

12/22/2023

RE: P230888-01
Roof - Osage Lot 48

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

Site Information:

Customer: Clover & Hive Project Name: P230888-01
Lot/Block: 48 Model:
Address: 3733/3735/3737/3739 SW Clayton Blvd. Subdivision: Osage
City: Lee's Summit State: MO

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-16 Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 26 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I62216229	A1	11/29/2023	21	I62216249	V2	11/29/2023
2	I62216230	A2	11/29/2023	22	I62216250	V3	11/29/2023
3	I62216231	A3	11/29/2023	23	I62216251	V4	11/29/2023
4	I62216232	A4	11/29/2023	24	I62216252	V5	11/29/2023
5	I62216233	B1	11/29/2023	25	I62216253	V6	11/29/2023
6	I62216234	B2	11/29/2023	26	I62216254	V7	11/29/2023
7	I62216235	C1	11/29/2023				
8	I62216236	C2	11/29/2023				
9	I62216237	C3	11/29/2023				
10	I62216238	C4	11/29/2023				
11	I62216239	D1	11/29/2023				
12	I62216240	D2	11/29/2023				
13	I62216241	D3	11/29/2023				
14	I62216242	E1	11/29/2023				
15	I62216243	E2	11/29/2023				
16	I62216244	G1	11/29/2023				
17	I62216245	G1A	11/29/2023				
18	I62216246	G2	11/29/2023				
19	I62216247	G2A	11/29/2023				
20	I62216248	V1	11/29/2023				

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

Truss Design Engineer's Name: Sevier, Scott

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: 001193

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



November 29, 2023

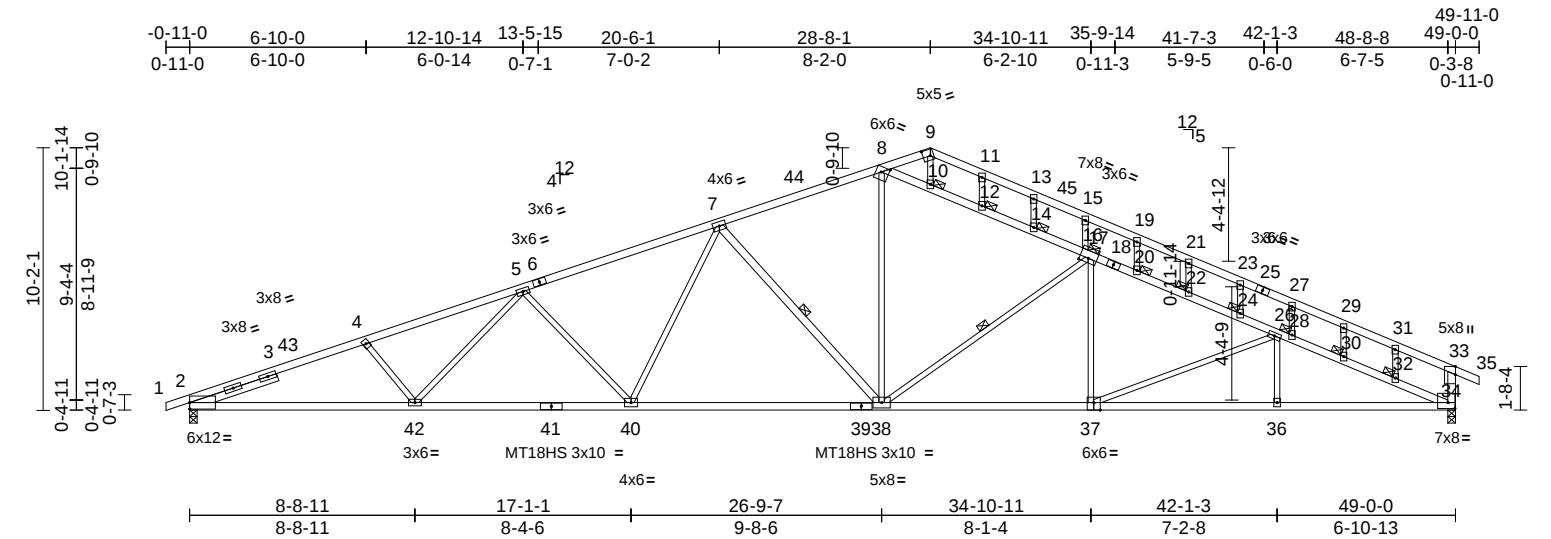
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216229 LEE'S SUMMIT, MISSOURI
P230888-01	A1	Roof Special Structural Gable	1	1	Job Reference (optional)	

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 Nov 27 21:00:07

ID:kkw6VMCTKypJEPYbt576Oz_rGt-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKVCDoi7342364

12/22/2023



Scale = 1:89.2									
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], [33:0-3-13,Edge], [34:0-3-4,0-2-12], [37:0-3-0,Edge]									
Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.44	38-40	>999
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.92	38-40	>634
BCLL	0.0	Rep Stress Incr	NO	WB	0.99	Horz(CT)	0.27	34	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH					
PLATES GRIP									
MT20 244/190									
MT18HS 244/190									
Weight: 264 lb FT = 20%									

LUMBER		TOP CHORD		1-2=0/0, 2-4=-5397/1088, 4-5=-5154/1055, 5-7=-4366/941, 7-8=-3140/767, 8-9=-594/412, 9-11=-605/413, 11-13=-611/375, 13-15=-652/353, 15-19=-592/287, 19-21=-602/258, 21-23=-637/240, 23-27=-644/202, 27-29=-602/139, 29-31=-640/122, 31-33=-673/92, 33-35=0/29, 33-34=-501/176, 8-10=-2585/471, 10-12=-2507/414, 12-14=-2549/438, 14-16=-2567/446, 16-17=-2682/497, 17-20=-3326/616, 20-22=-3365/634, 22-24=-3383/642, 24-26=-3436/673, 26-28=-3910/830, 28-30=-4001/888, 30-32=-4022/897, 32-34=-4049/926	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 28-8-1, Exterior(2R) 28-8-1 to 33-8-1, Interior (1) 33-8-1 to 49-11-0 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	
TOP CHORD	2x4 SP No.2 *Except* 1-6:2x4 SP 2400F 2.0E, 6-9:2x4 SP 1650F 1.5E	BOT CHORD		2-42=-966/4973, 40-42=-861/4585, 38-40=-653/3694, 36-38=-855/4248, 34-36=-855/4248		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.
BOT CHORD	2x4 SP 2400F 2.0E *Except* 41-39,39-37:2x4 SP 1650F 1.5E	WEBS		9-10=-158/203, 11-12=-109/75, 13-14=-49/32, 15-16=-305/150, 19-20=-101/53, 21-22=-47/23, 23-24=-140/84, 27-28=-243/157, 29-30=-55/22, 31-32=-69/74, 4-42=-224/176, 5-42=-50/441, 5-40=-793/290, 7-40=-117/861, 7-38=-1207/364, 8-38=-284/1632, 17-38=-971/262, 17-37=-10/469, 26-37=-668/272, 26-36=0/238		4) All plates are MT20 plates unless otherwise indicated.
WEBS	2x3 SPF No.2 *Except* 34-33:2x4 SP 1650F 1.5E, 7-38:2x4 SP No.2	BRACING		1) Unbalanced roof live loads have been considered for this design.		
OTHERS	2x3 SPF No.2	REACTIONS		(size) 2=0-3-8, 34=0-3-8		
SLIDER	Left 2x4 SPF No.3 -- 3-6-9	FORCES		(lb) - Maximum Compression/Maximum Tension		
				</		



November 29,2023

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216229 LEE'S SUMMIT, MISSOURI
P230888-01	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 Nov 27 21:00:07
ID:kkw6VMCTKypIjEPYbt576Oz_rGt-RfC?PsB70Hq3NSgPqnL8w3ulTXbGK1VrCDoi734zJG94

- 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) N/A

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.**

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)

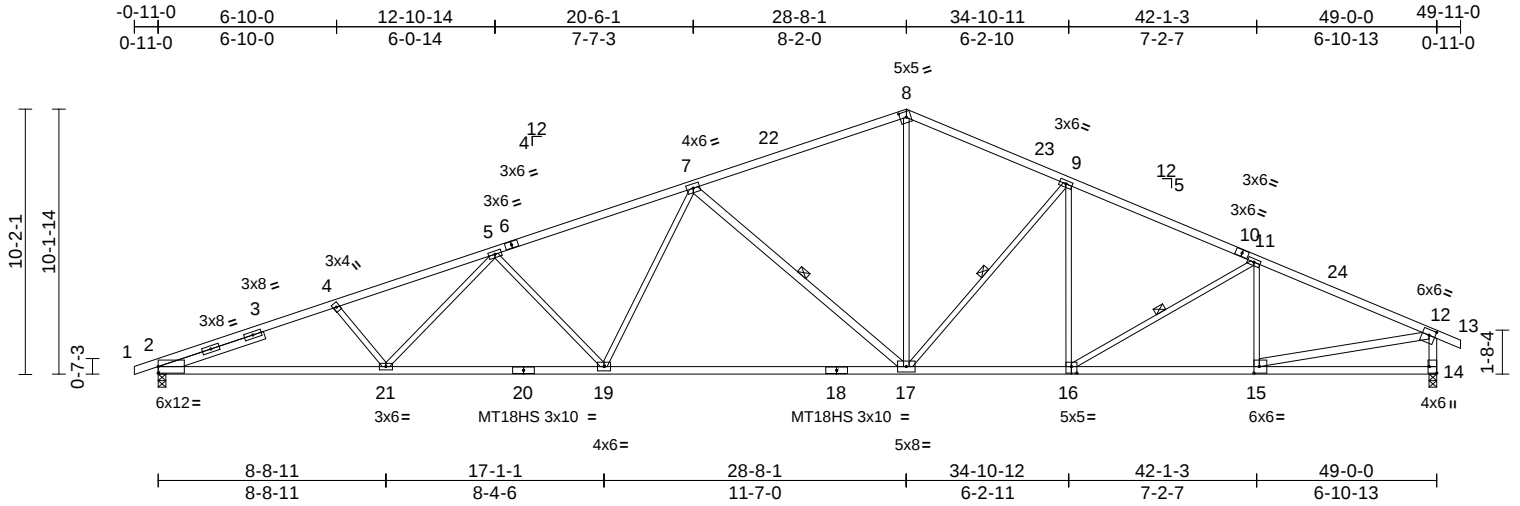
MiTek®
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION
P230888-01	A2	Roof Special	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216230 LEE'S SUMMIT, MISSOURI

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 Nov 27 21:00:09
ID:kkw6VMCTKypIjEPYbt576Oz_rGt-RfC?PsB70Hq3NSgPqnL8w3uITXbGK1VrCDoi7342J64

12/22/2023



Scale = 1:88.3

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	0.96	Vert(LL)	-0.42	17-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.98	17-19	>598	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.20	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH								
Weight: 235 lb											FT = 20%	

LUMBER

TOP CHORD 2x4 SP 1650F 1.5E *Except* 10-13:2x4 SP No.2, 6-8:2x4 SP 2400F 2.0E
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 -- 4-3-0

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-5-5 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=177 (LC 16)
Max Uplift 2=413 (LC 8), 14=301 (LC 13)
Max Grav 2=2262 (LC 1), 14=2273 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-5391/1090, 4-5=-5159/1057, 5-7=-4375/934, 7-8=-2917/733, 8-9=-2985/750, 9-11=-3408/775, 11-12=-3420/708, 12-13=0/29, 12-14=-2203/573
BOT CHORD 2-21=-973/4986, 19-21=-853/4578, 17-19=-663/3707, 15-17=-572/3075, 14-15=-89/191
WEBS 12-15=-494/2949, 4-21=-244/182, 8-17=-297/1547, 5-19=-757/281, 11-15=-476/203, 9-16=-5/232, 11-16=-185/146, 7-17=-1392/411, 5-21=-66/451, 9-17=-688/266, 7-19=-89/865

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 28-8-1, Exterior(2R) 28-8-1 to 33-8-1, Interior (1) 33-8-1 to 49-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) 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



November 29, 2023

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

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

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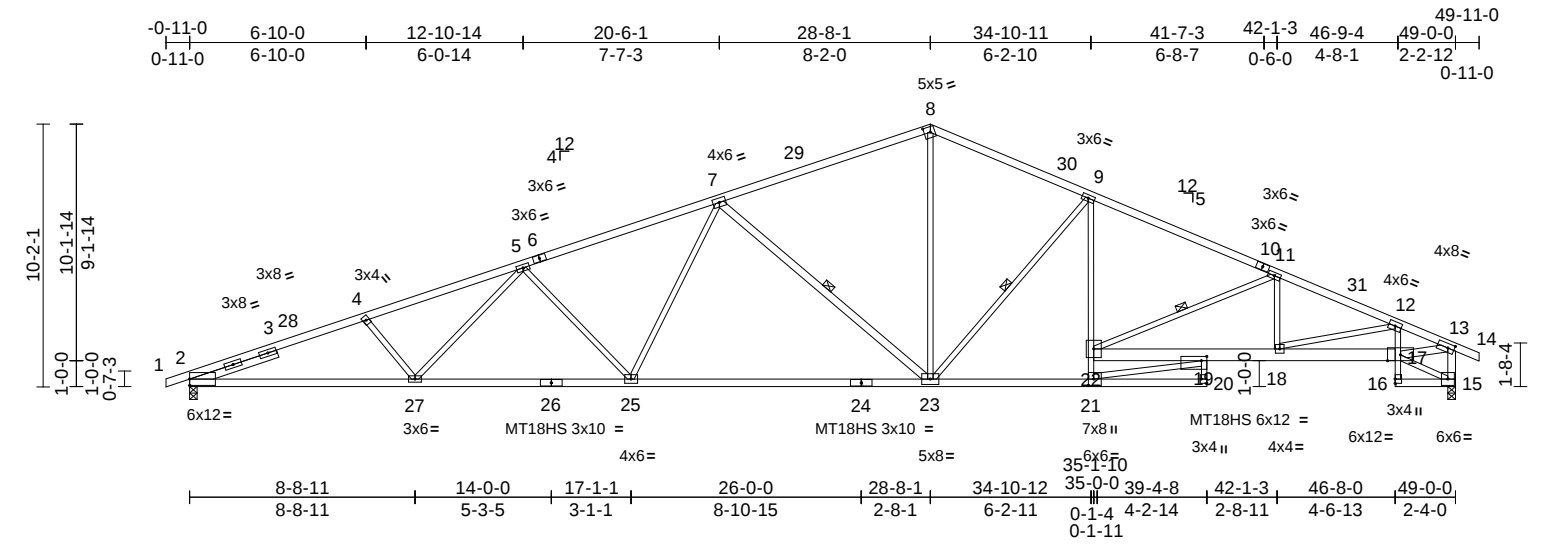
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION
P230888-01	A3	Roof Special	5	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216231 LEE'S SUMMIT, MISSOURI

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 Nov 27 21:00:10 Page: 1
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12/22/2023



Scale = 1:89.2									
Plate Offsets (X, Y): [8:0-2-15,0-2-8], [13:0-2-15,0-2-0], [19:0-2-8,0-2-0], [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
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.42 23-25	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-1.00 23-25	>584	180
BCLL	0.0	Rep Stress Incr	NO	WB	0.98	Horz(CT)	0.32 15	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH					
						PLATES		GRIP	
						MT20		244/190	
						MT18HS		197/144	
						Weight: 253 lb FT = 20%			

LUMBER	
TOP CHORD	2x4 SP 2400F 2.0E *Except* 10-14:2x4 SP No.2, 10-8:2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP No.2 *Except* 20-19,12-16:2x3 SPF No.2, 22-17:2x6 SP 2400F 2.0E, 24-26,26-2:2x4 SP 2400F 2.0E, 20-24:2x4 SP 1650F 1.5E
WEBS	2x3 SPF No.2 *Except* 15-13:2x4 SPF No.3, 23-7,13-17:2x4 SP No.2
SLIDER	Left 2x4 SPF No.3 -- 3-6-9
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 2-1-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-5-5 oc bracing.
WEBS	1 Row at midpt 11-22, 7-23, 9-23
REACTIONS	
(size)	2=0-3-8, 15=0-3-8
Max Horiz	2=177 (LC 16)
Max Uplift	2=-413 (LC 8), 15=-300 (LC 13)
Max Grav	2=2262 (LC 1), 15=2272 (LC 1)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/0, 2-4=-5397/1092, 4-5=-5150/1058, 5-7=-4377/935, 7-8=-2916/733, 8-9=-2986/751, 9-11=-3413/776, 11-12=-4646/948, 12-13=-3565/757, 13-14=0/28, 13-15=-2201/547
BOT CHORD	19-20=0/87, 19-22=-276/1223, 18-19=-783/4246, 17-18=-686/3295, 16-17=0/39, 12-17=-827/203, 15-16=-28/126, 2-27=-971/4974, 25-27=-854/4580, 23-25=-663/3707, 21-23=-511/3057, 20-21=-28/259

WEBS	
11-18=-3/563, 4-27=-237/181,	
8-23=-298/1548, 5-25=-759/282,	
9-22=-3/227, 21-22=-604/172,	
11-22=-1292/296, 7-23=-1391/411,	
5-27=-64/440, 7-25=-90/867, 9-23=-689/271,	
15-17=-109/56, 13-17=-675/3295,	
12-18=-139/986, 19-21=-493/2847	

- 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 28-8-1, Exterior(2R) 28-8-1 to 33-8-1, Interior (1) 33-8-1 to 49-10-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) 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 SP No.2 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



November 29,2023

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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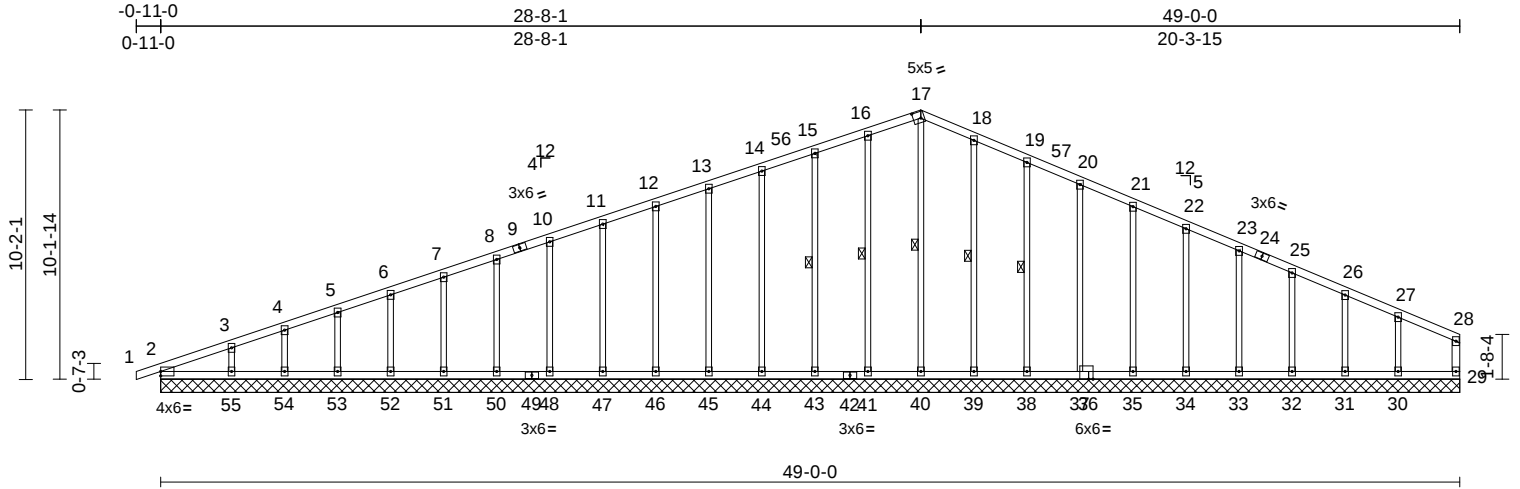
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION
P230888-01	A4	Roof Special Supported Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						162216232
						LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:30 Page: 1

ID:kkw6VMCTKypIjEPYbt576Oz_rGt-RfC?PsB70Hq3NSgPqnL8w3uITXbGK1VrCDoi7342J64

12/22/2023



Scale = 1:86.9

Plate Offsets (X, Y): [17:0-3-7,0-3-0], [36:0-2-0,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	0.04	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: 253 lb FT = 20%											

LUMBER		Max Grav	2=175 (LC 1), 29=91 (LC 1), 30=205 (LC 26), 31=174 (LC 1), 32=181 (LC 26), 33=180 (LC 1), 34=180 (LC 26), 35=180 (LC 26), 37=180 (LC 1), 38=180 (LC 26), 39=188 (LC 26), 40=213 (LC 22), 41=188 (LC 25), 43=180 (LC 25), 44=180 (LC 1), 45=180 (LC 25), 46=180 (LC 1), 47=180 (LC 25), 48=180 (LC 1), 50=180 (LC 1), 51=180 (LC 1), 52=179 (LC 25), 53=185 (LC 1), 54=159 (LC 25), 55=242 (LC 25)	WEBS	17-40=-179/36, 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=-139/70, 5-53=-143/71, 4-54=-128/66, 3-55=-178/85, 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=-135/67, 27-30=-160/106
TOP CHORD	2x4 SP No.2				
BOT CHORD	2x4 SP 2400F 2.0E *Except* 36-42,42-49:2x4 SP No.2				
WEBS	2x4 SPF No.3				
OTHERS	2x3 SPF No.2				
BRACING					
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.				
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.				
WEBS	1 Row at midpt 17-40, 16-41, 15-43, 18-39, 19-38				
REACTIONS (size)		2=49-0-0, 29=49-0-0, 30=49-0-0, 31=49-0-0, 32=49-0-0, 33=49-0-0, 34=49-0-0, 35=49-0-0, 37=49-0-0, 38=49-0-0, 39=49-0-0, 40=49-0-0, 41=49-0-0, 43=49-0-0, 44=49-0-0, 45=49-0-0, 46=49-0-0, 47=49-0-0, 48=49-0-0, 50=49-0-0, 51=49-0-0, 52=49-0-0, 53=49-0-0, 54=49-0-0, 55=49-0-0	FORCES (lb) - Maximum Compression/Maximum Tension		
Max Horiz	2=187 (LC 16)				
Max Uplift	2=-32 (LC 13), 30=-101 (LC 13), 31=-38 (LC 13), 32=-54 (LC 13), 33=-50 (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=-47 (LC 12), 54=-43 (LC 8), 55=-62 (LC 12)	TOP CHORD	1-2=0/18, 2-3=-194/110, 3-4=-162/118, 4-5=-141/134, 5-6=-120/151, 6-7=-99/168, 7-8=-78/185, 8-10=-85/208, 10-11=-97/236, 11-12=-108/264, 12-13=-119/292, 13-14=-131/320, 14-15=-142/348, 15-16=-154/377, 16-17=-164/400, 17-18=-169/398, 18-19=-155/341, 19-20=-140/281, 20-21=-125/243, 21-22=-111/207, 22-23=-96/171, 23-25=-81/135, 25-26=-66/99, 26-27=-53/65, 27-28=-61/41, 28-29=-72/21		
		BOT CHORD	2-55=-42/78, 54-55=-38/76, 53-54=-38/76, 52-53=-38/76, 51-52=-38/76, 50-51=-38/76, 48-50=-38/76, 47-48=-38/76, 46-47=-38/76, 45-46=-38/76, 44-45=-38/76, 43-44=-38/76, 41-43=-38/76, 40-41=-38/76, 39-40=-38/76, 38-39=-38/76, 37-38=-38/76, 35-37=-38/76, 34-35=-38/76, 33-34=-38/76, 32-33=-38/76, 31-32=-38/76, 30-31=-38/76, 29-30=-38/76		

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



November 29,2023

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 48	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216232 LEE'S SUMMIT, MISSOURI
P230888-01	A4	Roof Special Supported 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 Nov 27 21:09:30 Page: 2

ID:kkw6VMCTKypIjEPYbt576Oz_rGt-RfC?PsB70Hq3NSgPqnL8w3ulTXbGK1VrCDoi734z3C94

12/22/2023

- 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 28-8-1, Corner(3R) 28-8-1 to
33-8-1, Exterior(2N) 33-8-1 to 48-10-4 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 2400F 2.0E crushing
capacity of 805 psi.
- 9) Solid blocking is required on both sides of the truss at
joint(s), 2.
- 10) Beveled plate or shim required to provide full bearing
surface with truss chord at joint(s) 2.
- 11) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard**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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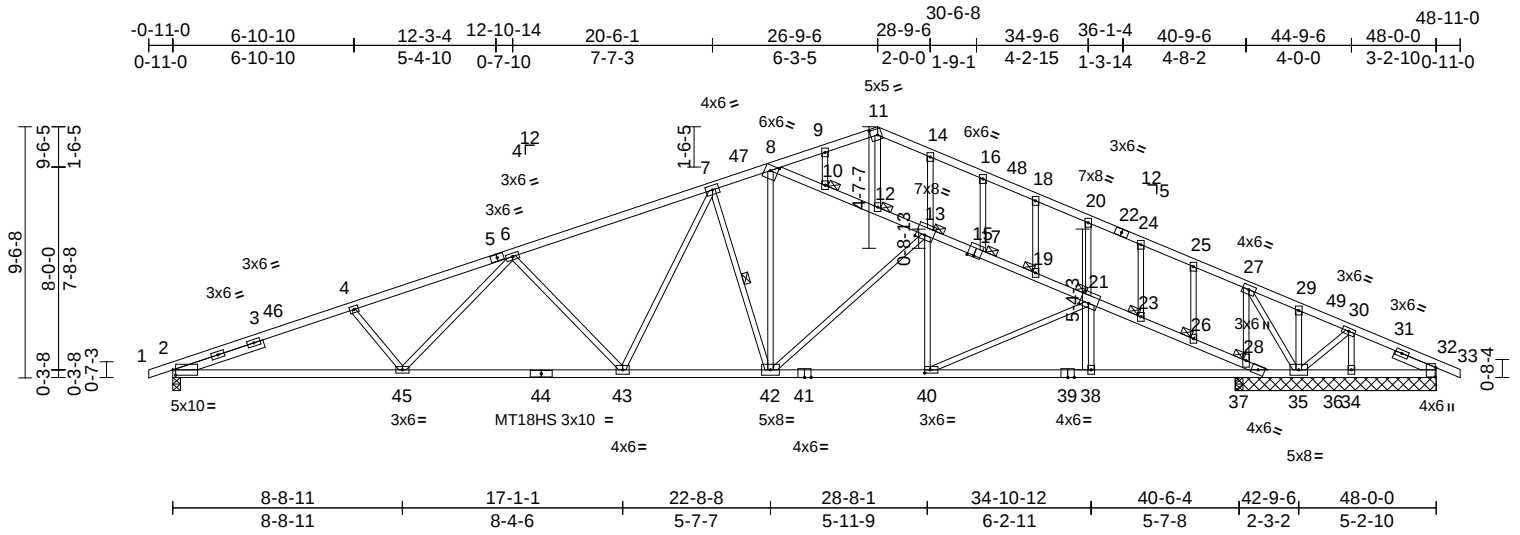
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION
P230888-01	B1	Roof Special Structural Gable	4	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216233 LEE'S SUMMIT, MISSOURI

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 Nov 27 21:00:11

ID:kkw6VMCTKypIjEPYbt576Oz_rGt-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKVCDoi7342J694

12/22/2023



Scale = 1:87.5

Plate Offsets (X, Y): [2:0-1-4,0-2-8], [8:0-3-8,0-2-7], [11:0-3-3,0-2-12], [13:0-4-0,0-2-0], [15:0-3-0,0-0-12], [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	0.80	Vert(LL)	-0.37	43-45	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.73	43-45	>669	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.23	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=-4430/866, 4-6=-4194/834, 6-7=-3356/716, 7-8=-2655/646, 8-9=-741/252, 9-11=-742/281, 11-14=-761/292, 14-16=-761/253, 16-18=-790/234, 18-20=-822/212, 20-24=-753/143, 24-25=-778/118, 25-27=-817/100, 27-29=-329/412, 29-30=-355/376, 30-32=-159/138, 32-33=0/0, 8-10=-1901/410, 10-12=-1952/434, 12-13=-1844/396, 13-17=-2221/485, 17-19=-2238/498, 19-21=-2263/512, 21-23=-2773/665, 23-26=-2800/680, 26-28=-2818/690, 28-36=-2584/630, 2-45=-774/4081, 43-45=-633/3635, 42-43=-382/2755, 40-42=-360/2767, 38-40=-525/3270, 37-38=-525/3270, 36-37=-525/3270, 35-36=-694/0, 34-35=-105/174, 32-34=-105/174, 11-12=-99/280, 9-10=-131/64, 13-14=-168/120, 16-17=-46/34, 18-19=-69/40, 20-21=-282/157, 23-24=-73/43, 25-26=-52/31, 27-28=-236/935, 29-35=-42/44, 30-34=-183/129, 4-45=-248/176, 6-45=-51/484, 6-43=-800/284, 8-42=-297/1354, 7-42=-1021/315, 13-42=-494/112, 13-40=-16/408, 21-40=-604/212, 21-38=0/184, 30-35=-326/319, 27-35=-1953/558, 7-43=-141/814
BRACING		BOT CHORD		2-45=-774/4081, 43-45=-633/3635, 42-43=-382/2755, 40-42=-360/2767, 38-40=-525/3270, 37-38=-525/3270, 36-37=-525/3270, 35-36=-694/0, 34-35=-105/174, 32-34=-105/174, 11-12=-99/280, 9-10=-131/64, 13-14=-168/120, 16-17=-46/34, 18-19=-69/40, 20-21=-282/157, 23-24=-73/43, 25-26=-52/31, 27-28=-236/935, 29-35=-42/44, 30-34=-183/129, 4-45=-248/176, 6-45=-51/484, 6-43=-800/284, 8-42=-297/1354, 7-42=-1021/315, 13-42=-494/112, 13-40=-16/408, 21-40=-604/212, 21-38=0/184, 30-35=-326/319, 27-35=-1953/558, 7-43=-141/814
REACTIONS		WEBS		11-12=-99/280, 9-10=-131/64, 13-14=-168/120, 16-17=-46/34, 18-19=-69/40, 20-21=-282/157, 23-24=-73/43, 25-26=-52/31, 27-28=-236/935, 29-35=-42/44, 30-34=-183/129, 4-45=-248/176, 6-45=-51/484, 6-43=-800/284, 8-42=-297/1354, 7-42=-1021/315, 13-42=-494/112, 13-40=-16/408, 21-40=-604/212, 21-38=0/184, 30-35=-326/319, 27-35=-1953/558, 7-43=-141/814
FORCES		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 48-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 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 1650F 1.5E crushing capacity of 565 psi.



November 29, 2023

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 48
P230888-01	B1	Roof Special Structural Gable	4	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
162216233
LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:11 Page: 2
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12/22/2023

- 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) N/A

LOAD CASE(S) Standard

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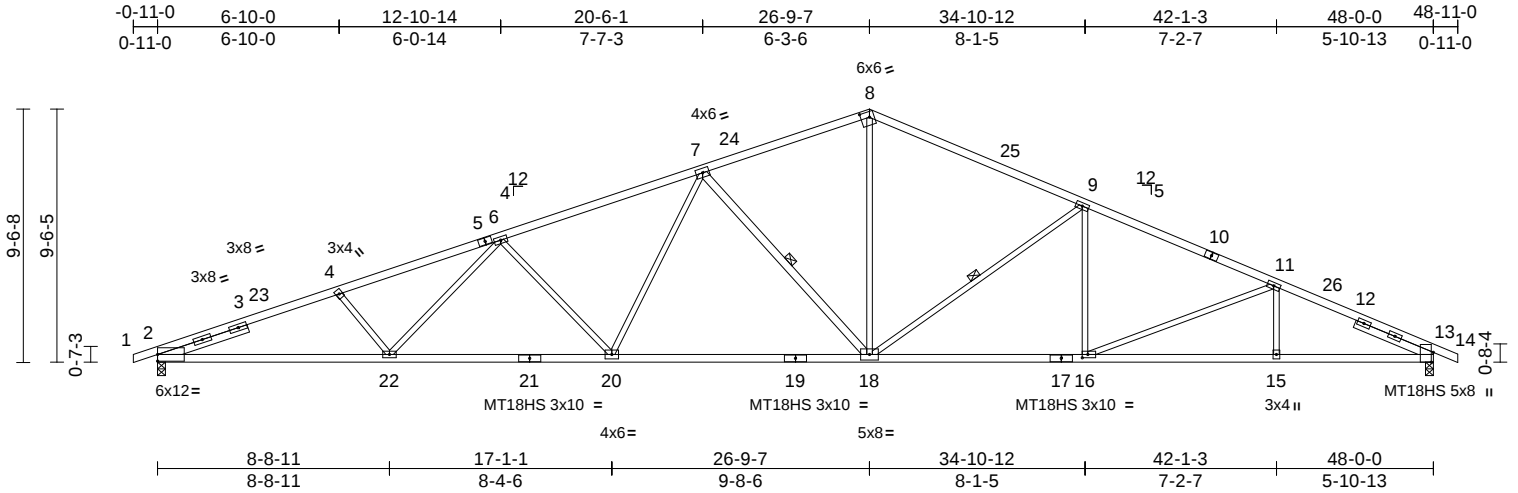
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION
P230888-01	B2	Roof Special	8	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						162216234
						LEE'S SUMMIT, MISSOURI

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 Nov 27 21:00:12 Page: 1

ID:kkw6VMCTKypIjEPYbt576Oz_rGt-RfC?PsB70Hq3NSgPqnL8w3ulTXbGK-VrCdoi73423694

12/22/2023



Scale = 1:86.7

Plate Offsets (X, Y): [8:0-3-15,0-2-8], [13:0-4-7,Edge], [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	0.87	Vert(LL)	-0.40	20-22	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.85	18-20	>677	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.25	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH								
Weight: 218 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* 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 -- 3-2-1

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-6-6 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=-4248/922, 7-8=-3028/756, 8-9=-3158/759, 9-11=-3964/856, 11-13=-4430/895, 13-14=0/0
BOT CHORD 2-22=-917/4876, 20-22=-785/4475, 18-20=-572/3582, 16-18=-601/3610, 15-16=-715/3920, 13-15=-715/3920
WEBS 4-22=-238/180, 8-18=-308/1653, 6-22=-55/458, 7-20=-117/860, 7-18=-1209/360, 6-20=-793/290, 11-15=0/226, 9-16=0/396, 11-16=-423/169, 9-18=-1028/325

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 26-9-7, 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 R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



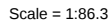
November 29, 2023

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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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.40	38-40	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.86	38-40	>662	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.24	33	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 263 lb	FT = 20%

LUMBER		TOP CHORD	1-2=0/0, 2-3=-5348/1076, 3-4=-5105/1043, 4-6=-4207/910, 6-7=-2986/741, 7-9=-629/333, 9-11=-647/327, 11-12=-652/291, 12-14=-694/270, 14-17=-625/198, 17-19=-638/168, 19-22=-667/150, 22-25=-697/115, 25-29=-727/66, 29-31=-49/319, 31-34=-89/212, 7-8=-2388/536, 8-10=-2304/496, 10-13=-2347/517, 13-15=-2364/526, 15-16=-2487/582, 16-18=-2952/687, 18-20=-2990/706, 20-23=-3013/715, 23-24=-3042/743, 24-26=-3088/832, 26-28=-3112/881, 28-32=-3065/908, 32-33=-4036/969, 33-34=-84/219	2) 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 Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 28-8-1, Exterior(2R) 28-8-1 to 33-8-1, Interior (1) 33-8-1 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
TOP CHORD	2x4 SP No.2 *Except* 1-5:2x4 SP 2400F 2.0E, 21-33,5-9:2x4 SP 1650F 1.5E			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.
BOT CHORD	2x4 SP 2400F 2.0E *Except* 39-41,37-39:2x4 SP 1650F 1.5E			4) All plates are MT20 plates unless otherwise indicated.
WEBS	2x3 SPF No.2 *Except* 6-38,33-34:2x4 SP No.2	BOT CHORD	2-42=-1019/4931, 40-42=-893/4437, 38-40=-685/3551, 36-38=-645/3366, 35-36=-804/3401, 33-35=-804/3401	5) All plates are 3x4 MT20 unless otherwise indicated.
OTHERS	2x3 SPF No.2			6) Gable studs spaced at 2-0-0 oc.
WEDGE	Left: 2x4 SPF No.3			7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
SLIDER	Right 2x4 SP No.2 -- 3-0-13	WEBS	8-9=-120/219, 10-11=-112/69, 12-13=-46/33, 14-15=-323/163, 17-18=-100/54, 19-20=-59/24, 22-23=-91/78, 25-26=-102/131, 28-29=0/123, 31-32=0/150, 3-42=-266/185, 4-42=-67/539, 4-40=-793/291, 6-40=-116/851, 6-38=-1212/360, 24-35=0/207, 24-36=-193/203, 16-38=-821/265, 7-38=-274/1532, 16-36=0/331, 32-34=-333/106, 29-32=-1235/46	8) All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
BRACING				
TOP CHORD	Structural wood sheathing directly applied or 2-7-12 oc purlins, except end verticals. Except: 28-33			
1 Row at midpt	28-33			
BOT CHORD	Rigid ceiling directly applied or 7-6-13 oc bracing.			
WEBS	1 Row at midpt 6-38, 16-38			
JOINTS	1 Brace at Jt(s): 8, 10, 13, 15, 18, 20, 23, 26, 28			
REACTIONS	(size) 2=0-3-8, 33=0-3-8 Max Horiz 2=186 (LC 16) Max Uplift 2=-407 (LC 8), 33=-268 (LC 13) Max Grav 2=2212 (LC 1), 33=2156 (LC 1)			
FORCES	(lb) - Maximum Compression/Maximum Tension			

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/TP1 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 48
P230888-01	C1	Roof Special Structural Gable	1	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
162216235
LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:12 Page: 2
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12/22/2023

- 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) N/A

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.**

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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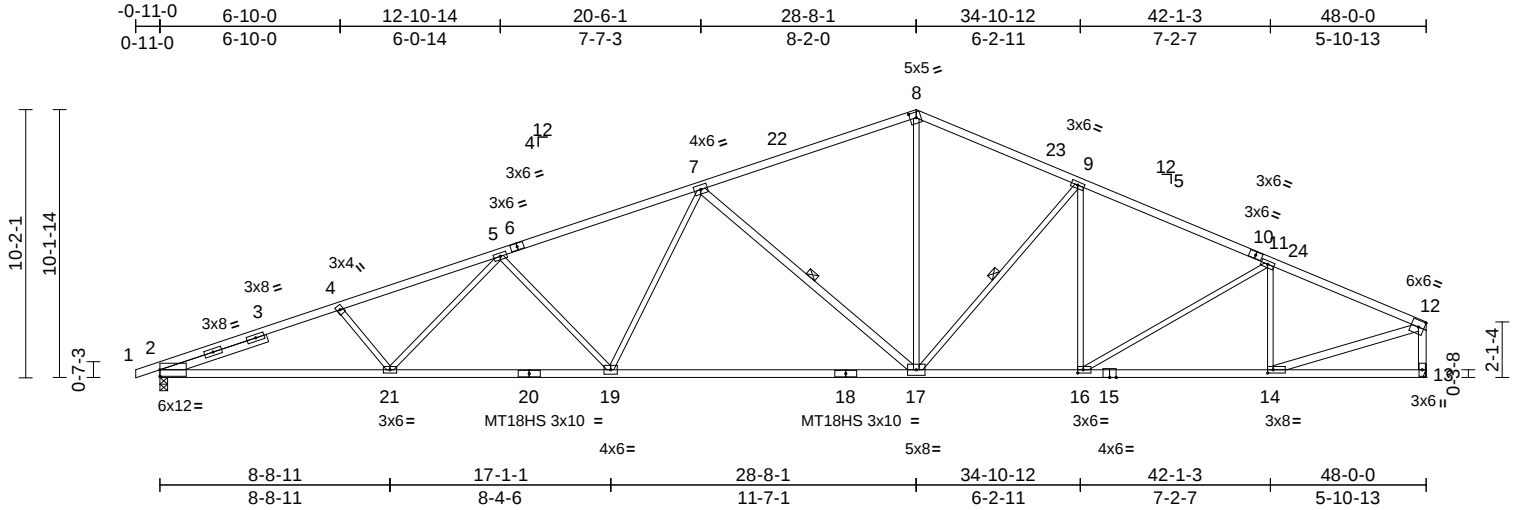
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION
P230888-01	C2	Roof Special	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						162216236
						LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:13 Page: 1

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12/22/2023



Scale = 1:87.3

Plate Offsets (X, Y): [8:0-2-15,0-2-8], [14:0-2-8,0-1-8], [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	0.91	Vert(LL)	-0.40	17-19	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.95	17-19	>607	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.19	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 229 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 1650F 1.5E *Except* 10-12:2x4 SP No.2, 6-8:2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP 2400F 2.0E *Except* 18-15:2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except* 13-12:2x4 SPF No.3, 17-14:12:2x4 SP No.2
SLIDER Left 2x4 SPF No.3 -- 4-3-0

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-1-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-3-6 oc bracing.

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

REACTIONS (size) 2=0-3-8, 13= Mechanical
Max Horiz 2=186 (LC 16)
Max Uplift 2=-408 (LC 8), 13=-263 (LC 13)
Max Grav 2=2218 (LC 1), 13=2153 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-4=-5269/1066, 4-5=-5035/1032, 5-7=-4243/908, 7-8=-2781/706, 8-9=-2846/726, 9-11=-3178/735, 11-12=-2921/622, 12-13=-2098/498
BOT CHORD 2-21=-1011/4871, 19-21=-889/4454, 17-19=-699/3580, 16-17=-529/2845, 14-16=-557/2636, 13-14=-58/73
WEBS 4-21=-248/182, 8-17=-278/1451, 5-19=-758/281, 7-17=-1394/411, 9-17=-586/248, 5-21=-67/457, 7-19=-89/866, 12-14=-525/2698, 11-14=-694/256, 11-16=-49/315, 9-16=-50/143

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 28-8-1, Exterior(2R) 28-8-1 to 33-8-1, Interior (1) 33-8-1 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) 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 13 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



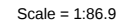
November 29, 2023

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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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	1.00	Vert(LL)	-0.42	25-27	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-1.00	25-27	>576	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.92	Horz(CT)	0.38	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 254 lb	FT = 20%

WEBS

4-29=-241/181, 8-25=-283/1463,
5-29=-65/449, 7-27=-92/866,
11-20=-385/2282, 5-27=-762/282,
14-19=-1186/5230, 11-22=-981/301,
22-24=-591/206, 9-22=-48/136,
9-25=-593/236, 7-25=-1391/413,
21-24=-628/2677, 13-20=-1516/355,
11-13=-4643/1067

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 28-8-1, Exterior(2R) 28-8-1 to
33-8-1, Interior (1) 33-8-1 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) The Fabrication Tolerance at joint 13 = 0%
- 6) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 7) Bearings are assumed to be: Joint 2 SP 2400F 2.0E
crushing capacity of 805 psi, Joint 15 SPF No.3
crushing capacity of 425 psi.
- 8) Refer to girder(s) for truss to truss connections.
- 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.

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/TP1 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)

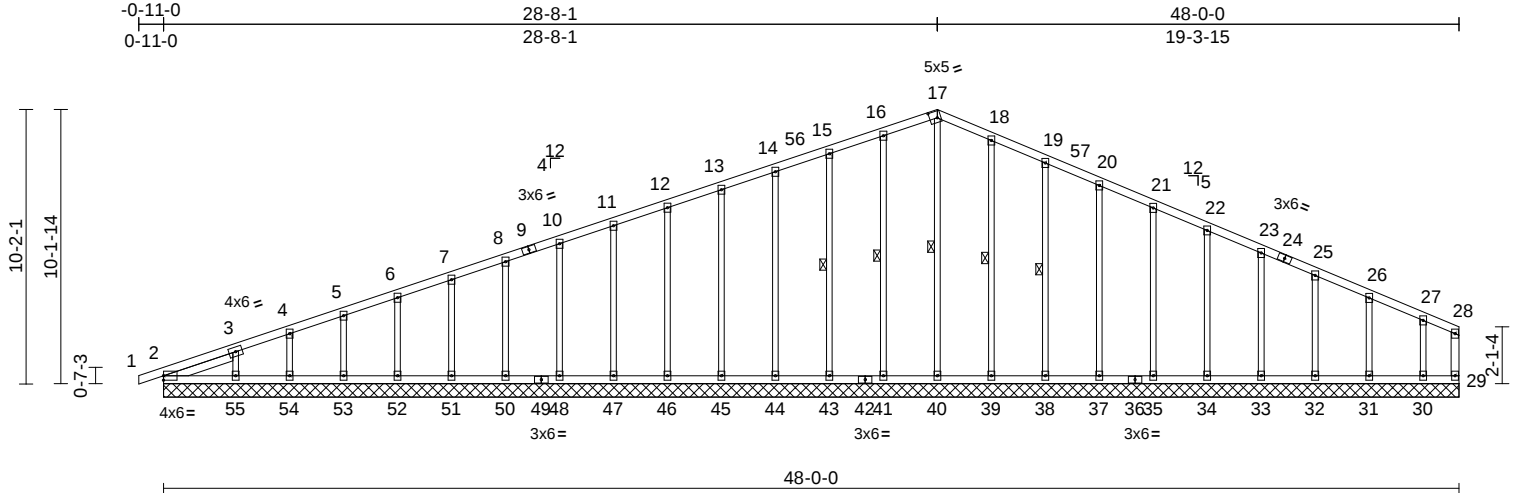
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION
P230888-01	C4	Roof Special Supported Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216238 LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:34 Page: 1

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11/22/2023



Scale = 1:85.4

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: 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 -- 2-8-8

BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 17-40, 16-41, 15-43, 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, 37=48-0-0, 38=48-0-0, 39=48-0-0, 40=48-0-0, 41=48-0-0, 43=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=186 (LC 12)
Max Uplift 2=40 (LC 13), 30=97 (LC 13), 31=47 (LC 13), 32=52 (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=78 (LC 12)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/0, 2-3=-210/107, 3-4=-164/108, 4-5=-142/125, 5-6=-121/142, 6-7=-100/159, 7-8=-79/187, 8-10=-88/215, 10-11=-100/243, 11-12=-111/271, 12-13=-123/299, 13-14=-134/327, 14-15=-145/355, 15-16=-158/384, 16-17=-167/407, 17-18=-172/405, 18-19=-159/349, 19-20=-143/288, 20-21=-129/250, 21-22=-114/215, 22-23=-99/178, 23-25=-85/142, 25-26=-70/106, 26-27=-55/70, 27-28=-54/54, 28-29=-44/12, 2-55=-45/75, 54-55=-45/75, 53-54=-45/75, 52-53=-45/75, 51-52=-45/75, 50-51=-45/75, 48-50=-45/75, 47-48=-45/75, 46-47=-45/75, 45-46=-45/75, 44-45=-45/75, 43-44=-45/75, 41-43=-45/75, 40-41=-45/75, 39-40=-45/75, 38-39=-45/75, 37-38=-45/75, 35-37=-45/75, 34-35=-45/75, 33-34=-45/75, 32-33=-45/75, 31-32=-45/75, 30-31=-45/75, 29-30=-45/75
BOT CHORD

WEBS 17-40=-183/38, 16-41=-148/119, 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=-135/68, 3-55=-169/104, 18-39=-148/123, 19-38=-139/133, 20-37=-140/75, 21-35=-140/75, 22-34=-140/75, 23-33=-140/75, 25-32=-139/75, 26-31=-145/75, 27-30=-120/92

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



November 29, 2023

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 the 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 48	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216238 LEE'S SUMMIT, MISSOURI
P230888-01	C4	Roof Special Supported 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 Nov 27 21:09:34 Page: 2

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12/22/2023

- 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 28-8-1, Corner(3R) 28-8-1 to
33-8-1, Exterior(2N) 33-8-1 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.**

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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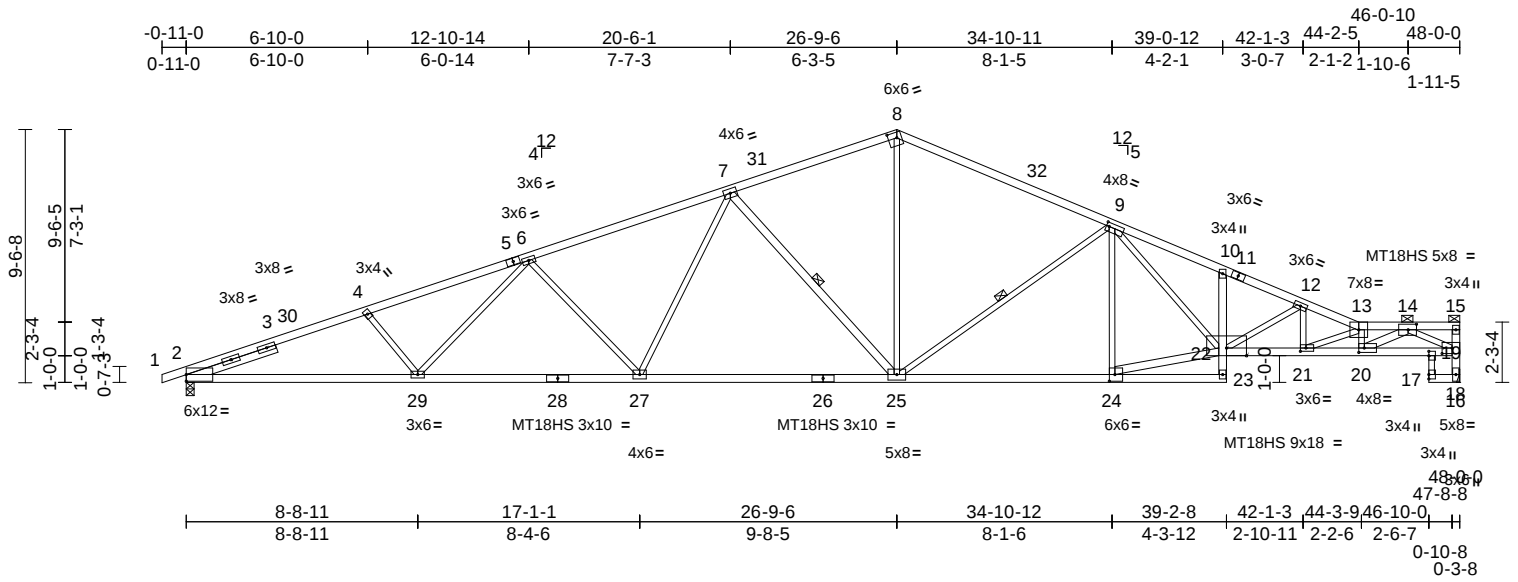
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION
P230888-01	D2	Roof Special	10	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216240 LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:35 Page: 1

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11/22/2023



Scale = 1:86.8

Plate Offsets (X, Y): [8:0-3-15,0-2-8], [9:0-1-4,0-1-12], [14:0-3-12,0-2-8], [18:0-4-8,0-2-8], [19:0-2-0,Edge], [20:0-2-8,0-2-0], [21:0-2-8,0-1-8], [24:0-2-8,0-3-0]

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	0.90	Vert(LL)	-0.48	25	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-1.00	25-27	>574	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.92	Horz(CT)	0.40	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH								
											Weight: 236 lb	FT = 20%

LUMBER	
TOP CHORD	2x4 SP 2400F 2.0E *Except* 11-13:2x4 SP No.2, 13-15,5-8:2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP 2400F 2.0E *Except* 23-10,17-16:2x4 SP No.2, 19-17:2x3 SPF No.2, 26-23,26-28:2x4 SP 1650F 1.5E
WEBS	2x3 SPF No.2 *Except* 25-7,22-24,16-15,20-14:2x4 SP No.2
SLIDER	Left 2x4 SPF No.3 -- 3-6-9

WEBS	4-29=-239/180, 6-29=-55/459, 7-27=-117/859, 6-27=-794/290, 8-25=-297/1629, 7-25=-1207/360, 12-21=-116/738, 9-24=-663/225, 9-25=-987/313, 22-24=-613/3325, 12-22=-1152/266, 9-22=-411/2002, 13-21=-1346/289, 16-18=-2099/457, 15-18=-80/36, 13-20=-1950/417, 14-20=-697/3743, 14-18=-4086/884
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BRACING	
TOP CHORD	Structural wood sheathing directly applied or 1-5-12 oc purlins, except 2-0-0 oc purlins (2-2-4 max.): 13-15.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 7-25, 9-25
REACTIONS	(size) 2=0-3-8, 16= Mechanical Max Horiz 2=216 (LC 12) Max Uplift 2=-397 (LC 8), 16=-285 (LC 13) Max Grav 2=2218 (LC 1), 16=2153 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/0, 2-4=-5276/1063, 4-6=-5030/1030, 6-7=-4230/914, 7-8=-3012/748, 8-9=-3137/747, 9-10=-5269/1131, 10-12=-5396/1102, 12-13=-6412/1291, 13-14=-6938/1395, 14-15=-80/10
BOT CHORD	2-29=-989/4860, 27-29=-877/4458, 25-27=-669/3564, 24-25=-665/3555, 23-24=-69/322, 22-23=0/60, 10-22=-102/69, 21-22=-1178/5925, 20-21=-1440/7145, 19-20=-787/3669, 18-19=-797/3747, 17-19=-35/11, 16-17=-78/10

- 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 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
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearings are assumed to be: Joint 2 SP 2400F 2.0E crushing capacity of 805 psi, Joint 16 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.
 - 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



November 29,2023

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 48	RELEASE FOR CONSTRUCTION
P230888-01	D3	Roof Special Supported Gable	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216241 LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:36 Page: 2
ID:kkw6VMCTKypIjEPYbt576Oz_rGt-RfC?PsB70Hq3NSgPqnL8w3ulTXbGK1VrCDoi734zJ694

- 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" 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

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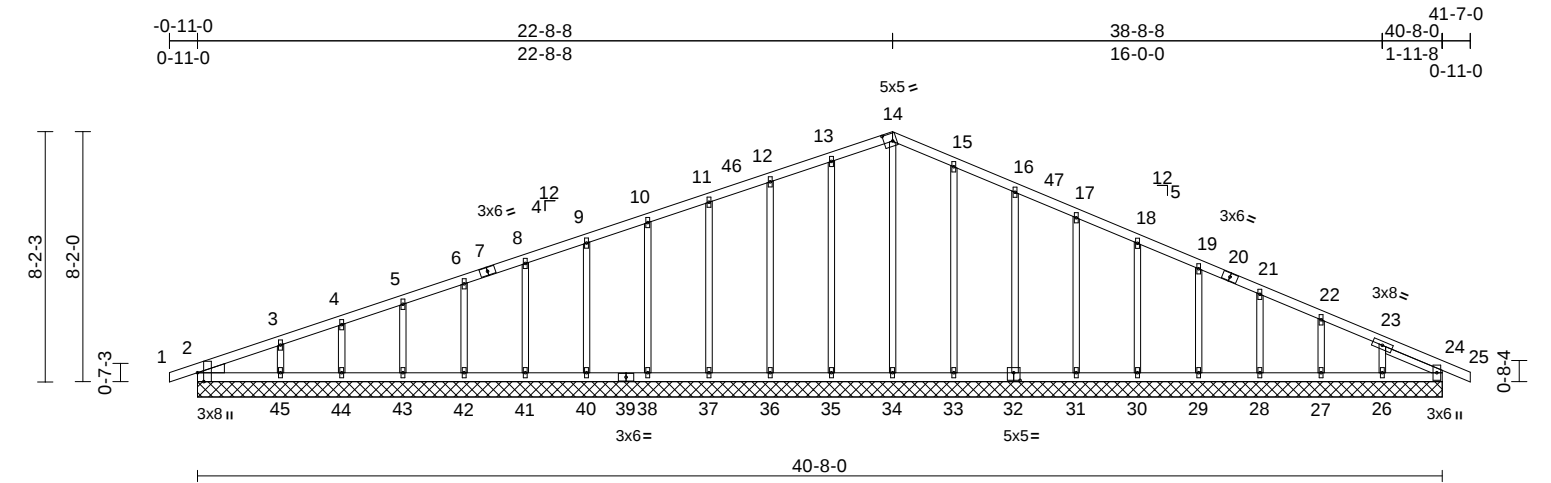
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION
P230888-01	E1	Roof Special Supported Gable	4	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216242 LEE'S SUMMIT, MISSOURI

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 Nov 27 21:00:17 Page: 1
ID:kkw6VMCTKypIjEPYbt576Oz_rGt-RfC?PsB70Hq3NSgPqnL8w3uITXbGK1VrCDoi7342J64

12/22/2023



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
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.01	24	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH					
PLATES MT20 GRIP 244/190									
Weight: 195 lb FT = 20%									

LUMBER		Max Grav	2=177 (LC 1), 24=155 (LC 1), 26=170 (LC 26), 27=175 (LC 26), 28=174 (LC 1), 29=174 (LC 1), 30=174 (LC 26), 31=175 (LC 1), 32=173 (LC 26), 33=182 (LC 26), 34=174 (LC 22), 35=183 (LC 25), 36=174 (LC 25), 37=174 (LC 1), 38=174 (LC 25), 40=174 (LC 1), 41=175 (LC 25), 42=173 (LC 25), 43=179 (LC 1), 44=157 (LC 25), 45=227 (LC 25)	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, 8-41=-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
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	FORCES	(lb) - Maximum Compression/Maximum Tension		
Max Horiz	2=139 (LC 12)	TOP CHORD	1-2=0/0, 2-3=-171/69, 3-4=-121/72, 4-5=-95/81, 5-6=-76/93, 6-8=-61/110, 8-9=-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		
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)	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		

- 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



November 29,2023

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 48	RELEASE FOR CONSTRUCTION
P230888-01	E1	Roof Special Supported Gable	4	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216242 LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:37 Page: 2
ID:kkw6VMCTKypIjEPYbt576Oz_rGt-RfC?PsB70Hq3NSgPqnL8w3ulTXbGK1VrCDoi734zJ694

- 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" 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.

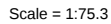
LOAD CASE(S) Standard

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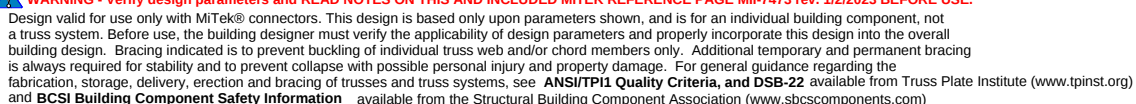
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.34	19-21	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.68	19-21	>716	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.82	Horz(CT)	0.21	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-SH							Weight: 184 lb	FT = 20%

LOAD CASE(S) Standard



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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48
P230888-01	G1	Common Supported Gable	2	1	Job Reference (optional)

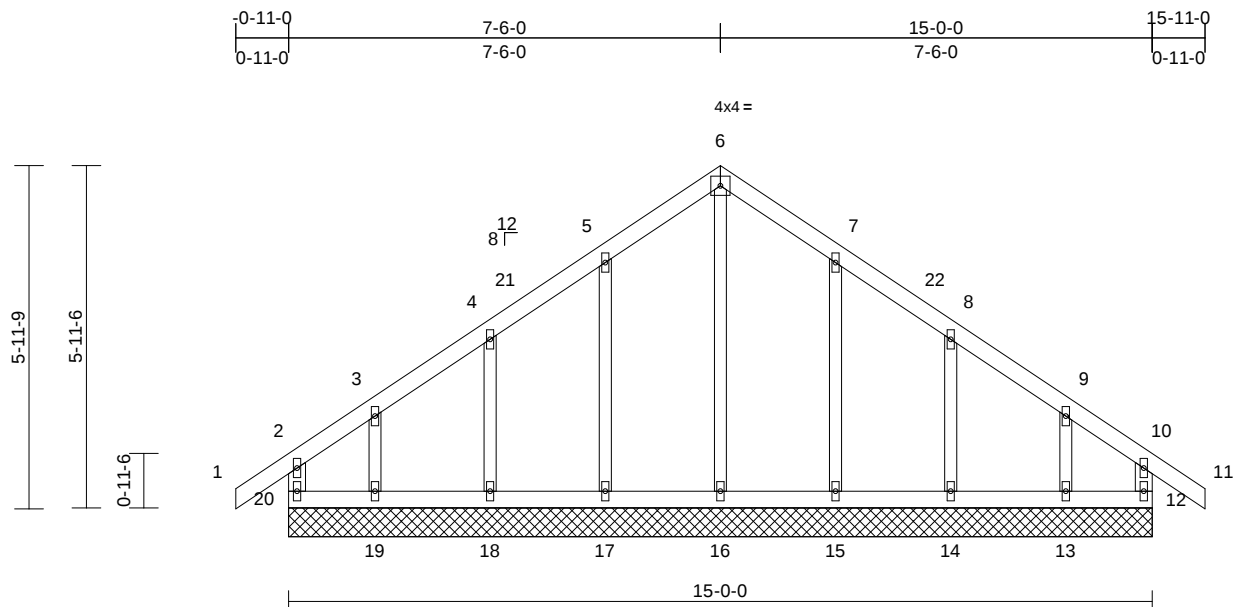
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
162216244
LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:38 Page: 1

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12/22/2023



Scale = 1:40

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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.00	12	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 72 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=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)
Max Uplift	12=-53 (LC 9), 13=-105 (LC 13), 14=-72 (LC 13), 15=-74 (LC 13), 17=-75 (LC 12), 18=-70 (LC 12), 19=-111 (LC 12), 20=-79 (LC 8)
Max Grav	12=155 (LC 19), 13=178 (LC 20), 14=189 (LC 20), 15=197 (LC 20), 16=195 (LC 22), 17=198 (LC 19), 18=187 (LC 25), 19=190 (LC 19), 20=176 (LC 20)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-20=-143/91, 1-2=0/41, 2-3=-110/106, 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.

- 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 7-6-0, Corner(3R) 7-6-0 to 12-6-0,
Exterior(2N) 12-6-0 to 15-11-0 zone; cantilever left and
right exposed; end vertical left and right exposed; C-C
for members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely
braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 9) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.
- 10) 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

November 29, 2023

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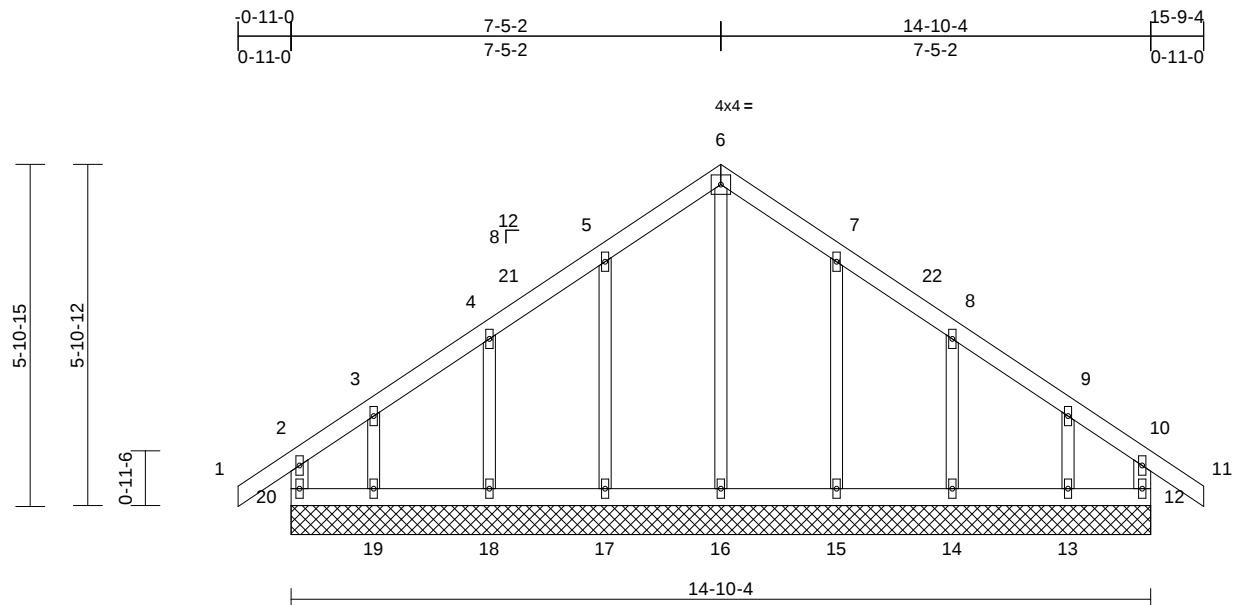
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48
P230888-01	G1A	Common Supported Gable	1	1	Job Reference (optional)

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
162216245
LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:38
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12/22/2023



Scale = 1:39.8

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	0.10	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.00	12	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



November 29, 2023

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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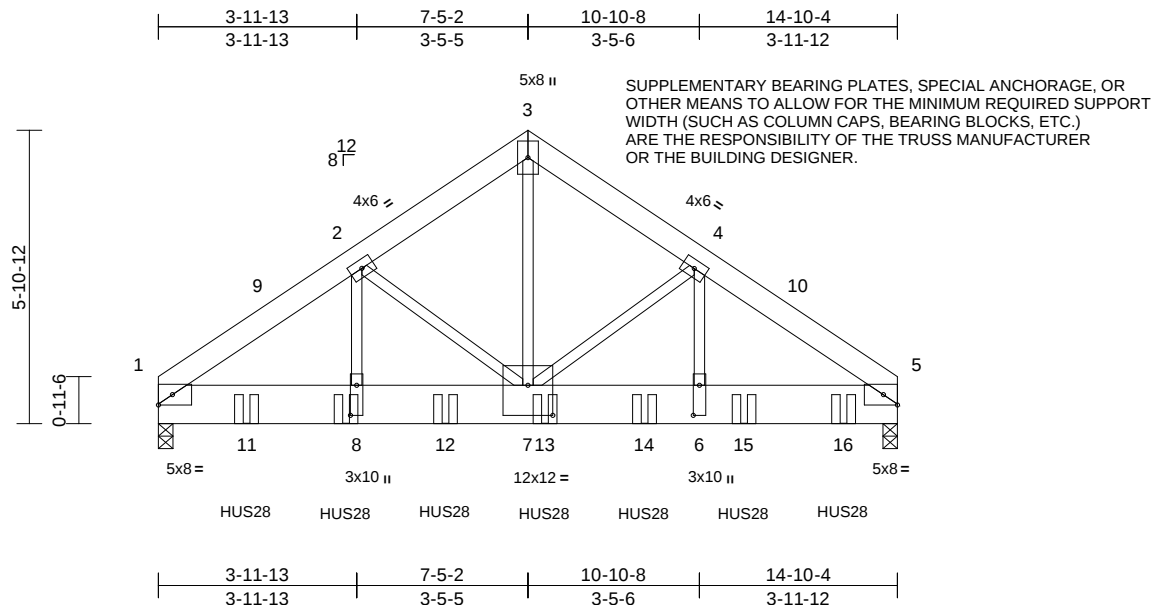
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216247 LEE'S SUMMIT, MISSOURI
P230888-01	G2A	Common Girder	1	3	Job Reference (optional)	

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 Nov 27 21:00:39 Page: 1

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12/22/2023



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	0.24	Vert(LL)	-0.05	7-8	>999	240	MT20	185/144
TCDL	10.0	Lumber DOL	1.15	BC	0.59	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 31)
 Max Uplift 1=-1006 (LC 12), 5=-1106 (LC 13)
 Max Grav 1=7732 (LC 1), 5=8499 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-2=-10060/1368, 2-3=-7460/1082, 3-4=-7462/1082, 4-5=-10106/1374
 BOT CHORD 1-8=-1062/7920, 7-8=-1065/7946, 6-7=-1029/7993, 5-6=-1025/7966
 WEBS 2-8=-392/3315, 2-7=-2277/396, 3-7=-1068/7744, 4-7=-2336/407, 4-6=-401/3361

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 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 1-9-4 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.
- N/A

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=-2131 (B), 11=-2133 (B), 12=-2131 (B), 13=-2131 (B), 14=-2131 (B), 15=-2131 (B), 16=-2133 (B)



November 29, 2023

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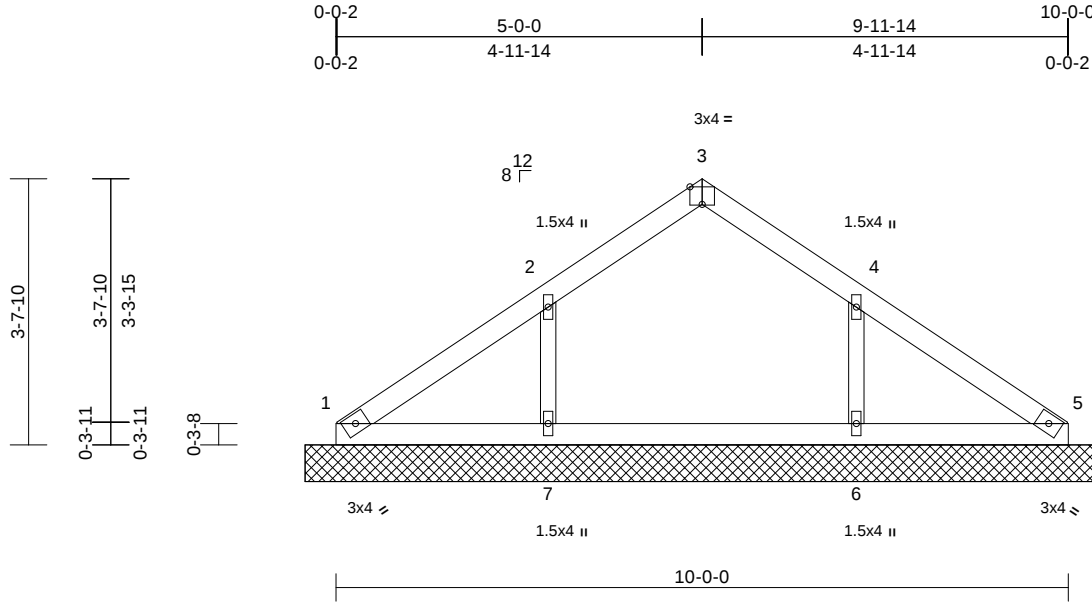
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216248 LEE'S SUMMIT, MISSOURI
P230888-01	V1	Valley	2	1	Job Reference (optional)	

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

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12/22/2023



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	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	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'-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10'-0-0 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'-0-0 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



November 29, 2023

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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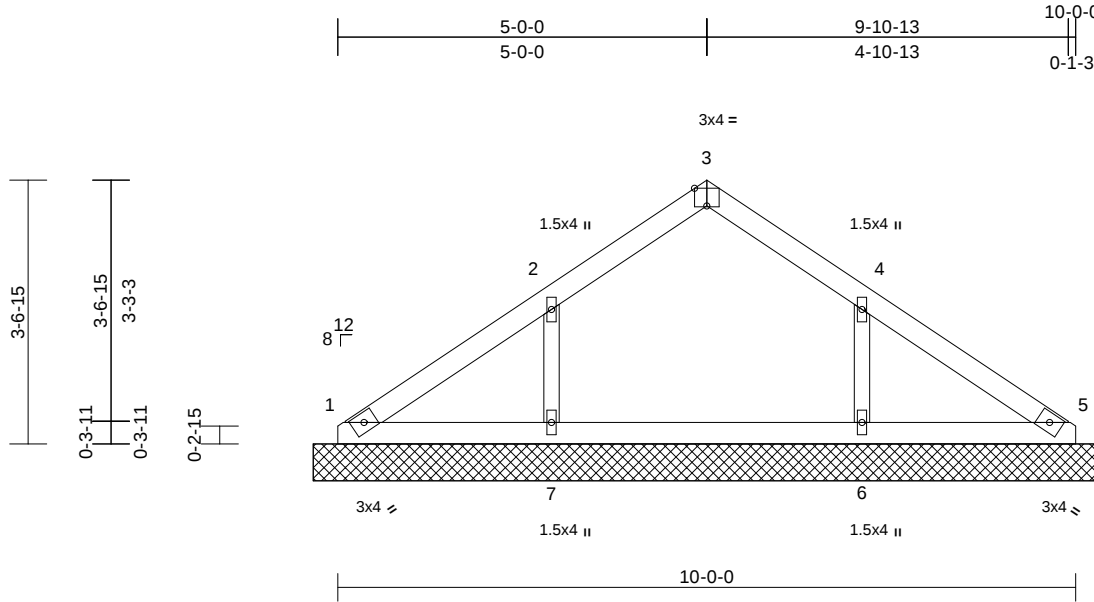
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	RELEASE FOR CONSTRUCTION
P230888-01	V2	Valley	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						162216249
						LEE'S SUMMIT, MISSOURI

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 Nov 27 21:09:20 Page: 1

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12/22/2023



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'-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10'-0-0 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'-0-0 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'-0-0 tall by 2'-0-0 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



November 29, 2023

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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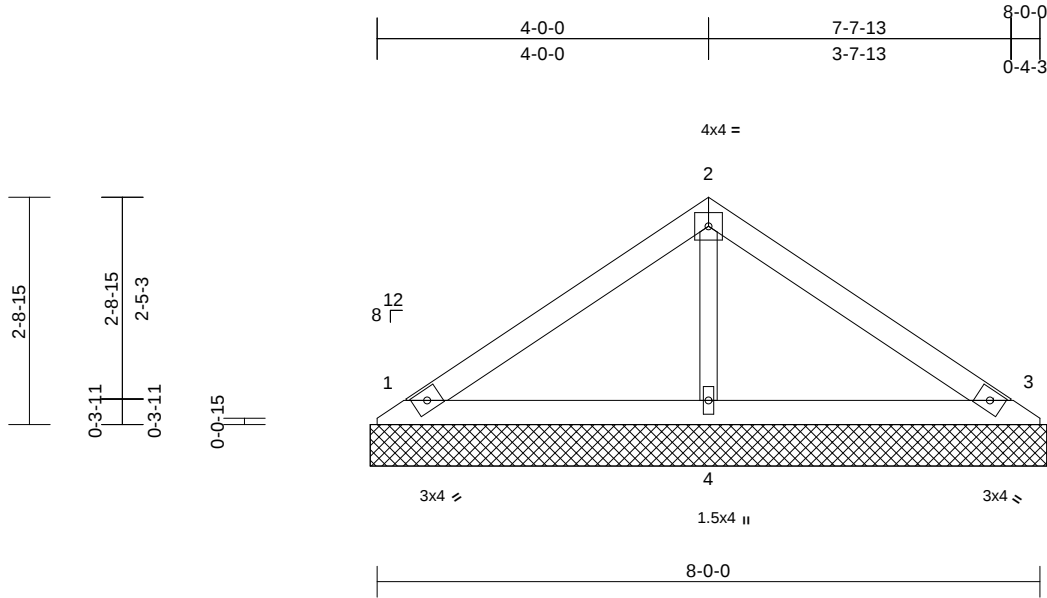
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48
P230888-01	V3	Valley	2	1	Job Reference (optional)

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

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12/22/2023



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



November 29, 2023

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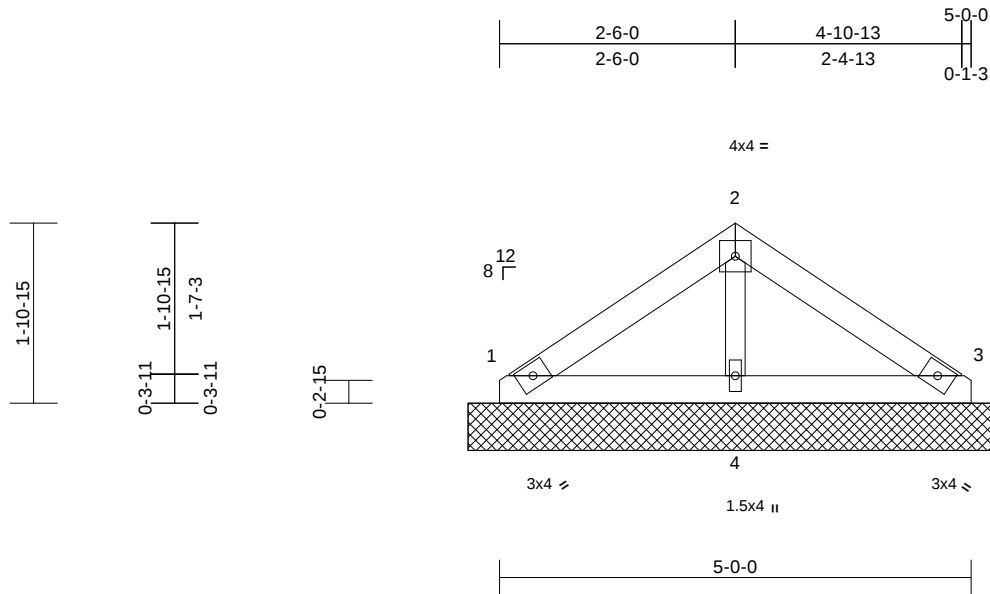
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 162216251 LEE'S SUMMIT, MISSOURI
P230888-01	V4	Valley	2	1	Job Reference (optional)	

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

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12/22/2023



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	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	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

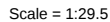
November 29, 2023

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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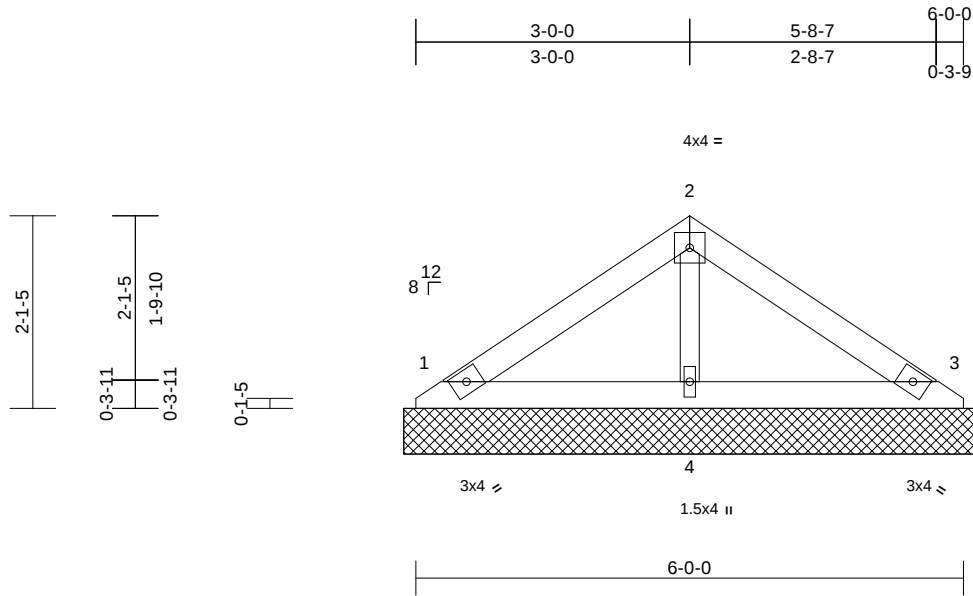
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48
P230888-01	V6	Valley	1	1	Job Reference (optional)

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 Nov 27 21:09:21
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12/22/2023



Scale = 1:25.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	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: 20 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=6-3-3, 3=6-3-3, 4=6-3-3
Max Horiz 1=-50 (LC 8)
Max Uplift 1=-34 (LC 12), 3=-41 (LC 13)
Max Grav 1=136 (LC 1), 3=136 (LC 1), 4=211 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-85/58, 2-3=-81/58
BOT CHORD 1-4=-10/40, 3-4=-10/40
WEBS 2-4=-144/90

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



November 29, 2023

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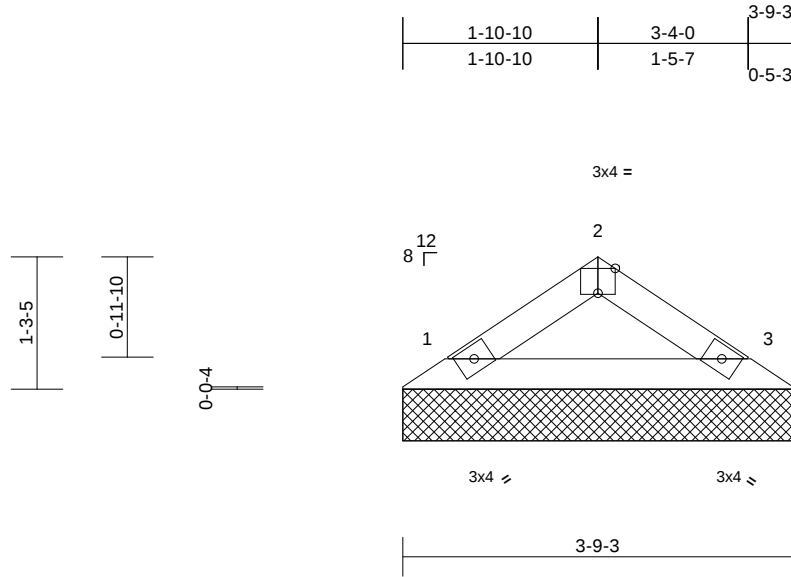
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 48
P230888-01	V7	Valley	1	1	Job Reference (optional)

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

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12/22/2023



Scale = 1:22.2

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-9-3, 3=3-9-3
Max Horiz 1=-27 (LC 8)
Max Uplift 1=-18 (LC 12), 3=-18 (LC 13)
Max Grav 1=129 (LC 1), 3=129 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-113/78, 2-3=-113/78
BOT CHORD 1-3=-28/75

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



November 29, 2023

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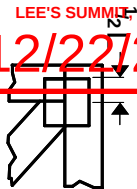
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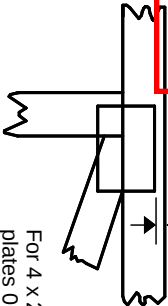
Symbols

PLATE LOCATION AND ORIENTATION

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



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



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



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

PLATE SIZE

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

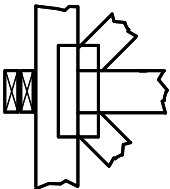
4 X 4

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

Numbering System

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

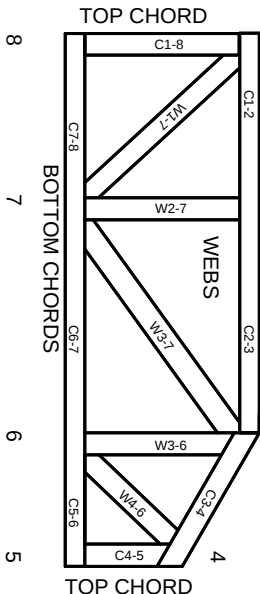
1

2

3

Joint ID typ.

TOP CHORDS



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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

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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.