

RE: P240242-01
Roof - Osage Lot 66

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

Site Information:

Customer: Clayton Properties Project Name: P240242-01
Lot/Block: 66 Model:
Address: 3828 SW Ravengate Pl. Subdivision: Osage
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
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 24 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I64307706	D4	3/19/2024	21	I64307726	A4	3/19/2024
2	I64307707	D3	3/19/2024	22	I64307727	A5	3/19/2024
3	I64307708	E1	3/19/2024	23	I64307728	A6	3/19/2024
4	I64307709	E2	3/19/2024	24	I64307729	A7	3/19/2024
5	I64307710	E3	3/19/2024				
6	I64307711	D2	3/19/2024				
7	I64307712	D1	3/19/2024				
8	I64307713	V6	3/19/2024				
9	I64307714	V5	3/19/2024				
10	I64307715	B1	3/19/2024				
11	I64307716	V4	3/19/2024				
12	I64307717	V3	3/19/2024				
13	I64307718	V2	3/19/2024				
14	I64307719	V1	3/19/2024				
15	I64307720	C1	3/19/2024				
16	I64307721	C2	3/19/2024				
17	I64307722	C3	3/19/2024				
18	I64307723	A1	3/19/2024				
19	I64307724	A2	3/19/2024				
20	I64307725	A3	3/19/2024				

The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision
based on the parameters provided by .

Truss Design Engineer's Name: Sevier, Scott

My license renewal date for the state of Missouri is December 31, 2025.

Missouri COA: 001193

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



March 19, 2024

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66
P240242-01	D4	Monopitch Supported Gable	1	1	Job Reference (optional)

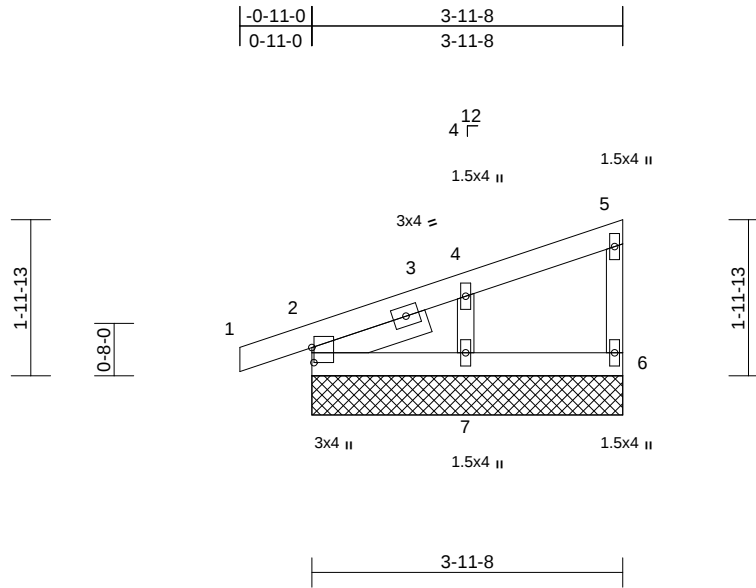
I64307706

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Scale = 1:29.3

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	0.08	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size)	2=3-11-8, 6=3-11-8, 7=3-11-8
	Max Horiz	2=77 (LC 9)
	Max Uplift	2=-52 (LC 8), 6=-13 (LC 8), 7=-59 (LC 12)
	Max Grav	2=151 (LC 1), 6=68 (LC 1), 7=192 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-4/0, 2-4=-169/83, 4-5=-58/48, 5-6=-54/91
BOT CHORD	2-7=-34/46, 6-7=-34/46
WEBS	4-7=-144/275

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 13 lb uplift at joint 6, 52 lb uplift at joint 2 and 59 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

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

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

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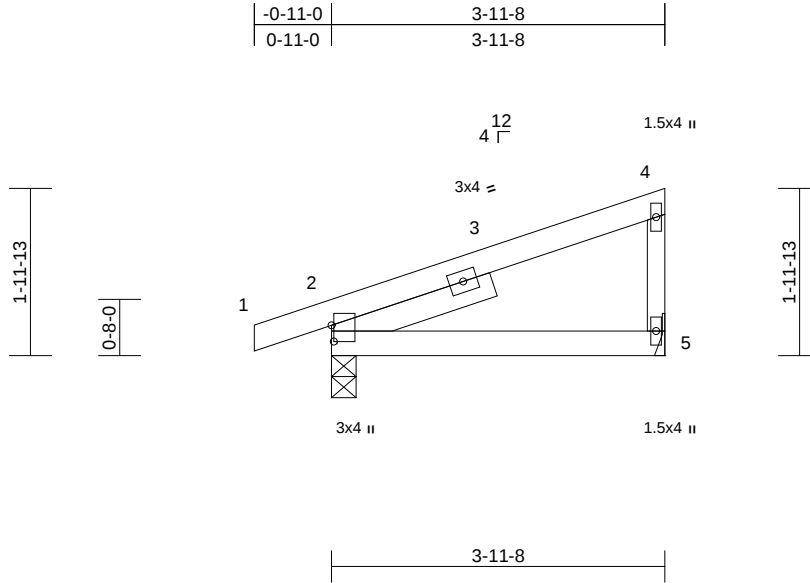
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66
P240242-01	D3	Monopitch	5	1	I64307707
Job Reference (optional)					

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Scale = 1:27.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.01	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

LUMBER

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

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-11-8 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=77 (LC 9)
 Max Uplift 2=-78 (LC 8), 5=-43 (LC 12)
 Max Grav 2=245 (LC 1), 5=166 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-4/0, 2-4=-100/61, 4-5=-127/200
 BOT CHORD 2-5=-34/37

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 5 and 78 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.



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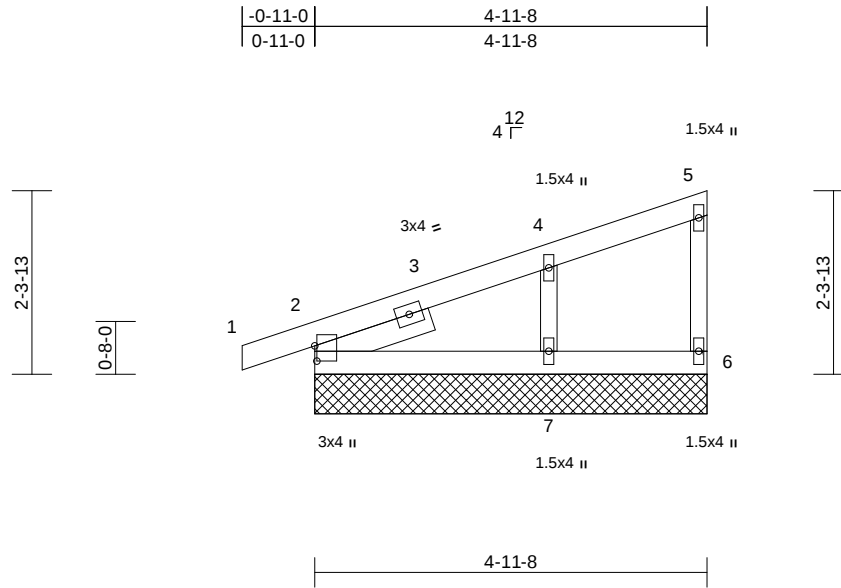
Job P240242-01	Truss E1	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	Roof - Osage Lot 66 Job Reference (optional)	I64307708
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Scale = 1:29.1

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	0.18	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	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 4-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 2=4-11-8, 6=4-11-8, 7=4-11-8
Max Horiz	2=93 (LC 9)
Max Uplift	2=-57 (LC 8), 6=-10 (LC 9), 7=-79 (LC 12)
Max Grav	2=186 (LC 1), 6=53 (LC 1), 7=262 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-4/0, 2-4=-188/99, 4-5=-56/52, 5-6=-43/68
BOT CHORD	2-7=-41/55, 6-7=-41/55
WEBS	4-7=-199/362

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 4-10-4 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
- 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 10 lb uplift at joint 6, 57 lb uplift at joint 2 and 79 lb uplift at joint 7.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 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



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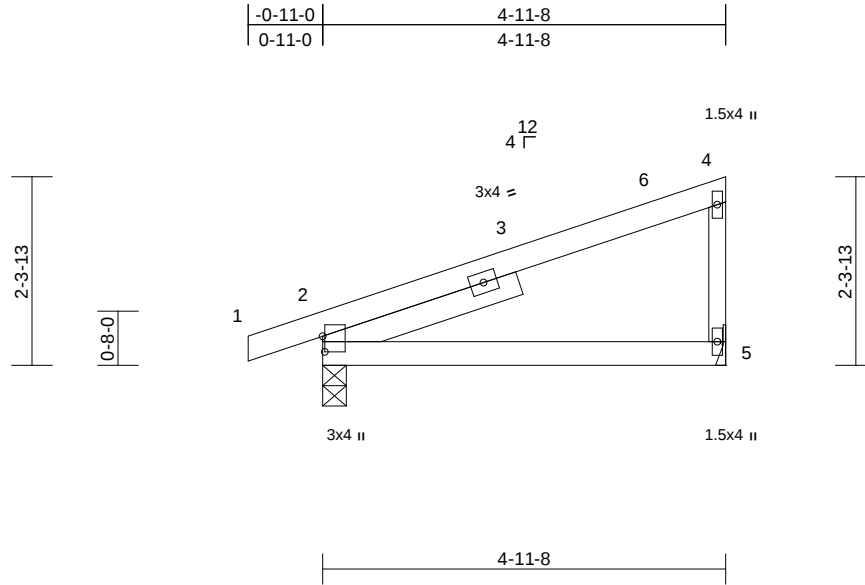
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307709
P240242-01	E2	Monopitch	7	1	Job Reference (optional)	

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Scale = 1:28.3

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	0.58	Vert(LL)	-0.03	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	2-5	>875	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 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 -- 2-6-5

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-8 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=93 (LC 9)
 Max Uplift 2=-86 (LC 8), 5=-55 (LC 12)
 Max Grav 2=289 (LC 1), 5=212 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-4/0, 2-4=-125/74, 4-5=-164/252
 BOT CHORD 2-5=-41/44

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 4-10-4 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
- 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 55 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.



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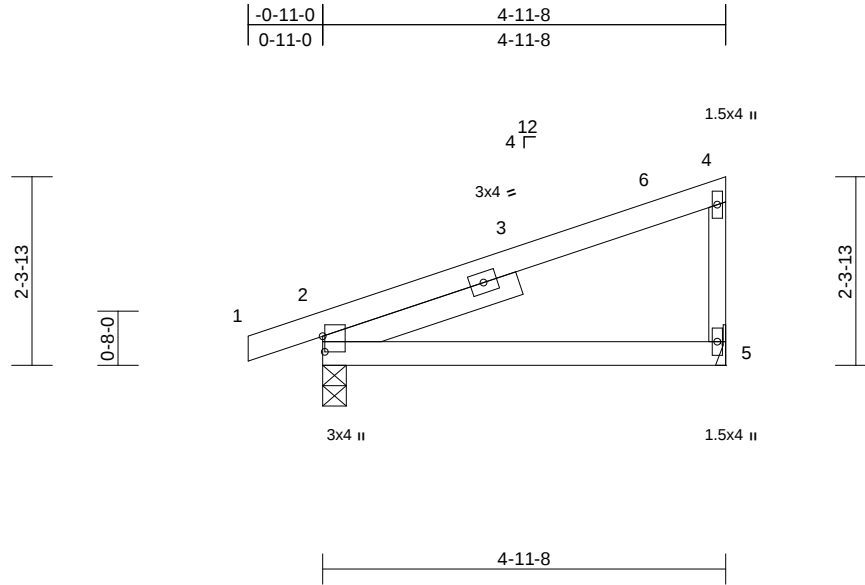
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307710
P240242-01	E3	Monopitch	1	1	Job Reference (optional)	

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TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.03	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	2-5	>875	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 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 -- 2-6-5

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-11-8 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=93 (LC 9)
 Max Uplift 2=-86 (LC 8), 5=-55 (LC 12)
 Max Grav 2=289 (LC 1), 5=212 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-4/0, 2-4=-125/74, 4-5=-164/252
 BOT CHORD 2-5=-41/44

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 4-10-4 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
- 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 55 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.



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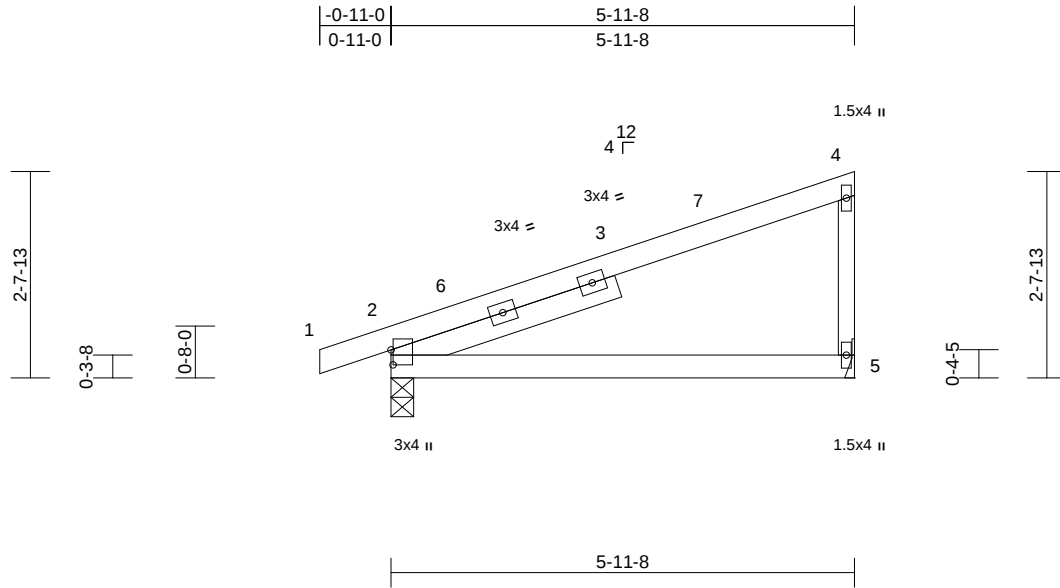
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307711
P240242-01	D2	Monopitch	5	1	Job Reference (optional)	

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 18 12:08:24

Page: 1

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Scale = 1:29.6

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	0.84	Vert(LL)	-0.07	2-5	>997	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.14	2-5	>499	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 26 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x3 SPF No.2
 SLIDER Left 2x4 SP No.2 -- 3-0-10

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-15 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=109 (LC 9)
 Max Uplift 2=-94 (LC 8), 5=-66 (LC 12)
 Max Grav 2=333 (LC 1), 5=258 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-4/0, 2-4=-146/87, 4-5=-200/293
 BOT CHORD 2-5=-48/52

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 5-10-4 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
- 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 66 lb uplift at joint 5 and 94 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.



March 19,2024

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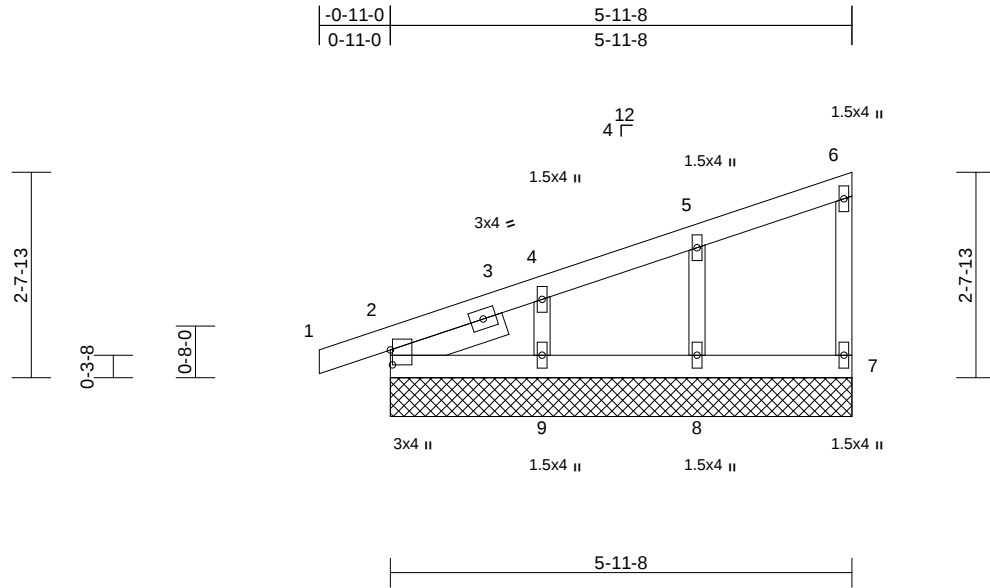
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307712
P240242-01	D1	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

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Scale = 1:29.7

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	7	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 26 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)	2=5-11-8, 7=5-11-8, 8=5-11-8, 9=5-11-8
Max Horiz	2=109 (LC 9)
Max Uplift	2=-41 (LC 8), 7=-14 (LC 9), 8=-54 (LC 8), 9=-59 (LC 12)
Max Grav	2=154 (LC 1), 7=67 (LC 1), 8=198 (LC 1), 9=172 (LC 1)

FORCES

TOP CHORD	1-2=-4/0, 2-4=-255/119, 4-5=-148/89, 5-6=-68/63, 6-7=-56/91
BOT CHORD	2-9=-48/64, 8-9=-48/64, 7-8=-48/64
WEBS	5-8=-155/234, 4-9=-137/259

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 3-11-8, Exterior(2N) 3-11-8 to 5-10-4 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 7, 41 lb uplift at joint 2, 54 lb uplift at joint 8 and 59 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024

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

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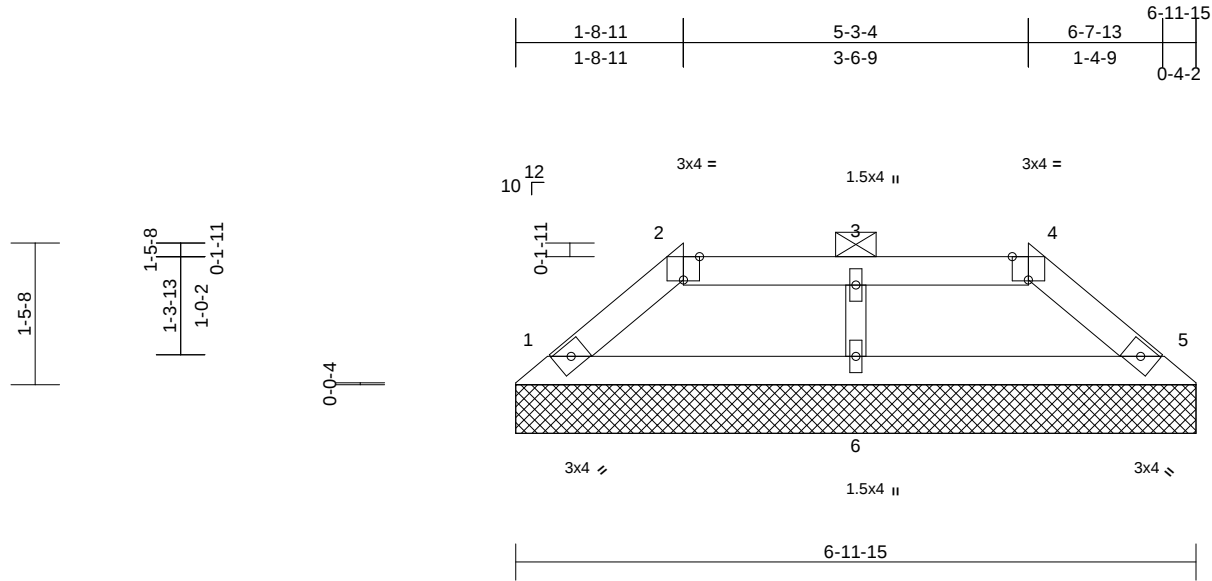
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307713
P240242-01	V6	Valley	1	1	Job Reference (optional)	

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

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Page: 1



Scale = 1:23.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 22 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, except 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	1=6-11-15, 5=6-11-15, 6=6-11-15
Max Horiz	1=-29 (LC 8)
Max Uplift	1=-30 (LC 12), 5=-31 (LC 13), 6=-28 (LC 9)
Max Grav	1=162 (LC 1), 5=162 (LC 1), 6=238 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-174/116, 2-3=-121/121, 3-4=-121/121, 4-5=-174/119
BOT CHORD	1-6=-59/120, 5-6=-59/120
WEBS	3-6=-160/125

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.

- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1, 31 lb uplift at joint 5 and 28 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 19, 2024

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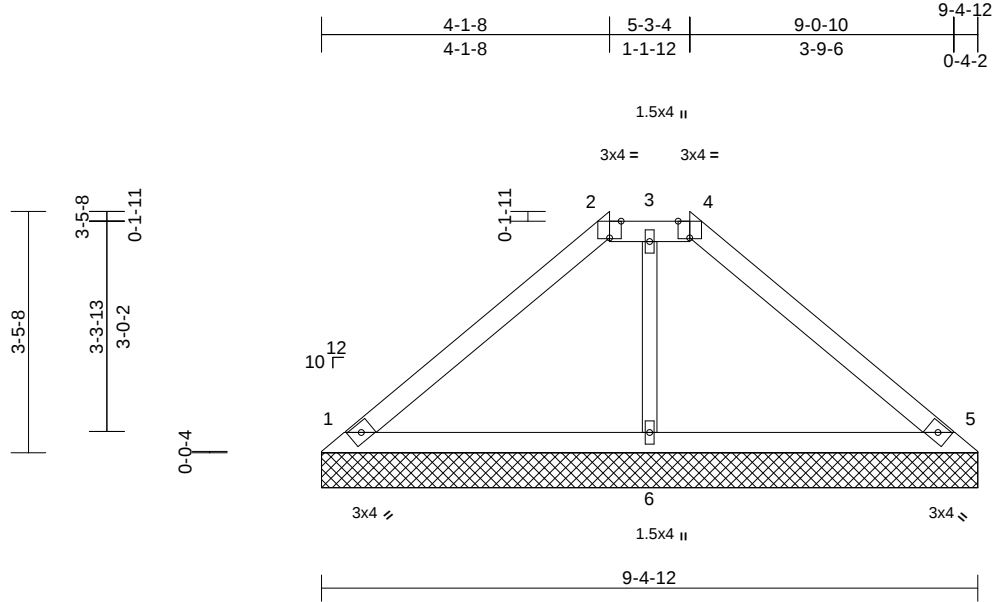
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307714
P240242-01	V5	Valley	1	1	Job Reference (optional)	

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

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Scale = 1:33

Plate Offsets (X, Y): [2:0-2-0,Edge], [4:0-2-0,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	0.26	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 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, except 2-0-0 oc purlins (6-0-0 max.): 2-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=9-4-12, 5=9-4-12, 6=9-4-12
Max Horiz 1=-85 (LC 8)
Max Uplift 1=-66 (LC 12), 5=-74 (LC 13)
Max Grav 1=258 (LC 1), 5=258 (LC 1), 6=262 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-252/149, 2-3=-137/195, 3-4=-137/194, 4-5=-252/162
BOT CHORD 1-6=-42/134, 5-6=-42/134
WEBS 3-6=-136/40

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 1 and 74 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



March 19, 2024

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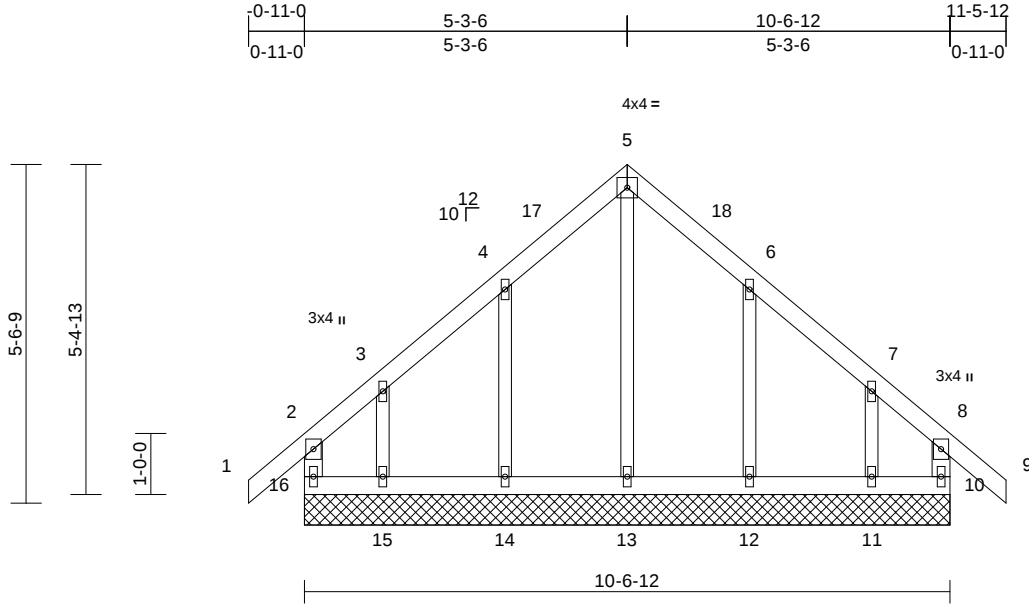
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307715
P240242-01	B1	Common Supported Gable	1	1	Job Reference (optional)	

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

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Scale = 1:37.7

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	10	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 54 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)	10=10-6-12, 11=10-6-12, 12=10-6-12, 13=10-6-12, 14=10-6-12, 15=10-6-12, 16=10-6-12
Max Horiz	16=-176 (LC 10)
Max Uplift	10=-73 (LC 9), 11=-130 (LC 13), 12=-99 (LC 13), 14=-98 (LC 12), 15=-134 (LC 12), 16=-94 (LC 8)
Max Grav	10=160 (LC 19), 11=177 (LC 20), 12=210 (LC 20), 13=196 (LC 22), 14=209 (LC 19), 15=186 (LC 19), 16=177 (LC 20)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-16=-142/100, 1-2=0/48, 2-3=-106/104, 3-4=-72/137, 4-5=-123/270, 5-6=-123/270, 6-7=-59/136, 7-8=-85/85, 8-9=0/48, 8-10=-129/101
BOT CHORD	15-16=-85/110, 14-15=-85/110, 13-14=-85/110, 12-13=-85/110, 11-12=-85/110, 10-11=-85/110
WEBS	5-13=-238/45, 4-14=-171/221, 3-15=-140/184, 6-12=-171/221, 7-11=-139/184

NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 5-3-6, Corner(3R) 5-3-6 to 10-5-0, Exterior(2N) 10-5-0 to 11-5-12 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 16, 73 lb uplift at joint 10, 98 lb uplift at joint 14, 134 lb uplift at joint 15, 99 lb uplift at joint 12 and 130 lb uplift at joint 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



March 19,2024

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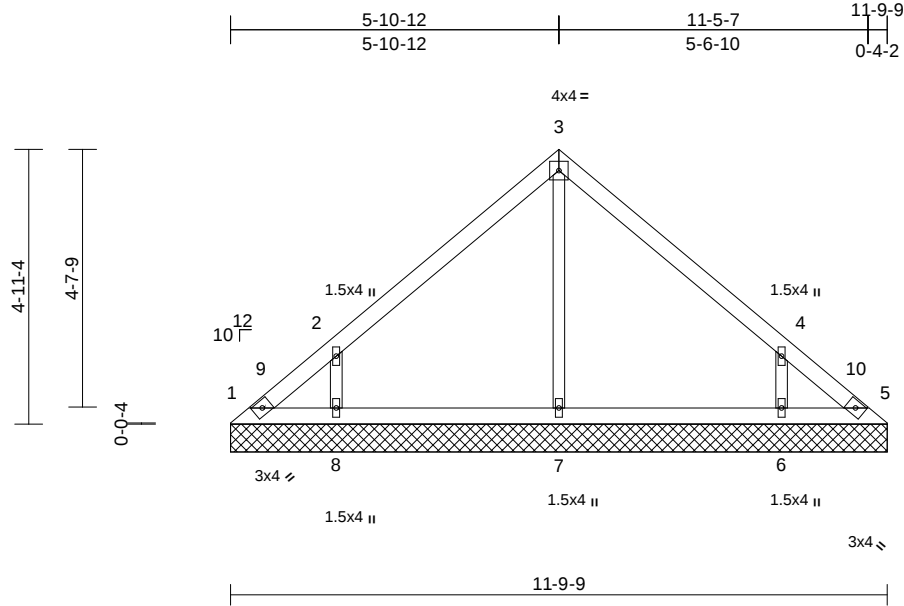
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307716
P240242-01	V4	Valley	1	1	Job Reference (optional)	

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Page: 1



Scale = 1:41.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 44 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size)	1=11-9-9, 5=11-9-9, 6=11-9-9, 7=11-9-9, 8=11-9-9
Max Horiz	1=-128 (LC 8)
Max Uplift	1=-58 (LC 10), 5=-35 (LC 11), 6=-195 (LC 13), 8=-195 (LC 12)
Max Grav	1=94 (LC 12), 5=79 (LC 22), 6=358 (LC 20), 7=257 (LC 1), 8=359 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-143/109, 2-3=-172/126, 3-4=-167/118, 4-5=-119/74
BOT CHORD	1-8=-37/92, 7-8=-37/92, 6-7=-37/92, 5-6=-37/92
WEBS	3-7=-171/16, 2-8=-299/291, 4-6=-299/291

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-13 to 5-4-13, Interior (1) 5-4-13 to 5-11-1, Exterior(2R) 5-11-1 to 10-11-1, Interior (1) 10-11-1 to 11-5-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 1, 35 lb uplift at joint 5, 195 lb uplift at joint 8 and 195 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19, 2024

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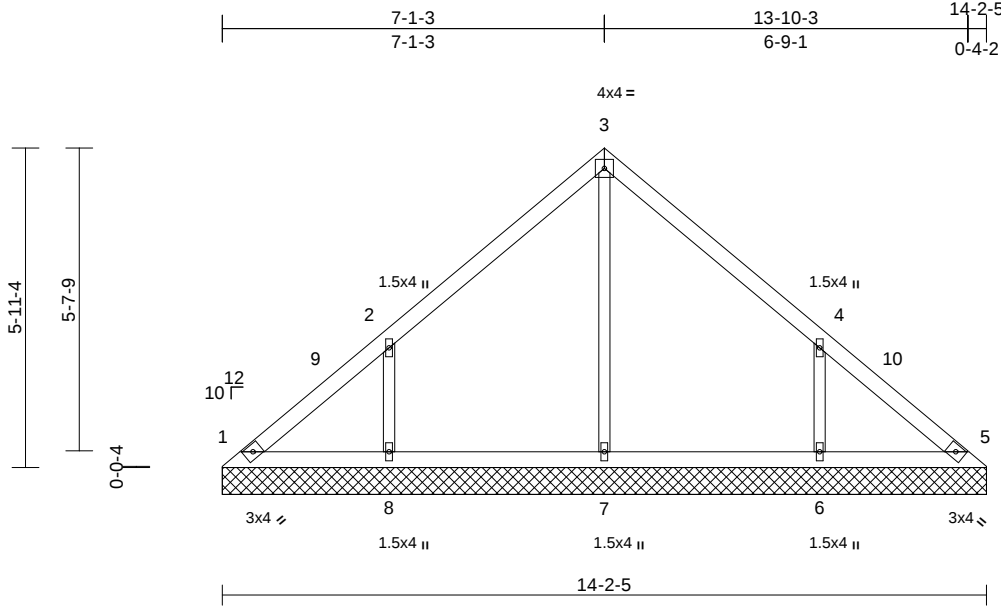
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307717
P240242-01	V3	Valley	1	1	Job Reference (optional)	

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

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 55 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size)	1=14-2-5, 5=14-2-5, 6=14-2-5, 7=14-2-5, 8=14-2-5
Max Horiz	1=156 (LC 9)
Max Uplift	1=-30 (LC 8), 5=-3 (LC 9), 6=-207 (LC 13), 8=-207 (LC 12)
Max Grav	1=151 (LC 20), 5=130 (LC 19), 6=389 (LC 20), 7=253 (LC 1), 8=389 (LC 19)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-162/116, 2-3=-175/136, 3-4=-166/128, 4-5=-138/74
BOT CHORD	1-8=-50/114, 7-8=-50/114, 5-6=-50/114
WEBS	3-7=-171/0, 2-8=-312/261, 4-6=-312/261

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-13 to 5-4-13, Interior (1) 5-4-13 to 7-1-8, Exterior(2R) 7-1-8 to 12-1-8, Interior (1) 12-1-8 to 13-10-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

- Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1, 3 lb uplift at joint 5, 207 lb uplift at joint 8 and 207 lb uplift at joint 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



March 19,2024

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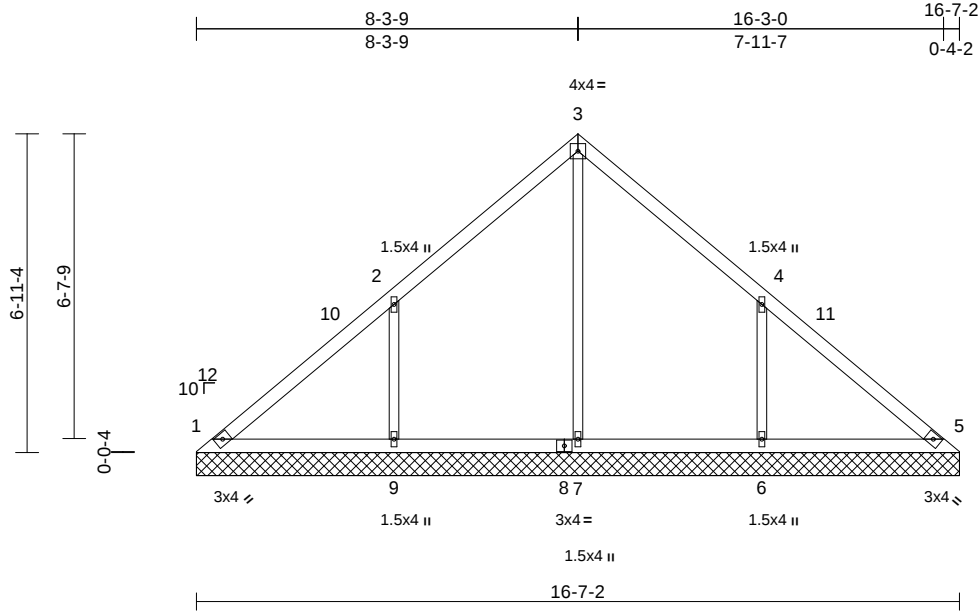
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307718
P240242-01	V2	Valley	1	1	Job Reference (optional)	

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

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 65 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=16-7-2, 5=16-7-2, 6=16-7-2, 7=16-7-2, 9=16-7-2
Max Horiz 1=-184 (LC 8)
Max Uplift 1=-20 (LC 8), 6=-240 (LC 13), 9=-241 (LC 12)
Max Grav 1=195 (LC 20), 5=177 (LC 1), 6=459 (LC 20), 7=235 (LC 22), 9=459 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-186/136, 2-3=-177/152, 3-4=-166/135, 4-5=-158/88
BOT CHORD 1-9=-63/144, 7-9=-63/144, 5-6=-63/144
WEBS 3-7=-162/0, 2-9=-360/284, 4-6=-360/283

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-13 to 5-4-13, Interior (1) 5-4-13 to 8-3-14, Exterior(2R) 8-3-14 to 13-3-14, Interior (1) 13-3-14 to 16-2-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 1, 241 lb uplift at joint 9 and 240 lb uplift at joint 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



March 19, 2024

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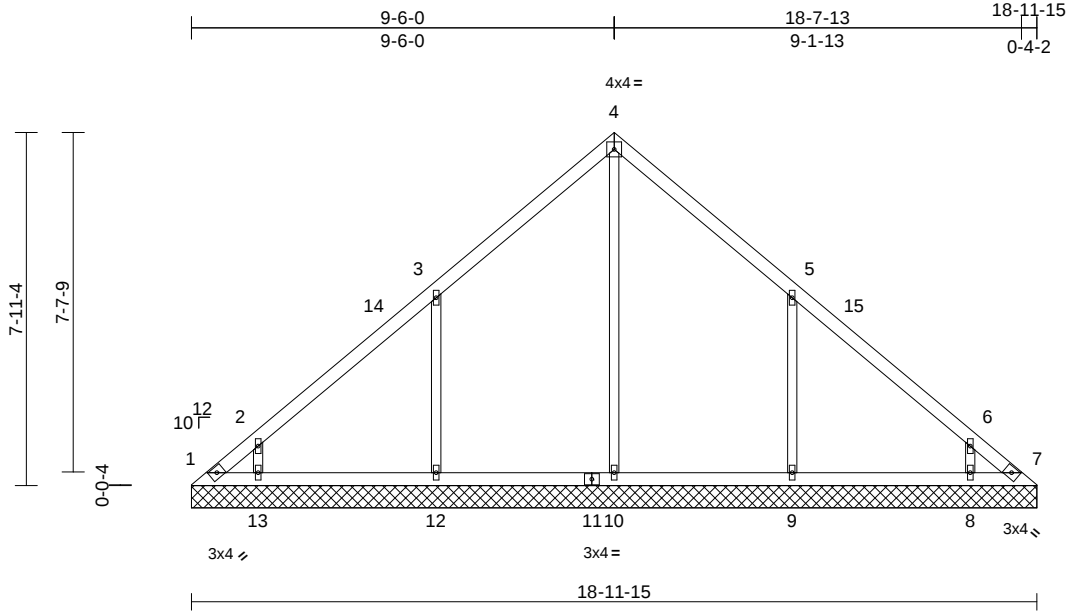
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307719
P240242-01	V1	Valley	1	1	Job Reference (optional)	

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

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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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 77 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS

(size) 1=18-11-15, 7=18-11-15,
8=18-11-15, 9=18-11-15,
10=18-11-15, 12=18-11-15,
13=18-11-15
Max Horiz 1=-212 (LC 8)
Max Uplift 1=-120 (LC 10), 7=-83 (LC 11),
8=-163 (LC 13), 9=-223 (LC 13),
12=-224 (LC 12), 13=-162 (LC 12)
Max Grav 1=181 (LC 12), 7=156 (LC 13),
8=321 (LC 20), 9=425 (LC 20),
10=256 (LC 22), 12=425 (LC 19),
13=321 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-275/179, 2-3=-215/132, 3-4=-181/174,
4-5=-167/151, 5-6=-172/75, 6-7=-236/121
BOT CHORD 1-13=-75/169, 12-13=-75/169,
10-12=-75/169, 9-10=-75/169, 8-9=-75/169,
7-8=-75/169
WEBS 4-10=-178/0, 3-12=-343/273, 2-13=-258/209,
5-9=-342/273, 6-8=-259/210

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) 0-4-13 to 5-6-4,
Interior (1) 5-6-4 to 9-6-4, Exterior(2R) 9-6-4 to 14-6-4,
Interior (1) 14-6-4 to 18-7-11 zone; cantilever left and
right exposed ; end vertical left and right exposed;C-C
for members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 120 lb uplift at
joint 1, 83 lb uplift at joint 7, 224 lb uplift at joint 12, 162
lb uplift at joint 13, 223 lb uplift at joint 9 and 163 lb uplift
at joint 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



March 19,2024

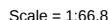
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LUMBER		WEBS	6-25=-185/38, 16-25=-200/41,	10) This truss is designed in accordance with the 2018
TOP CHORD	2x4 SP No.2		16-26=-306/290, 9-26=-284/268,	International Residential Code sections R502.11.1 and
BOT CHORD	2x4 SP No.2		21-23=-225/492, 6-23=-243/517,	R802.10.2 and referenced standard ANSI/TPI 1.
WEBS	2x3 SPF No.2 *Except* 22-2,12-10:2x4 SP		3-24=-261/228, 21-24=-290/262,	
	No.2		3-22=-244/91, 9-27=-191/113,	LOAD CASE(S) Standard
OTHERS	2x3 SPF No.2		27-28=-152/93, 12-28=-150/91,	
BRACING			6-18=-283/15, 5-23=-152/97, 20-23=-125/79,	
TOP CHORD	Structural wood sheathing directly applied or		4-24=-32/41, 7-25=-177/110,	
	6-0-0 oc purlins, except end verticals.		17-25=-171/117, 8-26=-28/36, 15-26=-10/18,	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc		14-27=-51/28, 13-28=-3/4	
	bracing.			
WEBS	1 Row at midpt 6-18	NOTES		
JOINTS	1 Brace at Jt(s): 23,	1) Unbalanced roof live loads have been considered for		
	25, 28	this design.		
REACTIONS (size)		2) Wind: ASCE 7-16; Vult=115mph (3-second gust)		
	12=10-5-12, 13=10-5-12,	Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;		
	14=10-5-12, 15=10-5-12,	Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)		
	16=10-5-12, 17=10-5-12,	exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0,		
	18=10-5-12, 22=0-3-8	Interior (1) 4-1-0 to 10-2-13, Exterior(2R) 10-2-13 to		
Max Horiz	22=292 (LC 11)	15-2-13, Interior (1) 15-2-13 to 21-8-0 zone; cantilever		
Max Uplift	12=-113 (LC 13), 16=-179 (LC 13),	left and right exposed ; end vertical left and right		
	17=-80 (LC 13), 18=-43 (LC 12),	exposed; C-C for members and forces & MWFRS for		
	22=-98 (LC 12)	reactions shown; Lumber DOL=1.60 plate grip		
Max Grav	12=346 (LC 26), 13=93 (LC 3),	DOL=1.60		
	14=81 (LC 17), 15=64 (LC 3),			
	16=416 (LC 1), 17=186 (LC 26),			
	18=413 (LC 19), 22=581 (LC 1)			
FORCES (lb) - Maximum Compression/Maximum		3) Truss designed for wind loads in the plane of the truss		
	Tension	only. For studs exposed to wind (normal to the face),		
TOP CHORD	1-2=0/48, 2-3=-363/220, 3-4=-359/195,	see Standard Industry Gable End Details as applicable,		
	4-5=-330/229, 5-6=-381/288, 6-7=-167/247,	or consult qualified building designer as per ANSI/TPI 1.		
	7-8=-116/168, 8-9=-125/134, 9-10=-269/233,			
	10-11=0/48, 2-22=-413/230, 10-12=-351/239			
BOT CHORD	21-22=-137/413, 20-21=-105/195,	4) All plates are 1.5x4 MT20 unless otherwise indicated.		
	18-20=-105/195, 17-18=-105/193,	5) Truss to be fully sheathed from one face or securely		
	16-17=-105/193, 15-16=-23/114,	braced against lateral movement (i.e. diagonal web).		
	14-15=-23/114, 13-14=-23/114,	6) Gable studs spaced at 2-0-0 oc.		
	12-13=-23/114	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 179 lb uplift at		
		joint 16, 98 lb uplift at joint 22, 113 lb uplift at joint 12, 43		
		lb uplift at joint 18 and 80 lb uplift at joint 17.		



March 19.2024



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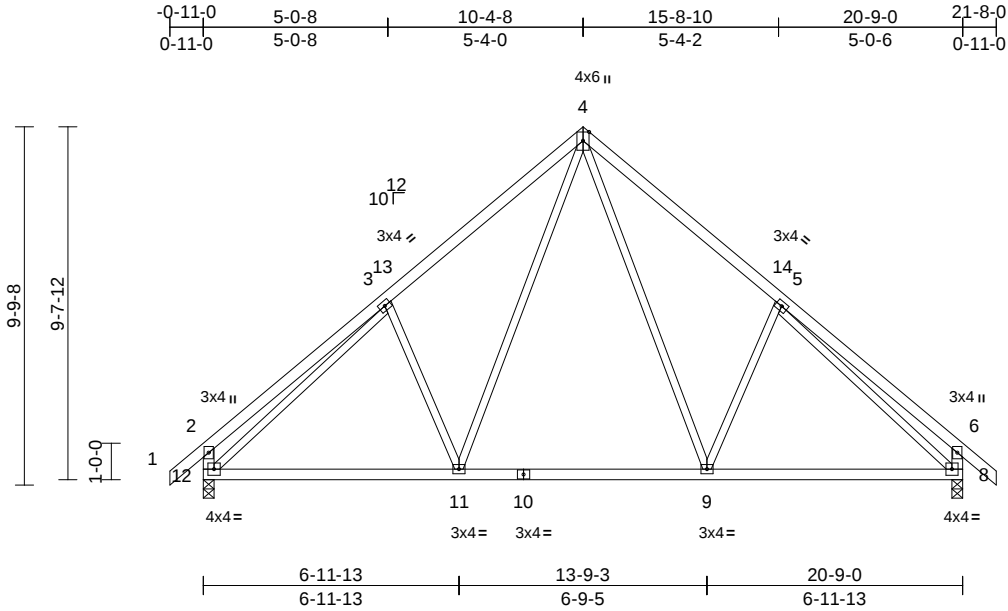
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307721
P240242-01	C2	Common	3	1	Job Reference (optional)	

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Scale = 1:63

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.05	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.11	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
											Weight: 111 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x3 SPF No.2 *Except* 12-2,8-6:2x4 SP No.2

BRACING

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

REACTIONS (size) 8=0-3-8, 12=0-3-8
 Max Horiz 12=295 (LC 11)
 Max Uplift 8=-141 (LC 13), 12=-141 (LC 12)
 Max Grav 8=995 (LC 1), 12=995 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/48, 2-3=-376/192, 3-4=-957/298, 4-5=-957/298, 5-6=-374/190, 6-7=0/48, 2-12=-413/203, 6-8=-411/202
 BOT CHORD 11-12=-157/808, 9-11=-10/548, 8-9=-44/726
 WEBS 4-9=-192/434, 5-9=-290/289, 4-11=-193/434, 3-11=-290/289, 3-12=-745/51, 5-8=-747/51

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 10-4-8, Exterior(2R) 10-4-8 to 15-4-8, Interior (1) 15-4-8 to 21-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 12 and 141 lb uplift at joint 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



March 19, 2024

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

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

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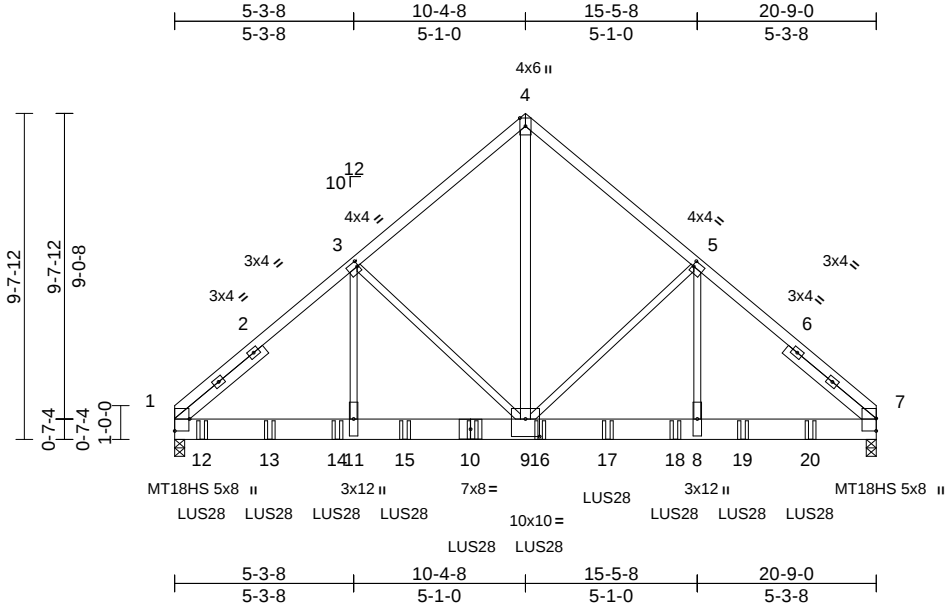
16023 Swingley Ridge Rd.
 Chesterfield, MO 63017
 314.434.1200 / MiTek-US.com

Job P240242-01	Truss C3	Truss Type Common Girder	Qty 1	Ply 2	Roof - Osage Lot 66 Job Reference (optional)	I64307722
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 18 12:08:23
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Page: 1



Scale = 1:68.2

Plate Offsets (X, Y): [1:Edge,0-5-4], [3:0-0-8,0-2-0], [5:0-0-8,0-2-0], [7:Edge,0-0-0], [7:0-0-0,0-0-0], [7:0-0-0,0-0-0], [9:0-5-0,0-6-4]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.09	8-9	>999	240	MT18HS 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.16	8-9	>999	180	MT20 244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.03	7	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 292 lb FT = 20%

LUMBER

TOP CHORD	2x4 SP 2400F 2.0E
BOT CHORD	2x8 SP 2400F 2.0E
WEBS	2x3 SPF No.2 *Except* 9-4:2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 3-4-10, Right 2x4 SP No.2 -- 3-4-10

BRACING

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

REACTIONS

(size)	1=0-3-8, 7=0-3-8
Max Horiz	1=-256 (LC 10)
Max Uplift	1=-1148 (LC 12), 7=-1042 (LC 13)
Max Grav	1=7232 (LC 1), 7=6575 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-3=-7976/1315, 3-4=-5536/1028, 4-5=-5536/1028, 5-7=-7918/1306
BOT CHORD	1-11=-993/5816, 9-11=-993/5816, 8-9=-868/5770, 7-8=-868/5770
WEBS	3-11=-438/3034, 3-9=-2234/553, 4-9=-1145/6509, 5-9=-2170/543, 5-8=-427/2955

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-3-8, Interior (1) 5-3-8 to 10-4-8, Exterior(2R) 10-4-8 to 15-5-8, Interior (1) 15-5-8 to 20-9-0 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
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1148 lb uplift at joint 1 and 1042 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS28 (6-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-9-12 from the left end to 18-9-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-7=-70, 1-7=-20
Concentrated Loads (lb)
Vert: 10=-1194 (B), 12=-1196 (B), 13=-1194 (B), 14=-1194 (B), 15=-1194 (B), 16=-1194 (B), 17=-1194 (B), 18=-1194 (B), 19=-1194 (B), 20=-1194 (B)



March 19, 2024

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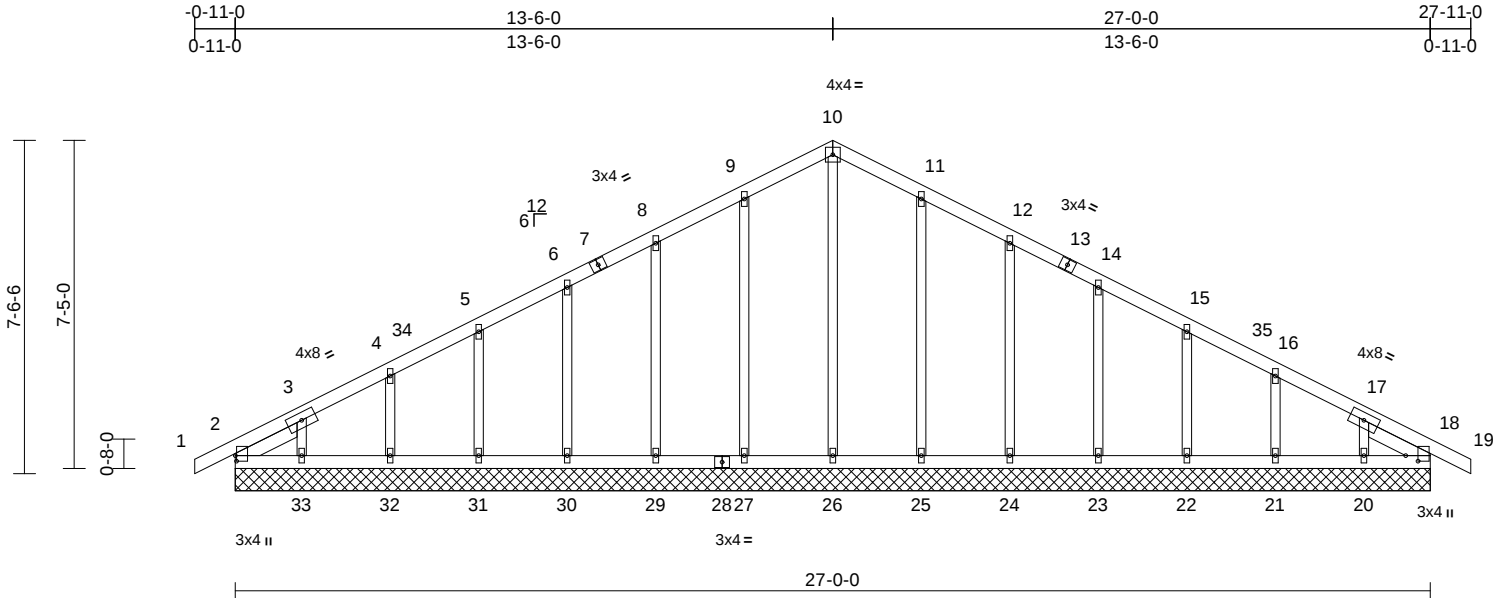
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	164307723
P240242-01	A1	Common Supported Gable	1	1	Job Reference (optional)	

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

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Page: 1



Scale = 1:52.1

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	244/190
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	0.17	Horz(CT)	0.01	18	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 131 lb FT = 20%											

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

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

REACTIONS (size)
2=27-0-0, 18=27-0-0, 20=27-0-0, 21=27-0-0, 22=27-0-0, 23=27-0-0, 24=27-0-0, 25=27-0-0, 26=27-0-0, 27=27-0-0, 29=27-0-0, 30=27-0-0, 31=27-0-0, 32=27-0-0, 33=27-0-0
Max Horiz 2=136 (LC 12)
Max Uplift 2=-29 (LC 8), 18=-2 (LC 9), 20=-81 (LC 13), 21=-62 (LC 13), 22=-61 (LC 13), 23=-61 (LC 13), 24=-64 (LC 13), 25=-57 (LC 13), 27=-60 (LC 12), 29=-63 (LC 12), 30=-61 (LC 12), 31=-61 (LC 12), 32=-62 (LC 12), 33=-93 (LC 12)
Max Grav 2=148 (LC 21), 18=147 (LC 1), 20=150 (LC 26), 21=183 (LC 26), 22=179 (LC 1), 23=180 (LC 1), 24=179 (LC 1), 25=189 (LC 26), 26=182 (LC 22), 27=189 (LC 25), 29=179 (LC 1), 30=180 (LC 1), 31=179 (LC 1), 32=183 (LC 25), 33=150 (LC 25)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/7, 2-3=-198/65, 3-4=-128/69, 4-5=-96/83, 5-6=-71/111, 6-8=-59/142, 8-9=-74/197, 9-10=-93/248, 10-11=-93/248, 11-12=-74/197, 12-14=-55/142, 14-15=-52/88, 15-16=-54/35, 16-17=-80/21, 17-18=-142/47, 18-19=0/7
BOT CHORD 2-33=-38/158, 32-33=-38/158, 31-32=-38/158, 30-31=-38/158, 29-30=-38/158, 27-29=-38/158, 26-27=-38/158, 25-26=-38/158, 24-25=-38/158, 23-24=-38/158, 22-23=-38/158, 21-22=-38/158, 20-21=-38/158, 18-20=-38/158, 10-26=-142/15, 9-27=-149/90, 8-29=-139/101, 6-30=-140/96, 5-31=-140/96, 4-32=-142/138, 3-33=-114/164, 11-25=-149/90, 12-24=-139/101, 14-23=-140/96, 15-22=-140/96, 16-21=-142/138, 17-20=-114/159
WEBS

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 13-6-0, Corner(3R) 13-6-0 to 18-6-0, Exterior(2N) 18-6-0 to 27-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 2, 60 lb uplift at joint 27, 63 lb uplift at joint 29, 61 lb uplift at joint 30, 61 lb uplift at joint 31, 62 lb uplift at joint 32, 93 lb uplift at joint 33, 57 lb uplift at joint 25, 64 lb uplift at joint 24, 61 lb uplift at joint 23, 61 lb uplift at joint 22, 62 lb uplift at joint 21, 81 lb uplift at joint 20 and 2 lb uplift at joint 18.
- 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



March 19,2024

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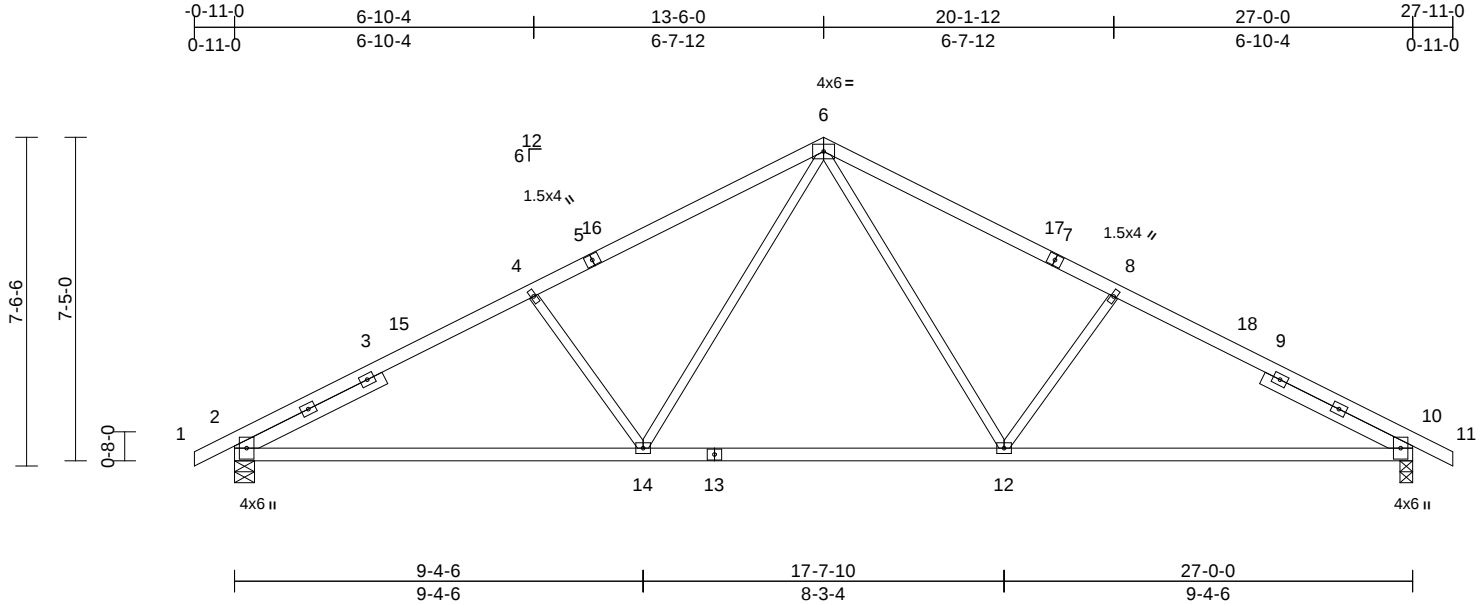
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307724
P240242-01	A2	Common	2	1	Job Reference (optional)	

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 18 12:08:22

Page: 1

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Scale = 1:52.8

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	0.80	Vert(LL)	-0.20	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.42	2-14	>776	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 120 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 -- 3-9-10, Right 2x4 SP No.2 -- 3-9-10

BRACING

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

REACTIONS

(size)	2=0-5-8, 10=0-3-8
Max Horiz	2=136 (LC 12)
Max Uplift	2=-207 (LC 12), 10=-207 (LC 13)
Max Grav	2=1279 (LC 1), 10=1279 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/7, 2-4=-2001/390, 4-6=-1743/396, 6-8=-1743/396, 8-10=-2000/390, 10-11=0/7
BOT CHORD	2-14=-317/1684, 12-14=-85/1167, 10-12=-255/1684
WEBS	6-12=-142/613, 8-12=-422/281, 6-14=-142/613, 4-14=-422/281

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 13-6-0, Exterior(2R) 13-6-0 to 18-6-0, Interior (1) 18-6-0 to 27-11-0 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
- All plates are 3x4 MT20 unless otherwise indicated.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 207 lb uplift at joint 2 and 207 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19, 2024

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

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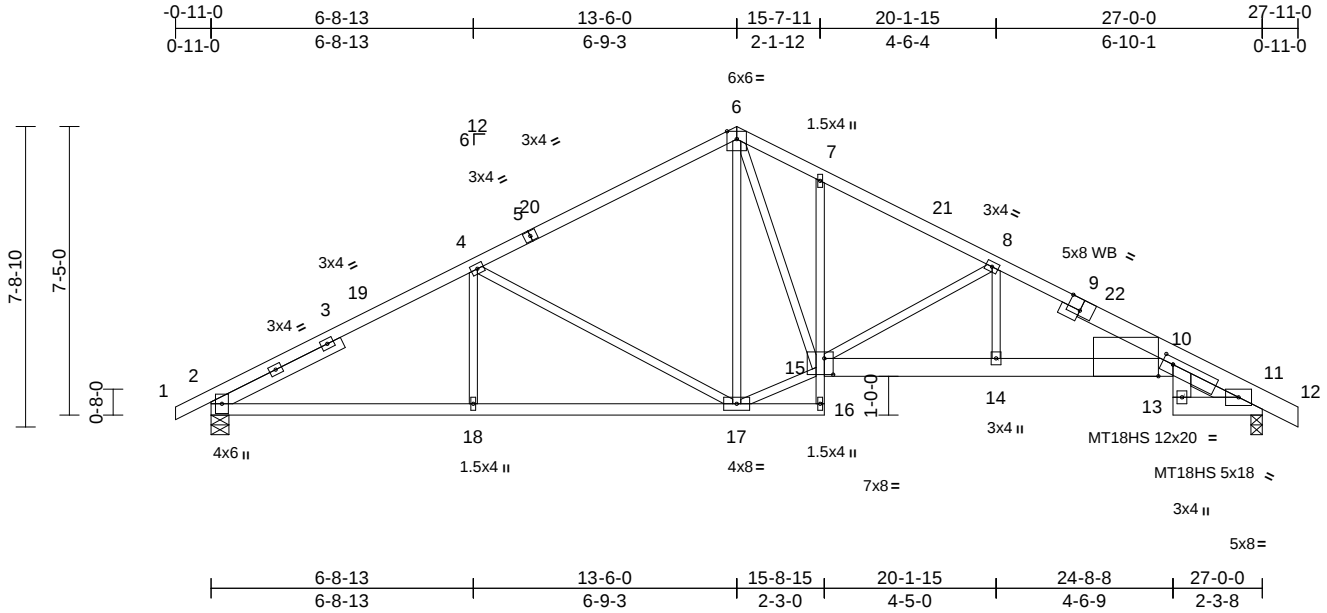
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307725
P240242-01	A3	Roof Special	4	1	Job Reference (optional)	

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 18 12:08:22

Page: 1

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Scale = 1:59.2

Plate Offsets (X, Y): [2:0-3-9,0-1-5], [9:0-4-0,Edge], [10:0-4-8,Edge], [10:0-3-5,0-2-0], [15:0-2-12,0-5-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.20	10-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.36	10-14	>885	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.26	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
Weight: 144 lb											FT = 20%	

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 6-9:2x4 SP 1650F
1.5E, 9-12:2x6 SP 2400F 2.0E
BOT CHORD 2x6 SPF No.2 *Except* 2-16:2x4 SP No.2,
16-7:2x3 SPF No.2, 15-10:2x6 SP 2400F
2.0E
WEBS 2x3 SPF No.2
OTHERS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 3-8-12, Right 2x4 SP
No.2 -- 1-4-7

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing, Except:
6-0-0 oc bracing: 15-16.

REACTIONS

(size) 2=0-5-8, 11=0-3-8
Max Horiz 2=140 (LC 17)
Max Uplift 2=207 (LC 12), 11=209 (LC 13)
Max Grav 2=1272 (LC 1), 11=1283 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/7, 2-4=-209/365, 4-6=-1416/342,
6-7=-1752/449, 7-8=-1858/384,
8-10=-2662/447, 10-11=-714/157, 11-12=0/19
BOT CHORD 2-18=-296/1707, 17-18=-296/1707,
16-17=-19/83, 15-16=-13/0, 7-15=-153/133,
14-15=-307/2420, 10-14=-307/2414,
10-13=-5/130, 11-13=-2/23
WEBS 6-15=-241/1196, 8-15=-988/230, 8-14=0/323,
6-17=-155/47, 15-17=-70/1213,
4-17=-645/251, 4-18=0/286

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 13-6-0, Exterior(2R) 13-6-0 to
18-6-0, Interior (1) 18-6-0 to 27-11-0 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) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 5) Bearings are assumed to be: Joint 2 SP No.2 crushing
capacity of 565 psi, Joint 11 SPF No.2 crushing capacity
of 425 psi.
- 6) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 207 lb uplift at
joint 2 and 209 lb uplift at joint 11.
- 7) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024

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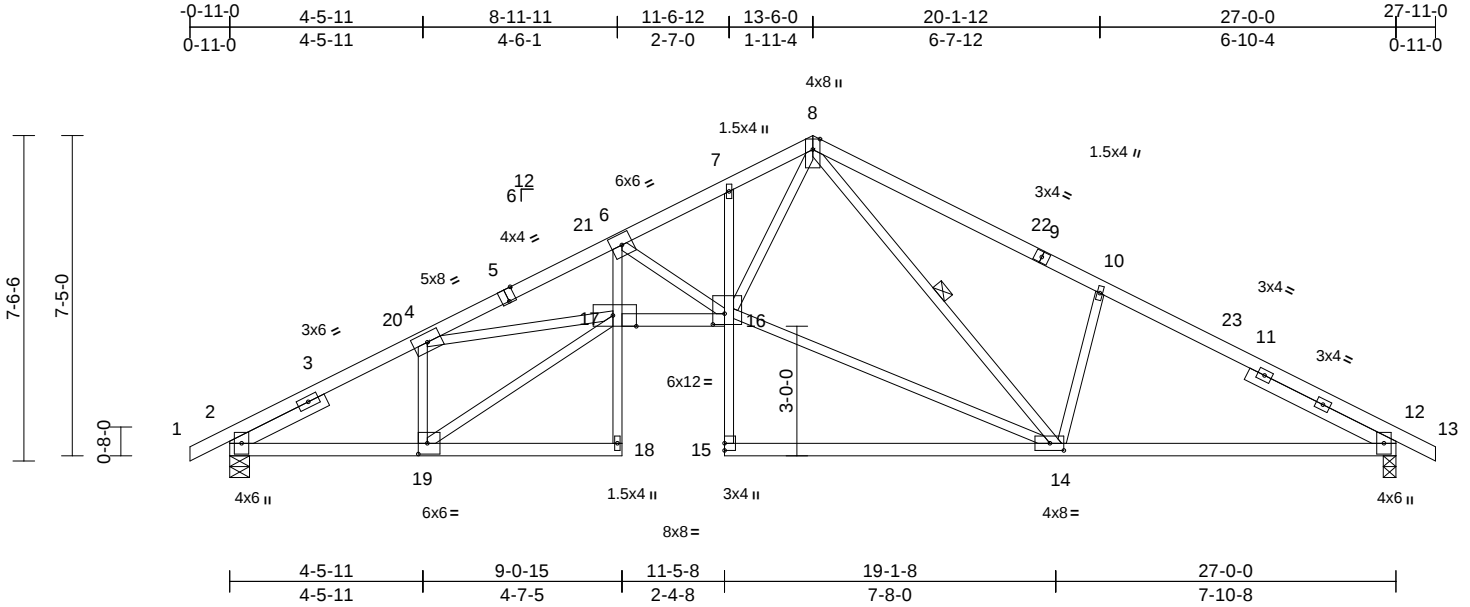
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307726
P240242-01	A4	Roof Special	1	1	Job Reference (optional)	

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

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Scale = 1:53.3

Plate Offsets (X, Y): [2:0-3-9,0-1-5], [5:0-2-0,Edge], [12:0-3-9,0-1-5], [14:0-3-14,0-2-0], [16:0-3-4,0-3-0], [17:0-6-8,Edge], [19:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.28	16-17	>999	240	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.51	16-17	>631	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.34	12	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 138 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except* 18-6,7-15:2x3 SPF No.2, 17-16:2x4 SP 1650F 1.5E
 WEBS 2x3 SPF No.2
 SLIDER Left 2x4 SP No.2 -- 2-5-9, Right 2x4 SP No.2 -- 3-9-10

BRACING

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied or 9-8-1 oc bracing.

WEBS 1 Row at midpt 8-14

REACTIONS (size) 2=0-5-8, 12=0-3-8
 Max Horiz 2=136 (LC 12), 12=207 (LC 13)
 Max Uplift 2=207 (LC 12), 12=207 (LC 13)
 Max Grav 2=1279 (LC 1), 12=1279 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/7, 2-4=-2101/364, 4-6=-4541/715, 6-7=-2889/500, 7-8=-2804/540, 8-10=-1914/458, 10-12=-2031/371, 12-13=0/7

BOT CHORD 2-19=-327/1752, 18-19=-4/37, 17-18=0/82, 6-17=-210/1513, 16-17=-559/4011, 15-16=0/128, 7-16=-92/66, 14-15=0/31, 12-14=-238/1708

WEBS 6-16=-1808/373, 14-16=-138/1780, 8-16=-303/1958, 8-14=-267/145, 10-14=-416/288, 4-19=-1085/283, 4-17=-251/2273, 17-19=-390/2071

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 13-6-0, Exterior(2R) 13-6-0 to 18-6-0, Interior (1) 18-6-0 to 27-11-0 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 207 lb uplift at joint 2 and 207 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024

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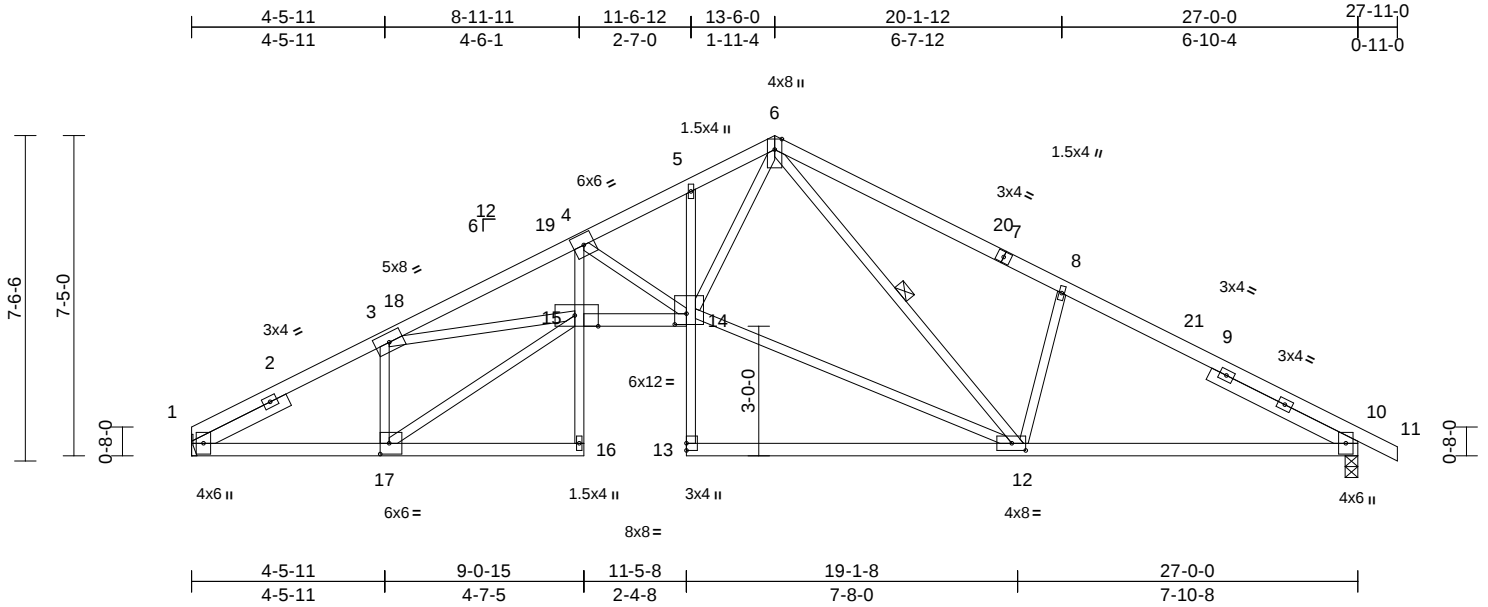
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	
P240242-01	A5	Roof Special	1	1	Job Reference (optional)	I64307727

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Scale = 1:53.3									
Plate Offsets (X, Y): [1:0-3-0,0-1-5], [10:0-3-9,0-1-5], [12:0-3-14,0-2-0], [14:0-3-4,0-3-0], [15:0-6-8,Edge], [17:0-2-8,0-3-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.29	14-15	>999
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.51	14-15	>629
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.34	10	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
							PLATES	GRIP	
							MT20	244/190	
							Weight: 137 lb FT = 20%		

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 16-4,5-13:2x3 SPF No.2, 15-14:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-5-9, Right 2x4 SP No.2 -- 3-9-10

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-7-12 oc bracing.
WEBS 1 Row at midpt 6-12

REACTIONS (size) 1= Mechanical, 10=0-3-8
Max Horiz 1=-138 (LC 13)
Max Uplift 1=-184 (LC 12), 10=-208 (LC 13)
Max Grav 1=1214 (LC 1), 10=1280 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2111/379, 3-4=-4567/718, 4-5=-2895/502, 5-6=-2810/542, 6-8=-1916/462, 8-10=-2033/373, 10-11=0/7
BOT CHORD 1-17=-331/1763, 16-17=-4/37, 15-16=0/82, 4-15=-213/1520, 14-15=-562/4021, 13-14=0/128, 5-14=-93/66, 12-13=0/31, 10-12=-241/1710
WEBS 4-14=-1814/375, 12-14=-140/1783, 6-14=-305/1963, 6-12=-269/145, 8-12=-416/288, 3-17=-1090/286, 3-15=-250/2271, 15-17=-395/2084

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 13-6-0, Exterior(2R) 13-6-0 to 18-6-0, Interior (1) 18-6-0 to 27-11-0 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) 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 10 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 184 lb uplift at joint 1 and 208 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



March 19,2024

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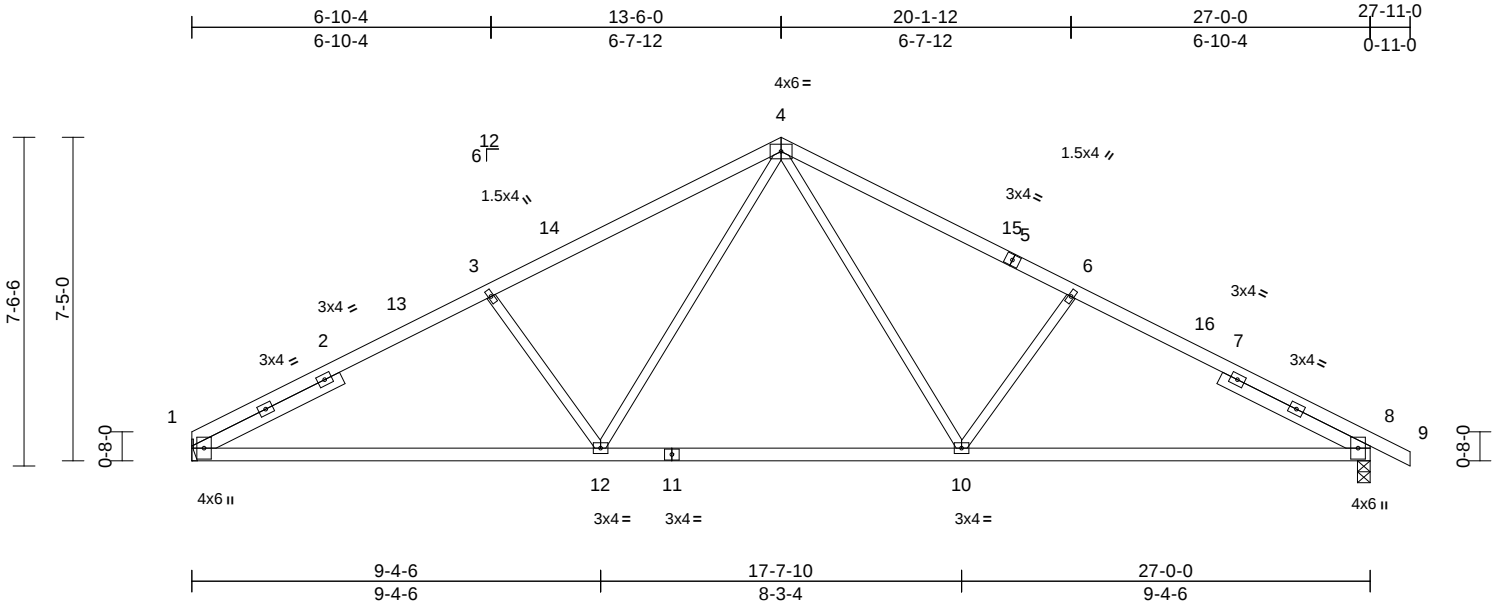
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307728
P240242-01	A6	Common	9	1	Job Reference (optional)	

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Scale = 1:52.8

Plate Offsets (X, Y): [1:0-3-0,0-1-5], [8:0-3-9,0-1-5]

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	0.81	Vert(LL)	-0.20	1-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.43	1-12	>757	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 118 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 -- 3-9-10, Right 2x4 SP No.2 -- 3-9-10

BRACING

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

REACTIONS

(size)	1= Mechanical, 8=0-3-8
Max Horiz	1=-138 (LC 17)
Max Uplift	1=-184 (LC 12), 8=-208 (LC 13)
Max Grav	1=1214 (LC 1), 8=1280 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-3=-2006/400, 3-4=-1748/405, 4-6=-1745/397, 6-8=-2003/393, 8-9=0/7
BOT CHORD	1-12=-320/1691, 10-12=-86/1169, 8-10=-258/1686
WEBS	4-10=-143/613, 6-10=-422/281, 4-12=-144/618, 3-12=-425/283

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 13-6-0, Exterior(2R) 13-6-0 to 18-6-0, Interior (1) 18-6-0 to 27-11-0 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
- All plates are 3x4 MT20 unless otherwise indicated.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 8 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 1 and 208 lb uplift at joint 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



March 19,2024

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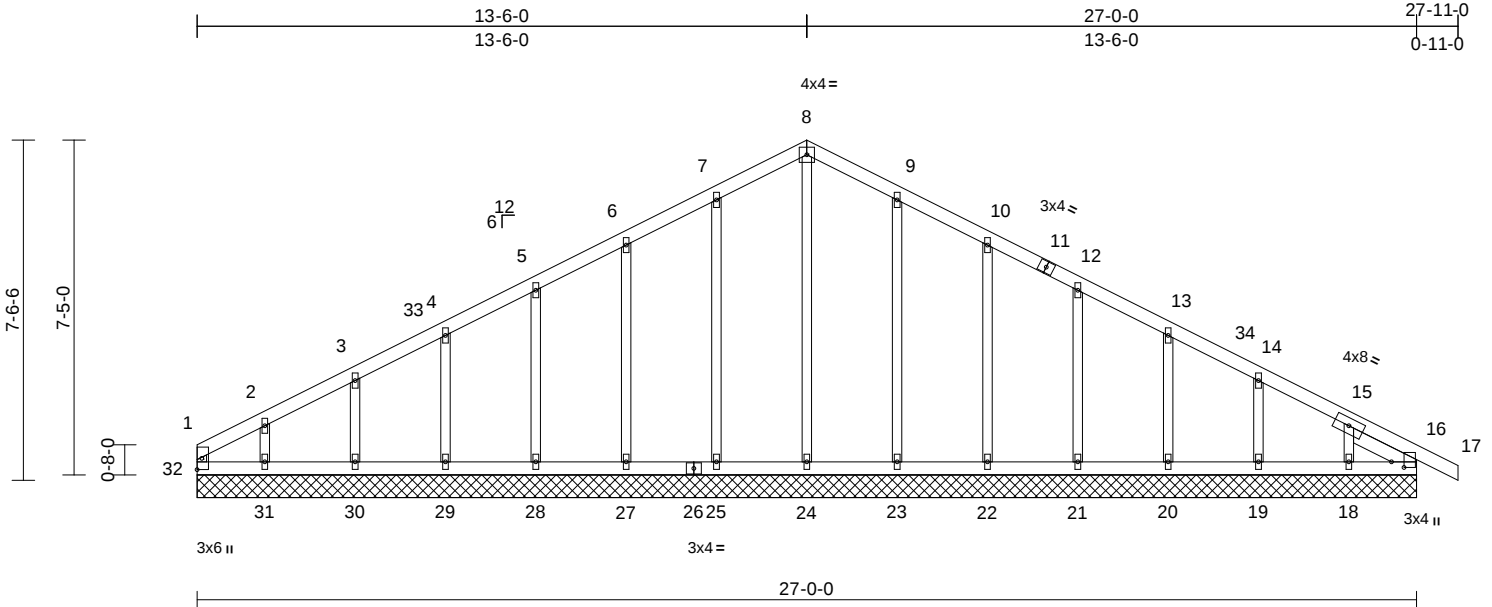
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66	I64307729
P240242-01	A7	Common Supported Gable	1	1	Job Reference (optional)	

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	16	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 128 lb FT = 20%											

LUMBER		TOP CHORD	1-32=-77/19, 1-2=-148/50, 2-3=-100/61, 3-4=-75/81, 4-5=-57/108, 5-6=-63/160, 6-7=-82/216, 7-8=-101/266, 8-9=-101/266, 9-10=-82/216, 10-12=-63/160, 12-13=-50/107, 13-14=-59/59, 14-15=-84/39, 15-16=-139/41, 16-17=0/7	7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
TOP CHORD		2x4 SP No.2		
BOT CHORD		2x4 SP No.2		
WEBS		2x3 SPF No.2		
OTHERS		2x3 SPF No.2		
SLIDER		Right 2x4 SP No.2 -- 1-7-0		
BRACING		TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
TOP CHORD				
BOT CHORD		Rigid ceiling directly applied or 10-0-0 oc bracing.		9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 32, 59 lb uplift at joint 25, 64 lb uplift at joint 27, 60 lb uplift at joint 28, 63 lb uplift at joint 29, 53 lb uplift at joint 30, 111 lb uplift at joint 31, 58 lb uplift at joint 23, 64 lb uplift at joint 22, 61 lb uplift at joint 21, 61 lb uplift at joint 20, 62 lb uplift at joint 19, 81 lb uplift at joint 18 and 17 lb uplift at joint 16.
BOT CHORD				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.
REACTIONS (size)		16=27-0-0, 18=27-0-0, 19=27-0-0, 20=27-0-0, 21=27-0-0, 22=27-0-0, 23=27-0-0, 24=27-0-0, 25=27-0-0, 27=27-0-0, 28=27-0-0, 29=27-0-0, 30=27-0-0, 31=27-0-0, 32=27-0-0		LOAD CASE(S) Standard
Max Horiz		32=-139 (LC 13)		
Max Uplift		16=-17 (LC 9), 18=-81 (LC 13), 19=-62 (LC 13), 20=-61 (LC 13), 21=-61 (LC 13), 22=-64 (LC 13), 23=-58 (LC 13), 25=-59 (LC 12), 27=-64 (LC 12), 28=-60 (LC 12), 29=-63 (LC 12), 30=-53 (LC 12), 31=-111 (LC 12), 32=-15 (LC 17)		
Max Grav		16=146 (LC 1), 18=150 (LC 26), 19=183 (LC 26), 20=179 (LC 1), 21=180 (LC 1), 22=179 (LC 1), 23=189 (LC 26), 24=178 (LC 22), 25=189 (LC 25), 27=179 (LC 1), 28=180 (LC 1), 29=179 (LC 25), 30=184 (LC 1), 31=165 (LC 25), 32=104 (LC 21)		
FORCES (lb) - Maximum Compression/Maximum Tension				
			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) 0-1-4 to 5-1-4, Exterior(2N) 5-1-4 to 13-6-0, Corner(3R) 13-6-0 to 18-6-0, Exterior(2N) 18-6-0 to 27-11-0 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) Gable studs spaced at 2-0-0 oc.	



March 19,2024

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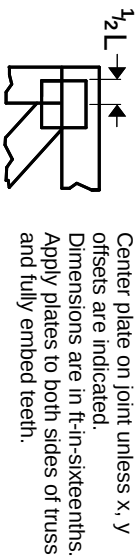
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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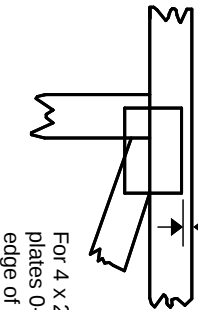
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Symbols

PLATE LOCATION AND ORIENTATION



0- $\frac{1}{16}$ "



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " 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

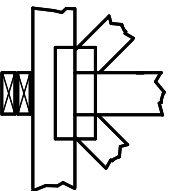
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

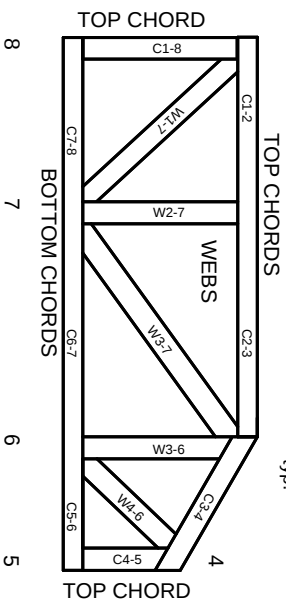
Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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

1 2 3 Joint ID typ.



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: MIL-7473 rev. 1/12/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.