

RE: P240008-01 - Roof - Osage Lot 44

Site Information:

Project Customer: Clover & Hive Project Name: Emerald Townhome - Farmhouse

Lot/Block: 44

Subdivision: Osage

Model:

Address: 3734/3736/3738/3740 Clayton Pl

City: Lee's Summit

State: MO

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

Design Code: IRC2018/TPI2014

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

Roof Load: 45.0 psf

Design Program: MiTek 20/20 8.6

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

Floor Load: N/A psf

Mean Roof Height (feet): 35

Exposure Category: C

MiTek, Inc.

16023 Swingley Ridge Rd.

Chesterfield, MO 63017

314.434.1200

No.	Seal#	Truss Name	Date
1	I62908255	A1	1/9/24
2	I62908256	A2	1/9/24
3	I62908257	A3	1/9/24
4	I62908258	A4	1/9/24
5	I62908259	B1	1/9/24
6	I62908260	B2	1/9/24
7	I62908261	C1	1/9/24
8	I62908262	C2	1/9/24
9	I62908263	C3	1/9/24
10	I62908264	C4	1/9/24
11	I62908265	D1	1/9/24
12	I62908266	D2	1/9/24
13	I62908267	D3	1/9/24
14	I62908268	E1	1/9/24
15	I62908269	E2	1/9/24
16	I62908270	G1	1/9/24
17	I62908271	G1A	1/9/24
18	I62908272	G2	1/9/24
19	I62908273	G2A	1/9/24
20	I62908274	V1	1/9/24
21	I62908275	V2	1/9/24
22	I62908276	V3	1/9/24
23	I62908277	V4	1/9/24
24	I62908278	V5	1/9/24
25	I62908279	V6	1/9/24
26	I62908280	V7	1/9/24

**EVERSTEAD
SHOP DRAWINGS/SUBMITTAL REVIEW**

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOBSITE FOR TOLERANCE, CLEARANCE, QUANTITIES, FABRICATION, COORDINATION OF HIS OR HER WORK WITH OTHER TRADES, AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS.

STATUS:

APPROVED

01/24/2024

REVIEWED BY:

H CJ

ENGINEER, EVERSTEAD ENGINEERING & DESIGN LLC.

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.



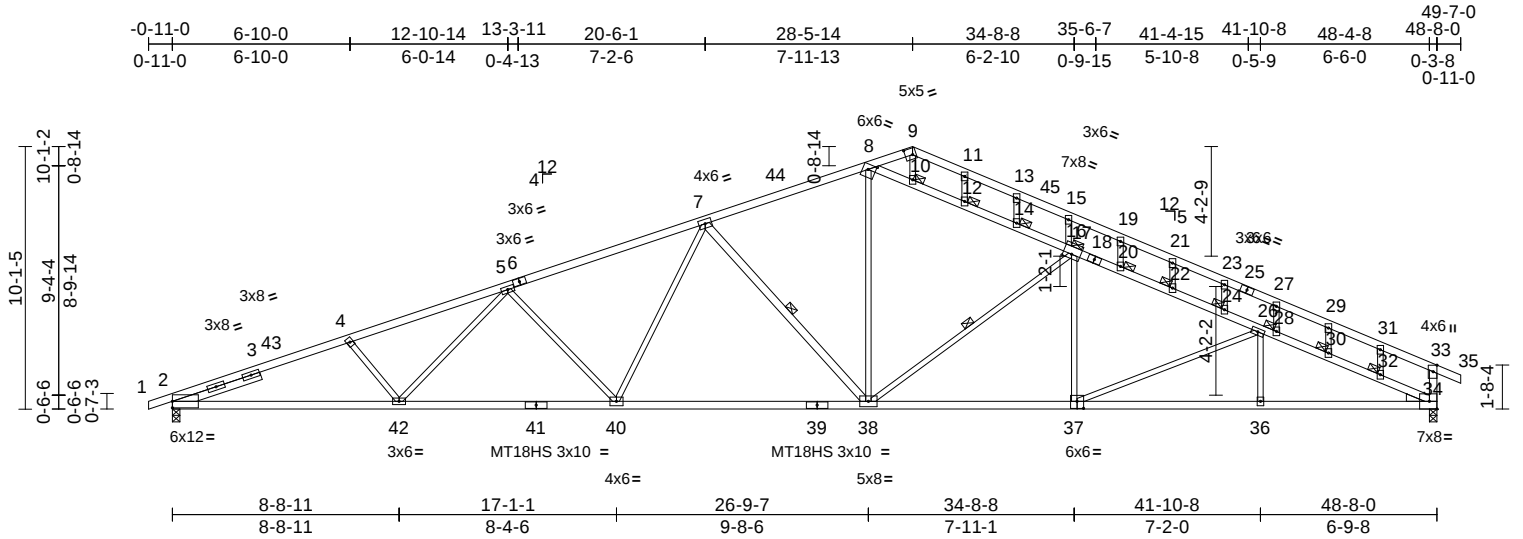
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	I62908255
P240008-01	A1	Roof Special Structural Gable	1	1	Job Reference (optional)	

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 Jan 08 10:56:34

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Scale = 1:88.7

Plate Offsets (X, Y): [8:0-3-8,0-2-7], [9:0-3-7,0-3-0], [16:0-4-0,0-2-0], [33:0-3-0,0-1-12], [37:0-3-0,0-3-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.43	38-40	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.91	38-40	>637	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.26	34	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH								
											Weight: 263 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-6:2x4 SP 2400F 2.0E, 6-9:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 41-39,39-37:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 34-33:2x4 SP 1650F 1.5E, 38-7:2x4 SP No.2
OTHERS 2x3 SPF No.2
WEDGE Right: 2x4 SP No.3
SLIDER Left 2x4 SPF No.3 -- 3-6-9
BRACING
TOP CHORD Structural wood sheathing directly applied or 2-7-13 oc purlins, except end verticals. Except:
1 Row at midpt 8-12
BOT CHORD Rigid ceiling directly applied or 7-8-14 oc bracing.
WEBS 1 Row at midpt 17-38, 7-38
JOINTS 1 Brace at Jt(s): 12, 14, 16, 20, 22, 24, 28, 30, 32
REACTIONS (size) 2=0-3-8, 34=0-3-8
Max Horiz 2=176 (LC 12)
Max Uplift 2=410 (LC 8), 34=299 (LC 13)
Max Grav 2=2247 (LC 1), 34=2258 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/0, 2-4=-5356/1080, 4-5=-5112/1047, 5-7=-4321/933, 7-8=-3096/760, 8-9=-507/397, 9-11=-506/396, 11-13=-520/358, 13-15=-561/337, 15-19=-495/268, 19-21=-504/239, 21-23=-539/221, 23-27=-549/184, 27-29=-527/124, 29-31=-556/107, 31-33=-548/70, 33-35=0/29, 33-34=-386/148, 8-10=-2628/482, 10-12=-2563/428, 12-14=-2603/451, 14-16=-2621/460, 16-17=-2741/511, 17-20=-3344/624, 20-22=-3383/643, 22-24=-3402/651, 24-26=-3451/682, 26-28=-3817/810, 28-30=-3893/863, 30-32=-3918/873, 32-34=-3987/913
BOT CHORD 2-42=-960/4935, 40-42=-854/4543, 38-40=-645/3649, 36-38=-811/4051, 34-36=-811/4051
WEBS 9-10=-153/169, 11-12=-104/73, 13-14=-49/32, 15-16=-318/154, 19-20=-102/53, 21-22=-49/23, 23-24=-134/85, 27-28=-211/148, 29-30=-66/26, 31-32=-162/94, 4-42=-226/176, 5-42=-51/444, 5-40=-794/291, 7-40=-117/862, 26-36=0/226, 26-37=-558/247, 17-37=-7/434, 8-38=-286/1625, 17-38=-953/263, 7-38=-1204/363

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=0.96; 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 28-5-14, Exterior(2R) 28-5-14 to 33-5-14, Interior (1) 33-5-14 to 49-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.



January 9, 2024

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not 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 44
P240008-01	A1	Roof Special Structural Gable	1	1	Job Reference (optional)

I62908255

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- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) 2 X 4 notch at 20000 o.c. is allowed along the stacked top chord. No notches allowed in overhang and 1100 from left end and 1100 from right end or 12" along rake from scarf, whichever is larger. Minimum 1.5x4 tie plates required at 2-0-0 o.c. maximum between the stacking chords. For edge-wise notching, provide at least one tie plate between each notch.

LOAD CASE(S) Standard

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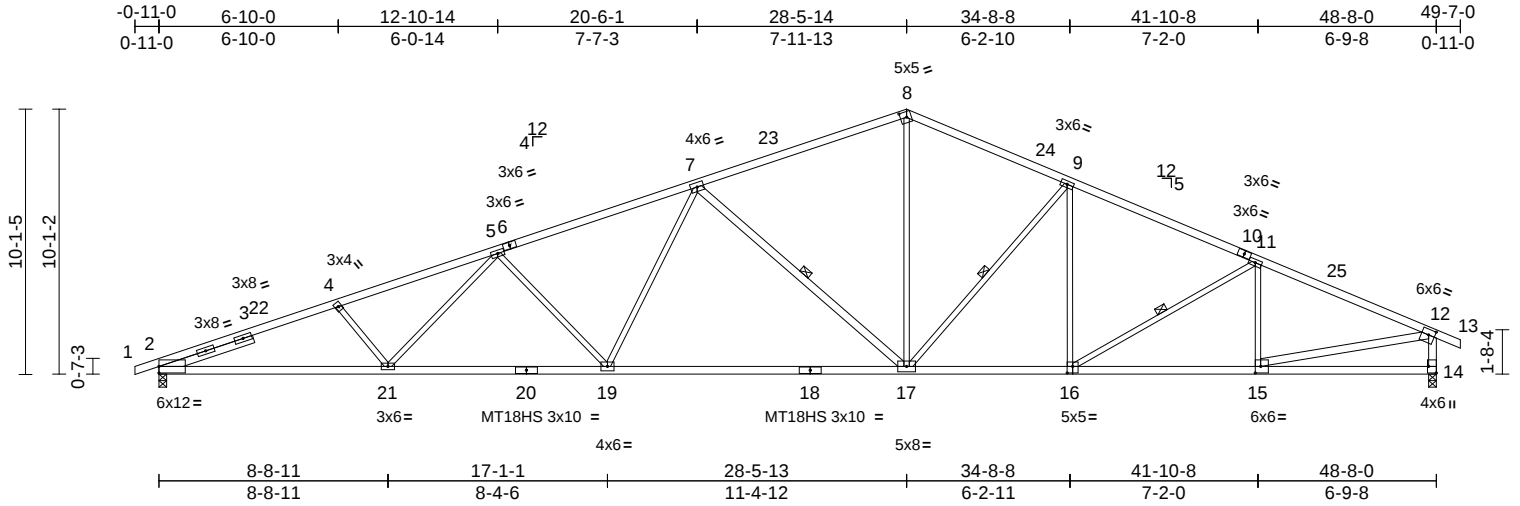
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	
P240008-01	A2	Roof Special	2	1	Job Reference (optional)	I62908256

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Scale = 1:87.8

Plate Offsets (X, Y): [8:0-2-15,0-2-8], [12:0-2-12,0-2-8], [14:Edge,0-3-8], [15:0-2-8,0-3-0], [16:0-2-8,0-3-0]

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	0.82	Vert(LL)	-0.39	17-19	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.93	17-19	>629	180	MT18HS 244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.20	14	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 233 lb FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E *Except* 10-13:2x4 SP No.2, 10-8:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 16-18:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 14-12,15-12,17-7:2x4 SP No.2
SLIDER Left 2x4 SPF No.3 -- 3-9-1

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-5-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-5-12 oc bracing.

WEBS 1 Row at midpt 11-16, 7-17, 9-17

REACTIONS (size) 2=0-3-8, 14=0-3-8
Max Horiz 2=176 (LC 12)
Max Uplift 2=-410 (LC 8), 14=-299 (LC 13)
Max Grav 2=2247 (LC 1), 14=2258 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-5353/1084, 4-5=-5111/1050, 5-7=-4330/927, 7-8=-2893/729, 8-9=-2963/745, 9-11=-3383/769, 11-12=-3382/700, 12-13=0/29, 12-14=-2189/570
BOT CHORD 2-21=-964/4938, 19-21=-847/4539, 17-19=-654/3662, 15-17=-567/3041, 14-15=-86/184
WEBS 11-15=-482/204, 4-21=-238/180, 8-17=-296/1539, 5-19=-764/283, 12-15=-492/2924, 9-16=-3/227, 11-16=-172/154, 7-17=-1373/406, 5-21=-64/445, 9-17=-682/264, 7-19=-92/867

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=0.96; 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 28-5-14, Exterior(2R) 28-5-14 to 33-5-14, Interior (1) 33-5-14 to 49-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- 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



January 9, 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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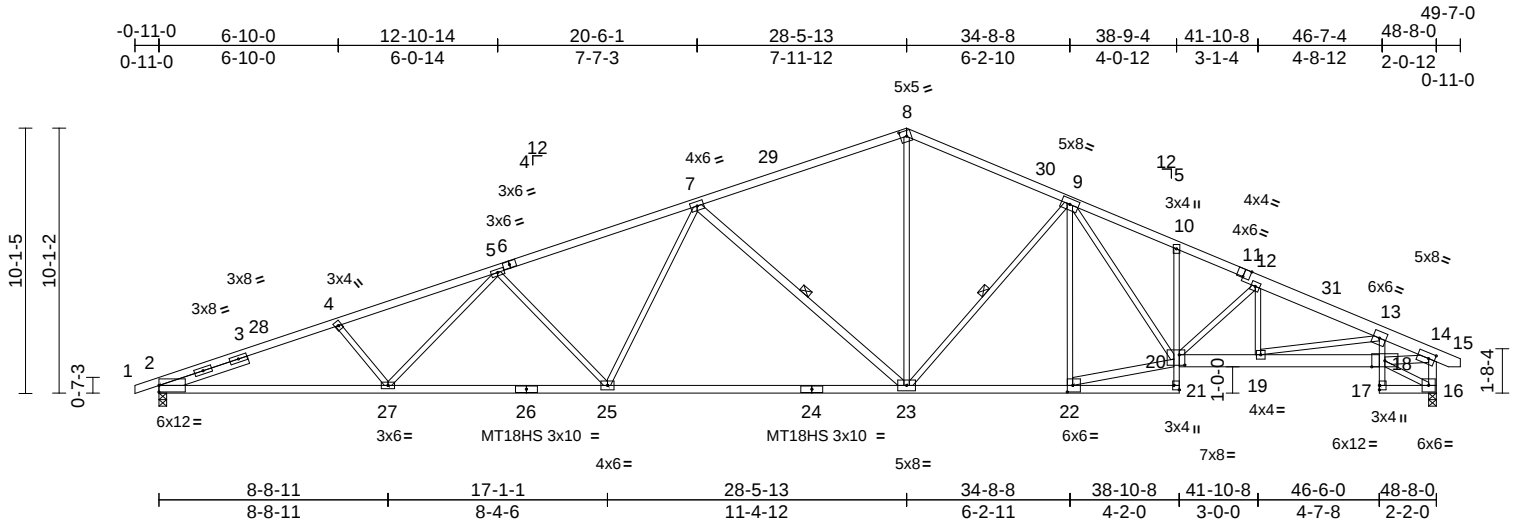
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	
P240008-01	A3	Roof Special	5	1	Job Reference (optional)	I62908257

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Scale = 1:87.8

Plate Offsets (X, Y): [8:0-2-15,0-2-8], [11:0-3-0,Edge], [14:0-2-12,0-2-8], [20:0-2-8,0-4-12], [21:Edge,0-2-8], [22:0-2-8,0-3-0]

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	0.95	Vert(LL)	-0.40	23-25	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.95	23-25	>614	180	MT18HS 244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.30	16	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 248 lb FT = 20%

LUMBER		
TOP CHORD	2x4 SP 2400F 2.0E *Except* 11-15:2x6 SPF No.2, 11-8:2x4 SP No.2	
BOT CHORD	2x4 SP 2400F 2.0E *Except* 21-10,13-17:2x3 SPF No.2, 20-18:2x6 SPF No.2, 17-16:2x4 SP No.2, 24-21:2x4 SP 1650F 1.5E	
WEBS	2x3 SPF No.2 *Except* 16-14:2x4 SP No.3, 23-7,14-18,22-20:2x4 SP No.2	
SLIDER	Left 2x4 SPF No.3 -- 3-6-9	
BRACING		
TOP CHORD	Structural wood sheathing directly applied, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 8-5-11 oc bracing.	
WEBS	1 Row at midpt 9-23, 7-23	
REACTIONS	(size) 2=0-3-8, 16=0-3-8 Max Horiz 2=177 (LC 12) Max Uplift 2=-410 (LC 8), 16=-293 (LC 13) Max Grav 2=2248 (LC 1), 16=2242 (LC 1)	
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/0, 2-4=-5356/1084, 4-5=-5109/1050, 5-7=-4332/928, 7-8=-2894/728, 8-9=-2961/745, 9-10=-4141/962, 10-12=-4183/914, 12-13=-4464/925, 13-14=-3750/816, 14-15=0/22, 14-16=-2192/535	
BOT CHORD	2-27=-966/4936, 25-27=-849/4540, 23-25=-656/3662, 22-23=-506/3024, 21-22=-25/174, 20-21=0/82, 10-20=-116/85, 19-20=-761/4066, 18-19=-748/3494, 17-18=0/32, 13-18=-602/176, 16-17=-26/87	

WEBS

12-19=0/142, 4-27=-238/180, 8-23=-290/1527, 9-22=-688/180, 5-27=-63/442, 13-19=-69/587, 5-25=-764/283, 9-23=-663/259, 7-25=-93/867, 7-23=-1373/406, 16-18=-54/48, 14-18=-727/3429, 12-20=-394/127, 20-22=-497/2949, 9-20=-304/1408

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=0.96; 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 28-5-13, Exterior(2R) 28-5-13 to 33-5-13, Interior (1) 33-5-13 to 49-4-4 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
- 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.
- Bearings are assumed to be: Joint 2 SP 2400F 2.0E crushing capacity of 805 psi, Joint 16 SP No.2 crushing capacity of 565 psi.
- 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



January 9,2024

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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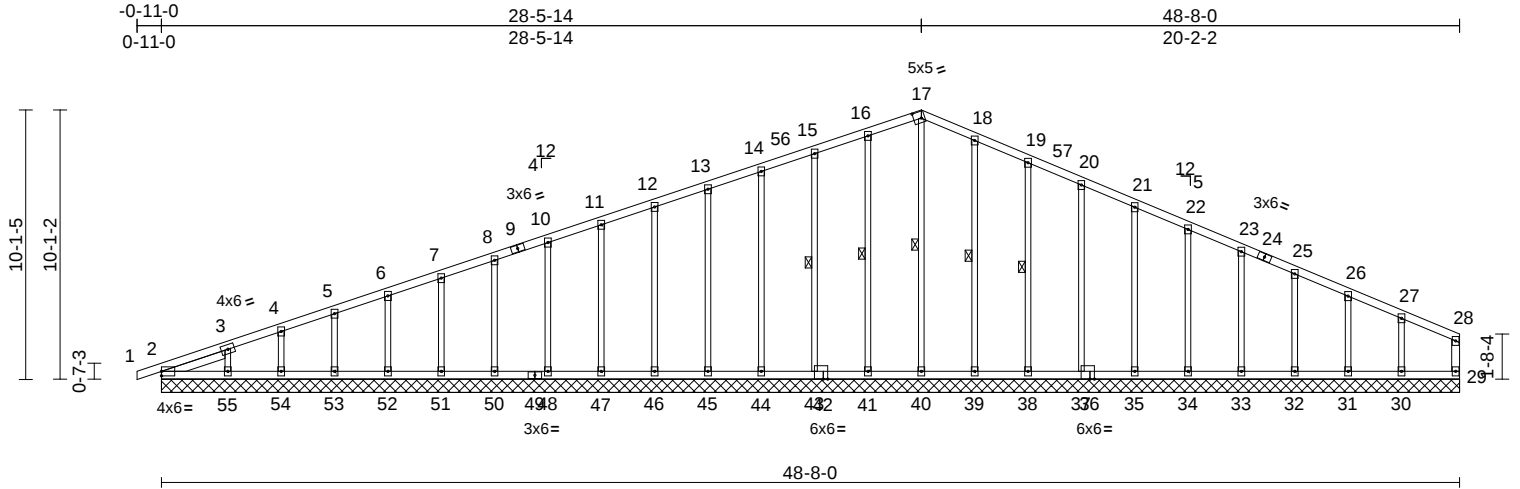
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44
P240008-01	A4	Roof Special Supported Gable	1	1	Job Reference (optional)
					I62908258

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Scale = 1:86.4

Plate Offsets (X, Y): [17:0-3-7,0-3-0], [36:0-2-0,Edge], [42:0-2-0,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	0.11	Ver(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Ver(CT)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.00	29	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							
Weight: 254 lb FT = 20%											

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

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.
WEBS 1 Row at midpt 17-40, 16-41, 15-43, 18-39, 19-38

REACTIONS (size)
2=48-8-0, 29=48-8-0, 30=48-8-0, 31=48-8-0, 32=48-8-0, 33=48-8-0, 34=48-8-0, 35=48-8-0, 37=48-8-0, 38=48-8-0, 39=48-8-0, 40=48-8-0, 41=48-8-0, 43=48-8-0, 44=48-8-0, 45=48-8-0, 46=48-8-0, 47=48-8-0, 48=48-8-0, 50=48-8-0, 51=48-8-0, 52=48-8-0, 53=48-8-0, 54=48-8-0, 55=48-8-0
Max Horiz 2=184 (LC 12)
Max Uplift 2=45 (LC 13), 30=97 (LC 13), 31=40 (LC 13), 32=54 (LC 13), 33=51 (LC 13), 34=51 (LC 13), 35=51 (LC 13), 37=50 (LC 13), 38=57 (LC 13), 39=41 (LC 13), 41=39 (LC 12), 43=50 (LC 8), 44=45 (LC 12), 45=46 (LC 8), 46=46 (LC 12), 47=46 (LC 8), 48=46 (LC 12), 50=46 (LC 8), 51=46 (LC 12), 52=46 (LC 8), 53=46 (LC 12), 54=46 (LC 8), 55=76 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-3=-208/116, 3-4=-163/117, 4-5=-142/134, 5-6=-121/151, 6-7=-100/168, 7-8=-79/185, 8-10=-86/209, 10-11=-97/237, 11-12=-108/265, 12-13=-120/293, 13-14=-131/322, 14-15=-143/349, 15-16=-155/379, 16-17=-165/402, 17-18=-169/400, 18-19=-156/343, 19-20=-140/282, 20-21=-126/244, 21-22=-111/209, 22-23=-96/173, 23-25=-82/137, 25-26=-67/100, 26-27=-53/66, 27-28=-59/42, 28-29=-66/19, 2-55=-37/72, 54-55=-37/72, 53-54=-37/72, 52-53=-37/72, 51-52=-37/72, 50-51=-37/72, 48-50=-37/72, 47-48=-37/72, 46-47=-37/72, 45-46=-37/72, 44-45=-37/72, 43-44=-37/72, 41-43=-37/72, 40-41=-37/72, 39-40=-37/72, 38-39=-37/72, 37-38=-37/72, 35-37=-37/72, 34-35=-37/72, 33-34=-37/72, 32-33=-37/72, 31-32=-37/72, 30-31=-37/72, 29-30=-37/72
BOT CHORD 1-2=0/0, 2-3=-208/116, 3-4=-163/117, 4-5=-142/134, 5-6=-121/151, 6-7=-100/168, 7-8=-79/185, 8-10=-86/209, 10-11=-97/237, 11-12=-108/265, 12-13=-120/293, 13-14=-131/322, 14-15=-143/349, 15-16=-155/379, 16-17=-165/402, 17-18=-169/400, 18-19=-156/343, 19-20=-140/282, 20-21=-126/244, 21-22=-111/209, 22-23=-96/173, 23-25=-82/137, 25-26=-67/100, 26-27=-53/66, 27-28=-59/42, 28-29=-66/19, 2-55=-37/72, 54-55=-37/72, 53-54=-37/72, 52-53=-37/72, 51-52=-37/72, 50-51=-37/72, 48-50=-37/72, 47-48=-37/72, 46-47=-37/72, 45-46=-37/72, 44-45=-37/72, 43-44=-37/72, 41-43=-37/72, 40-41=-37/72, 39-40=-37/72, 38-39=-37/72, 37-38=-37/72, 35-37=-37/72, 34-35=-37/72, 33-34=-37/72, 32-33=-37/72, 31-32=-37/72, 30-31=-37/72, 29-30=-37/72

WEBS 17-40=-180/37, 16-41=-148/118, 15-43=-140/123, 14-44=-140/71, 13-45=-140/70, 12-46=-140/70, 11-47=-140/70, 10-48=-140/70, 8-50=-140/70, 7-51=-140/70, 6-52=-140/70, 5-53=-141/70, 4-54=-137/69, 3-55=-161/101, 18-39=-148/123, 19-38=-140/133, 20-37=-140/75, 21-35=-140/75, 22-34=-140/75, 23-33=-140/75, 25-32=-141/77, 26-31=-137/69, 27-30=-153/103

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



January 9, 2024

Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not 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 44
P240008-01	A4	Roof Special Supported Gable	1	1	I62908258
					Job Reference (optional)

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=0.96; 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 28-5-14, Corner(3R) 28-5-14 to
33-5-14, Exterior(2N) 33-5-14 to 48-6-4 zone; cantilever
left and right exposed ; end vertical left and right
exposed;C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 3) 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 3x4 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) 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

 **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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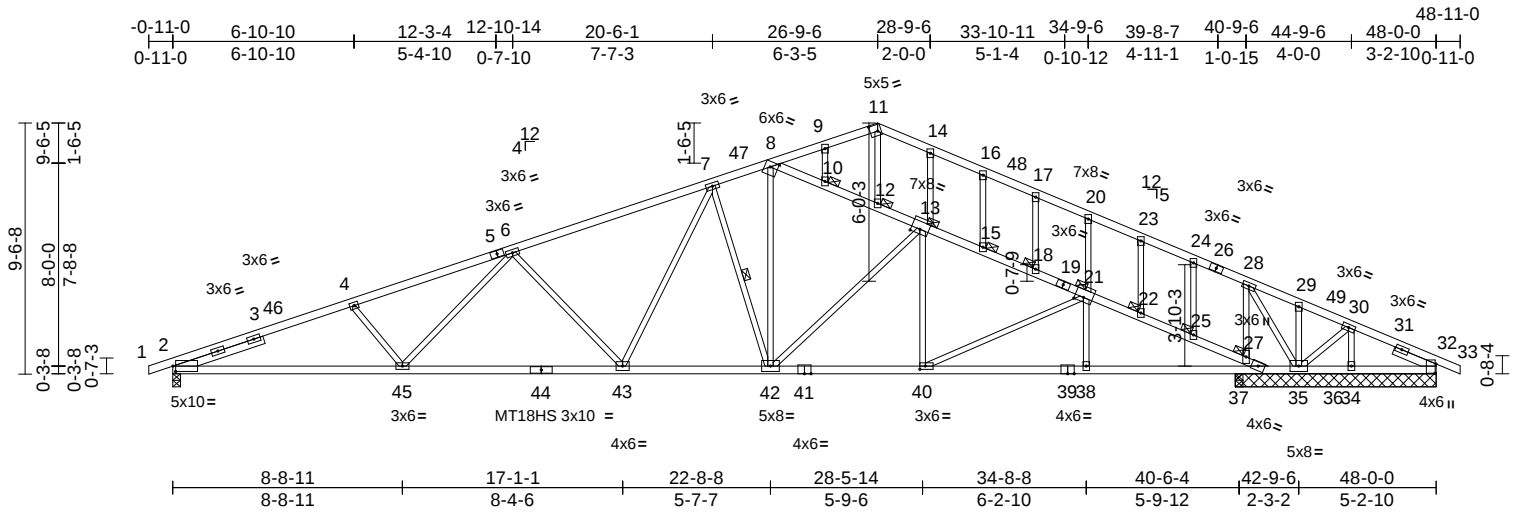
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44
P240008-01	B1	Roof Special Structural Gable	4	1	Job Reference (optional)
					I62908259

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 Jan 08 10:56:39

Page: 1

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Scale = 1:87.5

Plate Offsets (X, Y): [2:0-1-4,0-2-8], [8:0-3-8,0-2-7], [11:0-3-7,0-3-0], [13:0-4-0,0-2-0], [21:0-4-0,0-2-0], [32:0-4-3,0-0-7], [40:0-2-8,0-1-8]

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	0.77	Vert(LL)	-0.34	43-45	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.67	43-45	>729	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.19	35	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH								
											Weight: 263 lb	FT = 20%

LUMBER		TOP CHORD		1-2=0/0, 2-4=-4442/870, 4-6=-4205/838, 6-7=-3369/721, 7-8=-2668/651, 8-9=-775/259, 9-11=-780/288, 11-14=-802/301, 14-16=-803/264, 16-17=-847/249, 17-20=-863/224, 20-23=-822/165, 23-24=-841/141, 24-28=-882/122, 28-29=-306/334, 29-30=-332/300, 30-32=-160/105, 32-33=0/0, 8-10=-1879/408, 10-12=-1934/434, 12-13=-1807/390, 13-15=-2165/472, 15-18=-2168/480, 18-21=-2208/499, 21-22=-2690/635, 22-25=-2724/650, 25-27=-2739/660, 27-36=-2513/602, 2-45=-776/4092, 43-45=-636/3646, 42-43=-385/2767, 40-42=-359/2752, 38-40=-520/3259, 37-38=-520/3259, 36-37=-520/3259, 35-36=-755/0, 34-35=-85/175, 32-34=-85/175, 11-12=-112/330, 9-10=-143/67, 13-14=-194/130, 15-16=-14/21, 17-18=-106/48, 20-21=-257/152, 22-23=-88/39, 24-25=-47/32, 27-28=-228/906, 29-35=-47/43, 30-34=-155/90, 4-45=-249/176, 6-45=-50/484, 6-43=-799/284, 8-42=-295/1338, 7-42=-1019/315, 13-42=-473/109, 13-40=-19/410, 21-40=-608/206, 21-38=0/187, 30-35=-270/289, 28-35=-1898/545, 7-43=-142/814
BRACING		BOT CHORD		2x4 SP No.2 *Except* 1-5-5-11:2x4 SP 1650F 1.5E 2x4 SP 2400F 2.0E *Except* 44-41,41-39:2x4 SP 1650F 1.5E 2x3 SPF No.2 2x3 SPF No.2 Left 2x4 SPF No.3 -- 3-7-3, Right 2x4 SPF No.3 -- 1-8-10
REACTIONS		WEBS		12-15 Rigid ceiling directly applied or 6-0-0 oc bracing. 1 Row at midpt 7-42 1 Brace at Jt(s): 12, 10, 15, 18, 22, 25, 27, 21
FORCES		NOTES		1) Unbalanced roof live loads have been considered for this design.



January 9,2024

Continued on page 2

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

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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44
P240008-01	B1	Roof Special Structural Gable	4	1	I62908259
					Job Reference (optional)

- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) 2 X 4 notch at 20000 o.c. is allowed along the stacked top chord. No notches allowed in overhang and 1100 from left end and 1100 from right end or 12" along rake from scarf, whichever is larger. Minimum 1.5x4 tie plates required at 2-0-0 o.c. maximum between the stacking chords. For edge-wise notching, provide at least one tie plate between each notch.

LOAD CASE(S) Standard

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02/08/2024 2:34:42

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 Jan 08 10:56:40 Page: 1
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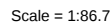


Plate Offsets (X, Y): [8:0-2-11,0-2-4], [13:0-4-7,Edge], [16:0-2-8,0-1-8]

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 5-8:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 17-19,19-21:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 18-7:2x4 SP No.2
SLIDER Left 2x4 SPF No.3 -- 3-6-9, Right 2x4 SPF No.3 -- 3-3-8

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-0-13 oc bracing.
WEBS 1 Row at midpt 7-18, 9-18

REACTIONS (size) 2=0-3-8, 13=0-3-8
Max Horiz 2=169 (LC 16)
Max Uplift 2=-399 (LC 8), 13=-308 (LC 13)
Max Grav 2=2224 (LC 1), 13=2224 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-5292/1071, 4-6=-5046/1038, 6-7=-4249/922, 7-8=-3028/756, 8-9=-3154/760, 9-11=-3943/854, 11-13=-4433/896, 13-14=0/0
BOT CHORD 2-22=-917/4876, 20-22=-785/4475, 18-20=-572/3582, 16-18=-596/3589, 15-16=-713/3924, 13-15=-713/3924 4-22=-238/180, 8-18=-312/1660, 6-22=-55/458, 7-20=-116/860, 7-18=-1210/361, 6-20=-793/290, 11-15=0/234, 9-16=0/398, 11-16=-447/174, 9-18=-1016/321

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCCL=6.0psf; BCCL=6.0psf; h=35ft;
Ke=0.96; 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 26-9-7, Exterior(2R) 26-9-7 to
31-9-7, Interior (1) 31-9-7 to 48-11-0 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) All plates are 3x6 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP 2400F 2.0E crushing
capacity of 805 psi.
- 7) This truss is designed in accordance with the 2018
International Residential Code sections R502.1.1 and
R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

TOP CHORD 1-2=0/0, 2-4=-5292/1071, 4-6=-5046/1038,
6-7=-4249/922, 7-8=-3028/756,
8-9=-3154/760, 9-11=-3943/854,
11-13=-4433/896, 13-14=0/0

BOT CHORD 2-22=-917/4876, 20-22=-785/4475,
18-20=-572/3582, 16-18=-596/3589,
15-16=-713/3924, 13-15=-713/3924

WEBS 4-22=-238/180, 8-18=-312/1660,
6-22=-55/458, 7-20=-116/860,
7-18=-1210/361, 6-20=-793/290,
11-15=0/234, 9-16=0/398, 11-16=-447/174,
9-18=-1016/321

NOTES

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



January 9, 2024



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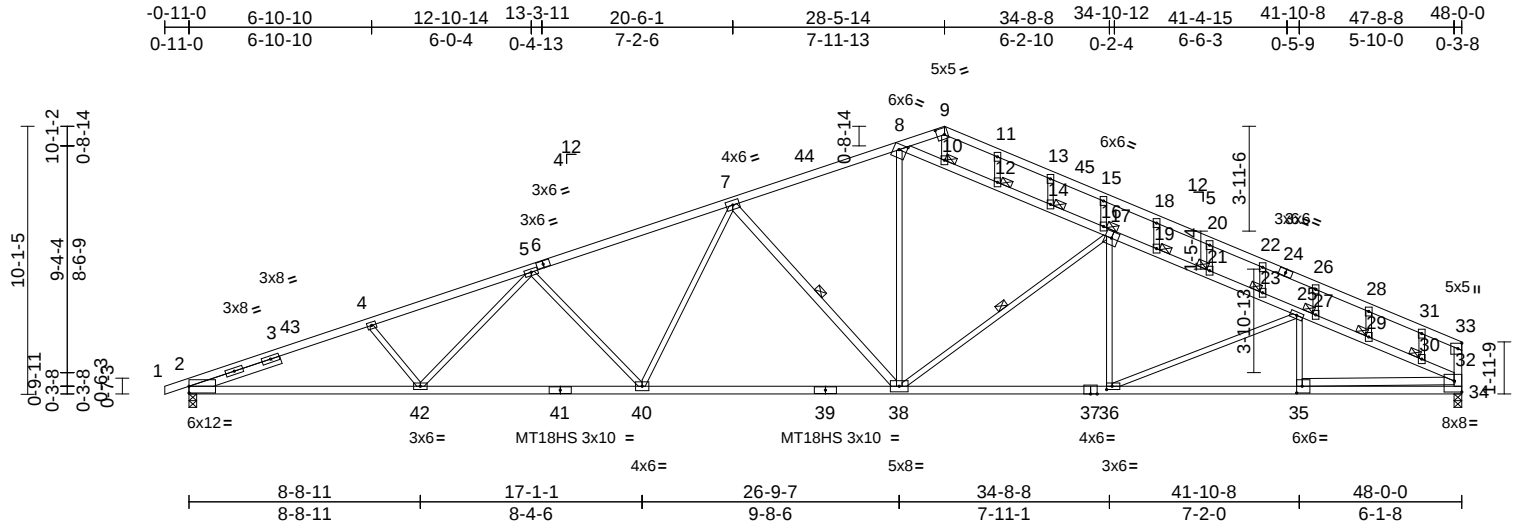
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	
P240008-01	C1	Roof Special Structural Gable	1	1	Job Reference (optional)	I62908261

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 Jan 08 10:56:41

Page: 1

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Scale = 1:86.9

Plate Offsets (X, Y): [8:0-3-8,0-2-7], [9:0-3-7,0-3-0], [34:Edge,0-5-0], [35:0-2-8,0-3-0], [36:0-2-8,0-1-8]

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	0.79	Vert(LL)	-0.40	40	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.85	38-40	>674	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.22	34	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 266 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2 *Except* 1-6:2x4 SP 2400F 2.0E, 6-9:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 37-39,39-41:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 34-33:2x4 SP 1650F 1.5E, 7-38,35-32:2x4 SP No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SPF No.3 -- 3-7-3

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-8-6 oc purlins, except end verticals.
Except:
1 Row at midpt 8-12
BOT CHORD Rigid ceiling directly applied or 7-8-7 oc bracing.
WEBS 1 Row at midpt 7-38, 17-38
JOINTS 1 Brace at Jt(s): 12, 14, 16, 19, 21, 23, 27, 29, 30

REACTIONS (size) 2=0-3-8, 34=0-3-8
Max Horiz 2=220 (LC 12)
Max Uplift 2=-407 (LC 8), 34=-262 (LC 13)
Max Grav 2=2225 (LC 1), 34=2149 (LC 1)
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/0, 2-4=-5292/1062, 4-5=-5050/1032, 5-7=-4252/915, 7-8=-3026/745, 8-9=-571/371, 9-11=-580/366, 11-13=-586/328, 13-15=-630/309, 15-18=-571/241, 18-20=-574/208, 20-22=-612/191, 22-26=-617/154, 26-28=-579/95, 28-31=-619/77, 31-33=-636/50, 32-34=-2123/509, 32-33=-385/54, 8-10=-2493/497, 10-12=-2416/449, 12-14=-2458/472, 14-16=-2473/479, 16-19=-3111/628, 19-21=-3156/650, 21-23=-3173/657, 23-25=-3227/687, 25-27=-3401/748, 27-29=-3489/800, 29-30=-3508/806, 30-32=-3528/827
BOT CHORD 2-42=-977/4876, 40-42=-862/4479, 38-40=-652/3585, 36-38=-599/3457, 35-36=-741/3749, 34-35=-306/512
WEBS 9-10=-141/200, 11-12=-110/72, 13-14=-41/29, 15-16=-300/152, 18-19=-120/63, 20-21=-43/21, 22-23=-142/84, 26-27=-232/146, 28-29=-50/19, 30-31=-56/59, 4-42=-228/176, 5-42=-53/451, 5-40=-795/291, 7-40=-117/862, 7-38=-1206/361, 8-38=-273/1561, 17-38=-875/257, 17-36=-0/388, 25-36=-419/213, 25-35=-140/125, 32-35=-466/3246

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=0.96; 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 28-5-14, Exterior(2R) 28-5-14 to 33-5-14, Interior (1) 33-5-14 to 47-10-4 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
- 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 MT20 plates unless otherwise indicated.
- All plates are 3x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- 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.



January 9,2024

Continued on page 2

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

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

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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44
P240008-01	C1	Roof Special Structural Gable	1	1	I62908261
					Job Reference (optional)

- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) 2 X 4 notch at 20000 o.c. is allowed along the stacked top chord. No notches allowed in overhang and 1100 from left end and 0 from right end or 12" along rake from scarf, whichever is larger. Minimum 1.5x4 tie plates required at 2-0-0 o.c. maximum between the stacking chords. For edge-wise notching, provide at least one tie plate between each notch.

LOAD CASE(S) Standard

 **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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Missouri City, MO 63053
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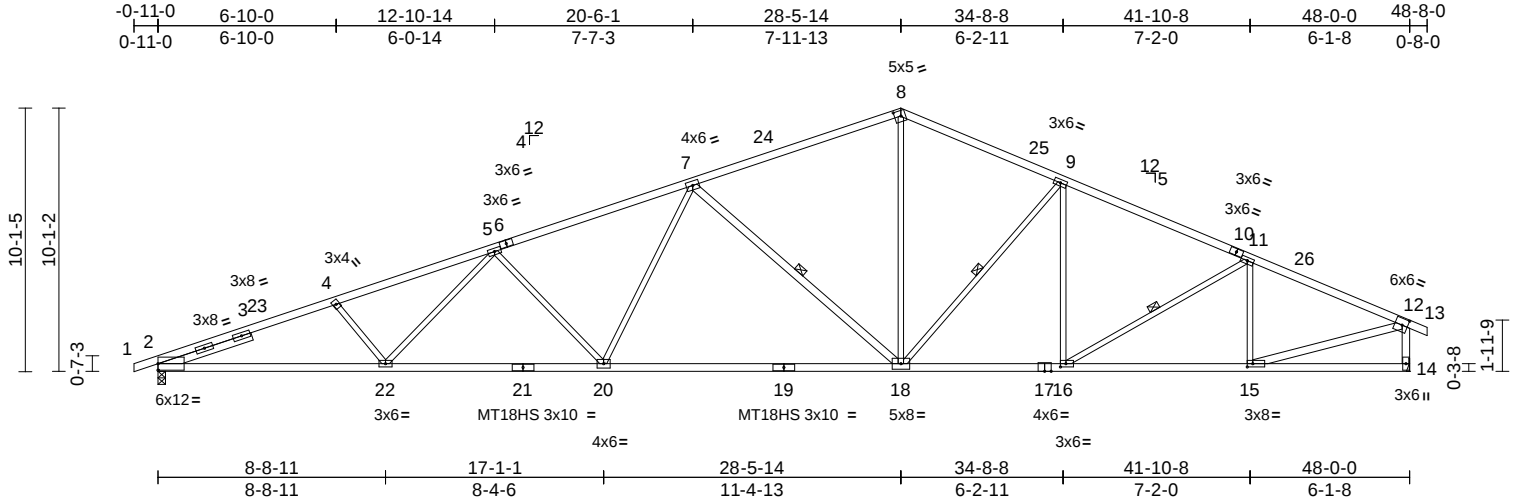
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	162908262
P240008-01	C2	Roof Special	2	1	Job Reference (optional)	

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

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Page: 1

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Scale = 1:88.3

Plate Offsets (X, Y): [8:0-2-15,0-2-8], [12:0-2-9,0-3-0], [15:0-2-8,0-1-8], [16:0-2-8,0-1-8]

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)	-0.36	18-20	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.86	18-20	>670	180	MT18HS 244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.18	14	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 230 lb FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E *Except* 10-13:2x4 SP No.2, 10-8:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2 *Except* 14-12,15-12,18-7:2x4 SP No.2
SLIDER Left 2x4 SPF No.3 -- 3-9-1

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-5-7 oc bracing.
WEBS 1 Row at midpt 11-16, 9-18, 7-18

REACTIONS

(size) 2=0-3-8, 14= Mechanical
Max Horiz 2=214 (LC 12)
Max Uplift 2=-407 (LC 8), 14=-284 (LC 13)
Max Grav 2=2218 (LC 1), 14=2210 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-5270/1064, 4-5=-5028/1030, 5-7=-4241/907, 7-8=-2803/706, 8-9=-2872/730, 9-11=-3229/745, 11-12=-3046/651, 12-13=0/22, 12-14=-2151/545
BOT CHORD 2-22=-968/4862, 20-22=-827/4455, 18-20=-619/3577, 16-18=-487/2892, 15-16=-498/2743, 14-15=-47/113
WEBS 4-22=-241/181, 8-18=-281/1476, 5-22=-64/450, 7-20=-94/866, 11-15=-623/226, 5-20=-765/283, 12-15=-478/2736, 11-16=-46/269, 9-16=-27/164, 9-18=-612/255, 7-18=-1373/407

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=0.96; 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 28-5-14, Exterior(2R) 28-5-14 to 33-5-14, Interior (1) 33-5-14 to 48-8-0 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) All plates are MT20 plates unless otherwise indicated.
- 4) All plates are 3x6 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearings are assumed to be: Joint 2 SP 2400F 2.0E crushing capacity of 805 psi, Joint 14 SPF No.3 crushing capacity of 425 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 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



January 9, 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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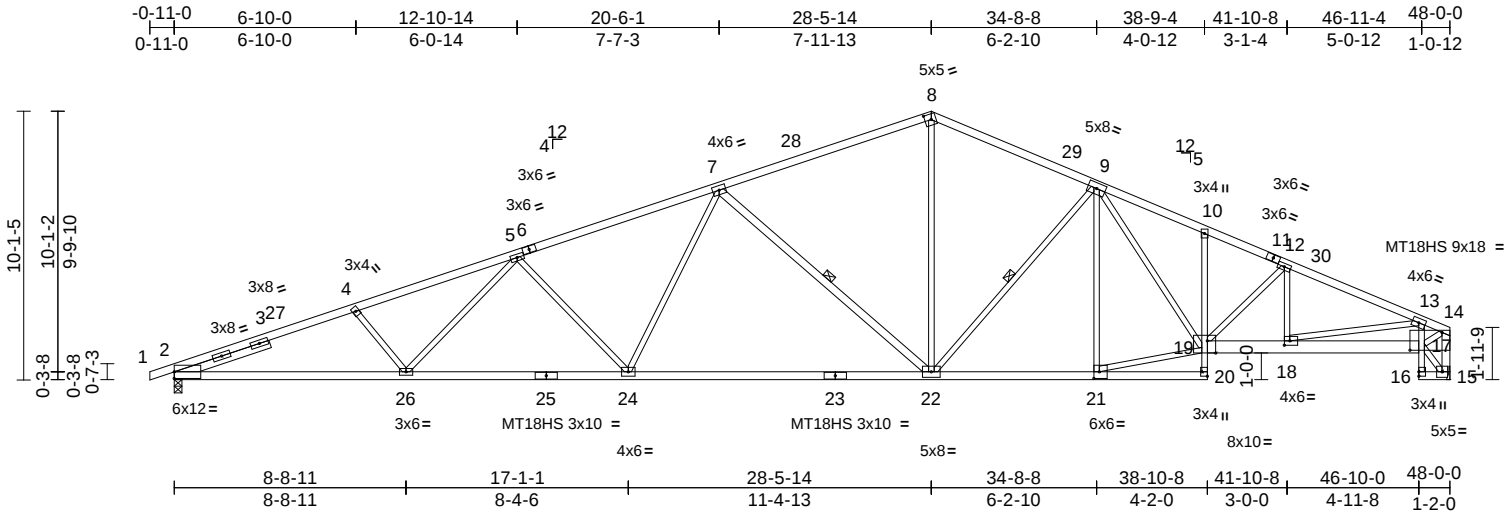
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	162908263
P240008-01	C3	Roof Special	5	1	Job Reference (optional)	

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

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Scale = 1:86.7

Plate Offsets (X, Y): [8:0-2-15,0-2-8], [14:1-2-8,0-8-0], [18:0-2-8,0-2-0], [19:0-3-12,Edge], [20:Edge,0-2-8], [21:0-2-8,0-3-0]

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	0.94	Vert(LL)	-0.37	22-24	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.88	22-24	>650	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.27	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 238 lb	FT = 20%

LUMBER		
TOP CHORD	2x4 SP 2400F 2.0E *Except* 8-11,11-14:2x4 SP No.2	
BOT CHORD	2x4 SP 2400F 2.0E *Except* 20-10,13-16:2x3 SPF No.2, 19-17:2x6 SPF No.2	
WEBS	2x3 SPF No.2 *Except* 15-14:2x4 SPF No.3, 22-7:2x4 SP No.2	
SLIDER	Left 2x4 SPF No.3 -- 3-9-1	
BRACING		
TOP CHORD	Structural wood sheathing directly applied, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	
WEBS	1 Row at midpt 9-22, 7-22	
REACTIONS		
(size)	2=0-3-8, 15= Mechanical	
Max Horiz	2=185 (LC 12)	
Max Uplift	2=-407 (LC 8), 15=-265 (LC 13)	
Max Grav	2=2218 (LC 1), 15=2153 (LC 1)	
FORCES		
(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=0/0, 2-4=-5272/1068, 4-5=-5029/1034, 5-7=-4242/911, 7-8=-2805/710, 8-9=-2869/728, 9-10=-3867/926, 10-12=-3900/877, 12-13=-3979/856, 13-14=-2247/537, 14-15=-2092/478	
BOT CHORD	2-26=-1001/4863, 24-26=-883/4456, 22-24=-690/3578, 21-22=-530/2880, 20-21=-33/207, 19-20=0/87, 10-19=-174/90, 18-19=-749/3606, 17-18=-601/2255, 16-17=-2/8, 13-17=-1203/350, 15-16=-23/43	

WEBS		4-26=-241/181, 8-22=-277/1463, 5-26=-63/450, 5-24=-765/283, 9-21=-650/183, 7-24=-94/865, 9-22=-589/248, 7-22=-1372/407, 19-21=-514/2766, 9-19=-287/1204, 15-17=-78/81, 14-17=-631/2439, 12-18=-225/115, 12-19=-167/91, 13-18=-219/1380
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=0.96; 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 28-5-14, Exterior(2R) 28-5-14 to 33-5-14, Interior (1) 33-5-14 to 47-10-4 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 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 2400F 2.0E crushing capacity of 805 psi, Joint 15 SPF No.3 crushing capacity of 425 psi. 6) Refer to girder(s) for truss to truss connections. 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



January 9,2024

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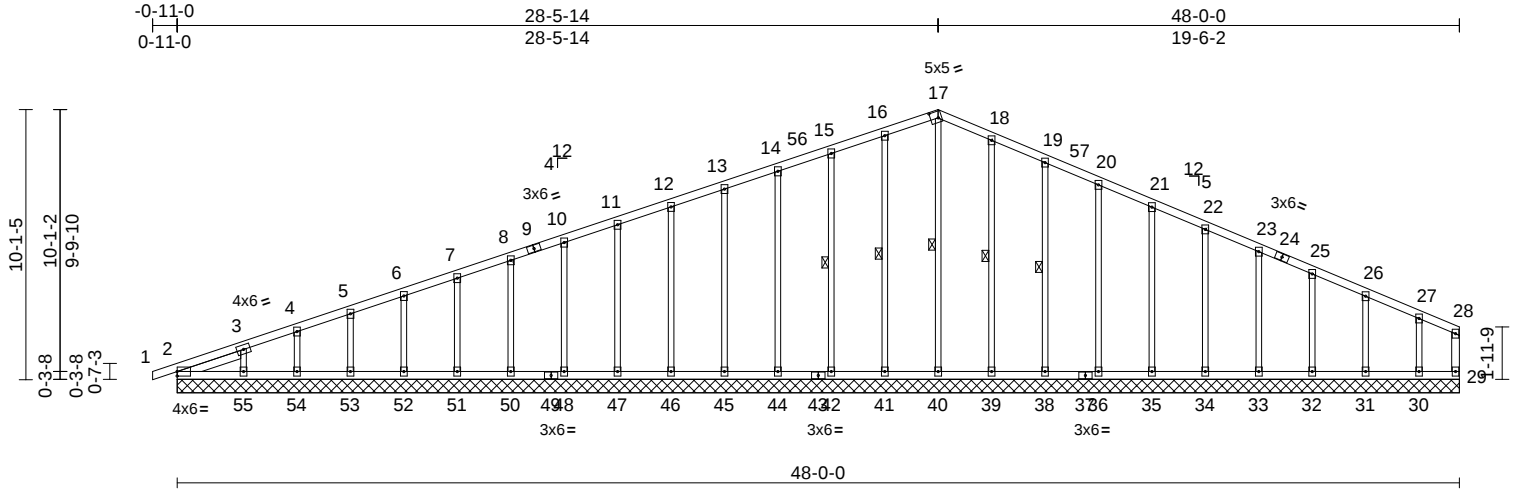
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44
P240008-01	C4	Roof Special Supported Gable	1	1	I62908264
Job Reference (optional)					

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

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Scale = 1:86.2

Plate Offsets (X, Y): [17:0-3-7,0-3-0]

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	0.11	Ver(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Ver(CT)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.00	29	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							
Weight: 252 lb FT = 20%											

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

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.
WEBS 1 Row at midpt 17-40, 16-41, 15-42, 18-39, 19-38

REACTIONS (size)
2=48-0-0, 29=48-0-0, 30=48-0-0, 31=48-0-0, 32=48-0-0, 33=48-0-0, 34=48-0-0, 35=48-0-0, 36=48-0-0, 38=48-0-0, 39=48-0-0, 40=48-0-0, 41=48-0-0, 42=48-0-0, 44=48-0-0, 45=48-0-0, 46=48-0-0, 47=48-0-0, 48=48-0-0, 50=48-0-0, 51=48-0-0, 52=48-0-0, 53=48-0-0, 54=48-0-0, 55=48-0-0
Max Horiz 2=185 (LC 12)
Max Uplift 2=-42 (LC 13), 30=-96 (LC 13), 31=-45 (LC 13), 32=-53 (LC 13), 33=-51 (LC 13), 34=-51 (LC 13), 35=-51 (LC 13), 36=-50 (LC 13), 38=-57 (LC 13), 39=-41 (LC 13), 41=-40 (LC 12), 42=-50 (LC 8), 44=-45 (LC 12), 45=-46 (LC 8), 46=-46 (LC 12), 47=-46 (LC 8), 48=-46 (LC 12), 50=-46 (LC 8), 51=-46 (LC 12), 52=-46 (LC 8), 53=-46 (LC 12), 54=-46 (LC 8), 55=-76 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-3=-210/109, 3-4=-164/110, 4-5=-143/126, 5-6=-121/143, 6-7=-100/160, 7-8=-79/183, 8-10=-86/211, 10-11=-98/239, 11-12=-109/267, 12-13=-120/295, 13-14=-132/323, 14-15=-143/351, 15-16=-155/381, 16-17=-165/404, 17-18=-170/401, 18-19=-156/345, 19-20=-141/284, 20-21=-126/246, 21-22=-112/211, 22-23=-97/175, 23-25=-82/139, 25-26=-68/103, 26-27=-53/67, 27-28=-53/50, 28-29=-46/9, 2-55=-43/74, 54-55=-43/74, 53-54=-43/74, 52-53=-43/74, 51-52=-43/74, 50-51=-43/74, 48-50=-43/74, 47-48=-43/74, 46-47=-43/74, 45-46=-43/74, 44-45=-43/74, 42-44=-43/74, 41-42=-43/74, 40-41=-43/74, 39-40=-43/74, 38-39=-43/74, 36-38=-43/74, 35-36=-43/74, 34-35=-43/74, 33-34=-43/74, 32-33=-43/74, 31-32=-43/74, 30-31=-43/74, 29-30=-43/74
BOT CHORD

WEBS
17-40=-181/37, 16-41=-148/119, 15-42=-140/123, 14-44=-140/71, 13-45=-140/70, 12-46=-140/70, 11-47=-140/70, 10-48=-140/70, 8-50=-140/70, 7-51=-140/70, 6-52=-140/70, 5-53=-141/70, 4-54=-137/69, 3-55=-161/102, 18-39=-148/123, 19-38=-139/133, 20-36=-140/75, 21-35=-140/75, 22-34=-140/75, 23-33=-140/75, 25-32=-139/75, 26-31=-144/74, 27-30=-126/94

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



January 9, 2024

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44
P240008-01	C4	Roof Special Supported Gable	1	1	Job Reference (optional)

I62908264

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

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Page: 2

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=0.96; 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 28-5-14, Corner(3R) 28-5-14 to
33-5-14, Exterior(2N) 33-5-14 to 47-10-4 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
- 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 3x4 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) 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

 **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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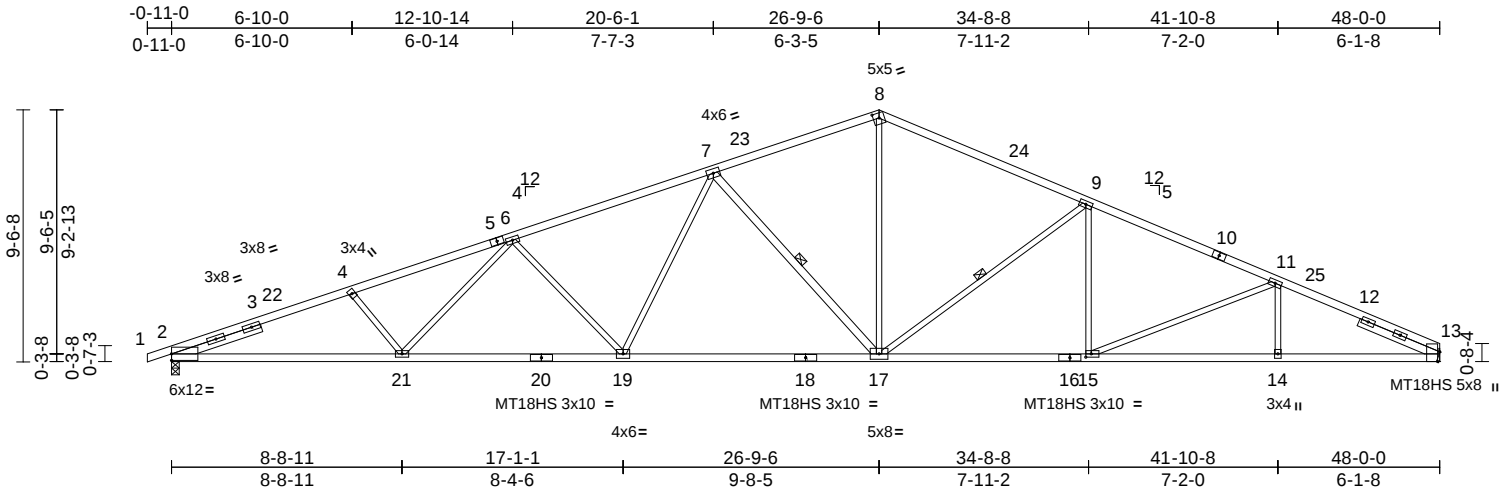
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	162908265
P240008-01	D1	Roof Special	4	1	Job Reference (optional)	

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

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Scale = 1:87.2

Plate Offsets (X, Y): [8:0-2-11,0-2-4], [13:0-4-7,Edge], [15:0-2-8,0-1-8]

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	0.87	Vert(LL)	-0.40	19-21	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.85	17-19	>676	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.92	Horz(CT)	0.25	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 217 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E *Except* 5-8:2x4 SP 1650F 1.5E
 BOT CHORD 2x4 SP 2400F 2.0E *Except* 18-20,18-16:2x4 SP 1650F 1.5E
 WEBS 2x3 SPF No.2 *Except* 17-7:2x4 SP No.2
 SLIDER Left 2x4 SPF No.3 -- 3-6-9, Right 2x4 SPF No.3 -- 3-3-8

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 8-0-12 oc bracing.

WEBS 1 Row at midpt 7-17, 9-17

REACTIONS (size) 2=0-3-8, 13= Mechanical
 Max Horiz 2=169 (LC 16)
 Max Uplift 2=-399 (LC 8), 13=-285 (LC 13)
 Max Grav 2=2225 (LC 1), 13=2159 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=0/0, 2-4=-5294/1072, 4-6=-5048/1039, 6-7=-4250/923, 7-8=-3030/757, 8-9=-3156/766, 9-11=-3948/867, 11-13=-4445/926
 BOT CHORD 2-21=-918/4877, 19-21=-786/4476, 17-19=-572/3584, 15-17=-597/3593, 14-15=-740/3937, 13-14=-740/3937, 4-21=-238/180, 8-17=-316/1661, 6-21=-55/458, 7-19=-117/860, 7-17=-1209/360, 6-19=-793/290, 11-14=0/234, 9-17=-1019/322, 11-15=-456/177, 9-15=0/399

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=0.96; 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 26-9-6, Exterior(2R) 26-9-6 to 31-9-6, Interior (1) 31-9-6 to 48-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x6 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 2 SP 2400F 2.0E crushing capacity of 805 psi, Joint 13 SPF No.3 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- 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



January 9,2024

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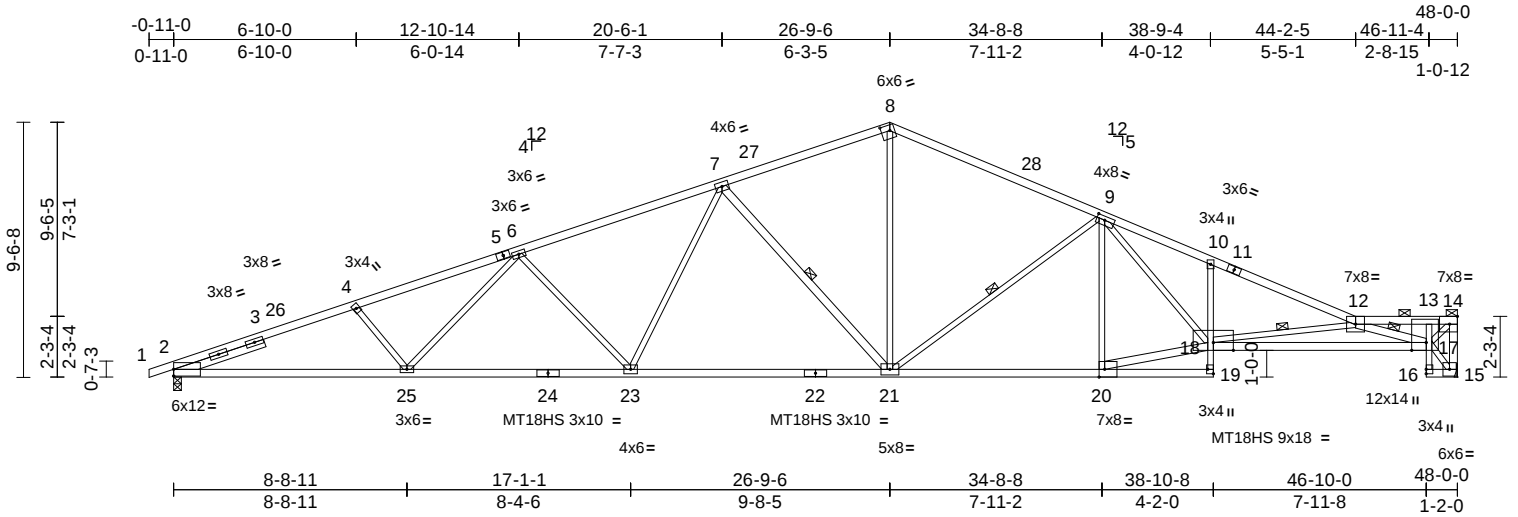
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	162908266
P240008-01	D2	Roof Special	10	1	Job Reference (optional)	

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 Jan 08 10:56:45

Page: 1

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Scale = 1:86.1

Plate Offsets (X, Y): [8:0-3-15,0-2-8], [9:0-3-10,0-1-12], [14:0-3-8,Edge], [17:0-3-8,Edge], [19:Edge,0-2-8], [20:0-2-8,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	0.89	Vert(LL)	-0.49	21	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-1.01	21-23	>566	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.96	Horz(CT)	0.45	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 233 lb	FT = 20%

LUMBER		
TOP CHORD	2x4 SP 2400F 2.0E *Except* 12-14:2x4 SP No.2, 5-8:2x4 SP 1650F 1.5E	
BOT CHORD	2x4 SP 2400F 2.0E *Except* 19-10,13-16:2x3 SPF No.2, 16-15:2x4 SP No.2, 24-22,22-19:2x4 SP 1650F 1.5E	
WEBS	2x3 SPF No.2 *Except* 21-7,17-12,15-14,20-18:2x4 SP No.2	
SLIDER	Left 2x4 SPF No.3 -- 3-6-9	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or 2-6-7 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-7 max.): 12-14.	
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.	
WEBS	1 Row at midpt 7-21, 12-18, 9-21, 12-17	
REACTIONS	(size) 2=0-3-8, 15= Mechanical	
	Max Horiz 2=175 (LC 16)	
	Max Uplift 2=-398 (LC 8), 15=-286 (LC 13)	
	Max Grav 2=2218 (LC 1), 15=2153 (LC 1)	
FORCES	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/0, 2-4=-5276/1068, 4-6=-5030/1035, 6-7=-4230/919, 7-8=-3012/753, 8-9=-3133/744, 9-10=-5341/1152, 10-12=-5402/1085, 12-13=-2082/393, 13-14=-1931/396, 14-15=-2054/439	
BOT CHORD	2-25=-1038/4860, 23-25=-929/4458, 21-23=-721/3564, 20-21=-706/3532, 19-20=-71/137, 18-19=0/55, 10-18=-295/151, 17-18=-1616/7240, 16-17=-9/7, 13-17=-207/114, 15-16=-53/88	

WEBS	4-25=-239/180, 6-25=-55/459, 7-23=-117/860, 6-23=-794/290, 8-21=-297/1630, 7-21=-1207/360, 12-18=-2328/621, 9-21=-970/304, 12-17=-5473/1239, 15-17=-99/125, 14-17=-615/2796, 18-20=-654/3496, 9-18=-457/2152, 9-20=-723/236
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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=0.96; 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 26-9-6, Exterior(2R) 26-9-6 to 31-9-6, Interior (1) 31-9-6 to 47-10-4 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearings are assumed to be: Joint 2 SP 2400F 2.0E crushing capacity of 805 psi, Joint 15 SPF No.3 crushing capacity of 425 psi.
- 7) Refer to girder(s) for truss to truss connections.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



January 9, 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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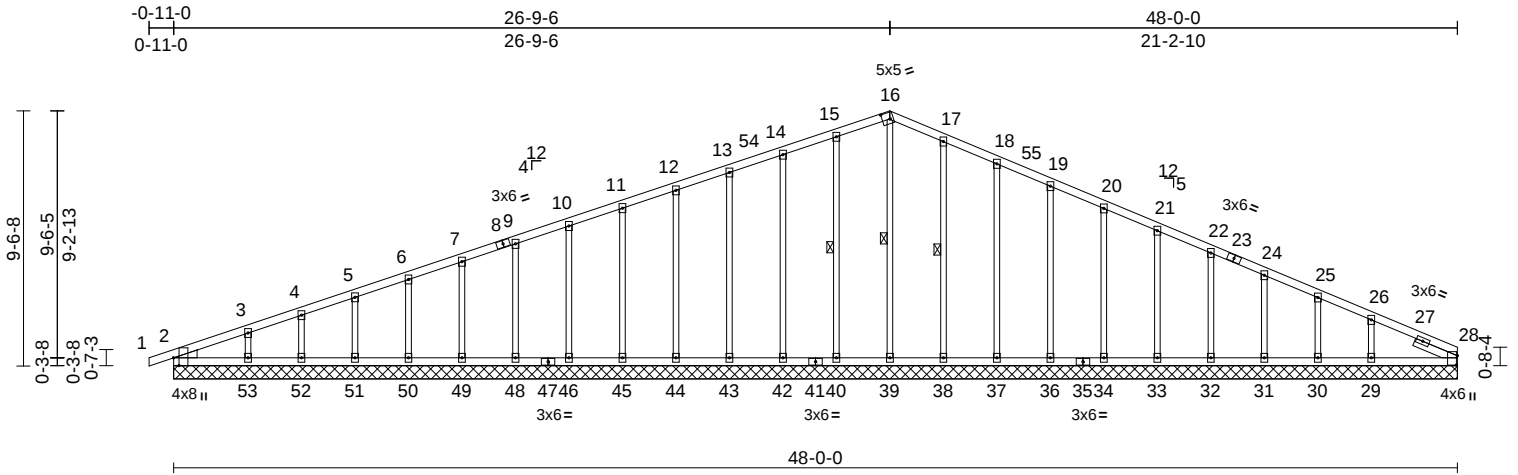
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44
P240008-01	D3	Roof Special Supported Gable	2	1	162908267
					Job Reference (optional)

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

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Scale = 1:86.1

Plate Offsets (X, Y): [2:0-3-8,Edge], [16:0-3-7,0-3-0], [28:0-4-3,0-0-7]

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	0.16	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.01	28	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							
Weight: 240 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
SLIDER Right 2x4 SPF No.3 -- 1-8-10

BRACING

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

WEBS 1 Row at midpt 16-39, 15-40, 17-38

REACTIONS (size) 2=48-0-0, 28=48-0-0, 29=48-0-0, 30=48-0-0, 31=48-0-0, 32=48-0-0, 33=48-0-0, 34=48-0-0, 36=48-0-0, 37=48-0-0, 38=48-0-0, 39=48-0-0, 40=48-0-0, 42=48-0-0, 43=48-0-0, 44=48-0-0, 45=48-0-0, 46=48-0-0, 48=48-0-0, 49=48-0-0, 50=48-0-0, 51=48-0-0, 52=48-0-0, 53=48-0-0
Max Horiz 2=169 (LC 12)
Max Uplift 2=-25 (LC 13), 29=-107 (LC 13), 30=-33 (LC 13), 31=-55 (LC 13), 32=-50 (LC 13), 33=-51 (LC 13), 34=-51 (LC 13), 36=-50 (LC 13), 37=-56 (LC 13), 38=-44 (LC 13), 40=-41 (LC 12), 42=-49 (LC 8), 43=-45 (LC 12), 44=-46 (LC 8), 45=-46 (LC 8), 46=-46 (LC 12), 48=-46 (LC 8), 49=-46 (LC 12), 50=-46 (LC 8), 51=-47 (LC 12), 52=-42 (LC 8), 53=-83 (LC 12)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-3=-208/85, 3-4=-155/87, 4-5=-128/96, 5-6=-107/109, 6-7=-91/126, 7-9=-76/142, 9-10=-60/159, 10-11=-65/176, 11-12=-76/193, 12-13=-88/221, 13-14=-99/248, 14-15=-111/278, 15-16=-122/302, 16-17=-125/297, 17-18=-111/248, 18-19=-96/211, 19-20=-81/175, 20-21=-66/139, 21-22=-52/103, 22-24=-52/67, 24-25=-52/36, 25-26=-76/19, 26-28=-119/36
BOT CHORD 2-53=-38/138, 52-53=-38/138, 51-52=-38/138, 50-51=-38/138, 49-50=-38/138, 48-49=-38/138, 46-48=-38/138, 45-46=-38/138, 44-45=-38/138, 43-44=-38/138, 42-43=-38/138, 40-42=-38/138, 39-40=-38/138, 38-39=-38/138, 37-38=-38/138, 36-37=-38/138, 34-36=-38/138, 33-34=-38/138, 32-33=-38/138, 31-32=-38/138, 30-31=-38/138, 29-30=-38/138, 28-29=-38/138

WEBS

16-39=-149/21, 15-40=-148/120, 14-42=-140/123, 13-43=-140/70, 12-44=-140/70, 11-45=-140/70, 10-46=-140/70, 9-48=-140/70, 7-49=-140/70, 6-50=-139/70, 5-51=-143/71, 4-52=-127/65, 3-53=-179/109, 17-38=-148/129, 18-37=-140/131, 19-36=-140/76, 20-34=-140/75, 21-33=-140/75, 22-32=-139/74, 24-31=-145/79, 25-30=-118/59, 26-29=-211/127

NOTES

- 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=0.96; 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 26-9-6, Corner(3R) 26-9-6 to 31-9-6, Exterior(2N) 31-9-6 to 48-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



January 9, 2024

Continued on page 2

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

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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44
P240008-01	D3	Roof Special Supported Gable	2	1	Job Reference (optional)

I62908267

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

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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 3x4 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) 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

 **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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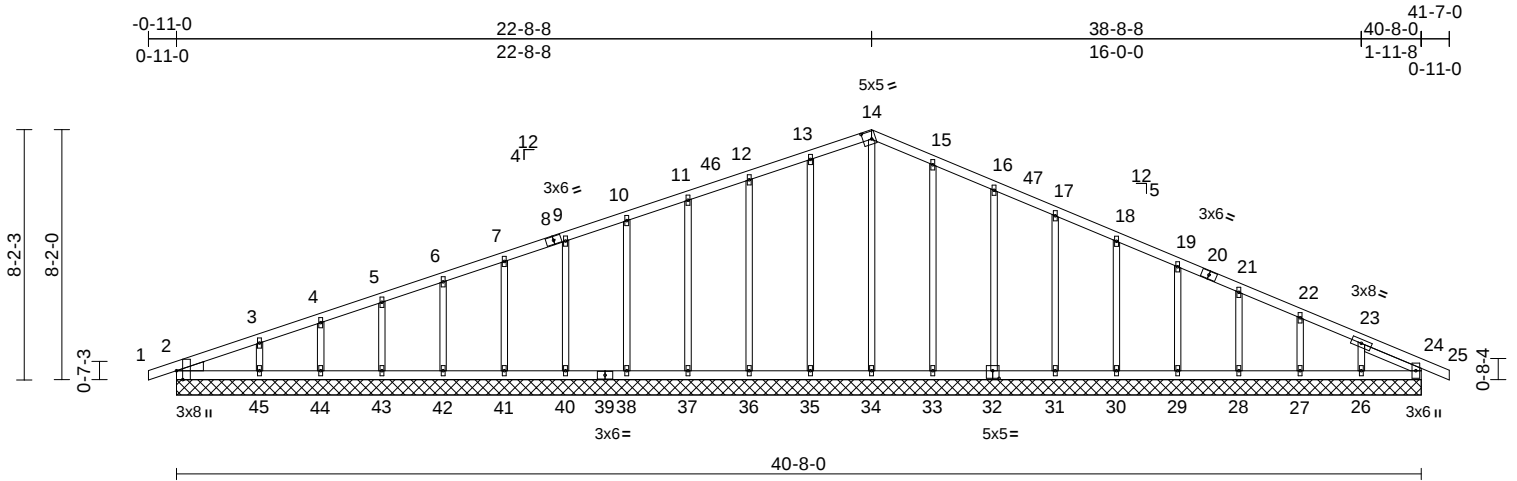
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44
P240008-01	E1	Roof Special Supported Gable	4	1	Job Reference (optional)
					I62908268

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

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Scale = 1:75.3

Plate Offsets (X, Y): [2:0-3-8,Edge], [14:0-3-7,0-3-0], [32:0-2-8,0-3-0]

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.01	24	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							
Weight: 195 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
WEDGE Left: 2x4 SP No.2

BRACING

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

REACTIONS (size)
2=40-8-0, 24=40-8-0, 26=40-8-0, 27=40-8-0, 28=40-8-0, 29=40-8-0, 30=40-8-0, 31=40-8-0, 32=40-8-0, 33=40-8-0, 34=40-8-0, 35=40-8-0, 36=40-8-0, 37=40-8-0, 38=40-8-0, 40=40-8-0, 41=40-8-0, 42=40-8-0, 43=40-8-0, 44=40-8-0, 45=40-8-0
Max Horiz 2=139 (LC 12)
Max Uplift 2=-20 (LC 13), 24=-6 (LC 9), 26=-71 (LC 13), 27=-49 (LC 13), 28=-50 (LC 13), 29=-49 (LC 13), 30=-50 (LC 13), 31=-48 (LC 13), 32=-52 (LC 13), 33=-46 (LC 13), 35=-42 (LC 12), 36=-47 (LC 8), 37=-44 (LC 12), 38=-44 (LC 8), 40=-44 (LC 8), 41=-44 (LC 12), 42=-44 (LC 8), 43=-46 (LC 12), 44=-41 (LC 8), 45=-77 (LC 12)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-3=-171/69, 3-4=-121/72, 4-5=-95/81, 5-6=-76/93, 6-7=-61/110, 7-9=-46/126, 9-10=-51/142, 10-11=-62/168, 11-12=-73/195, 12-13=-84/223, 13-14=-95/247, 14-15=-97/242, 15-16=-83/194, 16-17=-69/159, 17-18=-55/124, 18-19=-41/89, 19-21=-39/54, 21-22=-47/28, 22-23=-67/21, 23-24=-117/41, 24-25=0/0
BOT CHORD 2-45=-36/121, 44-45=-36/121, 43-44=-36/121, 42-43=-36/121, 41-42=-36/121, 40-41=-36/121, 38-40=-36/121, 37-38=-36/121, 36-37=-36/121, 35-36=-36/121, 34-35=-36/121, 33-34=-36/121, 31-33=-36/121, 30-31=-35/120, 29-30=-35/120, 28-29=-35/120, 27-28=-35/120, 26-27=-35/120, 24-26=-35/120

WEBS

14-34=-135/7, 13-35=-144/120, 12-36=-135/118, 11-37=-136/68, 10-38=-136/68, 9-40=-136/68, 7-41=-136/68, 6-42=-135/67, 5-43=-138/69, 4-44=-125/63, 3-45=-170/101, 15-33=-144/128, 16-32=-134/126, 17-31=-136/73, 18-30=-136/73, 19-29=-136/73, 21-28=-136/73, 22-27=-136/73, 23-26=-132/92

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=0.96; 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 22-8-8, Corner(3R) 22-8-8 to 27-8-8, Exterior(2N) 27-8-8 to 41-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



January 9, 2024

Continued on page 2

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

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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44
P240008-01	E1	Roof Special Supported Gable	4	1	I62908268
					Job Reference (optional)

- 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) 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

 **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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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 Jan 08 10:56:48 Page: 1
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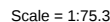


Plate Offsets (X, Y): [2:0-1-12,0-2-12], [8:0-2-15,0-2-8], [13:0-4-7,Edge]

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP 1650F 1.5E *Except* 0-0:2x4 SP
No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SPF No.3 -- 3-11-3, Right 2x4 SPF
No.3 -- 3-2-7

BRACING
TOP CHORD Structural wood sheathing directly applied or
2-4-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-2-6 oc
bracing.
WEBS 1 Row at midpt 7-18, 9-18

REACTIONS (size) 2=0-3-8, 13=0-3-8
Max Horiz 2=144 (LC 12)
Max Uplift 2=-344 (LC 8), 13=-264 (LC 13)
Max Grav 2=1894 (LC 1), 13=1894 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/0, 2-4=-4371/905, 4-6=-4128/869,
6-7=-3246/749, 7-8=-2517/675,
8-9=-2630/662, 9-11=-3211/720,
11-13=-3681/763, 13-14=0/0
BOT CHORD 2-21=-762/4030, 19-21=-626/3551,
18-19=-393/2633, 16-18=-482/2916,
15-16=-594/3243, 13-15=-594/3243
WEBS 4-21=-276/186, 8-18=-394/1581,
6-19=-837/296, 7-18=-1017/317,
6-21=-56/525, 11-16=-436/169,
9-18=-808/247, 9-16=0/358, 11-15=0/217,
7-19=-147/848

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=0.96; 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 22-8-8, Exterior(2R) 22-8-8 to
27-8-8, Interior (1) 27-8-8 to 41-7-0 zone; cantilever left
and right exposed ; end vertical left and right
exposed; C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 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) All bearings are assumed to be SP 1650F 1.5E crushing
capacity of 565 psi.
- 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



January 9, 2024



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LUMBER		2)	Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope)
TOP CHORD	2x4 SP No.2		exterior zone and C-C Corner(3E) -0-11-0 to 4-1-0,
BOT CHORD	2x4 SP No.2		Exterior(2N) 4-1-0 to 7-6-0, Corner(3R) 7-6-0 to 12-6-0,
WEBS	2x4 SP No.2		Exterior(2N) 12-6-0 to 15-11-0 zone; cantilever left and
OTHERS	2x3 SPF No.2		right exposed ; end vertical left and right exposed;C-C
BRACING			for members and forces & MWFRS for reactions shown;
TOP CHORD	Sheathed or 6-0-0 oc purlins, except end	3)	Lumber DOL=1.60 plate grip DOL=1.60
	verticals.		
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc		
	bracing.		
REACTIONS			
(size)	12=15-0-0, 13=15-0-0, 14=15-0-0,		
	15=15-0-0, 16=15-0-0, 17=15-0-0,		
	18=15-0-0, 19=15-0-0, 20=15-0-0		
Max Horiz	20=180 (LC 11)	4)	All plates are 1.5x4 MT20 unless otherwise indicated.
Max Uplift	12=-53 (LC 9), 13=-105 (LC 13),	5)	Gable requires continuous bottom chord bearing.
	14=-72 (LC 13), 15=-74 (LC 13),	6)	Truss to be fully sheathed from one face or securely
	17=-75 (LC 12), 18=-70 (LC 12),		braced against lateral movement (i.e. diagonal web).
	19=-111 (LC 12), 20=-79 (LC 8)	7)	Gable studs spaced at 2-0-0 oc.
Max Grav	12=155 (LC 19), 13=178 (LC 20),	8)	This truss has been designed for a 10.0 psf bottom
	14=189 (LC 20), 15=197 (LC 20),		chord live load nonconcurrent with any other live loads.
	16=195 (LC 22), 17=198 (LC 19),	9)	All bearings are assumed to be SP No.2 crushing
	18=187 (LC 25), 19=190 (LC 19),		capacity of 565 psi.
	20=176 (LC 20)	10)	This truss is designed in accordance with the 2018
FORCES			International Residential Code sections R502.11.1 and
(lb) - Maximum Compression/Maximum			R802.10.2 and referenced standard ANSI/TPI 1.
Tension			
TOP CHORD	2-20=-143/91, 1-2=0/41, 2-3=-110/106,	LOAD CASE(S) Standard	
	3-4=-80/85, 4-5=-78/165, 5-6=-117/243,		
	6-7=-117/243, 7-8=-77/165, 8-9=-59/80,		
	9-10=-80/76, 10-11=0/41, 10-12=-133/91		
BOT CHORD	19-20=-83/90, 18-19=-83/90, 17-18=-83/90,		
	16-17=-83/90, 15-16=-83/90, 14-15=-83/90,		
	13-14=-83/90, 12-13=-83/90		
WEBS	6-16=-181/31, 5-17=-157/117,		
	4-18=-149/152, 3-19=-135/128,		
	7-15=-156/117, 8-14=-150/152,		
	9-13=-128/128		

NOTES

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



STATE OF MISSOURI
NATHANIEL
FOX
MEMBER
PE-2022042259
PROFESSIONAL ENGINEER

January 9, 2024

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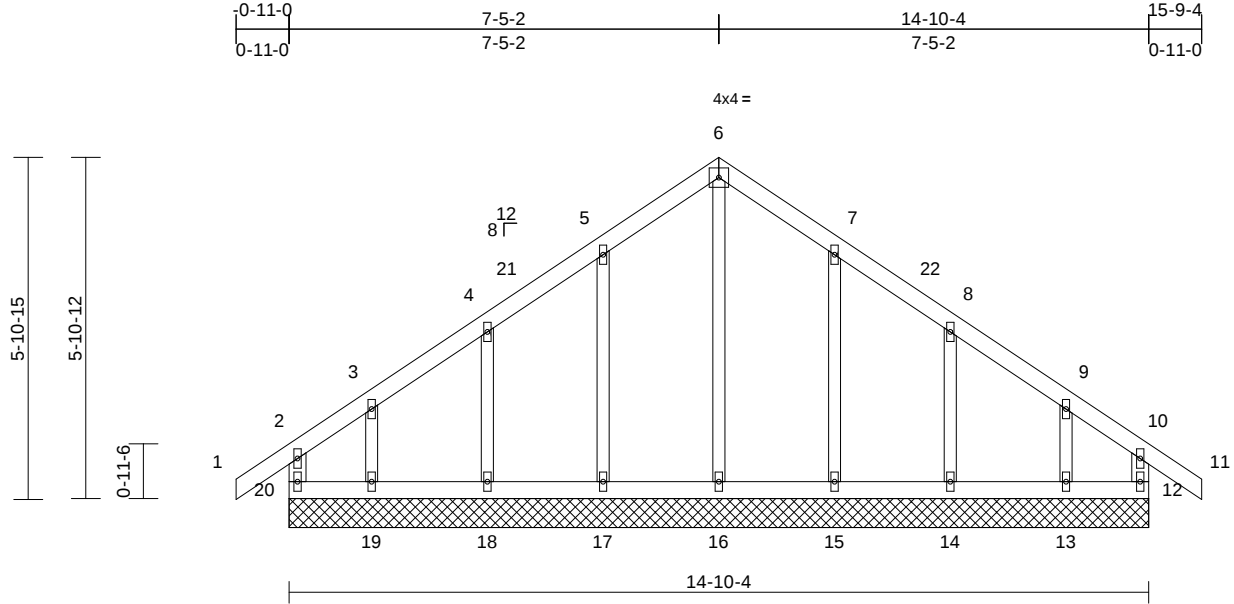
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	162908271
P240008-01	G1A	Common Supported Gable	1	1	Job Reference (optional)	

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 71 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	Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS

(size)	12=14-10-4, 13=14-10-4, 14=14-10-4, 15=14-10-4, 16=14-10-4, 17=14-10-4, 18=14-10-4, 19=14-10-4, 20=14-10-4
Max Horiz	20=-179 (LC 10)
Max Uplift	12=-55 (LC 9), 13=-105 (LC 13), 14=-72 (LC 13), 15=-74 (LC 13), 17=-75 (LC 12), 18=-71 (LC 12), 19=-112 (LC 12), 20=-82 (LC 8)
Max Grav	12=154 (LC 19), 13=175 (LC 20), 14=190 (LC 20), 15=197 (LC 20), 16=194 (LC 22), 17=198 (LC 19), 18=187 (LC 19), 19=187 (LC 19), 20=176 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	2-20=-143/89, 1-2=0/41, 2-3=-110/107, 3-4=-79/85, 4-5=-76/162, 5-6=-116/241, 6-7=-116/241, 7-8=-76/162, 8-9=-59/77, 9-10=-81/76, 10-11=0/41, 10-12=-131/88
BOT CHORD	19-20=-82/90, 18-19=-82/90, 17-18=-82/90, 16-17=-82/90, 15-16=-82/90, 14-15=-82/90, 13-14=-82/90, 12-13=-82/90
WEBS	6-16=-179/29, 5-17=-157/118, 4-18=-150/154, 3-19=-132/125, 7-15=-156/118, 8-14=-151/154, 9-13=-125/126

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=0.96; 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 7-5-2, Corner(3R) 7-5-2 to 12-5-2, Exterior(2N) 12-5-2 to 15-9-4 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.
- 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.
- 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



January 9, 2024

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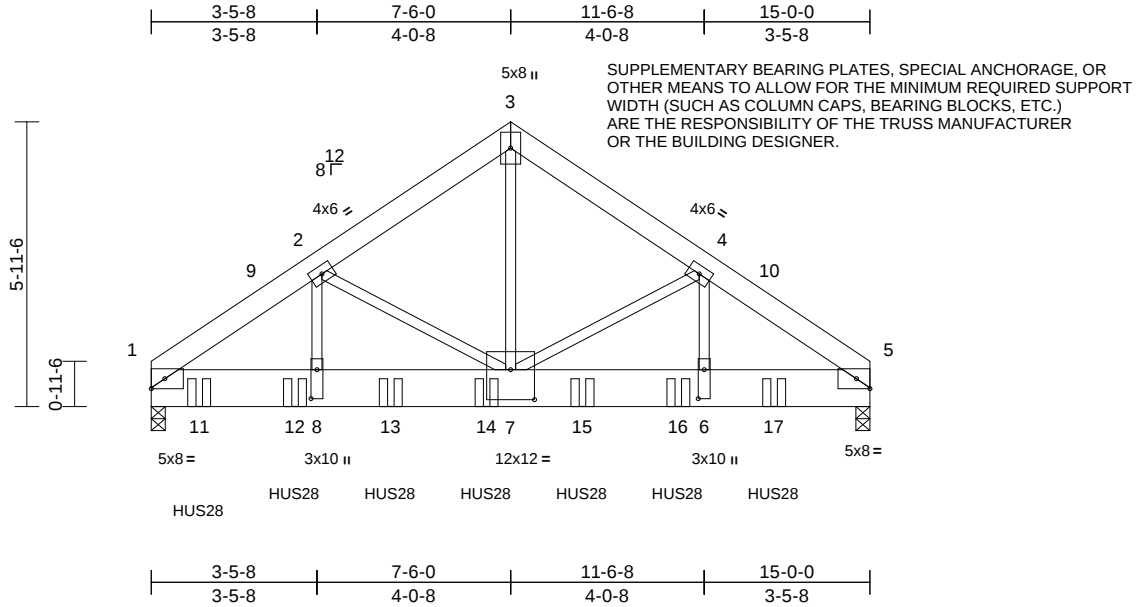
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	162908272
P240008-01	G2	Common Girder	2	3	Job Reference (optional)	

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Scale = 1:48.1

Plate Offsets (X, Y): [6:0-7-4,0-1-8], [7:0-6-0,0-7-8], [8:0-7-4,0-1-8]

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	0.23	Vert(LL)	-0.05	7-8	>999	240	MT20	185/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.09	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 281 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x10 HF No.2
WEBS 2x3 SPF No.2

BRACING

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

REACTIONS (size) 1=0-3-8, (req. 0-4-12), 5=0-3-8, (req. 0-4-3)
Max Horiz 1=143 (LC 11)
Max Uplift 1=-1195 (LC 12), 5=-1054 (LC 13)
Max Grav 1=8643 (LC 1), 5=7625 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-10445/1495, 2-3=-7588/1150, 3-4=-7588/1150, 4-5=-10338/1480
BOT CHORD 1-8=-1171/8174, 7-8=-1175/8203, 6-7=-1113/8105, 5-6=-1110/8077
WEBS 2-8=-424/3292, 2-7=-2266/415, 3-7=-1124/7876, 4-7=-2150/402, 4-6=-404/3182

NOTES

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 4 rows staggered at 0-4-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=0.96; 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 7-6-0, Exterior(2R) 7-6-0 to 12-6-0, Interior (1) 12-6-0 to 14-10-4 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- WARNING: Required bearing size at joint(s) 1, 5 greater than input bearing size.
- All bearings are assumed to be HF No.2 crushing capacity of 405 psi.
- 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 HUS28 (22-16d Girder, 4-16d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-0-0 from the left end to 13-0-0 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: 1-3=-70, 3-5=-70, 1-5=-20
Concentrated Loads (lb)
Vert: 11=-2141 (B), 12=-2133 (B), 13=-2133 (B), 14=-2133 (B), 15=-2133 (B), 16=-2133 (B), 17=-2139 (B)



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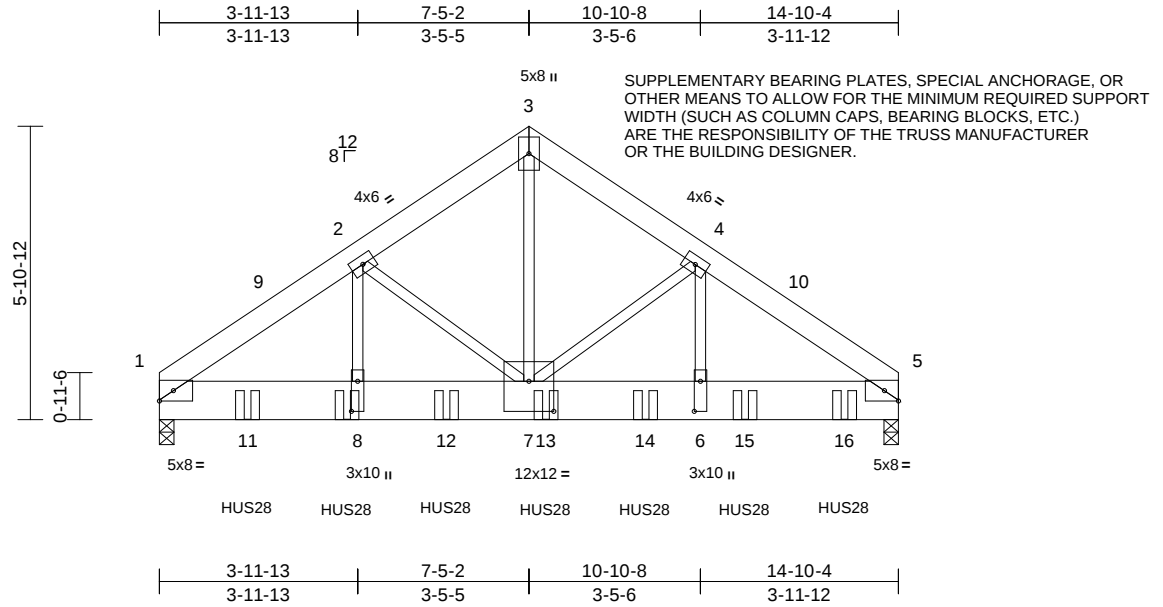
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	
P240008-01	G2A	Common Girder	1	3	Job Reference (optional)	I62908273

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Scale = 1:46.3

Plate Offsets (X, Y): [6:0-7-4,0-1-8], [7:0-6-0,0-7-4], [8:0-7-4,0-1-8]

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	0.25	Vert(LL)	-0.05	7-8	>999	240	MT20	185/144
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.09	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 279 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x10 HF No.2
WEBS 2x3 SPF No.2

BRACING

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

REACTIONS (size) 1=0-3-8, (req. 0-4-4), 5=0-3-8, (req. 0-4-11)
Max Horiz 1=-142 (LC 10)
Max Uplift 1=-1020 (LC 12), 5=-1122 (LC 13)
Max Grav 1=7791 (LC 1), 5=8564 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-10106/1373, 2-3=-7483/1081, 3-4=-7485/1081, 4-5=-10143/1375
BOT CHORD 1-8=-1066/7957, 7-8=-1069/7983, 6-7=-1030/8023, 5-6=-1027/7996
WEBS 2-8=-400/3344, 2-7=-2301/403, 3-7=-1067/7769, 4-7=-2350/410, 4-6=-404/3379

NOTES

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 4 rows staggered at 0-4-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc, Except member 2-8 2x3 - 1 row at 0-4-0 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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 7-5-2, Exterior(2R) 7-5-2 to 12-5-2, Interior (1) 12-5-2 to 14-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- WARNING: Required bearing size at joint(s) 1, 5 greater than input bearing size.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- 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 HUS28 (22-16d Girder, 4-16d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-9-4 from the left end to 13-9-4 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: 1-3=-70, 3-5=-70, 1-5=-20
Concentrated Loads (lb)
Vert: 8=-2133 (B), 11=-2190 (B), 12=-2133 (B), 13=-2133 (B), 14=-2133 (B), 15=-2133 (B), 16=-2191 (B)



January 9,2024

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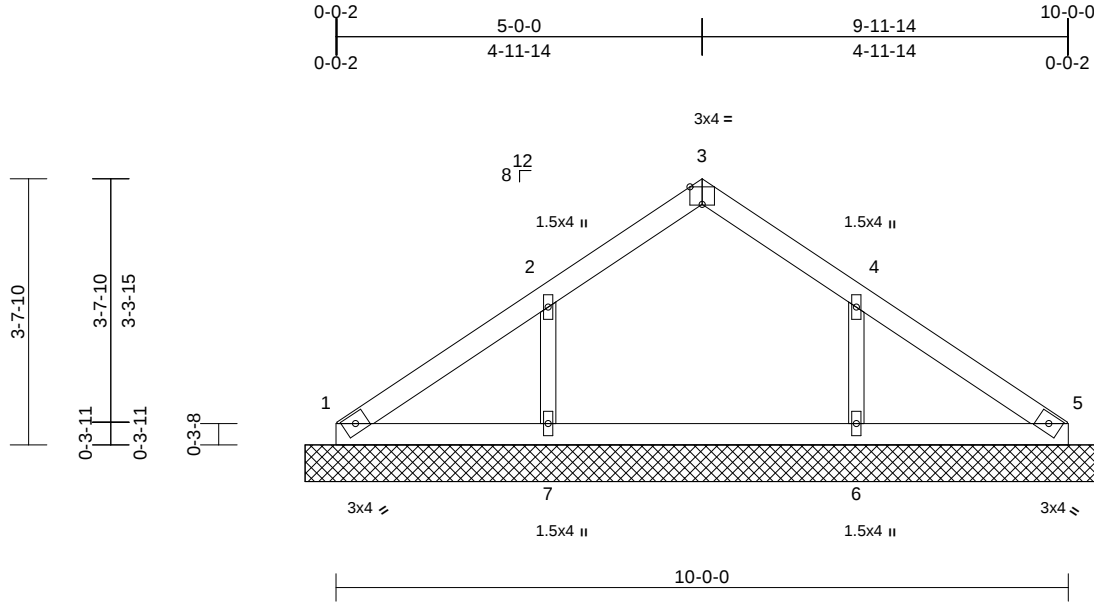
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02/08/2024 2:34:43

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	
P240008-01	V1	Valley	2	1	Job Reference (optional)	I62908274

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 Jan 08 10:56:51
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Page: 1



Scale = 1:31.5

Plate Offsets (X, Y): [3'-0"-2'-0",Edge], [4'-0"-0'-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	0.11	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	NO	WB	0.04	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 35 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" oc purlins.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS (size) 1=10-10-1, 5=10-10-1, 6=10-10-1, 7=10-10-1
Max Horiz 1=90 (LC 9)
Max Uplift 6=-96 (LC 13), 7=-98 (LC 12)
Max Grav 1=152 (LC 1), 5=152 (LC 1), 6=299 (LC 20), 7=301 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-153/33, 2-3=-149/64, 3-4=-149/64, 4-5=-151/30
BOT CHORD 1-7=-24/111, 6-7=-24/111, 5-6=-24/111
WEBS 2-7=-210/161, 4-6=-209/160

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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4'-0" 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.
- 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



January 9, 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)

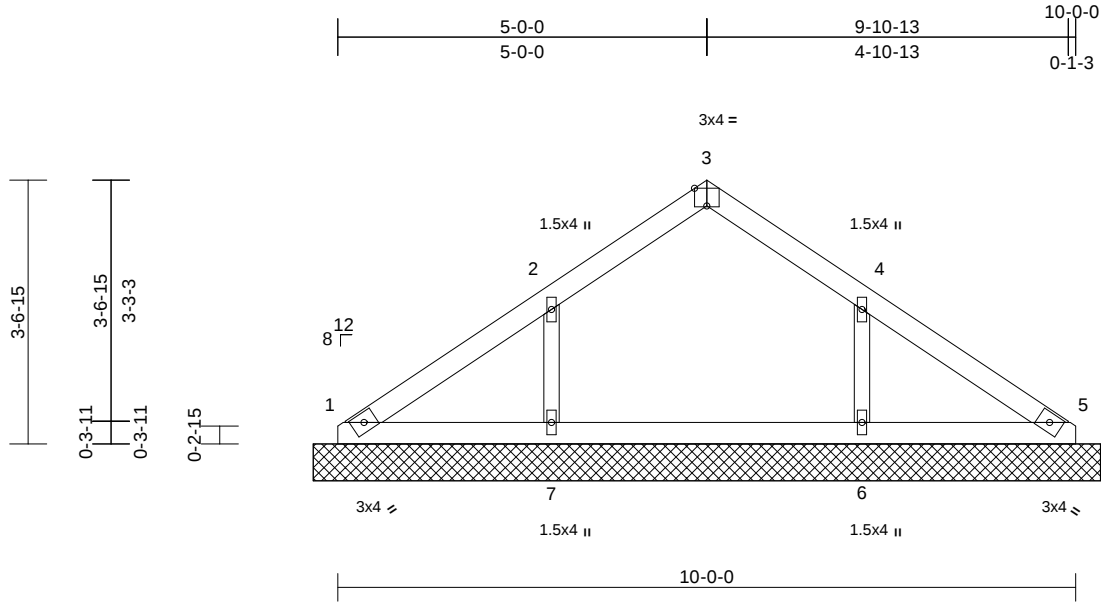
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	
P240008-01	V2	Valley	2	1	Job Reference (optional)	I62908275

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 Jan 08 10:56:51
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Page: 1



Scale = 1:31.2

Plate Offsets (X, Y): [3:0-2-0,Edge], [4:0-0-0,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	0.11	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	NO	WB	0.04	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 35 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" oc purlins.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS (size) 1=10-8-0, 5=10-8-0, 6=10-8-0, 7=10-8-0
Max Horiz 1=-91 (LC 8)
Max Uplift 6=-100 (LC 13), 7=-101 (LC 12)
Max Grav 1=150 (LC 1), 5=150 (LC 1), 6=301 (LC 20), 7=303 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-151/33, 2-3=-149/67, 3-4=-149/67, 4-5=-150/30
BOT CHORD 1-7=-24/111, 6-7=-24/111, 5-6=-24/111
WEBS 2-7=-213/165, 4-6=-211/165

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 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" oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 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



January 9,2024

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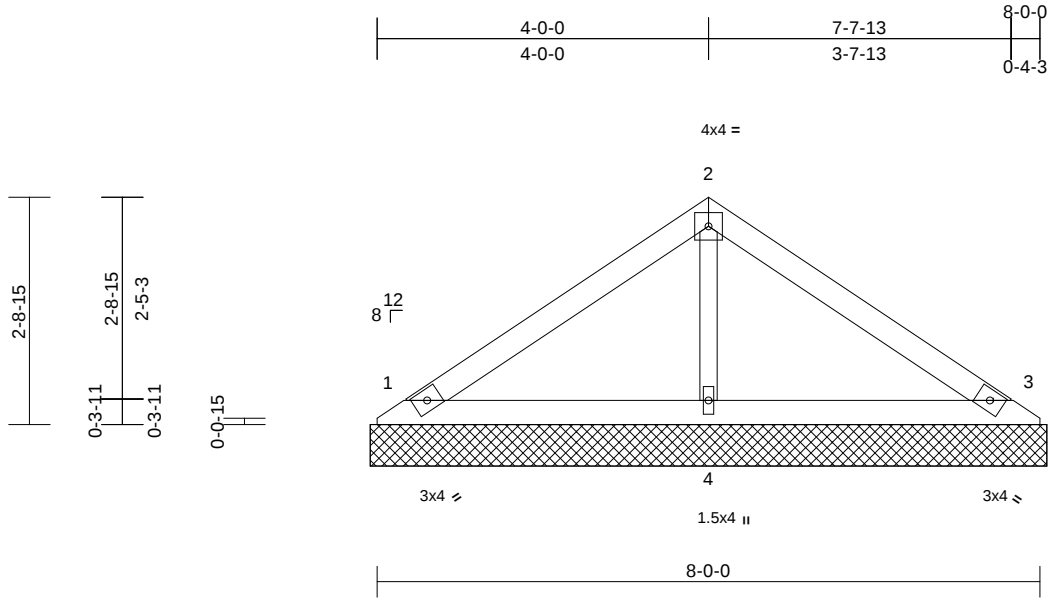
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	
P240008-01	V3	Valley	2	1	Job Reference (optional)	I62908276

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

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Page: 1



Scale = 1:27.8

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	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=8-2-0, 3=8-2-0, 4=8-2-0
Max Horiz 1=68 (LC 11)
Max Uplift 1=-46 (LC 12), 3=-55 (LC 13)
Max Grav 1=184 (LC 1), 3=184 (LC 1), 4=286 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-116/68, 2-3=-110/68
BOT CHORD 1-4=-14/54, 3-4=-14/54
WEBS 2-4=-195/101

NOTES

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

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 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



January 9,2024

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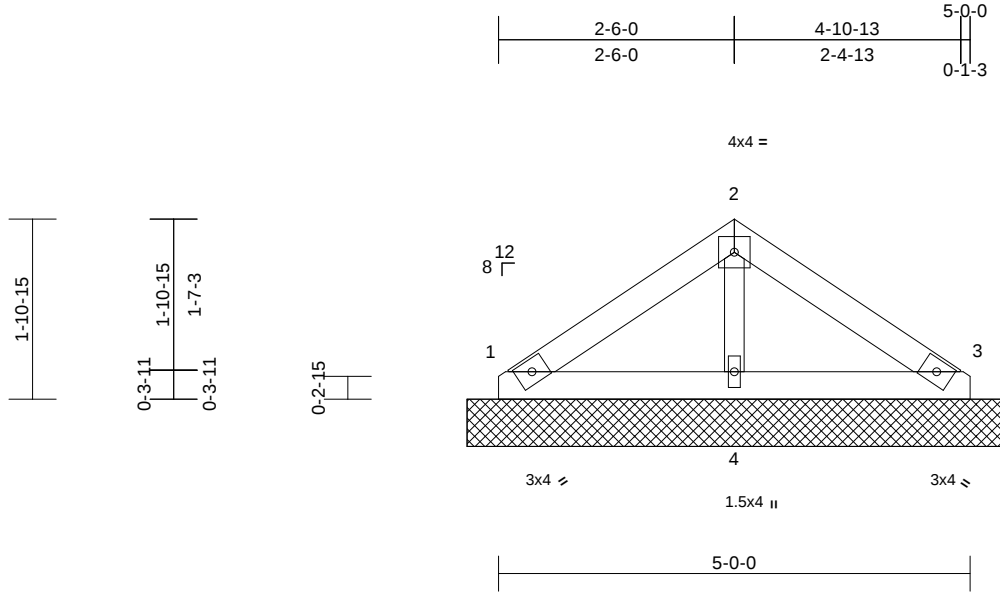
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	162908277
P240008-01	V4	Valley	2	1	Job Reference (optional)	

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 Jan 08 10:56:52

Page: 1

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Scale = 1:24.4

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.02	Horiz(TL)	0.00	3	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
OTHERS 2x3 SPF No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-8-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=5-8-0, 3=5-8-0, 4=5-8-0
Max Horiz 1=44 (LC 9)
Max Uplift 1=30 (LC 12), 3=36 (LC 13)
Max Grav 1=120 (LC 1), 3=120 (LC 1), 4=184 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-76/53, 2-3=-72/53
BOT CHORD 1-4=-9/36, 3-4=-9/36
WEBS 2-4=-126/82

NOTES

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

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 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



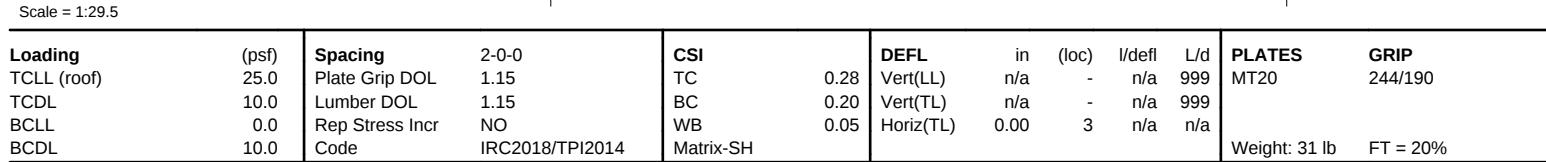
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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters 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)

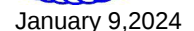
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- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

Design valid for use only with MiteTek® 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.sbccomponents.com)

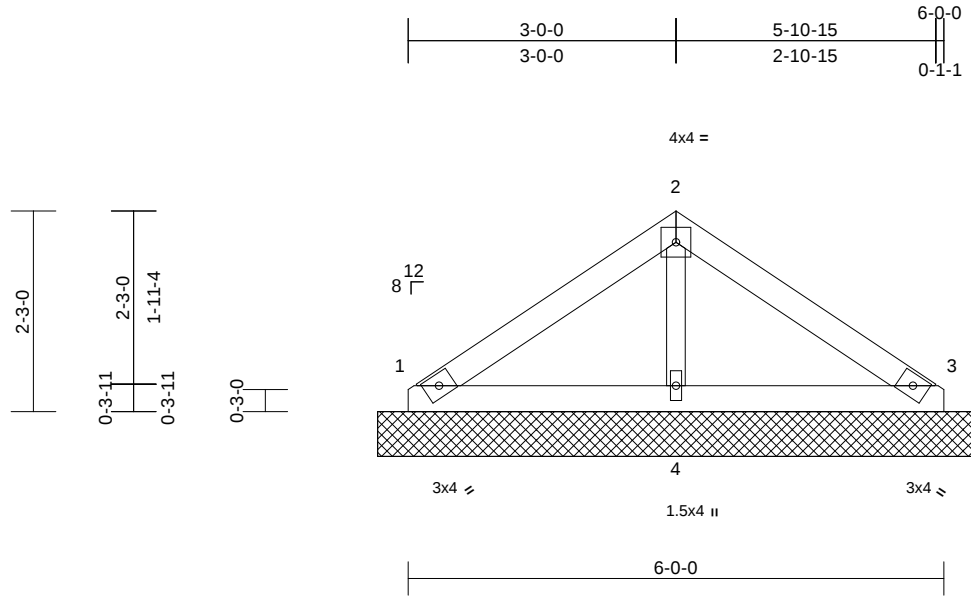
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Crestedmont, MO 63017
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02/08/2024 2:34:44

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 44	I62908279
P240008-01	V6	Valley	1	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 Jan 08 10:56:53
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Page: 1



Scale = 1:25.8

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	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.03	Horiz(TL)	0.00	3	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
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=6-8-3, 3=6-8-3, 4=6-8-3
Max Horiz 1=-54 (LC 8)
Max Uplift 1=-36 (LC 12), 3=-43 (LC 13)
Max Grav 1=145 (LC 1), 3=145 (LC 1), 4=224 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-92/62, 2-3=-87/62
BOT CHORD 1-4=-11/43, 3-4=-11/43
WEBS 2-4=-152/94

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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 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



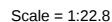
January 9,2024

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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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 Jan 08 10:56:53 Page: 1
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[illegible]

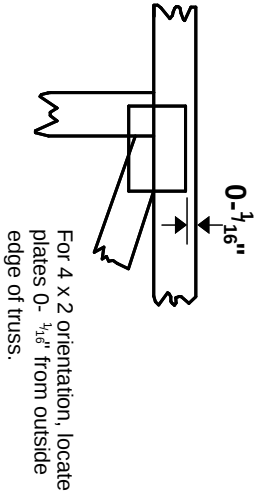
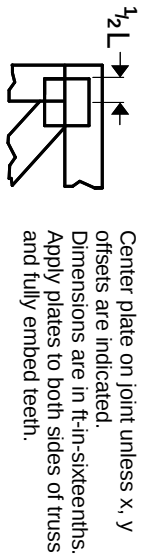
January 9, 2024

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Symbols

PLATE LOCATION AND ORIENTATION



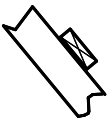
For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

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

PLATE SIZE

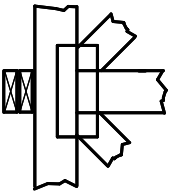
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

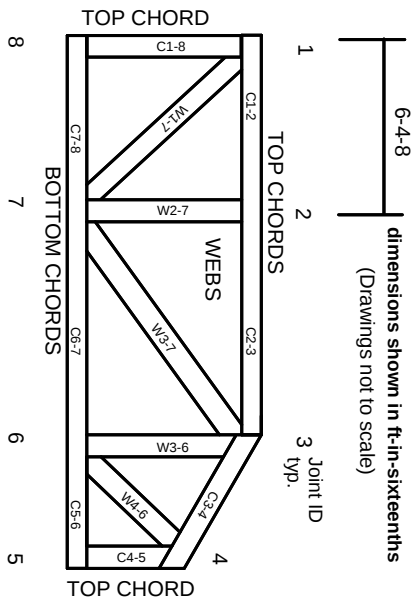
BEARING



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: 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/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.

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