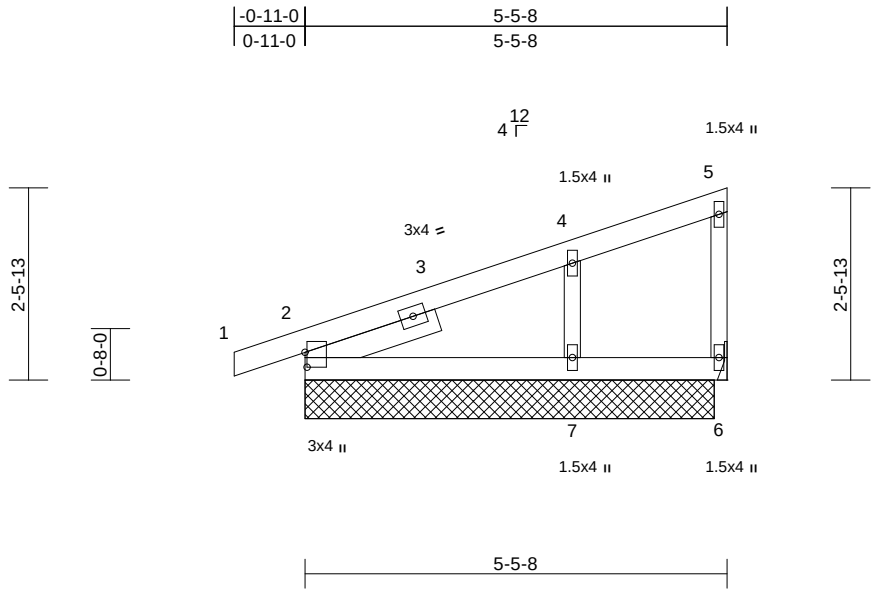

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Plate Offsets (X, Y): [2:0-2-5,0-0-5]

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	0.23	Vert(LL)	0.00	2-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	2-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 1-9-8

BRACING

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

REACTIONS (size) 2=5-3-8, 6=5-3-8, 7=5-3-8
Max Horiz 2=89 (LC 12)
Max Uplift 2=-47 (LC 8), 6=-11 (LC 8), 7=-89 (LC 12)
Max Grav 2=198 (LC 1), 6=40 (LC 1), 7=291 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-4/0, 2-4=-162/55, 4-5=-30/7
BOT CHORD	2-7=0/0, 6-7=0/0
WEBS	4-7=-221/386, 5-6=-33/45

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 5-4-4 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: Joint 7 SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 47 lb uplift at joint 2, 11 lb uplift at joint 6 and 89 lb uplift at joint 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	B2	Monopitch	7	1	I65719429
					Job Reference (optional)

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

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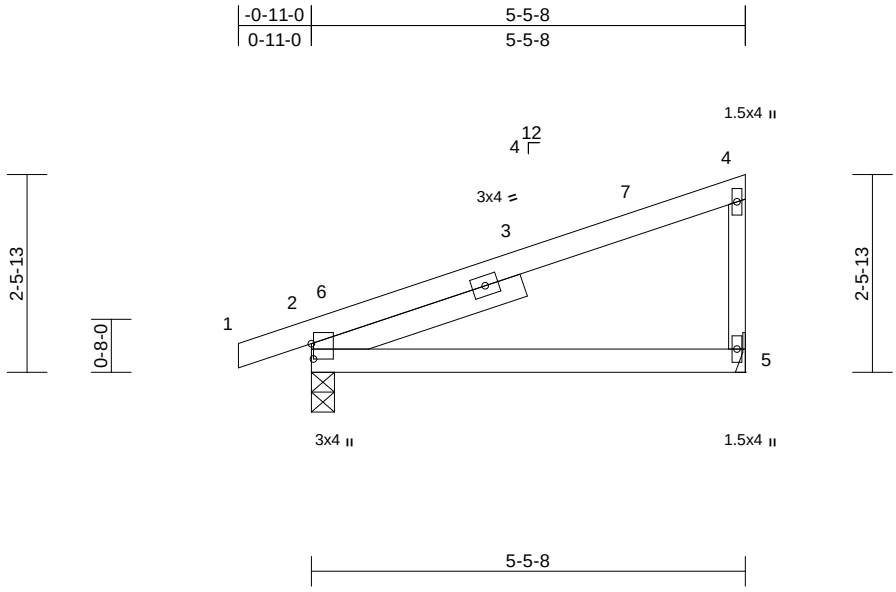

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Plate Offsets (X, Y): [2:0-2-5,0-0-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.05	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.10	2-5	>652	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-9-7

BRACING

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

REACTIONS (size) 2=0-3-8, 5= Mechanical
Max Horiz 2=92 (LC 12)
Max Uplift 2=-80 (LC 8), 5=-69 (LC 12)
Max Grav 2=311 (LC 1), 5=235 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4/0, 2-4=-104/45, 4-5=-182/261
BOT CHORD 2-5=0/0

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 5-4-4 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 5 and 80 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

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

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	B3	Monopitch	2	1	I65719430 Job Reference (optional)

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

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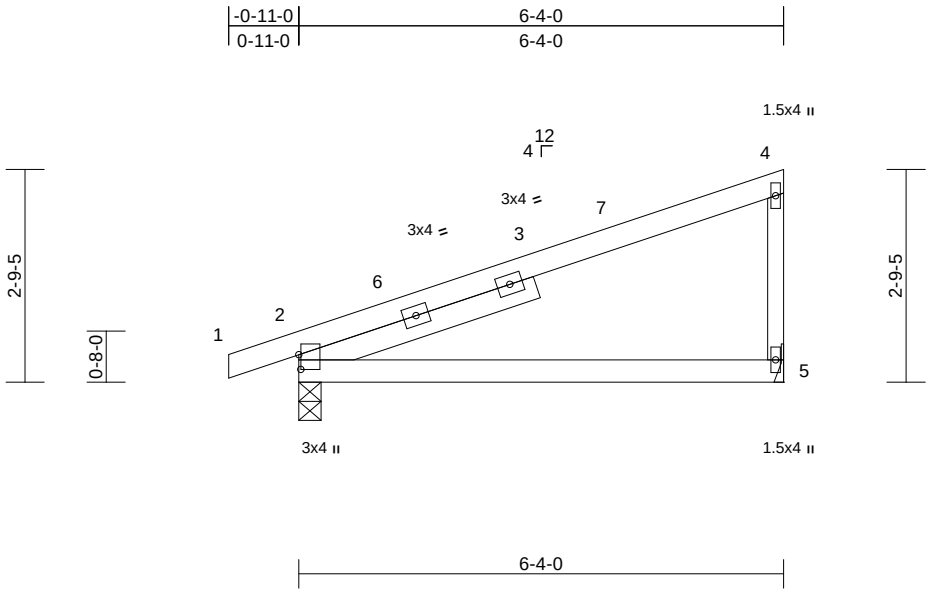

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Plate Offsets (X, Y): [2:0-2-5,0-0-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.09	2-5	>828	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.18	2-5	>414	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 28 lb	FT = 20%

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

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

REACTIONS (size) 2=0-3-8, 5= Mechanical
Max Horiz 2=104 (LC 12)
Max Uplift 2=-86 (LC 8), 5=-80 (LC 12)
Max Grav 2=349 (LC 1), 5=276 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4/0, 2-4=-115/53, 4-5=-213/290
BOT CHORD 2-5=0/0

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 6-2-12 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
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 80 lb uplift at joint 5 and 86 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	B4	Monopitch Structural Gable	1	1	I65719431 Job Reference (optional)

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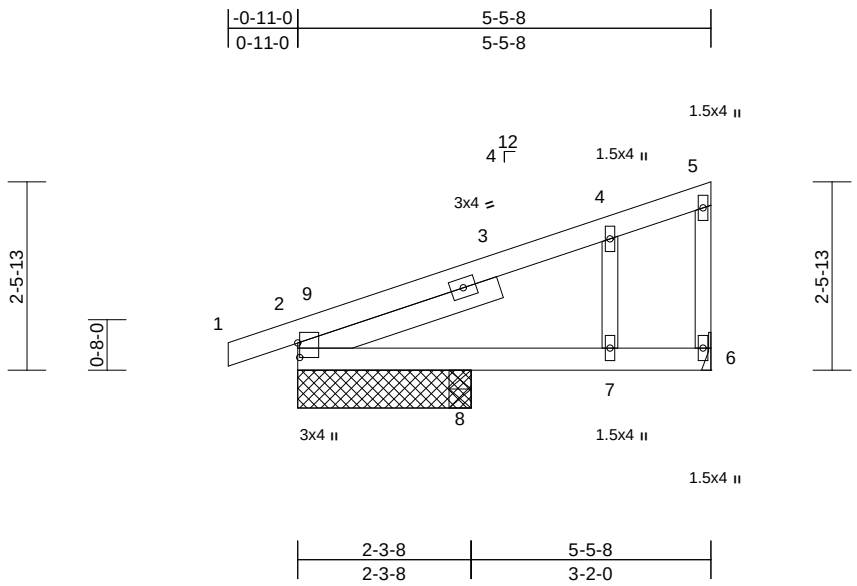

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Plate Offsets (X, Y): [2:0-2-5,0-0-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	0.02	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.02	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-9-7

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

REACTIONS (size) 2=2-3-8, 6= Mechanical, 8=0-3-8
Max Horiz 2=92 (LC 12)
Max Uplift 2=-60 (LC 8), 6=-56 (LC 12), 8=-34 (LC 12)
Max Grav 2=197 (LC 1), 6=160 (LC 1), 8=189 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4/0, 2-4=-133/48, 4-5=-16/8, 5-6=-34/29
BOT CHORD 2-8=0/0, 7-8=0/0, 6-7=0/0
WEBS 4-7=-192/301

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) -0-11-0 to 4-1-8, Interior (1) 4-1-8 to 5-4-4 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 1-4-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 8 SP No.2 crushing capacity of 565 psi.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 6, 60 lb uplift at joint 2 and 34 lb uplift at joint 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

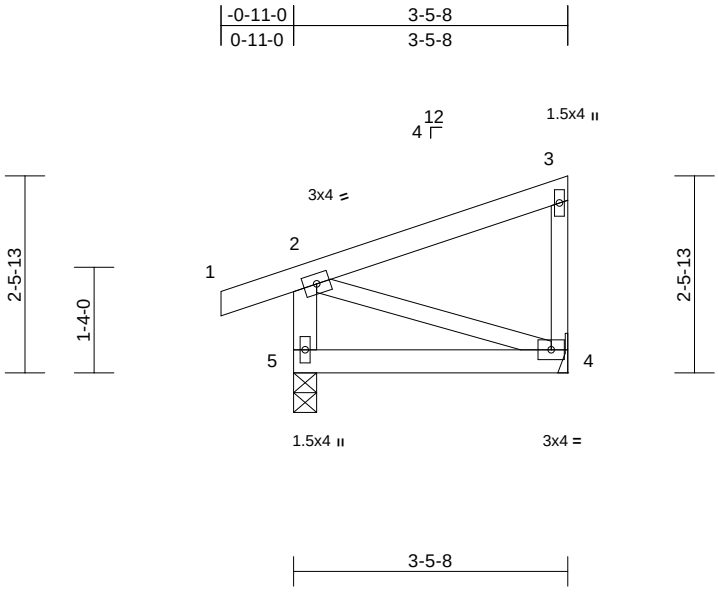
LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	C1	Monopitch	5	1	I65719432 Job Reference (optional)

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:52 ID:FXADgiPtNElqT3dL5st?_mzw3Oq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:29.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb	FT = 20%

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

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

REACTIONS (size) 4= Mechanical, 5=0-3-8
Max Horiz 5=65 (LC 9)
Max Uplift 4=-52 (LC 12), 5=-63 (LC 8)
Max Grav 4=132 (LC 1), 5=231 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/24, 2-3=-56/26, 3-4=-100/138, 2-5=-199/198
BOT CHORD 4-5=-160/46
WEBS 2-4=-49/169

NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: Joint 5 SP No.2 crushing capacity of 565 psi.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 4 and 63 lb uplift at joint 5.
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

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	C2	Monopitch Supported Gable	1	1	I65719433 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:52 Page: 1
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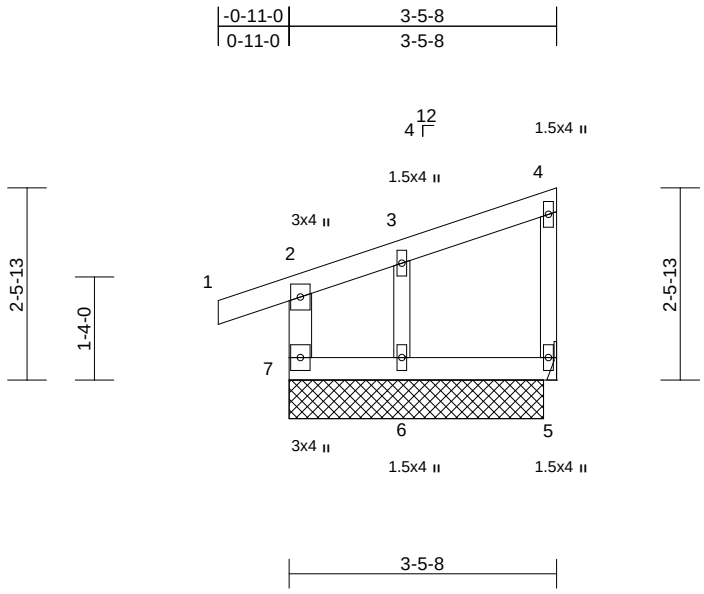

Scale = 1:29.8

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	0.19	Vert(LL)	0.00	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.00	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 16 lb	FT = 20%

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

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

REACTIONS (size) 5=3-3-8, 6=3-3-8, 7=3-3-8
Max Horiz 7=65 (LC 9)
Max Uplift 5=-16 (LC 8), 6=-89 (LC 12), 7=-14 (LC 8)
Max Grav 5=73 (LC 1), 6=144 (LC 1), 7=146 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-7=-133/126, 1-2=0/24, 2-3=-127/44, 3-4=-34/14
BOT CHORD 6-7=0/0, 5-6=0/0
WEBS 3-6=-138/283, 4-5=-57/84

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Bearings are assumed to be: Joint 6 SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 7, 16 lb uplift at joint 5 and 89 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	D1	Monopitch Supported Gable	2	1	I65719434 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:52 Page: 1
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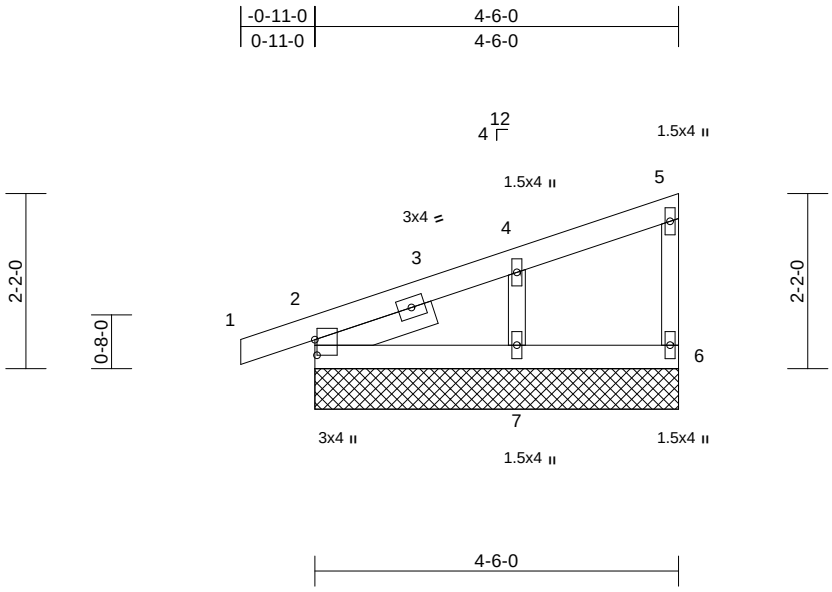

Scale = 1:28.5

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

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 20 lb	FT = 20%

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

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

REACTIONS (size) 2=4-6-0, 6=4-6-0, 7=4-6-0
Max Horiz 2=75 (LC 12)
Max Uplift 2=-43 (LC 8), 6=-16 (LC 8), 7=-70 (LC 12)
Max Grav 2=165 (LC 1), 6=60 (LC 1), 7=220 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4/0, 2-4=-145/47, 4-5=-30/11, 5-6=-48/72
BOT CHORD 2-7=0/0, 6-7=0/0
WEBS 4-7=-166/304

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 4-4-12 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 6, 43 lb uplift at joint 2 and 70 lb uplift at joint 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	D2	Monopitch	7	1	I65719435
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:53 Page: 1
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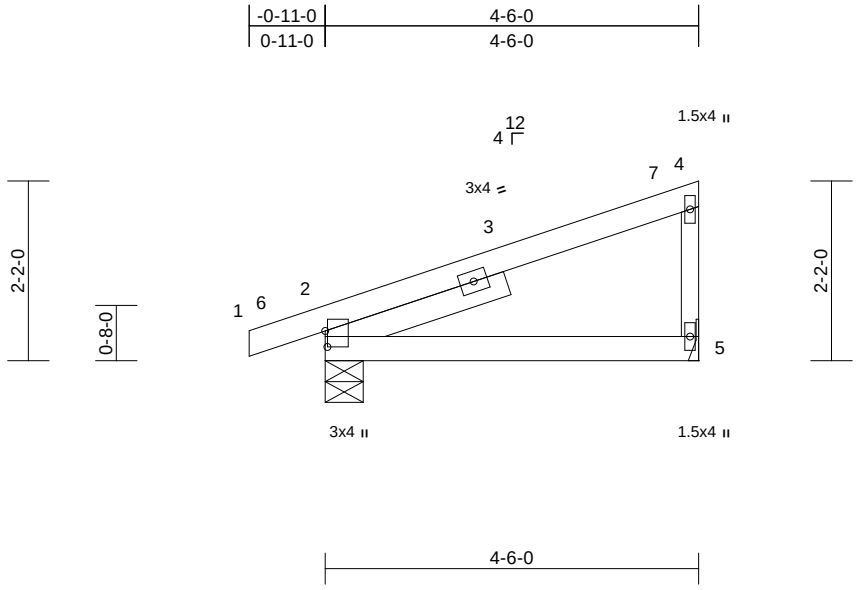


Scale = 1:27.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.02	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.04	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 20 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-3-6

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

REACTIONS (size) 2=0-5-8, 5= Mechanical
Max Horiz 2=78 (LC 12)
Max Uplift 2=-73 (LC 8), 5=-57 (LC 12)
Max Grav 2=269 (LC 1), 5=191 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4/0, 2-4=-85/40, 4-5=-147/218
BOT CHORD 2-5=0/0

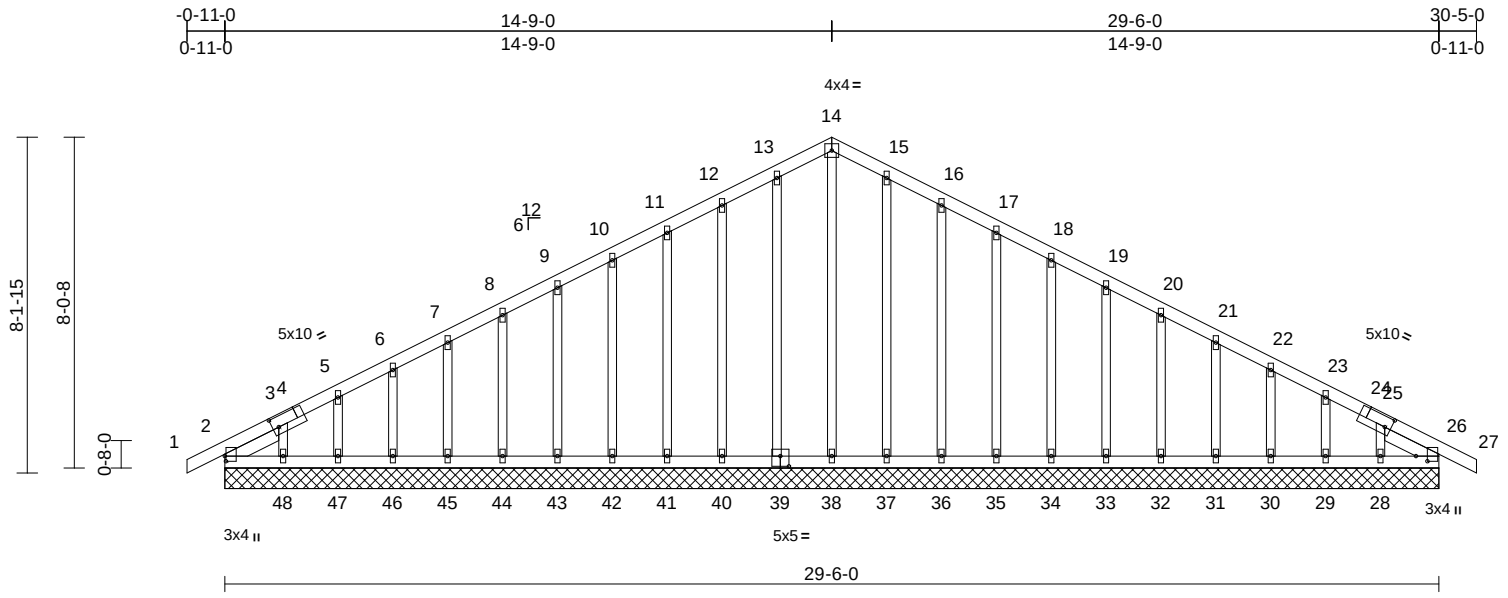
NOTES
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 4-4-12 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 5 and 73 lb uplift at joint 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	G1	Common Supported Gable	1	1	I65719436 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:53 ID:X0UIqcAee_eyxTYg3cO0sfzw3DV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:56

Plate Offsets (X, Y): [2:0-1-8,0-0-5], [4:0-1-12,0-3-0], [24:0-1-12,0-3-0], [26:0-1-8,0-3-5], [39:0-2-8,0-3-0]

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 169 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-5-14, Right 2x4 SP No.2 -- 1-5-14

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=29-6-0, 26=29-6-0, 28=29-6-0, 29=29-6-0, 30=29-6-0, 31=29-6-0, 32=29-6-0, 33=29-6-0, 34=29-6-0, 35=29-6-0, 36=29-6-0, 37=29-6-0, 38=29-6-0, 39=29-6-0, 40=29-6-0, 41=29-6-0, 42=29-6-0, 43=29-6-0, 44=29-6-0, 45=29-6-0, 46=29-6-0, 47=29-6-0, 48=29-6-0
Max Horiz 2=-143 (LC 13)
Max Uplift 2=-30 (LC 8), 26=-1 (LC 9), 28=-67 (LC 13), 29=-41 (LC 13), 30=-39 (LC 13), 31=-40 (LC 13), 32=-39 (LC 13), 33=-39 (LC 13), 34=-39 (LC 13), 35=-40 (LC 13), 36=-47 (LC 13), 37=-17 (LC 13), 39=-24 (LC 12), 40=-44 (LC 12), 41=-40 (LC 12), 42=-39 (LC 12), 43=-39 (LC 12), 44=-39 (LC 12), 45=-40 (LC 12), 46=-39 (LC 12), 47=-41 (LC 12), 48=-80 (LC 12)
Max Grav 2=152 (LC 21), 26=144 (LC 1), 28=105 (LC 26), 29=117 (LC 26), 30=116 (LC 1), 31=116 (LC 26), 32=116 (LC 1), 33=116 (LC 26), 34=116 (LC 1), 35=116 (LC 1), 36=118 (LC 26), 37=119 (LC 26), 38=143 (LC 22), 39=118 (LC 25), 40=119 (LC 25), 41=116 (LC 1), 42=116 (LC 1), 43=116 (LC 25), 44=116 (LC 1), 45=116 (LC 25), 46=116 (LC 1), 47=117 (LC 25), 48=105 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/7, 2-3=-211/68, 3-5=-150/66, 5-6=-118/74, 6-7=-90/83, 7-8=-72/100, 8-9=-57/118, 9-10=-49/136, 10-11=-58/165, 11-12=-71/199, 12-13=-84/238, 13-14=-92/260, 14-15=-92/260, 15-16=-84/237, 16-17=-70/199, 17-18=-58/164, 18-19=-46/129, 19-20=-34/95, 20-21=-33/60, 21-22=-43/26, 22-23=-59/17, 23-25=-90/27, 25-26=-148/51, 26-27=0/7
BOT CHORD 2-48=-42/164, 47-48=-42/164, 46-47=-42/164, 45-46=-42/164, 44-45=-42/164, 43-44=-42/164, 42-43=-42/164, 41-42=-42/164, 40-41=-42/164, 38-40=-43/165, 37-38=-43/165, 36-37=-43/165, 35-36=-43/165, 34-35=-43/165, 33-34=-43/165, 32-33=-43/165, 31-32=-43/165, 30-31=-43/165, 29-30=-43/165, 28-29=-43/165, 26-28=-43/165
WEBS 14-38=-151/29, 13-39=-92/40, 12-40=-92/72, 11-41=-90/62, 10-42=-90/62, 9-43=-90/62, 8-44=-90/62, 7-45=-90/62, 6-46=-90/78, 5-47=-92/100, 3-48=-78/124, 15-37=-93/36, 16-36=-92/72, 17-35=-90/62, 18-34=-90/62, 19-33=-90/62, 20-32=-90/62, 21-31=-90/62, 22-30=-90/78, 23-29=-92/100, 25-28=-79/120

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=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 14-9-0, Corner(3R) 14-9-0 to 19-9-0, Exterior(2N) 19-9-0 to 30-5-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

May 22,2024

Continued on page 2

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 2, 24 lb uplift at joint 39, 44 lb uplift at joint 40, 40 lb uplift at joint 41, 39 lb uplift at joint 42, 39 lb uplift at joint 43, 39 lb uplift at joint 44, 40 lb uplift at joint 45, 39 lb uplift at joint 46, 41 lb uplift at joint 47, 80 lb uplift at joint 48, 17 lb uplift at joint 37, 47 lb uplift at joint 36, 40 lb uplift at joint 35, 39 lb uplift at joint 34, 39 lb uplift at joint 33, 39 lb uplift at joint 32, 40 lb uplift at joint 31, 39 lb uplift at joint 30, 41 lb uplift at joint 29, 67 lb uplift at joint 28 and 1 lb uplift at joint 26.
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

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	G2	Common	8	1	I65719437 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:53 Page: 1
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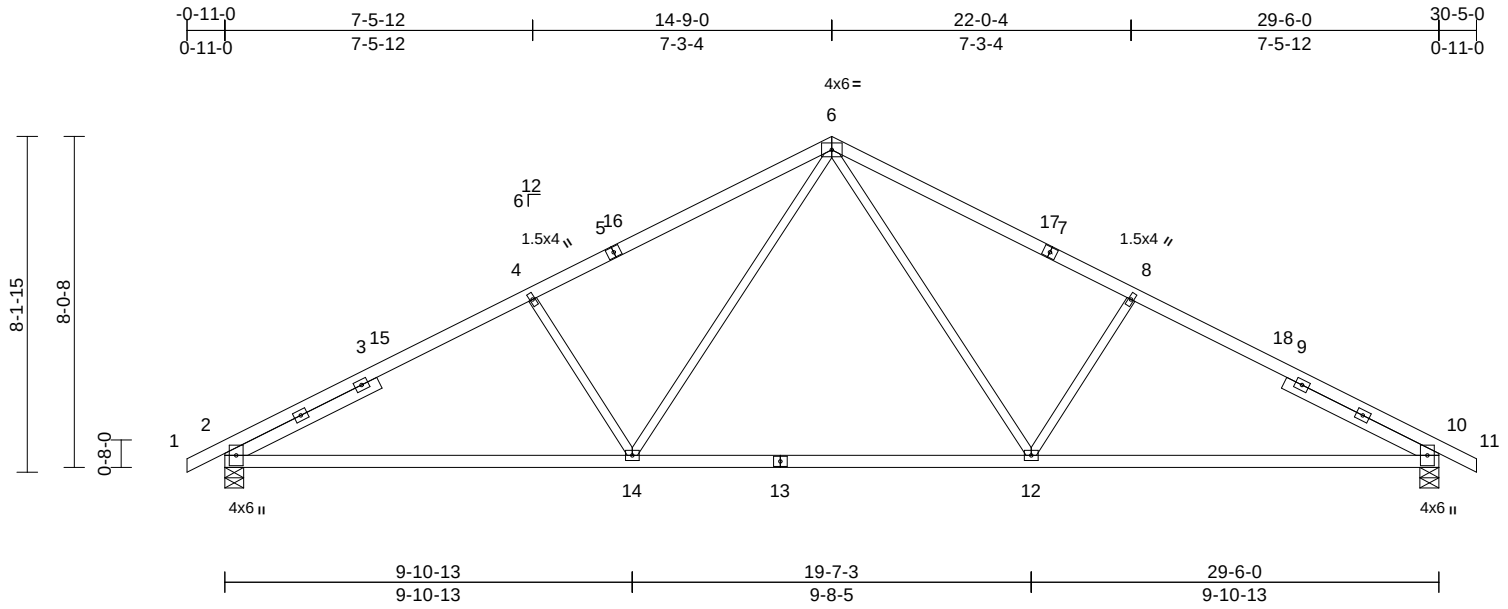


Scale = 1:56

Plate Offsets (X, Y): [2:0-3-9,0-1-5], [10:0-3-9,0-1-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.23	2-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.49	2-14	>728	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 131 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E *Except* 1-5,7-11:2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-1-13, Right 2x4 SP No.2 -- 4-1-13

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

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=-148 (LC 17)
Max Uplift 2=-225 (LC 12), 10=-225 (LC 13)
Max Grav 2=1392 (LC 1), 10=1392 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/7, 2-4=-2209/390, 4-6=-1951/411, 6-8=-1951/411, 8-10=-2209/390, 10-11=0/7
BOT CHORD 2-14=-345/1864, 12-14=-96/1278, 10-12=-249/1864
WEBS 6-12=-166/708, 8-12=-463/307, 6-14=-166/708, 4-14=-463/307

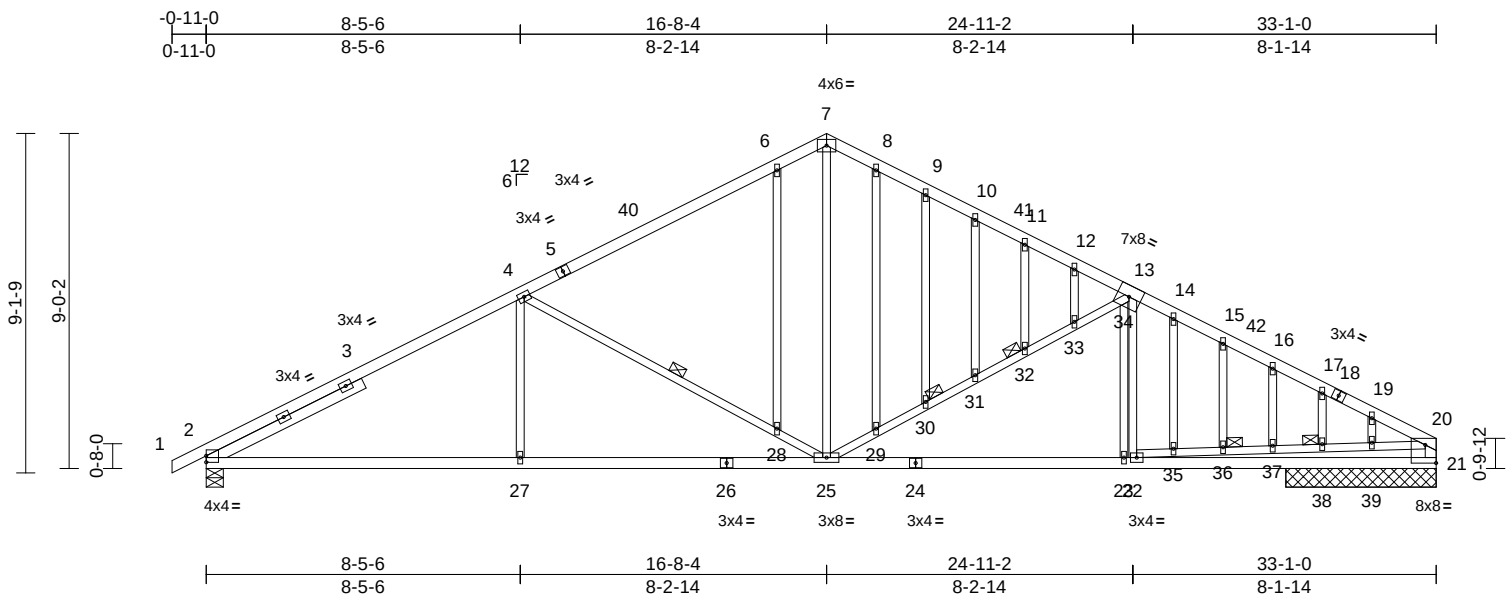
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 14-9-0, Exterior(2R) 14-9-0 to 19-9-0, Interior (1) 19-9-0 to 30-5-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 3x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 2 and 225 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	H1	Common Structural Gable	1	1	I65719438 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:53 Page: 1
ID:gg_d5Z_6YmQpJNRJIPZyP4zw3BA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:62

Plate Offsets (X, Y): [2:Edge,0-2-1], [21:Edge,0-5-13]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.10	23-25	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.21	23-25	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.06	21	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 184 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 21-20:2x4 SP No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-8-4

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-9-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-25
JOINTS 1 Brace at Jt(s): 30, 32, 36, 38

REACTIONS (size) 2=0-5-8, 21=4-0-8
Max Horiz 2=113 (LC 12)
Max Uplift 2=-167 (LC 12), 21=-148 (LC 13)
Max Grav 2=1031 (LC 1), 21=988 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/5, 2-4=-1678/264, 4-6=-1163/251, 6-7=-1038/261, 7-8=-1024/256, 8-9=-1073/262, 9-10=-1080/249, 10-11=-1104/243, 11-12=-1116/231, 12-13=-1179/236, 13-14=-1418/255, 14-15=-1544/269, 15-16=-1554/256, 16-17=-1577/249, 17-19=-1590/236, 19-20=-1632/239, 20-21=-933/186
BOT CHORD 2-27=-248/1417, 25-27=-248/1417, 23-25=-180/1385, 22-23=-180/1385, 21-22=-154/551
WEBS 7-25=-77/636, 25-29=-522/199, 29-30=-527/203, 30-31=-511/195, 31-32=-507/191, 32-33=-488/182, 33-34=-517/192, 13-34=-588/257, 13-22=-74/67, 4-28=-540/203, 25-28=-572/217, 4-27=0/235, 22-35=-79/861, 35-36=-72/834, 36-37=-72/835, 37-38=-73/836, 38-39=-73/837, 20-39=-73/836, 6-28=-61/28, 8-29=-22/40, 9-30=-42/20, 10-31=-8/9, 11-32=-42/19, 12-33=-22/68, 23-34=-124/118, 14-35=-55/219, 15-36=-35/22, 16-37=-11/7, 17-38=-40/20, 19-39=-18/21

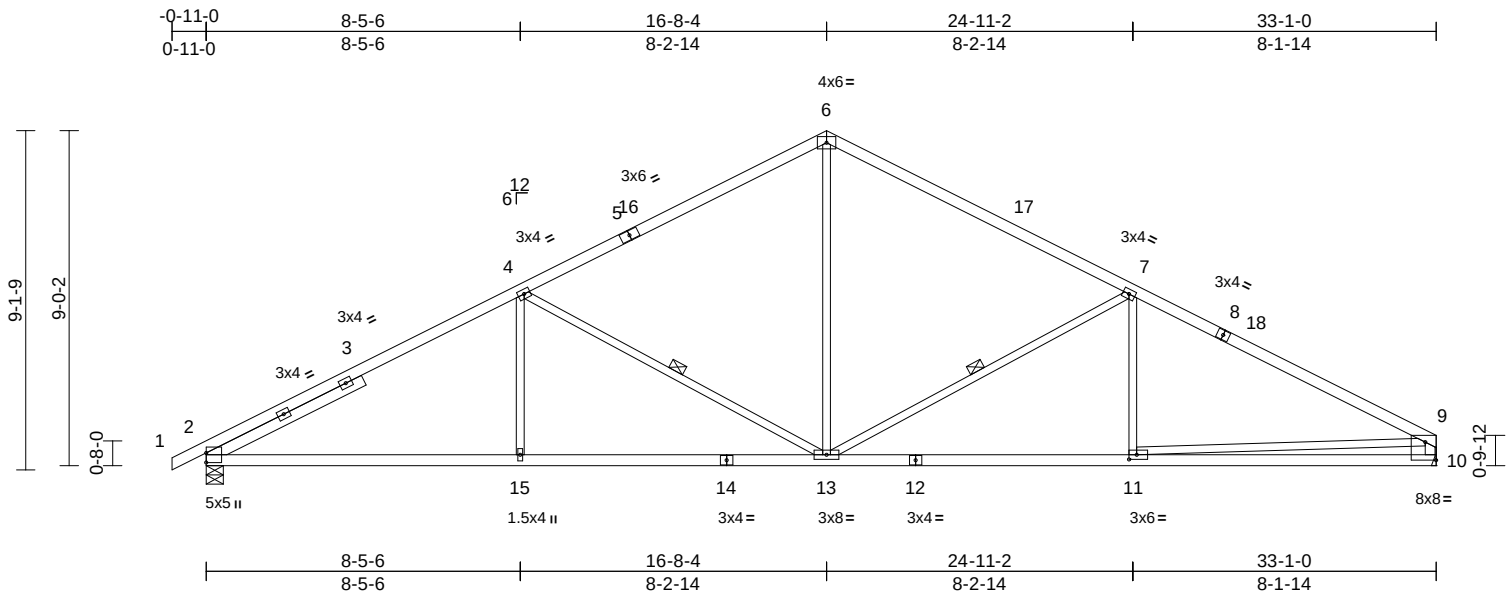
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 16-8-4, Exterior(2R) 16-8-4 to 21-8-4, Interior (1) 21-8-4 to 32-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 1-4-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 167 lb uplift at joint 2 and 148 lb uplift at joint 21.
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 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	H2	Common	12	1	I65719439 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:53 Page: 1
ID:EuznFT4ljw7jUTsTf68SeZzw35t-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:62

Plate Offsets (X, Y): [10:Edge,0-5-13], [11:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.13	2-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.30	2-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 149 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 10-9:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 4-8-4

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-6-2 oc bracing.
WEBS 1 Row at midpt 7-13, 4-13

REACTIONS (size) 2=0-5-8, 10= Mechanical
Max Horiz 2=170 (LC 12)
Max Uplift 2=-250 (LC 12), 10=-222 (LC 13)
Max Grav 2=1547 (LC 1), 10=1481 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/7, 2-4=-2523/400, 4-6=-1747/382, 6-7=-1751/386, 7-9=-2435/397, 9-10=-1401/279
BOT CHORD 2-15=-376/2134, 13-15=-376/2134, 11-13=-277/2078, 10-11=-138/535
WEBS 6-13=-104/908, 7-13=-778/307, 7-11=0/265, 4-13=-834/318, 4-15=0/351, 9-11=-175/1547

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=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 16-8-4, Exterior(2R) 16-8-4 to 21-8-4, Interior (1) 21-8-4 to 32-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 250 lb uplift at joint 2 and 222 lb uplift at joint 10.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

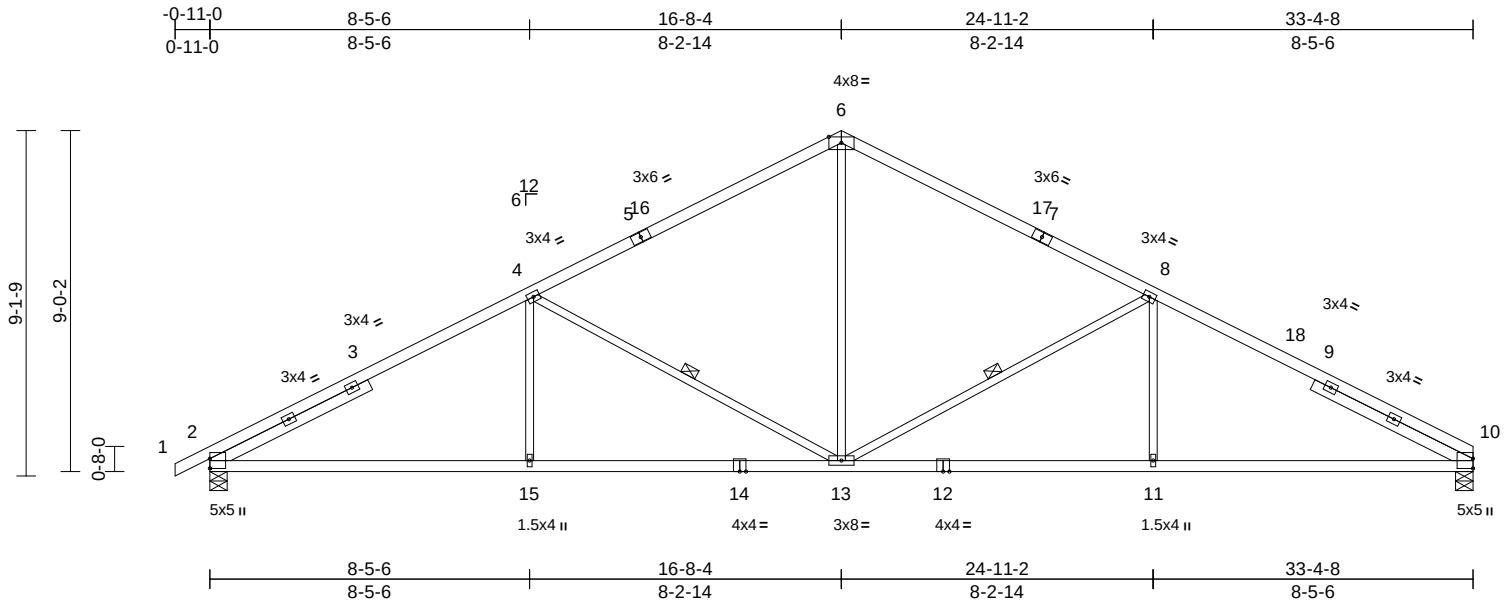
LOAD CASE(S) Standard

STATE OF MISSOURI
NATHANIEL FOX
NUMBER
PE-2022042259
PROFESSIONAL ENGINEER

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	H3	Common	2	1	I65719440 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:53 Page: 1
ID:5hQbrvtypi4h1LMIRAMYjzzw38k-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:60.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.14	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.31	10-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.12	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 150 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-8-4, Right 2x4 SP No.2 -- 4-8-4

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-6-0 oc bracing.
WEBS 1 Row at midpt 8-13, 4-13

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=168 (LC 12)
Max Uplift 2=-251 (LC 12), 10=-228 (LC 13)
Max Grav 2=1567 (LC 1), 10=1501 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/7, 2-4=-2564/405, 4-6=-1788/388, 6-8=-1789/391, 8-10=-2567/414
BOT CHORD 2-15=-377/2169, 13-15=-377/2169, 11-13=-254/2174, 10-11=-254/2174
WEBS 6-13=-108/933, 8-13=-837/320, 8-11=0/354, 4-13=-832/318, 4-15=0/352

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 16-8-4, Exterior(2R) 16-8-4 to 21-8-4, Interior (1) 21-8-4 to 33-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 251 lb uplift at joint 2 and 228 lb uplift at joint 10.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

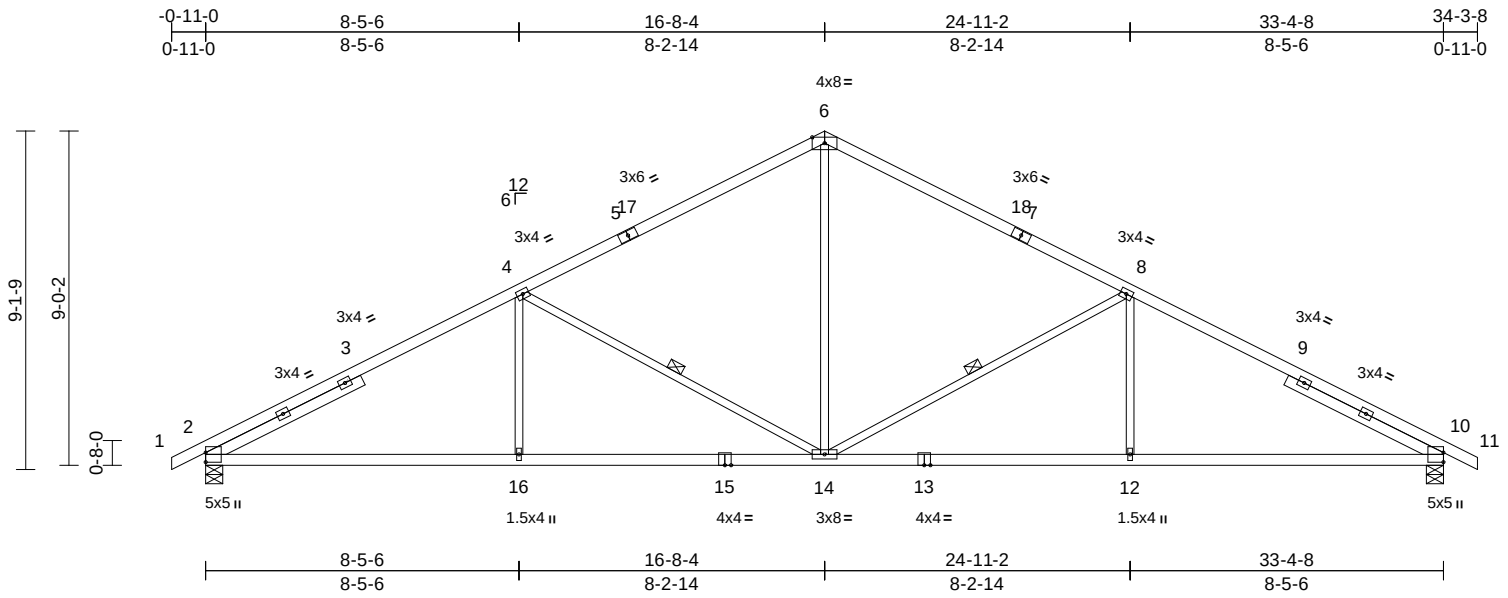
LOAD CASE(S) Standard

STATE OF MISSOURI
NATHANIEL FOX
NUMBER PE-2022042259
PROFESSIONAL ENGINEER
May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	H4	Common	1	1	I65719441 Job Reference (optional)

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:54 ID:GjT2tPBCEBumhaVLbiqAvyzw39d-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:62.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.13	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.30	10-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.12	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 151 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 4-8-4, Right 2x4 SP No.2 -- 4-8-4

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 9-6-6 oc bracing.
WEBS	1 Row at midpt 8-14, 4-14

REACTIONS (size) 2=0-5-8, 10=0-5-8
Max Horiz 2=-166 (LC 13)
Max Uplift 2=-251 (LC 12), 10=-251 (LC 13)
Max Grav 2=1566 (LC 1), 10=1566 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/7, 2-4=-2562/405, 4-6=-1787/387, 6-8=-1787/387, 8-10=-2562/405, 10-11=0/7
BOT CHORD	2-16=-375/2168, 14-16=-375/2168, 12-14=-250/2168, 10-12=-250/2168
WEBS	6-14=-103/931, 8-14=-832/318, 8-12=0/352, 4-14=-832/318, 4-16=0/352

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 16-8-4, Exterior(2R) 16-8-4 to 21-8-4, Interior (1) 21-8-4 to 34-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 251 lb uplift at joint 2 and 251 lb uplift at joint 10.
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

May 22,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/12/2024 10:57:36

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	H5	Common Supported Gable	1	1	I65719442 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:54 Page: 1
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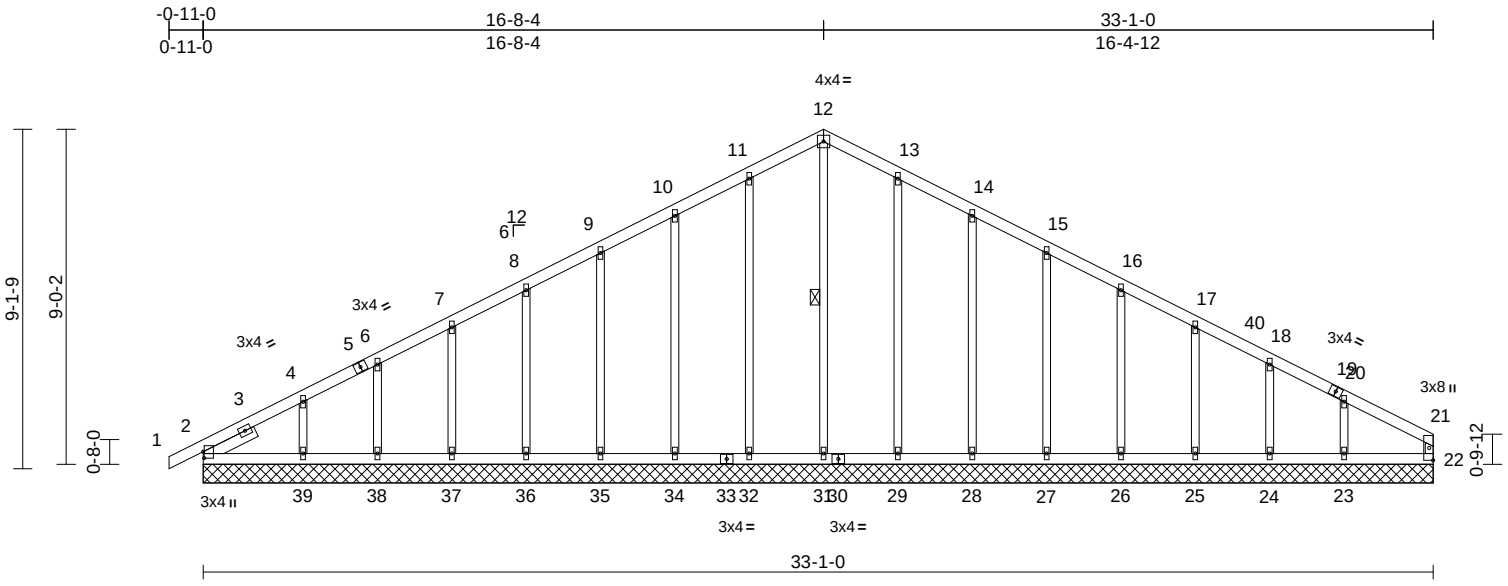

Scale = 1:62

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

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	22	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 166 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 12-31

REACTIONS (size) 2=33-1-0, 22=33-1-0, 23=33-1-0, 24=33-1-0, 25=33-1-0, 26=33-1-0, 27=33-1-0, 28=33-1-0, 29=33-1-0, 31=33-1-0, 32=33-1-0, 34=33-1-0, 35=33-1-0, 36=33-1-0, 37=33-1-0, 38=33-1-0, 39=33-1-0
Max Horiz 2=164 (LC 12)
Max Uplift 2=-46 (LC 13), 23=-110 (LC 13), 24=-44 (LC 13), 25=-63 (LC 13), 26=-59 (LC 13), 27=-58 (LC 13), 28=-65 (LC 13), 29=-50 (LC 13), 32=-54 (LC 12), 34=-63 (LC 12), 35=-59 (LC 12), 36=-59 (LC 12), 37=-62 (LC 12), 38=-46 (LC 12), 39=-111 (LC 12)
Max Grav 2=188 (LC 1), 22=102 (LC 22), 23=209 (LC 26), 24=165 (LC 1), 25=177 (LC 26), 26=174 (LC 1), 27=175 (LC 1), 28=174 (LC 26), 29=182 (LC 26), 31=205 (LC 22), 32=182 (LC 25), 34=174 (LC 25), 35=175 (LC 1), 36=174 (LC 1), 37=178 (LC 25), 38=162 (LC 1), 39=219 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/7, 2-4=-190/98, 4-6=-129/109, 6-7=-105/135, 7-8=-91/162, 8-9=-83/189, 9-10=-101/237, 10-11=-120/293, 11-12=-136/338, 12-13=-136/338, 13-14=-120/293, 14-15=-101/237, 15-16=-83/186, 16-17=-64/134, 17-18=-56/80, 18-20=-67/27, 20-21=-100/34, 21-22=-80/4
BOT CHORD 2-39=-32/97, 38-39=-32/97, 37-38=-32/97, 36-37=-32/97, 35-36=-32/97, 34-35=-32/97, 32-34=-32/97, 31-32=-32/97, 29-31=-32/97, 28-29=-32/97, 27-28=-32/97, 26-27=-32/97, 25-26=-32/97, 24-25=-32/97, 23-24=-32/97, 22-23=-32/97
WEBS 12-31=-215/41, 11-32=-144/80, 10-34=-135/101, 9-35=-136/92, 8-36=-135/93, 7-37=-137/95, 6-38=-128/94, 4-39=-165/198, 13-29=-144/80, 14-28=-135/101, 15-27=-136/92, 16-26=-135/93, 17-25=-137/97, 18-24=-129/121, 20-23=-162/195

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 16-8-4, Corner(3R) 16-8-4 to 21-8-4, Exterior(2N) 21-8-4 to 32-11-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 2, 54 lb uplift at joint 32, 63 lb uplift at joint 34, 59 lb uplift at joint 35, 59 lb uplift at joint 36, 62 lb uplift at joint 37, 46 lb uplift at joint 38, 111 lb uplift at joint 39, 50 lb uplift at joint 29, 65 lb uplift at joint 28, 58 lb uplift at joint 27, 59 lb uplift at joint 26, 63 lb uplift at joint 25, 44 lb uplift at joint 24 and 110 lb uplift at joint 23.
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 22,2024

RELEASE FOR CONSTRUCTION
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06/12/2024 10:57:36

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	I1	Common Supported Gable	1	1	I65719443 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:54 Page: 1
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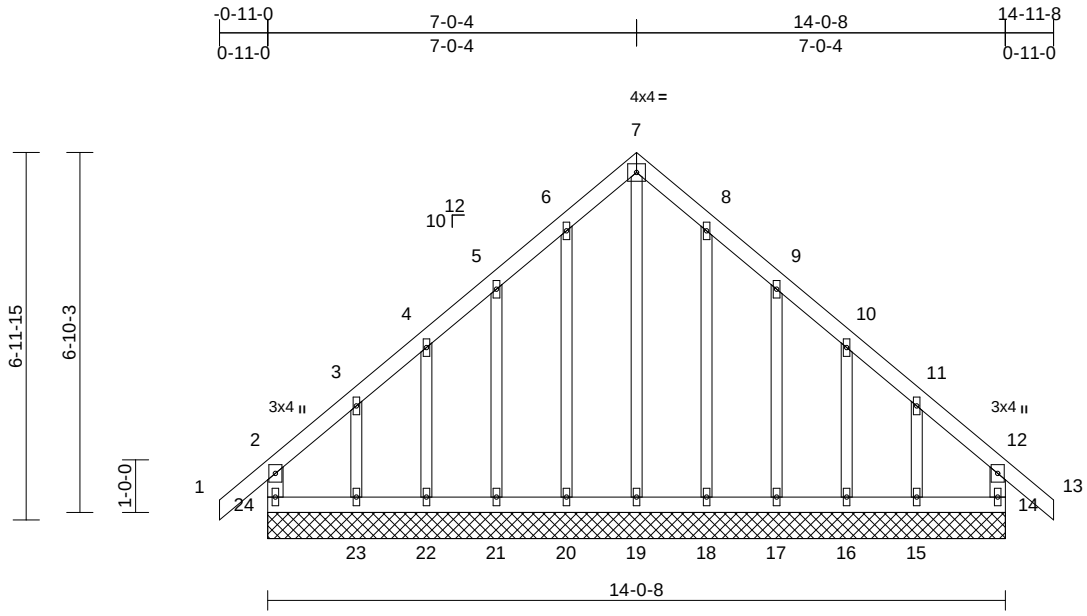

Scale = 1:43.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 82 lb	FT = 20%

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

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

REACTIONS (size) 14=14-0-8, 15=14-0-8, 16=14-0-8, 17=14-0-8, 18=14-0-8, 19=14-0-8, 20=14-0-8, 21=14-0-8, 22=14-0-8, 23=14-0-8, 24=14-0-8
Max Horiz 24=217 (LC 11)
Max Uplift 14=-76 (LC 9), 15=-139 (LC 13), 16=-46 (LC 13), 17=-82 (LC 13), 18=-39 (LC 13), 20=-41 (LC 12), 21=-82 (LC 12), 22=-44 (LC 12), 23=-146 (LC 12), 24=-102 (LC 8)
Max Grav 14=186 (LC 19), 15=178 (LC 20), 16=123 (LC 26), 17=134 (LC 20), 18=132 (LC 20), 19=206 (LC 13), 20=134 (LC 19), 21=134 (LC 19), 22=123 (LC 25), 23=190 (LC 19), 24=207 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-24=-168/97, 1-2=0/48, 2-3=-138/131, 3-4=-91/106, 4-5=-80/179, 5-6=-121/268, 6-7=-146/319, 7-8=-146/319, 8-9=-121/269, 9-10=-78/179, 10-11=-68/105, 11-12=-110/102, 12-13=0/48, 12-14=-151/97
BOT CHORD 23-24=-102/115, 22-23=-102/115, 21-22=-102/115, 20-21=-102/115, 19-20=-102/115, 18-19=-102/115, 17-18=-102/115, 16-17=-102/115, 15-16=-102/115, 14-15=-102/115
WEBS 7-19=-311/103, 6-20=-108/61, 5-21=-104/136, 4-22=-97/125, 3-23=-128/149, 8-18=-106/61, 9-17=-105/136, 10-16=-99/125, 11-15=-122/149

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-4-4, Exterior(2N) 4-4-4 to 7-0-4, Corner(3R) 7-0-4 to 12-0-4, Exterior(2N) 12-0-4 to 14-11-8 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 24, 76 lb uplift at joint 14, 41 lb uplift at joint 20, 82 lb uplift at joint 21, 44 lb uplift at joint 22, 146 lb uplift at joint 23, 39 lb uplift at joint 18, 82 lb uplift at joint 17, 46 lb uplift at joint 16 and 139 lb uplift at joint 15.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
NATHANIEL FOX
NUMBER PE-2022042259
PROFESSIONAL ENGINEER

May 22,2024

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

MiTek®
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RELEASE FOR CONSTRUCTION
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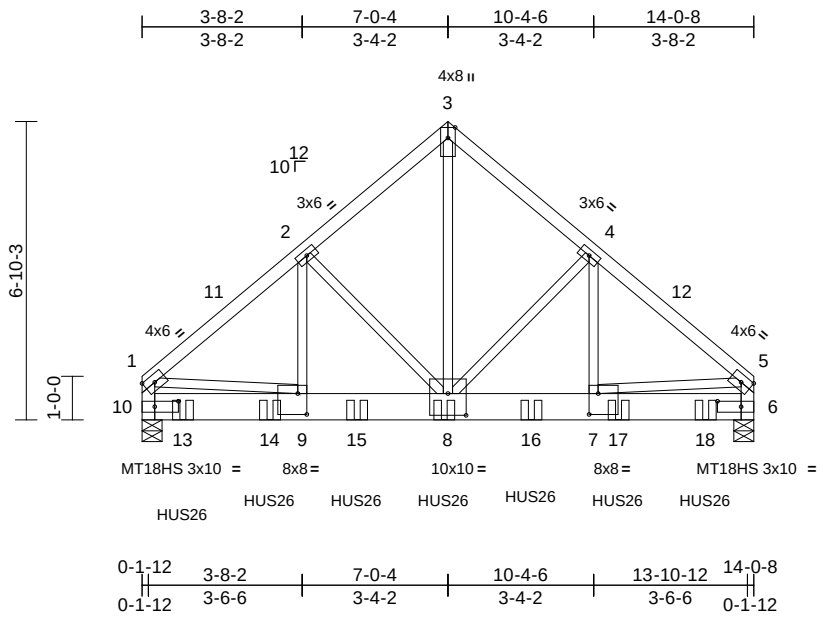
06/12/2024 10:57:36

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	I2	Common Girder	1	2	I65719444 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:54 Page: 1
ID:GytBmgAifHFXafrT59DFTKzw31u-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:52.9

Plate Offsets (X, Y): [6:0-6-8,0-1-8], [7:0-2-8,0-5-12], [8:0-5-0,0-6-0], [9:0-2-8,0-5-12], [10:0-6-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.06	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.10	7-8	>999	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 170 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SPF No.2
WEBS 2x3 SPF No.2 *Except* 10-1,6-5:2x4 SP No.2

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

REACTIONS (size) 6=0-5-8, 10=0-5-8
Max Horiz 10=-186 (LC 8)
Max Uplift 6=-887 (LC 13), 10=-903 (LC 12)
Max Grav 6=5681 (LC 1), 10=5788 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5560/951, 2-3=-4201/815, 3-4=-4201/815, 4-5=-5595/956, 1-10=-4208/731, 5-6=-4235/736
BOT CHORD 9-10=-319/1092, 8-9=-704/4191, 7-8=-684/4218, 6-7=-213/1091
WEBS 1-9=-470/3149, 5-7=-478/3176, 2-9=-262/1762, 2-8=-1473/362, 3-8=-920/5028, 4-8=-1512/368, 4-7=-271/1813

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-7-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 7-0-4, Exterior(2R) 7-0-4 to 12-0-4, Interior (1) 12-0-4 to 13-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Bearing at joint(s) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 903 lb uplift at joint 10 and 887 lb uplift at joint 6.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-11-4 from the left end to 12-11-4 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 6-10=-20
Concentrated Loads (lb)
Vert: 8=-1461 (B), 13=-1463 (B), 14=-1461 (B), 15=-1461 (B), 16=-1461 (B), 17=-1461 (B), 18=-1462 (B)

STATE OF MISSOURI
NATHANIEL FOX
NUMBER
PE-2022042259
PROFESSIONAL ENGINEER

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	K1	Common Supported Gable	1	1	I65719445 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:54 Page: 1
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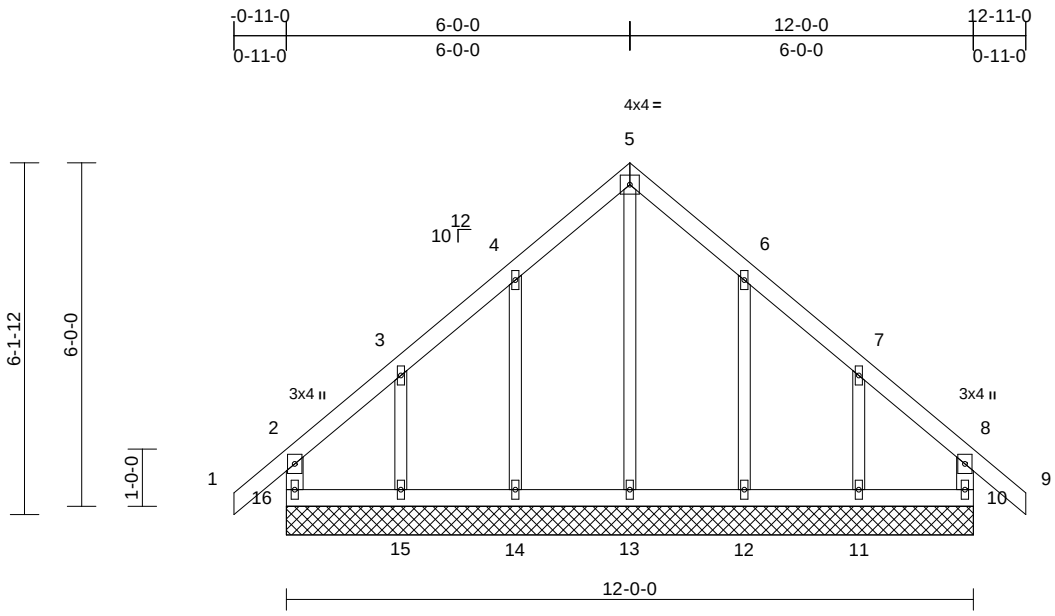

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 61 lb	FT = 20%

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

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

REACTIONS (size) 10=12-0-0, 11=12-0-0, 12=12-0-0, 13=12-0-0, 14=12-0-0, 15=12-0-0, 16=12-0-0
Max Horiz 16=-193 (LC 10)
Max Uplift 10=-58 (LC 9), 11=-141 (LC 13), 12=-90 (LC 13), 14=-90 (LC 12), 15=-145 (LC 12), 16=-74 (LC 8)
Max Grav 10=178 (LC 19), 11=215 (LC 20), 12=200 (LC 20), 13=207 (LC 22), 14=200 (LC 19), 15=221 (LC 19), 16=192 (LC 20)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-16=-157/139, 1-2=0/48, 2-3=-117/110, 3-4=-85/185, 4-5=-147/306, 5-6=-147/306, 6-7=-87/185, 7-8=-101/92, 8-9=0/48, 8-10=-149/139
BOT CHORD 15-16=-90/101, 14-15=-90/101, 13-14=-90/101, 12-13=-90/101, 11-12=-90/101, 10-11=-90/101
WEBS 5-13=-287/77, 4-14=-164/184, 3-15=-161/218, 6-12=-164/184, 7-11=-158/218

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-0-0, Exterior(2N) 4-0-0 to 6-0-0, Corner(3R) 6-0-0 to 11-0-0, Exterior(2N) 11-0-0 to 12-11-0 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 1.5x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) 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 74 lb uplift at joint 16, 58 lb uplift at joint 10, 90 lb uplift at joint 14, 145 lb uplift at joint 15, 90 lb uplift at joint 12 and 141 lb uplift at joint 11.
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 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	K2	Common Girder	1	2	I65719446 Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:55 Page: 1
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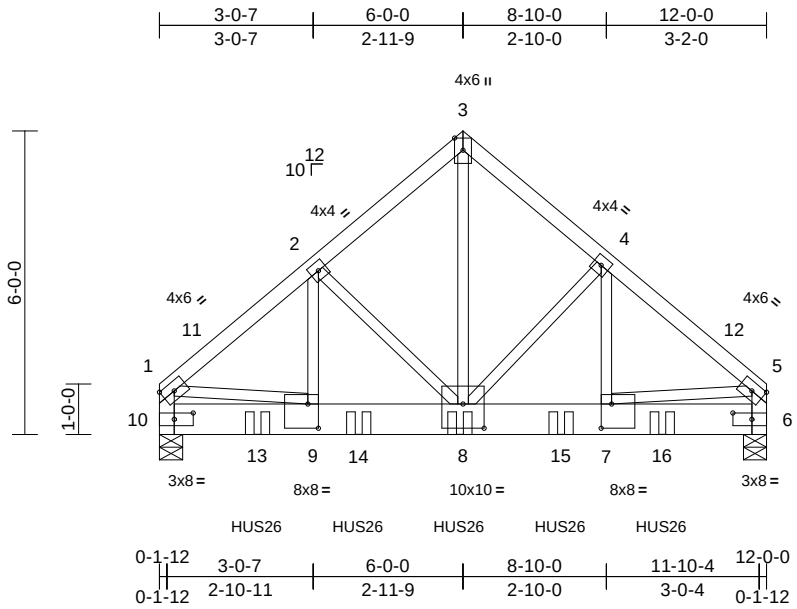

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Plate Offsets (X, Y): [6:0-4-8,0-1-8], [7:0-2-8,0-5-12], [8:0-5-0,0-5-12], [9:0-2-8,0-5-12], [10:0-4-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.04	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.07	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.71	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 145 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SPF No.2
WEBS 2x3 SPF No.2 *Except* 6-5,10-1:2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 6=0-5-8, 10=0-5-8
Max Horiz 10=162 (LC 9)
Max Uplift 6=-645 (LC 13), 10=-655 (LC 12)
Max Grav 6=4149 (LC 1), 10=4211 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4454/793, 2-3=-3468/706, 3-4=-3464/709, 4-5=-4437/790, 5-6=-3467/631, 1-10=-3507/636
BOT CHORD 9-10=-244/733, 8-9=-589/3350, 7-8=-560/3335, 6-7=-159/751
WEBS 5-7=-410/2640, 2-9=-185/1237, 2-8=-1033/292, 3-8=-784/4122, 4-8=-1054/296, 4-7=-191/1267, 1-9=-419/2679

NOTES
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-8-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 6-0-0, Exterior(2R) 6-0-0 to 11-0-0, Interior (1) 11-0-0 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Bearing at joint(s) 10, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 655 lb uplift at joint 10 and 645 lb uplift at joint 6.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 9-11-4 to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 6-10=-20
Concentrated Loads (lb)
Vert: 8=-1461 (B), 13=-1461 (B), 14=-1461 (B), 15=-1461 (B), 16=-1461 (B)

STATE OF MISSOURI
NATHANIEL FOX
NUMBER PE-2022042259
PROFESSIONAL ENGINEER

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	VI1	Valley	1	1	I65719447
					Job Reference (optional)

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

Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:55

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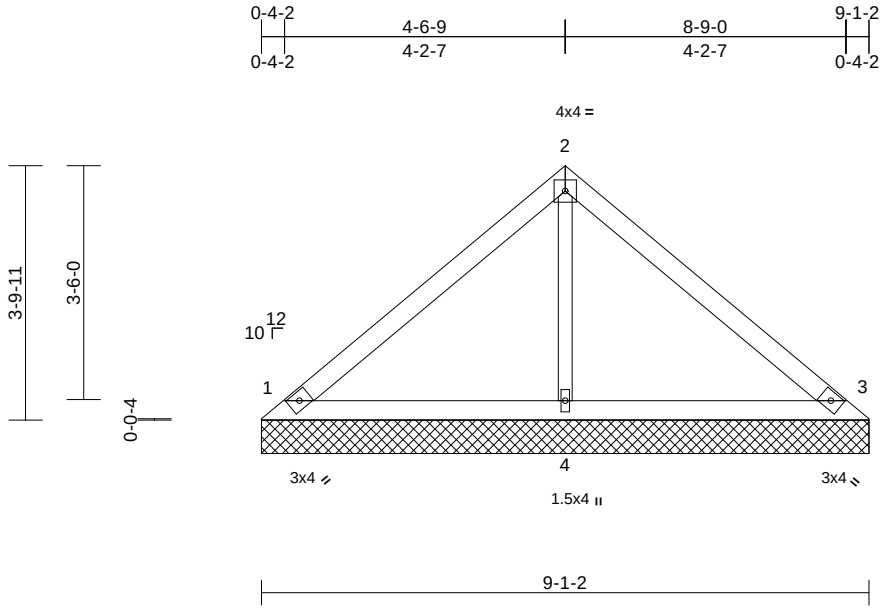

Scale = 1:34.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 32 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=9-1-2, 3=9-1-2, 4=9-1-2
Max Horiz 1=-97 (LC 8)
Max Uplift 1=-41 (LC 12), 3=-52 (LC 13), 4=-15 (LC 12)
Max Grav 1=209 (LC 1), 3=209 (LC 1), 4=332 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-175/88, 2-3=-172/97
BOT CHORD 1-4=-22/82, 3-4=-22/82
WEBS 2-4=-204/103

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1, 52 lb uplift at joint 3 and 15 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	VI2	Valley	1	1	I65719448
					Job Reference (optional)

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

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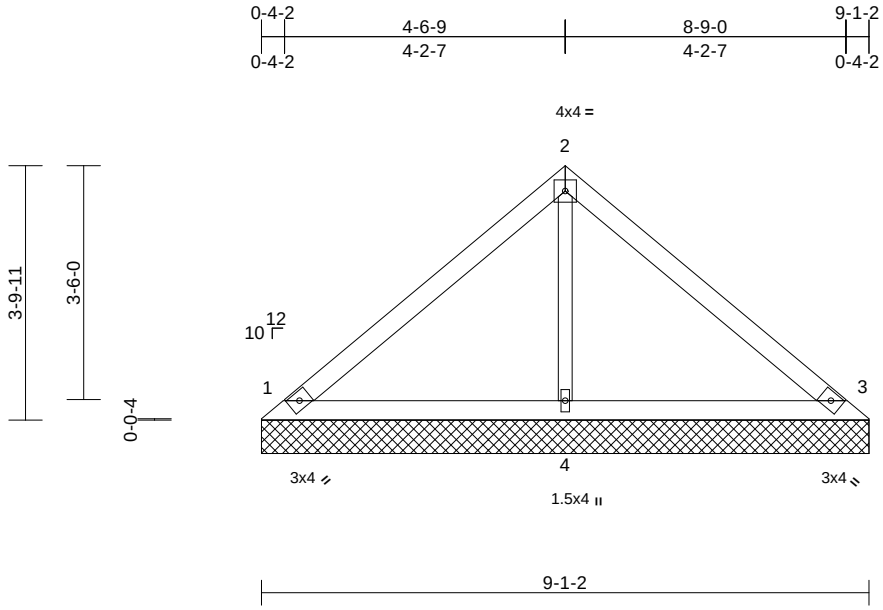

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 32 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=9-1-2, 3=9-1-2, 4=9-1-2
Max Horiz 1=-97 (LC 8)
Max Uplift 1=-41 (LC 12), 3=-52 (LC 13), 4=-15 (LC 12)
Max Grav 1=209 (LC 1), 3=209 (LC 1), 4=332 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-175/88, 2-3=-172/97
BOT CHORD 1-4=-22/82, 3-4=-22/82
WEBS 2-4=-204/103

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 1, 52 lb uplift at joint 3 and 15 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	VI3	Valley	1	1	I65719449
					Job Reference (optional)

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

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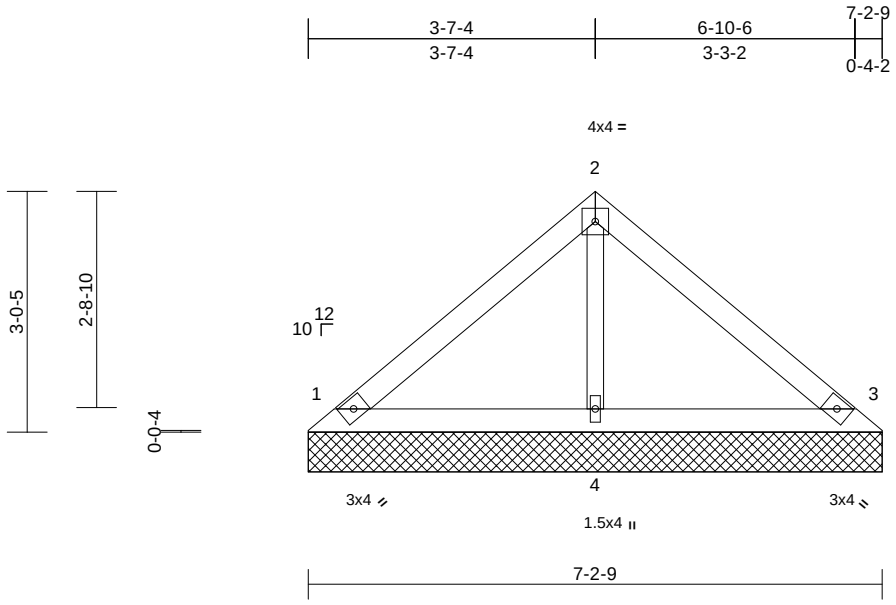

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

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

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

REACTIONS (size) 1=7-2-9, 3=7-2-9, 4=7-2-9
Max Horiz 1=-75 (LC 8)
Max Uplift 1=-42 (LC 12), 3=-50 (LC 13)
Max Grav 1=175 (LC 1), 3=175 (LC 1), 4=231 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-124/73, 2-3=-117/80
BOT CHORD 1-4=-18/59, 3-4=-18/59
WEBS 2-4=-150/85

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1 and 50 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	VI4	Valley	1	1	I65719450
					Job Reference (optional)

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

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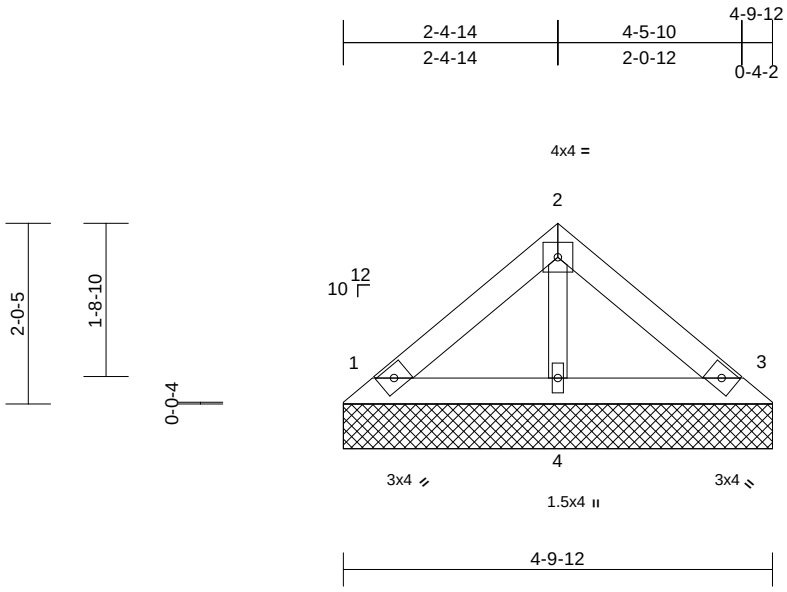

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 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 4-10-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-9-12, 3=4-9-12, 4=4-9-12
Max Horiz 1=-47 (LC 10)
Max Uplift 1=-26 (LC 12), 3=-32 (LC 13)
Max Grav 1=110 (LC 1), 3=110 (LC 1), 4=145 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-78/52, 2-3=-74/57
BOT CHORD 1-4=-11/37, 3-4=-11/37
WEBS 2-4=-94/62

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 1 and 32 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
06/12/2024 10:57:37

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	VI5	Valley	1	1	I65719451
					Job Reference (optional)

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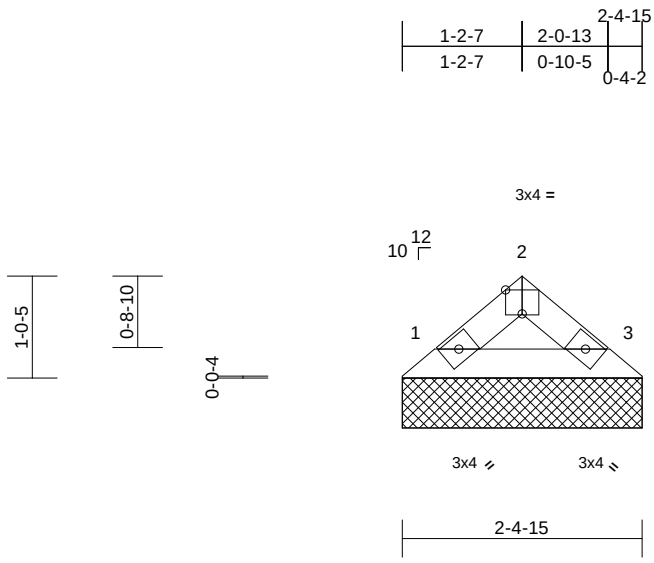

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Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 lb	FT = 20%

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

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

REACTIONS (size) 1=2-4-15, 3=2-4-15
Max Horiz 1=-19 (LC 8)
Max Uplift 1=-10 (LC 12), 3=-10 (LC 13)
Max Grav 1=74 (LC 1), 3=74 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-60/46, 2-3=-60/49
BOT CHORD 1-3=-9/36

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1 and 10 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

STATE OF MISSOURI
NATHANIEL FOX
NUMBER
PE-2022042259
PROFESSIONAL ENGINEER

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	VK1	Valley	1	1	I65719452
					Job Reference (optional)

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

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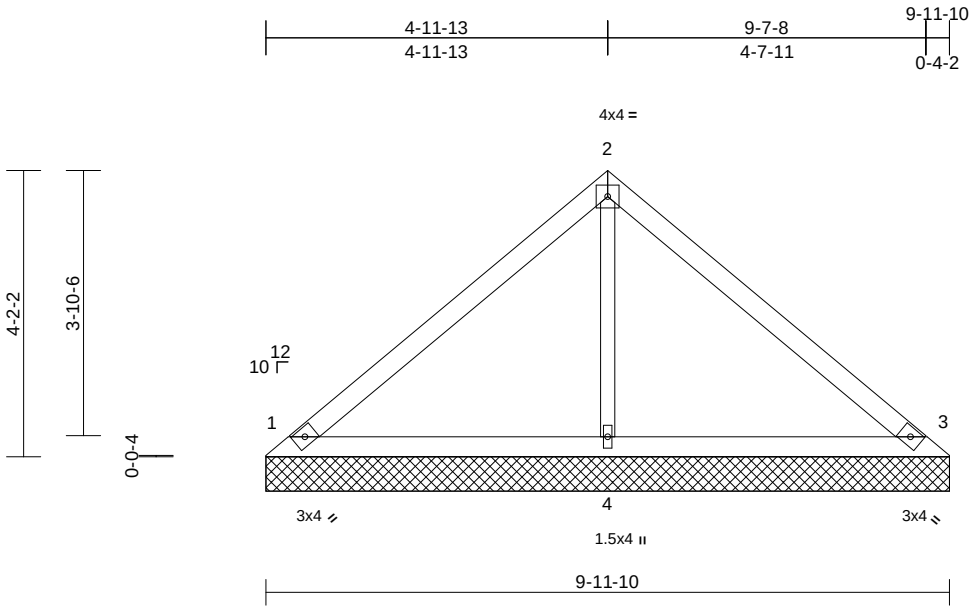

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 36 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=9-11-10, 3=9-11-10, 4=9-11-10
Max Horiz 1=-107 (LC 8)
Max Uplift 1=-45 (LC 12), 3=-58 (LC 13), 4=-17 (LC 12)
Max Grav 1=231 (LC 1), 3=231 (LC 1), 4=367 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-193/95, 2-3=-190/103
BOT CHORD 1-4=-25/91, 3-4=-25/91
WEBS 2-4=-225/107

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 1, 58 lb uplift at joint 3 and 17 lb uplift at joint 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	VK2	Valley	1	1	I65719453
					Job Reference (optional)

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

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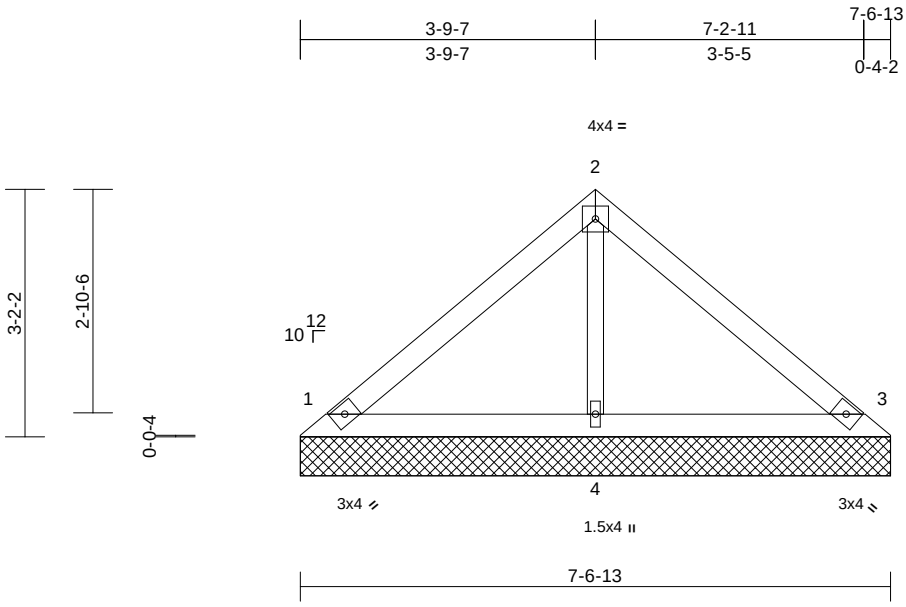

Scale = 1:29.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

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

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

REACTIONS (size) 1=7-6-13, 3=7-6-13, 4=7-6-13
Max Horiz 1=79 (LC 9)
Max Uplift 1=-44 (LC 12), 3=-53 (LC 13)
Max Grav 1=185 (LC 1), 3=185 (LC 1), 4=244 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-131/75, 2-3=-124/83
BOT CHORD 1-4=-18/63, 3-4=-18/63
WEBS 2-4=-158/87

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1 and 53 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	VK3	Valley	1	1	I65719454
					Job Reference (optional)

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

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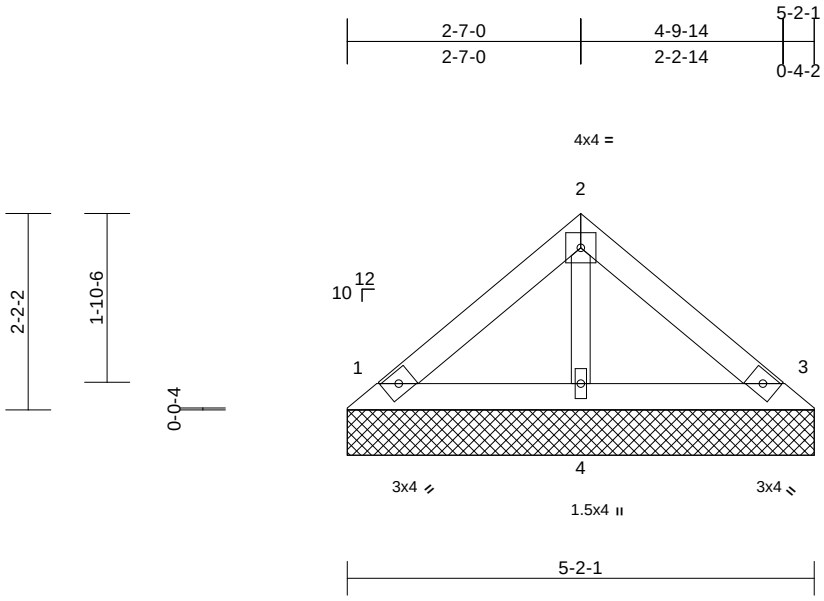


Scale = 1:25.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

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

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

REACTIONS (size) 1=5-2-1, 3=5-2-1, 4=5-2-1
Max Horiz 1=-51 (LC 8)
Max Uplift 1=-28 (LC 12), 3=-34 (LC 13)
Max Grav 1=120 (LC 1), 3=120 (LC 1), 4=158 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-85/57, 2-3=-80/61
BOT CHORD 1-4=-12/40, 3-4=-12/40
WEBS 2-4=-103/67

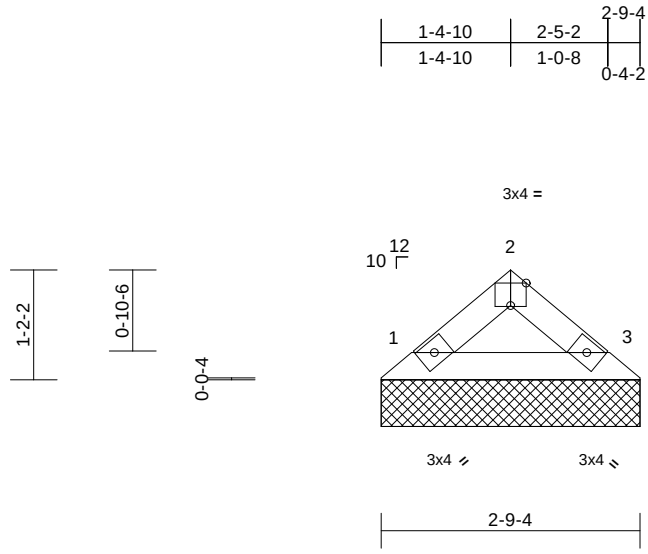
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 1 and 34 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

May 22,2024

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 172
P240541-01	VK4	Valley	1	1	I65719455
					Job Reference (optional)

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Apr 26 2024 Print: 8.630 S Apr 26 2024 MiTek Industries, Inc. Tue May 21 08:51:55 Page: 1
ID:eFHf?bDHGjT6CmDAI6DivVzw3Y6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:24.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-9-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-9-4, 3=2-9-4
Max Horiz 1=-23 (LC 8)
Max Uplift 1=-12 (LC 12), 3=-12 (LC 13)
Max Grav 1=91 (LC 1), 3=91 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-73/55, 2-3=-73/59
BOT CHORD 1-3=-11/44

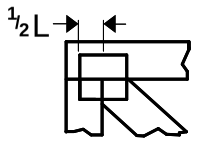
NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 4-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 1 and 12 lb uplift at joint 3.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

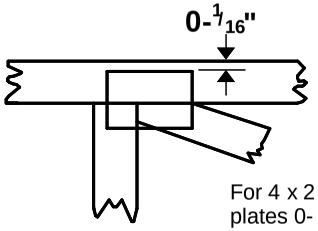
May 22,2024

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

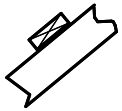
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

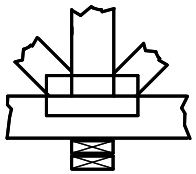
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

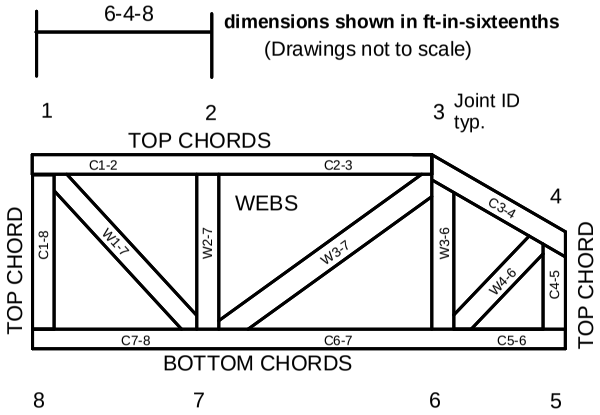


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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