

RE: P240157-01

Roof - Osage Lot 84

MiTek, Inc.

16023 Swingley Ridge Rd. Chesterfield, MO 63017

> Date 11/1/2023 11/1/2023 11/1/2023 11/1/2023

314.434.1200

Site Information:

Customer: Clover & Hive Project Name: P240157-01 Lot/Block: 84 Project Name: P240157-01 Model: Tw Model: Twin Honeydew - Farmhouse

Address: 3729 / 3731 SW Knoxville Ct 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 Floor Load: N/A psf Roof Load: 45.0 psf

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

No.	Seal#	Truss Name	Date	No.	Seal#	Tru
1	161755127	A1	11/1/2023	21	161755147	V5
2	161755128	A2	11/1/2023	22	161755148	V6
3	161755129	A3	11/1/2023	23	161755149	V7
4	161755130	A4	11/1/2023	24	161755150	V8
5	161755131	A5	11/1/2023			
6	l61755132	A6	11/1/2023			
7	l61755133	B1	11/1/2023			
8	l61755134	B2	11/1/2023			
9	l61755135	C1	11/1/2023			
10	l61755136	C2	11/1/2023			
11	l61755137	C3	11/1/2023			
12	l61755138	C4	11/1/2023			
13	l61755139	D1	11/1/2023			
14	l61755140	D2	11/1/2023			
15	l61755141	PB1	11/1/2023			
16	l61755142	PB2	11/1/2023			
17	l61755143	V1	11/1/2023			
18	l61755144	V2	11/1/2023			
19	l61755145	V3	11/1/2023			
20	l61755146	V4	11/1/2023			

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, 2025.

Missouri COA: 001193

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

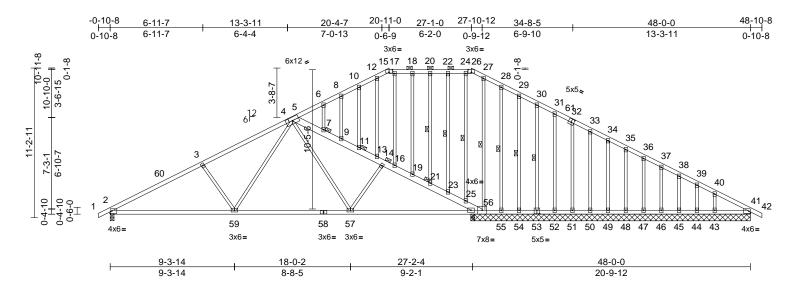


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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	A1	Piggyback Base Structural Gable	2	1	Job Reference (optional)	161755127

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:36 ID:EmCXOiXYCML5IKd?OVTvI7yGxE5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:86.4

WEBS

JOINTS

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	0.75	Vert(LL)	-0.20	2-59	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.43	2-59	>771	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.07	56	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 312 lb	FT = 20%

LUMBER		
TOP CHORD	2x4 SP No.2 *Except* 56-5:2x6 SPF No.2	
BOT CHORD	2x4 SP No.2	
WEBS	2x3 SPF No.2	
OTHERS	2x3 SPF No.2	
BRACING		
TOP CHORD	Structural wood sheathing directly applied or	
	2-2-0 oc purlins, except	
	2-0-0 oc purlins (10-0-0 max.): 15-26, 5-56.	FORCES
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc	TOD 011000

TOP CHORD bracing, Except: 8-11-14 oc bracing: 2-59 10-0-0 oc bracing: 57-59 2-2-0 oc bracing: 56-57. 1 Row at midpt 20-21, 22-23, 24-25, 27-56, 28-55, 29-54, 30-53 1 Brace at Jt(s): 14,

REACTIONS (size) 2=0-3-8, 41=20-11-8, 43=20-11-8, 44=20-11-8, 45=20-11-8, 46=20-11-8, 47=20-11-8, 48=20-11-8, 49=20-11-8, 50=20-11-8, 51=20-11-8, 52=20-11-8, 53=20-11-8, 54=20-11-8, 55=20-11-8, 56=20-11-8 Max Horiz 2=204 (LC 12)

21, 11, 7

Max Uplift 2=-225 (LC 12), 41=-29 (LC 25), 43=-91 (LC 13), 44=-28 (LC 13), 45=-42 (LC 13), 46=-41 (LC 13), 47=-41 (LC 13), 48=-41 (LC 13), 49=-41 (LC 13), 50=-42 (LC 13), 51=-41 (LC 13), 52=-39 (LC 13), 53=-46 (LC 13), 54=-23 (LC 13), 55=-509 (LC 25), 56=-162 (LC 12) Max Grav 2=1249 (LC 1), 41=166 (LC 26), 43=232 (LC 1), 44=81 (LC 1), 45=128 (LC 26), 46=119 (LC 1), 47=120 (LC 1), 48=120 (LC 1), 49=120 (LC 26), 50=123 (LC 1), 51=118 (LC 26), 52=128 (LC 1), 53=96 (LC 26), 54=234 (LC 1), 55=33 (LC 9), 56=1945 (LC 1) (lb) - Maximum Compression/Maximum

1-2=0/17, 2-3=-1983/353, 3-5=-1735/359, 5-6=-43/246, 6-8=-12/263, 8-10=0/277, 10-12=0/296, 12-15=-17/249, 15-17=-15/234, 17-18=-13/242, 18-20=-13/242, 20-22=-13/242, 22-24=-13/242,

24-26=-10/244, 26-27=-47/223, 27-28=0/312, 28-29=-6/254, 29-30=-9/233, 30-31=-7/227, 31-33=-27/219, 33-34=-46/203, 34-35=-64/198, 35-36=-83/198 36-37=-101/198, 37-38=-120/198, 38-39=-144/200, 39-40=-170/189, 40-41=-240/230, 41-42=0/17, 5-7=-1799/395,

7-9=-1829/416. 9-11=-1862/436. 11-13=-1892/457, 13-14=-1977/479 14-16=-2050/498, 16-19=-2125/504 19-21=-2155/510, 21-23=-2187/516, 23-25=-2216/523, 25-56=-2226/522 2-59=-415/1683, 57-59=-190/1108, 56-57=-274/1789, 55-56=-193/244, 54-55=-193/244, 52-54=-193/244, 51-52=-193/244, 50-51=-194/244, 49-50=-194/244, 48-49=-194/244, 47-48=-194/244, 46-47=-194/244,

45-46=-194/244, 44-45=-194/244,

43-44=-194/244, 41-43=-194/244

WEBS 3-59=-411/269, 5-59=-138/643, 5-57=-9/737 14-57=-551/143, 20-21=-74/35, 22-23=-67/38, 24-25=-49/21, 27-56=-367/24, 28-55=-12/84, 29-54=-87/60, 30-53=-98/56, 31-52=-92/56, 32-51=-93/56, 33-50=-95/58, 34-49=-93/57, 35-48=-93/57, 36-47=-93/57, 37-46=-93/57, 38-45=-97/59, 39-44=-69/41, 40-43=-174/115, 18-19=-73/40,

16-17=-169/20, 12-13=-190/48,

10-11=-67/47. 8-9=-73/46. 6-7=-60/41

NOTES

- Unbalanced roof live loads have been considered for 1) this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 20-11-0, Exterior(2E) 20-11-0 to 27-1-0, Exterior(2R) 27-1-0 to 34-1-14, Interior (1) 34-1-14 to 48-10-8 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



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ontinued on page 2

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

BOT CHORD



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	A1	Piggyback Base Structural Gable	2	1	Job Reference (optional)	l61755127

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:36 ID: EmCXOiXYCML5IKd?OVTvI7yGxE5-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?ff

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- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 3x4 MT20 unless otherwise indicated.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 2, 162 lb uplift at joint 56, 29 lb uplift at joint 41, 509 lb uplift at joint 55, 23 lb uplift at joint 54, 46 lb uplift at joint 53, 39 lb uplift at joint 52, 41 lb uplift at joint 51, 42 Ib uplift at joint 50, 41 lb uplift at joint 49, 41 lb uplift at joint 48, 41 lb uplift at joint 47, 41 lb uplift at joint 46, 42 lb uplift at joint 45, 28 lb uplift at joint 44 and 91 lb uplift at joint 43.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) 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

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	A2	Piggyback Base	6	1	Job Reference (optional)	61755128

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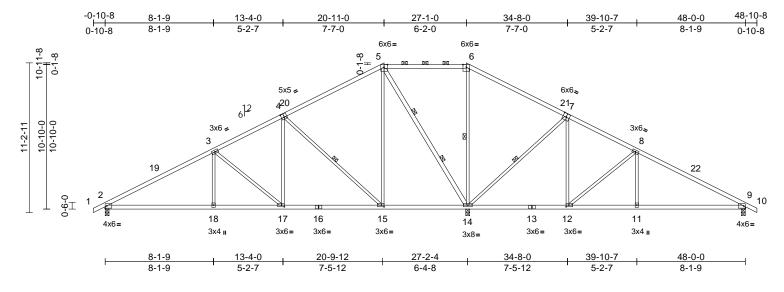


Plate Offsets (X, Y): [4:0-2-8,0-3-4], [7:0-3-0,0-3-4], [12:0-2-8,0-1-8], [15:0-2-8,0-1-8], [17:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.13	` '	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.30	2-18	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.04	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 232 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 1-4,7-10:2x4 SP

1650F 1.5E 2x4 SP No.2

WEBS 2x3 SPF No.2 *Except* 14-5:2x4 SP No.2

BRACING

BOT CHORD

Structural wood sheathing directly applied or TOP CHORD

2-2-0 oc purlins, except

2-0-0 oc purlins (10-0-0 max.): 5-6.

4-15, 6-14, 7-14

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

WEBS 1 Row at midpt

WEBS 2 Rows at 1/3 pts 5-14

REACTIONS (size) 2=0-3-8, 9=0-3-8, 14=0-3-8

Max Horiz 2=204 (LC 12)

Max Uplift 2=-198 (LC 12), 9=-184 (LC 13),

14=-303 (LC 12)

Max Grav 2=1034 (LC 25), 9=689 (LC 26),

14=2925 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=0/17, 2-3=-1514/257, 3-5=-926/229,

5-6=0/834, 6-8=-184/1051, 8-9=-783/228,

9-10=0/17

2-18=-312/1230, 17-18=-312/1230, **BOT CHORD**

15-17=-143/748, 14-15=-152/328, 12-14=-340/183, 11-12=-102/585,

9-11=-102/585

WEBS 3-18=0/297, 3-17=-623/218, 4-17=-60/504,

4-15=-911/325, 5-15=-137/756, 5-14=-1467/285, 6-14=-882/186,

7-14=-927/326, 7-12=-60/514,

8-12=-651/219, 8-11=0/300

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 20-11-0, Exterior(2E) 20-11-0 to 27-1-0, Exterior(2R) 27-1-0 to 34-1-14, Interior (1) 34-1-14 to 48-10-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 198 lb uplift at joint 2, 303 lb uplift at joint 14 and 184 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 1,2023

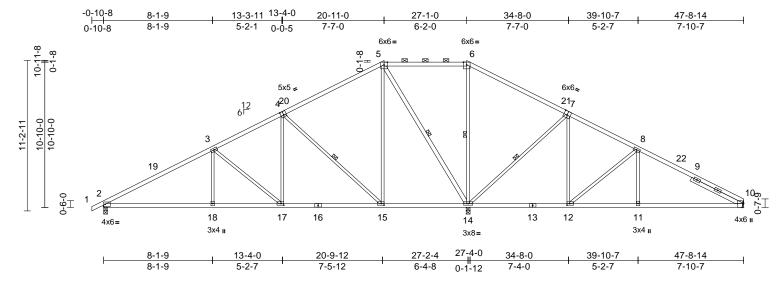
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	A3	Piggyback Base	2	1	Job Reference (optional)	161755129

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:39 ID:_BaRCVCQw9?42CIXuEbokKyGxNZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:85.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.13	2-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.31	2-18	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 236 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-1,7-10:2x4 SP

1650F 1.5E 2x4 SP No.2

2x3 SPF No.2 *Except* 14-5:2x4 SP No.2 WFBS

SLIDER Right 2x4 SP No.2 -- 4-4-0

BRACING

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or

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

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc

bracing

WEBS 1 Row at midpt 6-14, 5-14, 7-14, 4-15 REACTIONS 2=0-3-8, 10= Mechanical, 14=0-3-8 (size)

Max Horiz 2=209 (LC 12)

Max Uplift 2=-212 (LC 12), 10=-202 (LC 13),

14=-270 (LC 12)

2=1056 (LC 25), 10=696 (LC 26),

14=2770 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

5-6=0/665, 1-2=0/17, 2-3=-1560/287,

3-5=-973/270, 6-8=-364/860, 8-10=-913/318 BOT CHORD

2-18=-344/1270, 17-18=-344/1270,

15-17=-176/790, 14-15=-70/250,

12-14=-285/252, 11-12=-167/718

10-11=-167/718

WEBS 3-18=0/297, 5-15=-136/754, 6-14=-796/153,

8-11=0/287, 5-14=-1391/268, 4-17=-59/501,

3-17=-619/217, 7-12=-51/500, 7-14=-925/324, 8-12=-615/201

4-15=-908/324

NOTES

Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 20-11-0, Exterior(2E) 20-11-0 to 27-1-0, Exterior(2R) 27-1-0 to 34-1-14, Interior (1) 34-1-14 to 47-8-14 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
- Provide adequate drainage to prevent water ponding.
- All plates are 3x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 14 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 202 lb uplift at joint 10, 212 lb uplift at joint 2 and 270 lb uplift at joint
- 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.

LOAD CASE(S) Standard



November 1,2023

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

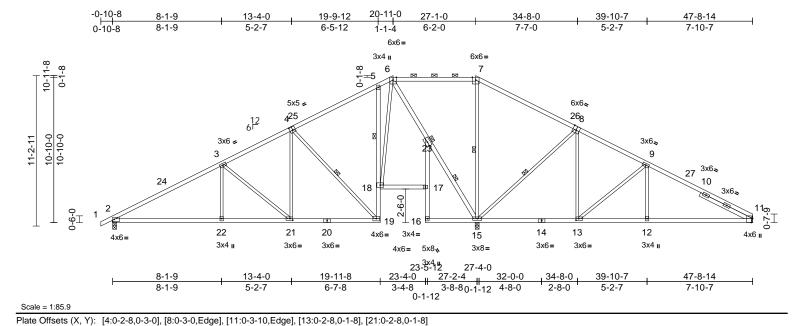
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	A4	Piggyback Base	2	1	Job Reference (optional)	161755130

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:39 ID:SN8pPrD2hT7xgLsjSx71GYyGxNY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.13	2-22	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.30	2-22	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.08	15	n/a	n/a		
BCDI.	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 257 lh	FT - 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-1,8-11:2x4 SP 1650F

1.5E

BOT CHORD 2x4 SP No.2

2x3 SPF No.2 *Except* 15-6:2x4 SP No.2 WFBS **SLIDER**

Right 2x4 SP No.2 -- 4-4-0

BRACING

TOP CHORD Structural wood sheathing directly applied or

2-2-0 oc purlins, except

2-0-0 oc purlins (10-0-0 max.): 6-7. **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc

bracing. Except:

1 Row at midpt 5-18

WEBS 1 Row at midpt 7-15, 15-23, 8-15, 4-19

JOINTS 1 Brace at Jt(s): 23

REACTIONS 2=0-3-8, 11= Mechanical, 15=0-3-8 (size)

Max Horiz 2=208 (LC 12)

Max Uplift 2=-233 (LC 12), 11=-358 (LC 13),

15=-221 (LC 12)

Max Grav 2=967 (LC 25), 11=682 (LC 26),

15=2891 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/17, 2-3=-1376/391, 3-5=-774/467,

5-6=-217/494, 6-7=0/903, 7-9=-333/1060,

9-11=-884/640 **BOT CHORD**

2-22=-385/1109, 21-22=-385/1109, 19-21=-205/604, 18-19=-168/668,

5-18=-288/208, 17-18=-98/31, 16-17=-15/11,

17-23=0/55, 15-16=-69/26, 13-15=-509/225,

12-13=-450/694, 11-12=-450/694

WEBS 3-22=0/301, 7-15=-878/77, 9-12=0/290,

6-23=-1393/238, 15-23=-1432/230,

4-21=-68/507, 3-21=-650/232, 8-13=-42/497,

8-15=-922/318, 9-13=-625/182,

4-19=-822/275, 6-18=-336/995

1) Unbalanced roof live loads have been considered for

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 20-11-0, Exterior(2E) 20-11-0 to 27-1-0, Exterior(2R) 27-1-0 to 34-1-14, Interior (1) 34-1-14 to 47-8-14 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
- Provide adequate drainage to prevent water ponding.
- All plates are 3x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 15 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 358 lb uplift at joint 11, 221 lb uplift at joint 15 and 233 lb uplift at joint
- 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 1,2023

NOTES

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

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



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	A5	Piggyback Base	10	1	Job Reference (optional)	l61755131

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:40 ID:waiCdBDgSnFoHVRv0eeGplyGxNX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

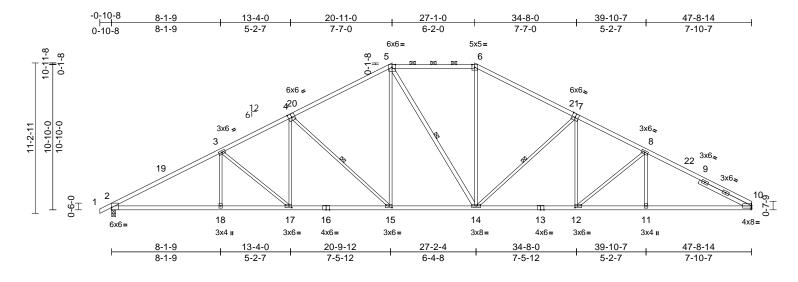


Plate Offsets (X, Y): [2:Edge,0-2-1], [4:0-3-0,0-3-4], [7:0-3-0,Edge], [10:Edge,0-2-2], [12:0-2-8,0-1-8], [15:0-2-8,0-1-8], [17:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)		(/	>999		MT20	197/144
TCDL	10.0	Lumber DOL	1.15	вс	0.82	Vert(CT)	-0.53	15-17	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.23	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 236 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 1650F 1.5E *Except* 5-6:2x4 SP

No.2, 4-1:2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP 1650F 1.5F

2x3 SPF No.2 *Except* 14-5:2x4 SP No.2 WFBS

SLIDER Right 2x4 SP No.2 -- 4-4-0

BRACING

TOP CHORD Structural wood sheathing directly applied,

except 2-0-0 oc purlins (2-2-0 max.): 5-6.

BOT CHORD Rigid ceiling directly applied or 9-5-7 oc

bracing

WEBS 1 Row at midpt 5-14, 7-14, 4-15

REACTIONS 2=0-3-8, 10= Mechanical (size)

Max Horiz 2=209 (LC 16)

Max Uplift 2=-329 (LC 12), 10=-301 (LC 13)

Max Grav 2=2214 (LC 1), 10=2141 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/17. 2-3=-4010/580. 3-5=-3462/598.

5-6=-2386/554, 6-8=-3430/590,

8-10=-3898/580

BOT CHORD 2-18=-561/3433, 17-18=-561/3433,

15-17=-401/3019, 14-15=-175/2388

12-14=-330/3010, 11-12=-404/3340, 10-11=-404/3340

WEBS 3-18=0/291, 5-15=-134/725, 6-14=-80/718,

8-11=0/270, 5-14=-282/275, 4-17=-53/466,

3-17=-547/206, 7-12=-44/425,

7-14=-851/319, 8-12=-452/190,

4-15=-860/321

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 20-11-0, Exterior(2E) 20-11-0 to 27-1-0, Exterior(2R) 27-1-0 to 34-1-14, Interior (1) 34-1-14 to 47-8-14 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
- Provide adequate drainage to prevent water ponding.
- 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 1650F 1.5E
- crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 301 lb uplift at joint 10 and 329 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 1,2023

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



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	A6	Piggyback Base Supported Gable	2	1	Job Reference (optional)	161755132

10.0 Code

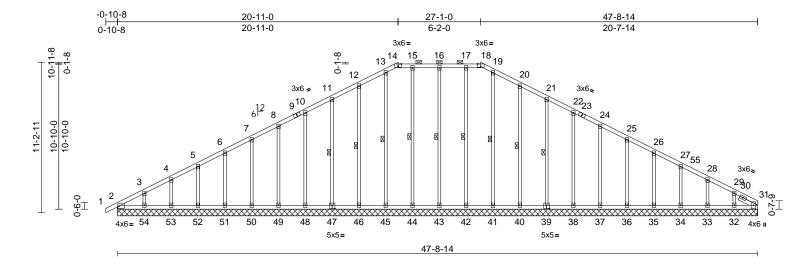
42=-9 (LC 9), 43=-58 (LC 8),

44=-12 (LC 9), 46=-71 (LC 12), 47=-61 (LC 12), 48=-61 (LC 12),

49=-61 (LC 12), 50=-61 (LC 12), 51=-61 (LC 12), 52=-61 (LC 12), 53=-61 (LC 12), 54=-87 (LC 12)

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:40 ID:JbPUB4NmDf0vUSJtFFIELayGxJT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:85.9

BCDL

Plate Offsets (X, Y): [14:0-3-0,Edge], [18:0-3-0,Edge], [31:0-3-2,0-1-12], [39:0-2-8,0-3-0], [47:0-2-8,0-3-0]													
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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999			
BCLL	0.0	Rep Stress Incr	YES	w _B	0.18	Horz(CT)	0.02	31	n/a	n/a			

Matrix-S

LUMBER TOP CHORD BOT CHORD OTHERS	2x4 SP No.2 2x4 SP No.2 2x3 SPF No.2			Max Grav	2=178 (LC 21), 31=119 (LC 22), 32=179 (LC 26), 33=182 (LC 1), 34=180 (LC 26), 35=180 (LC 1), 36=180 (LC 26), 37=180 (LC 1),	WEBS	16-43=-143/107, 17-42=-137/33, 19-41=-134/0, 20-40=-140/112, 21-39=-140/96, 22-38=-140/96, 24-37=-140/96, 25-36=-140/97,
SLIDER	Right 2x4 SP No.2	? 1-5-12			38=180 (LC 26), 39=180 (LC 26),		26-35=-140/96, 27-34=-139/106, 28-32=-142/147, 20-32=-137/101
BRACING TOP CHORD BOT CHORD	6-0-0 oc purlins, e 2-0-0 oc purlins (6	neathing directly applied or xcept i-0-0 max.): 14-18. tly applied or 10-0-0 oc			40=180 (LC 1), 41=174 (LC 26), 42=177 (LC 26), 43=183 (LC 26), 44=177 (LC 25), 45=176 (LC 22), 46=180 (LC 1), 47=180 (LC 25), 48=180 (LC 25), 49=180 (LC 1), 50=180 (LC 1), 51=180 (LC 25),		28-33=-142/147, 29-32=-137/191, 15-44=-137/36, 13-45=-136/8, 12-46=-140/112, 11-47=-140/96, 10-48=-140/96, 8-49=-140/96, 7-50=-140/96, 6-51=-140/97, 5-52=-140/97, 4-53=-140/123, 3-54=-138/171
WEBS	bracing. 1 Row at midpt	16-43, 17-42, 19-41, 20-40, 21-39, 15-44, 13-45, 12-46, 11-47	FORCES	(lb) - Ma	52=180 (LC 1), 53=179 (LC 25), 54=181 (LC 25) ximum Compression/Maximum	NOTES 1) Unbalance this design	ed roof live loads have been considered for

13-45, 12-46, 11-47	IONOLO	(ib) Maximum Compression/Maximum
2=47-8-14, 31=47-8-14, 32=47-8-14, 33=47-8-14, 33=47-8-14, 35=47-8-14, 35=47-8-14, 35=47-8-14, 35=47-8-14, 35=47-8-14, 40=47-8-14, 41=47-8-14, 42=47-8-14, 43=47-8-14, 45=47-8-14, 45=47-8-14, 47=4, 47=4, 4	TOP CHORD	Tension 1-2=0/17, 2-3=-295/92, 3-4=-229/87, 4-5=-181/97, 5-6=-136/110, 6-7=-110/135, 7-8=-84/162, 8-10=-71/190, 10-11=-88/234, 11-12=-106/287, 12-13=-127/347, 13-14=-126/341, 14-15=-119/341, 15-16=-118/342, 16-17=-118/342, 17-18=-119/341, 18-19=-126/341, 19-20=-127/347, 20-21=-106/287, 21-22=-88/234, 22-24=-69/180, 24-25=-56/126, 25-26=-56/72, 26-27=-74/27, 27-28=-100/27, 28-29=-146/43, 29-31=-232/67 2-54=-59/225, 51-52=-59/225, 50-51=-59/225, 51-52=-59/225, 48-49=-59/225, 44-45=-59/225, 43-44=-59/225, 44-45=-59/225, 41-42=-59/225, 44-41=-59/225, 41-42-59/225, 44-41=-59/225, 41-42-59/225, 44-41=-59/225, 41-42-59/225, 44-41=-59/225, 41-42-59/225, 44-41=-59/225, 41-42-59/225, 44-41=-59/225, 41-42-59/225, 44-41=-59/225, 41-42-59/225, 44-41=-59/225,

IRC2018/TPI2014

17 10- 110/011, 10 10- 120/011,
19-20=-127/347, 20-21=-106/287,
21-22=-88/234, 22-24=-69/180,
24-25=-56/126, 25-26=-56/72, 26-27=-7
27-28=-100/27, 28-29=-146/43,
29-31=-232/67
2-54=-59/225, 53-54=-59/225,
52-53=-59/225, 51-52=-59/225,
50-51=-59/225, 49-50=-59/225,
48-49=-59/225, 46-48=-59/225,
45-46=-59/225, 44-45=-59/225,
43-44=-59/225, 42-43=-59/225,
41-42=-59/225, 40-41=-59/225,
38-40=-59/225, 37-38=-59/225,
36-37=-59/225, 35-36=-59/225,
34-35=-59/225, 33-34=-59/225,
32-33=-59/225, 31-32=-59/225



Weight: 267 lb FT = 20%

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ontinued on page 2

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



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	A6	Piggyback Base Supported Gable	2	1	Job Reference (optional)	61755132

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:40 ID:JbPUB4NmDf0vUSJtFFIELayGxJT-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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- Wind: ASCF 7-16: Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-0-0, Exterior(2N) 4-0-0 to 20-11-0, Corner(3R) 20-11-0 to 26-0-0, Exterior(2N) 26-0-0 to 27-1-0, Corner(3R) 27-1-0 to 32-0-0, Exterior(2N) 32-0-0 to 47-8-14 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 3x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing. 6)
- 7) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 2, 58 lb uplift at joint 43, 9 lb uplift at joint 42, 74 lb uplift at joint 40, 60 lb uplift at joint 39, 61 lb uplift at joint 38, 61 lb uplift at joint 37, 61 lb uplift at joint 36, 61 lb uplift at joint 35, 62 lb uplift at joint 34, 59 lb uplift at joint 33, 103 lb uplift at joint 32, 12 lb uplift at joint 44, 71 lb uplift at joint 46, 61 lb uplift at joint 47, 61 lb uplift at joint 48, 61 lb uplift at joint 49, 61 lb uplift at joint 50, 61 lb uplift at joint 51, 61 lb uplift at joint 52, 61 lb uplift at joint 53 and 87 lb uplift at joint 54.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	B1	Common Supported Gable	2	1	Job Reference (optional)	161755133

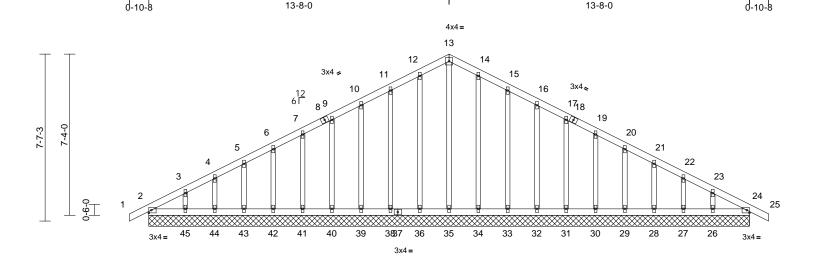
13-8-0

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

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27-4-0

Page: 1



Scale = 1:52.4

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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	24	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 145 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size)

2=27-4-0, 24=27-4-0, 26=27-4-0, 27=27-4-0, 28=27-4-0, 29=27-4-0, 30=27-4-0, 31=27-4-0, 32=27-4-0,

33=27-4-0, 34=27-4-0, 35=27-4-0, 36=27-4-0, 38=27-4-0, 39=27-4-0, 40=27-4-0, 41=27-4-0, 42=27-4-0, 43=27-4-0, 44=27-4-0, 45=27-4-0

Max Horiz 2=-137 (LC 13)

Max Uplift 2=-26 (LC 8), 24=-4 (LC 9), 26=-57

(LC 13), 27=-40 (LC 13), 28=-41 (LC 13), 29=-41 (LC 13), 30=-41 (LC 13), 31=-41 (LC 13), 32=-41 (LC 13), 33=-48 (LC 13), 34=-21

(LC 13), 36=-27 (LC 12), 38=-46 (LC 12), 39=-41 (LC 12), 40=-41 (LC 12), 41=-41 (LC 12), 42=-41 (LC 12), 43=-41 (LC 12), 44=-40 (LC 12), 45=-63 (LC 12)

Max Grav 2=150 (LC 1), 24=150 (LC 1), 26=130 (LC 26), 27=117 (LC 26), 28=121 (LC 1), 29=120 (LC 26), 30=120 (LC 26), 31=120 (LC 1), 32=120 (LC 1), 33=121 (LC 26), 34=123 (LC 26), 35=145 (LC 22), 36=123 (LC 25), 38=121 (LC 25), 39=120 (LC 1), 40=120 (LC 1),

41=120 (LC 25), 42=120 (LC 25), 43=121 (LC 1), 44=117 (LC 25), 45=130 (LC 25)

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 13-14=-89/255, 14-15=-80/230, 15-16=-66/191, 16-17=-53/155,

17-19=-41/119, 19-20=-34/83, 20-21=-35/48, 21-22=-51/20, 22-23=-74/22, 23-24=-123/45, 24-25=0/17, 1-2=0/17, 2-3=-181/64,

27-4-0

3-4=-131/67, 4-5=-99/76, 5-6=-76/89 6-7=-59/107, 7-9=-50/126, 9-10=-53/155,

10-11=-66/191, 11-12=-80/230,

12-13=-89/255

BOT CHORD

2-45=-40/160, 44-45=-40/160, 43-44=-40/160, 42-43=-40/160,

41-42=-40/160, 40-41=-40/160, 39-40=-40/160, 38-39=-40/160, 36-38=-40/160, 35-36=-40/160, 34-35=-40/160, 33-34=-40/160,

32-33=-40/160, 31-32=-40/160, 30-31=-40/160, 29-30=-40/160, 28-29=-40/160, 27-28=-40/160 26-27=-40/160, 24-26=-40/160

13-35=-148/26, 12-36=-96/43, 11-38=-95/74, 10-39=-93/64, 9-40=-93/64, 7-41=-93/64, 6-42=-93/64, 5-43=-94/82, 4-44=-92/99,

3-45=-99/122, 14-34=-96/40, 15-33=-95/74 16-32=-93/64, 17-31=-93/64, 19-30=-93/64, 20-29=-93/64, 21-28=-94/82, 22-27=-92/99,

23-26=-99/119

NOTES

WFBS

Unbalanced roof live loads have been considered for this design.

Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-4-0, Exterior(2N) 4-4-0 to 13-8-0, Corner(3R) 13-8-0 to 18-8-0, Exterior(2N) 18-8-0 to 28-2-8 zone; cantilever left and right exposed; end vertical left and right exposed:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated. Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 2, 27 lb uplift at joint 36, 46 lb uplift at joint 38, 41 lb uplift at joint 39, 41 lb uplift at joint 40, 41 lb uplift at joint 41, 41 lb uplift at joint 42, 41 lb uplift at joint 43, 40 lb uplift at joint 44, 63 lb uplift at joint 45, 21 lb uplift at joint 34, 48 lb uplift at joint 33, 41 lb uplift at joint 32, 41 lb uplift at joint 31, 41 lb uplift at joint 30, 41 lb uplift at joint 29, 41 lb uplift at joint 28, 40 lb uplift at joint 27, 57 lb uplift at joint 26 and 4 lb uplift at joint 24.
- 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.



November 1,2023

Continued on page 2

FORCES

- 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/TP11 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)

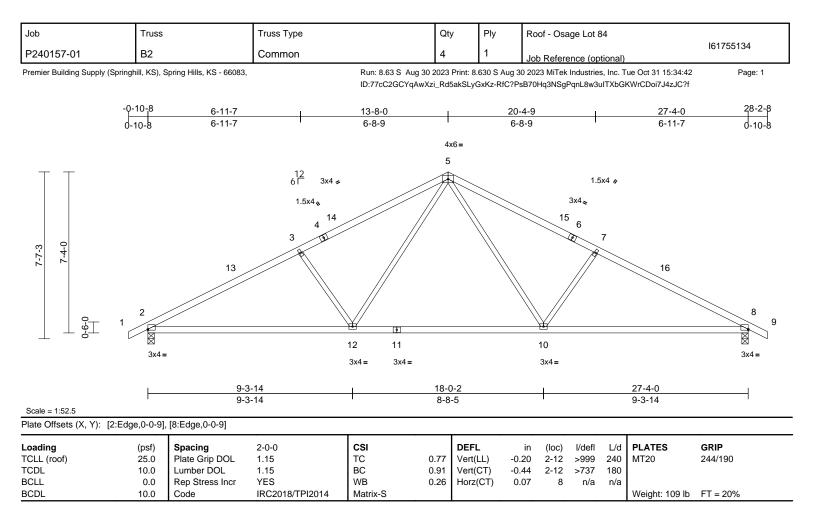
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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	B1	Common Supported Gable	2	1	Job Reference (optional)	161755133

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:41 $ID: UdTxDbh?e9q_8iTwPnntXZyGxKM-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?ff$

Page: 2

LOAD CASE(S) Standard



LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

2-6-11 oc purlins.

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

bracing.

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

Max Horiz 2=-137 (LC 13)

Max Uplift 2=-211 (LC 12), 8=-211 (LC 13) Max Grav 2=1288 (LC 1), 8=1288 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/17, 2-3=-2072/392, 3-5=-1821/403, 5-7=-1821/403, 7-8=-2072/392, 8-9=0/17

BOT CHORD 2-12=-328/1763, 10-12=-86/1180,

8-10=-263/1763

WEBS 5-10=-154/672, 7-10=-451/287, 5-12=-153/672, 3-12=-451/287

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 13-8-0, Exterior(2R) 13-8-0 to 18-8-0, Interior (1) 18-8-0 to 28-2-8 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 211 lb uplift at joint 2 and 211 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



November 1,2023

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



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	C1	Common Supported Gable	1	1	Job Reference (optional)	161755135

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:42 ID:pEeiREjqUZILYPLYj_L6IhyGxLc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



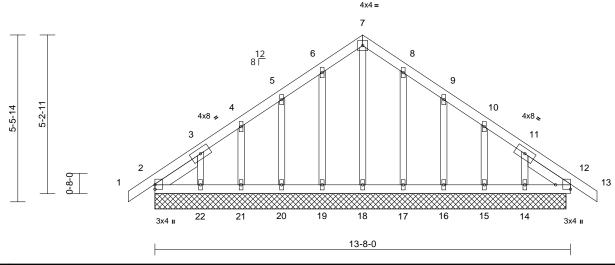


Plate Offsets (X, Y): [12:Edge,0-5-14]

		ı		1		_						-
Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 73 lb	FT = 20%

LUMBER TOP CHORD 2x4 SP No.2

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

SLIDER Left 2x4 SP No.2 -- 1-8-5, Right 2x4 SP No.2

-- 1-8-5

BRACING TOP CHORD

FORCES

Scale = 1:37.9

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=13-6-4, 12=13-6-4, 14=13-6-4, 15=13-6-4, 16=13-6-4, 17=13-6-4, 18=13-6-4, 19=13-6-4, 20=13-6-4,

21=13-6-4, 22=13-6-4 Max Horiz 2=-144 (LC 10)

Max Uplift 2=-39 (LC 8), 12=-2 (LC 9), 14=-73

(LC 13), 15=-52 (LC 13), 16=-57 (LC 13), 17=-42 (LC 13), 19=-45

(LC 12), 20=-56 (LC 12), 21=-52

(LC 12), 22=-80 (LC 12) Max Grav 2=159 (LC 20), 12=154 (LC 1),

14=132 (LC 20), 15=125 (LC 20),

16=128 (LC 20), 17=127 (LC 20),

18=119 (LC 22), 19=131 (LC 19),

20=126 (LC 19), 21=126 (LC 19),

22=139 (LC 19)

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 7-8=-91/176, 8-9=-66/126, 9-10=-49/59

10-11=-58/29, 11-12=-112/57, 12-13=0/16, 1-2=0/16, 2-3=-140/112, 3-4=-96/80,

4-5=-87/72, 5-6=-77/126, 6-7=-91/176 **BOT CHORD** 2-22=-52/150, 21-22=-52/150,

20-21=-52/150, 19-20=-52/150,

18-19=-52/150, 17-18=-52/150,

16-17=-52/150, 15-16=-52/150,

14-15=-52/150, 12-14=-52/150

LOAD CASE(S) Standard

7-18=-119/26, 8-17=-100/74, 9-16=-101/107, 10-15=-100/111, 11-14=-102/129,

6-19=-104/73, 5-20=-99/106, 4-21=-100/111,

3-22=-109/131

NOTES

WEBS

Unbalanced roof live loads have been considered for 1)

this design.

DOI = 1.60

Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-2-0, Exterior(2N) 4-2-0 to 6-10-0, Corner(3R) 6-10-0 to 11-10-0, Exterior(2N) 11-10-0 to 14-6-8 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

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 studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 12, 39 lb uplift at joint 2, 42 lb uplift at joint 17, 57 lb uplift at joint 16, 52 lb uplift at joint 15, 73 lb uplift at joint 14, 45 lb uplift at joint 19, 56 lb uplift at joint 20, 52 lb uplift at joint 21 and 80 lb uplift at joint 22.
- N/A
- 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.



November 1,2023

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



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	C2	Monopitch	1	1	Job Reference (optional)	161755136

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:42 ID:Ho1WEiUTGX1gwu78IG1QiOyGxNB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

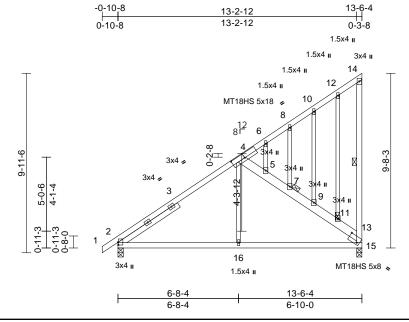


Plate Offsets (X, Y): [2:0-1-13,0-0-4], [4:0-9-0,0-3-0], [15:0-6-6,0-3-11]

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	0.65	Vert(LL)	-0.04	15-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.09	2-16	>999	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.01	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 97 lb	FT = 20%

LUMBER

2x4 SP No.2 *Except* 4-13:2x6 SPF No.2 TOP CHORD

BOT CHORD 2x4 SP No.2 WEBS

2x4 SP No.2 *Except* 4-16:2x3 SPF No.2 2x3 SPF No 2

OTHERS **SLIDER** Left 2x4 SP No.2 -- 3-11-10

BRACING

TOP CHORD Structural wood sheathing directly applied or

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

BOT CHORD Rigid ceiling directly applied or 9-10-14 oc

bracing.

WFBS 1 Row at midpt 14-15

JOINTS 1 Brace at Jt(s): 11,

REACTIONS (size) 2=0-3-8, 15=0-3-8

Max Horiz 2=399 (LC 9)

Max Uplift 2=-83 (LC 12), 15=-202 (LC 12)

Max Grav 2=665 (LC 1), 15=658 (LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/16, 2-6=-708/227, 6-8=-276/239, 8-10=-236/218, 10-12=-204/204,

12-14=-95/98, 13-15=-600/366,

13-14=-89/85, 4-5=-538/231, 5-7=-560/246,

7-9=-606/280, 9-11=-648/313,

11-13=-725/370

BOT CHORD 2-16=-333/580, 15-16=-338/572

WEBS 4-16=0/305, 11-12=-214/183, 9-10=-77/64,

7-8=-84/61, 5-6=-12/6

NOTES

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 13-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x4 MT20 unless otherwise indicated. 5)
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 202 lb uplift at joint 15 and 83 lb uplift at joint 2.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) 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 1,2023

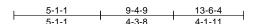
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	C3	Monopitch Girder	2	2	Job Reference (optional)	161755137

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:43 ID:HXV5guHpHJt4OGKtoCERWpyGxNS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



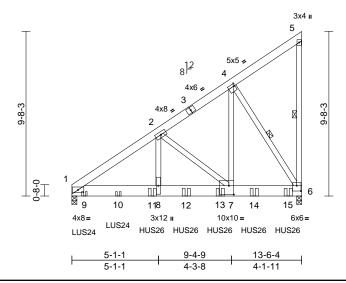


Plate Offsets (X, Y): [4:0-0-12,0-1-12], [6:0-3-0,0-3-12], [7:0-3-8,0-6-4]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.07	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.12	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 230 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SPF No.2 2x8 SP 2400F 2.0E **BOT CHORD** 2x4 SP No.2 WEBS

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-5-9 oc purlins, except end verticals.

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

bracing.

WEBS 1 Row at midpt 5-6. 4-6 REACTIONS (size) 1=0-3-8, 6=0-3-8

Max Horiz 1=384 (LC 11) Max Uplift 1=-1112 (LC 12), 6=-1295 (LC 12)

Max Grav 1=5503 (LC 1), 6=7639 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=-7647/1389 2-4=-4084/764 4-5=-202/180, 5-6=-144/122 BOT CHORD 1-8=-1372/6184, 7-8=-1372/6184

6-7=-721/3362

WFBS 2-8=-765/4127. 2-7=-3634/843.

4-7=-1201/7202, 4-6=-6287/1143

NOTES

1) 2-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, 2x4 - 1 row at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 4 rows staggered at 0-9-0 oc.

Web connected as follows: 2x4 - 1 row at 0-9-0 oc. All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-12 to 5-1-1, Interior (1) 5-1-1 to 13-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1295 lb uplift at joint 6 and 1112 lb uplift at joint 1.
- 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 LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-8-12 from the left end to 2-8-12 to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 4-8-12 from the left end to 12-8-12 to connect truss(es) to back face of bottom chord.
- 10) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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

Uniform Loads (lb/ft)

Vert: 1-5=-70, 1-6=-20

Concentrated Loads (lb)

Vert: 9=-680 (B), 10=-662 (B), 11=-2121 (B), 12=-2121 (B), 13=-2121 (B), 14=-2121 (B),

15=-2124 (B)



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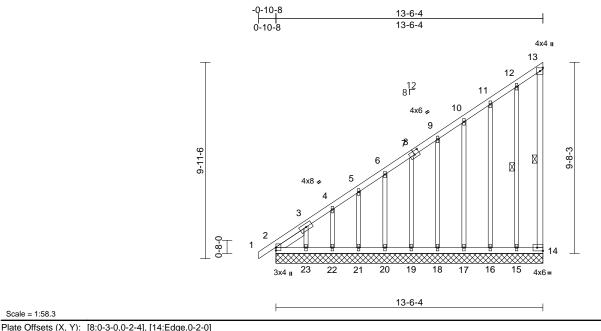
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	C4	Monopitch Supported Gable	1	1	Job Reference (optional)	161755138

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:43 ID:GjwpzSgpHeSKmRw4J_pUy2yGxOF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:58.3

	. , , [,-],	1 -3-,1										
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	ın	(loc)	I/defI	L/d	PLATES	
TCLL (roof)	25.0	Diota Crip DOI	1 15	I TC	0.77	\/ort/ \	2/0		2/0	000	MTOO	

TCLL (roof) late Grip DOL 244/190 MT20 25.0 1.15 Vert(LL) n/a n/a 999 ВС **TCDL** 10.0 Lumber DOL 1.15 0.37 Vert(CT) n/a n/a 999 **BCLL** WB 14 0.0 Rep Stress Incr YES Horz(CT) 0.00 n/a BCDL 10.0 Code IRC2018/TPI2014 Weight: 96 lb FT = 20%Matrix-S

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

SLIDER Left 2x4 SP No.2 -- 1-8-10

BRACING

TOP CHORD Structural wood sheathing directly applied or

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

BOT CHORD bracing.

WFBS

1 Row at midpt 13-14, 12-15

REACTIONS (size) 2=13-6-4, 14=13-6-4, 15=13-6-4, 16=13-6-4, 17=13-6-4, 18=13-6-4, 19=13-6-4, 20=13-6-4, 21=13-6-4,

22=13-6-4, 23=13-6-4

Max Horiz 2=399 (LC 9)

Max Uplift 2=-101 (LC 8), 14=-108 (LC 11), 15=-83 (LC 12), 16=-41 (LC 9),

17=-63 (LC 12), 18=-50 (LC 12), 19=-53 (LC 12), 20=-52 (LC 12), 21=-51 (LC 12), 22=-54 (LC 12),

23=-118 (LC 12)

Max Grav 2=258 (LC 20), 14=105 (LC 8), 15=124 (LC 20), 16=140 (LC 19),

17=122 (LC 19), 18=127 (LC 19), 19=126 (LC 19), 20=126 (LC 19), 21=126 (LC 19), 22=126 (LC 19),

23=160 (LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=0/16, 2-3=-841/547, 3-4=-686/452,

4-5=-624/422, 5-6=-566/394, 6-7=-508/365, 7-9=-449/337, 9-10=-384/308,

10-11=-316/282, 11-12=-244/253, 12-13=-127/149, 13-14=-60/74

BOT CHORD 2-23=-178/230, 22-23=-178/230, 21-22=-178/230, 20-21=-178/230, 19-20=-178/230, 18-19=-178/230, 17-18=-178/230, 16-17=-178/230,

15-16=-178/230, 14-15=-178/230 **WEBS** 12-15=-221/207, 11-16=-103/114, 10-17=-98/107, 9-18=-99/101, 7-19=-99/90,

6-20=-99/90, 5-21=-99/99, 4-22=-101/114, 3-23=-179/231

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-2-4, Exterior(2N) 4-2-4 to 13-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 14, 101 lb uplift at joint 2, 83 lb uplift at joint 15, 41 Ib uplift at joint 16, 63 lb uplift at joint 17, 50 lb uplift at joint 18, 53 lb uplift at joint 19, 52 lb uplift at joint 20, 51 Ib uplift at joint 21, 54 lb uplift at joint 22 and 118 lb uplift at joint 23.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

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.

GRIP

LOAD CASE(S) Standard



November 1,2023

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

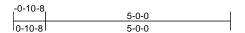
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



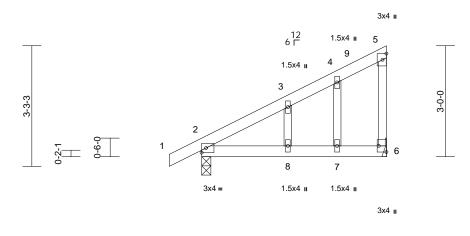
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	D1	Monopitch	4	1	Job Reference (optional)	161755139

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:43 ID:J9uoFkXWrWxKhW?zklsI4bzDH1v-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



5-0-0



Scale = 1:31.2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.04	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.05	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 22 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

5-0-0 oc purlins, except end verticals.

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

bracing.

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

Max Horiz 2=123 (LC 9)

Max Uplift 2=-59 (LC 12), 6=-60 (LC 12) Max Grav 2=292 (LC 1), 6=207 (LC 1)

FORCES (Ib) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/17, 2-3=-169/71, 3-4=-102/61,

4-5=-65/57, 5-6=-106/113 BOT CHORD 2-8=-67/74, 7-8=-67/74, 6-7=-67/74

WEBS 4-7=-36/69, 3-8=-48/105

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 4-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.

- 6) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 6 and 59 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



November 1,2023

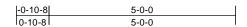
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

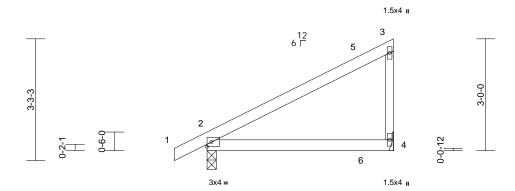
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	D2	Monopitch	10	1	Job Reference (optional)	161755140

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:44 ID:yf123P231X1sVXWTy3fc?NzDH2W-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f





Scale = 1:30.9

			-									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	0.09	2-4	>603	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	0.08	2-4	>751	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDI	10.0	Code	IRC2018/TPI2014	Matriy-P		l ` ´					Weight: 10 lb	FT - 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 2=0-3-0, 4= Mechanical

Max Horiz 2=123 (LC 9)

Max Uplift 2=-59 (LC 12), 4=-87 (LC 9) Max Grav 2=292 (LC 1), 4=207 (LC 1)

FORCES (Ib) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/17, 2-3=-167/114, 3-4=-167/225

BOT CHORD 2-4=-54/59

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 4-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 4 and 59 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

November 1,2023

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

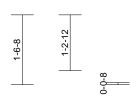


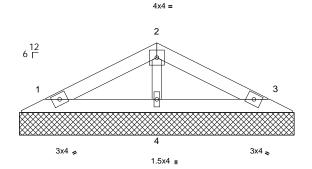
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	PB1	Piggyback	2	1	Job Reference (optional)	161755141

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:44 ID:9wUnxfypw9GahpSGfCwjgdzczGe-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1







6-0-0

Scale = 1:25.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=6-1-0, 3=6-1-0, 4=6-1-0

Max Horiz 1=23 (LC 12)

Max Uplift 1=-30 (LC 12), 3=-34 (LC 13), 4=-7

(LC 12)

Max Grav 1=115 (LC 1), 3=115 (LC 1), 4=211

(LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-55/46, 2-3=-55/52 BOT CHORD 1-4=-1/25, 3-4=-1/25 WEBS 2-4=-150/135

NOTES

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

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1, 34 lb uplift at joint 3 and 7 lb uplift at joint 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

SCOTT M.
SEVIER

NUMBER
PE-2001018807

November 1,2023

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

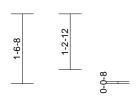


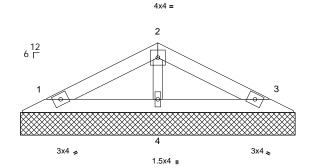
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	PB2	Piggyback	22	1	Job Reference (optional)	l61755142

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Page: 1







6-0-0

Scale = 1:25.5

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=6-1-0, 3=6-1-0, 4=6-1-0

Max Horiz 1=23 (LC 12)

Max Uplift 1=-30 (LC 12), 3=-34 (LC 13), 4=-7

(LC 12)

Max Grav 1=115 (LC 1), 3=115 (LC 1), 4=211

(LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-55/46, 2-3=-55/52 BOT CHORD 1-4=-1/25, 3-4=-1/25 WEBS 2-4=-150/135

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 DOI = 1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1, 34 lb uplift at joint 3 and 7 lb uplift at joint 4.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

SCOTT M.
SEVIER

NUMBER
PE-2001018807

November 1,2023

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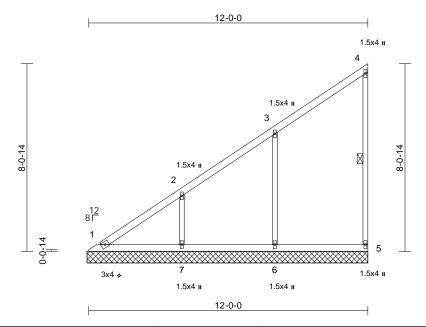
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



١	Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
	P240157-01	V1	Valley	2	1	Job Reference (optional)	161755143

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Page: 1



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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 50 lb	FT = 20%

LUMBER

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

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 4-5

REACTIONS (size) 1=12-0-15, 5=12-0-15, 6=12-0-15,

7=12-0-15 Max Horiz 1=335 (LC 12)

Max Uplift 5=-62 (LC 12), 6=-169 (LC 12), 7=-171 (LC 12)

1=183 (LC 21), 5=149 (LC 19), Max Grav

6=412 (LC 19), 7=388 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-377/251, 2-3=-228/156, 3-4=-104/51,

4-5=-116/84

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

WEBS 3-6=-327/235, 2-7=-299/221

NOTES

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

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 5, 169 lb uplift at joint 6 and 171 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



November 1,2023

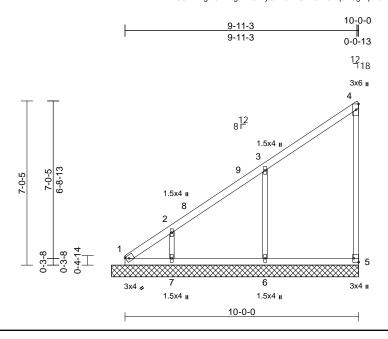
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	V2	Valley	2	1	Job Reference (optional)	161755144

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:45 ID:XHTUUTtwhgM5ZxmgHzAJ4LyGxRs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:49.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 42 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

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

bracing.

REACTIONS (size) 1=10-6-15, 5=10-6-15, 6=10-6-15,

7=10-6-15 Max Horiz 1=285 (LC 9)

Max Uplift

1=-77 (LC 10), 5=-59 (LC 9),

6=-176 (LC 12), 7=-148 (LC 12) 1=164 (LC 9), 5=164 (LC 19), Max Grav

6=426 (LC 19), 7=317 (LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-503/322, 2-3=-372/260, 3-4=-177/152,

4-5=-129/138

BOT CHORD 1-7=-133/145, 6-7=-133/145, 5-6=-133/145

WEBS 3-6=-344/303, 2-7=-249/215

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-9-1 to 5-9-1, Interior (1) 5-9-1 to 10-6-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 1, 59 lb uplift at joint 5, 176 lb uplift at joint 6 and 148 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



November 1,2023

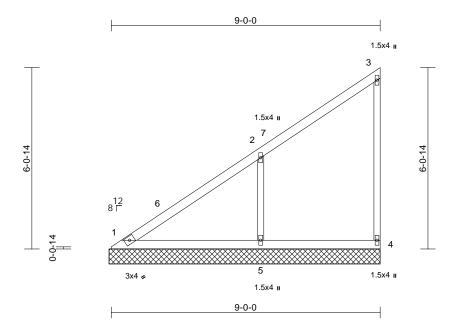
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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



	Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
١	P240157-01	V3	Valley	2	1	Job Reference (optional)	161755145

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:45 ID:7inLsRr1OlzWhT15crccTiyGxRv-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:38.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 36 lb	FT = 20%

LUMBER

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

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.

(size) REACTIONS 1=9-0-15, 4=9-0-15, 5=9-0-15

Max Horiz 1=242 (LC 9) Max Uplift

1=-4 (LC 8), 4=-50 (LC 9), 5=-209 (LC 12)

1=194 (LC 20), 4=143 (LC 19), Max Grav

5=506 (LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-388/267, 2-3=-172/145, 3-4=-134/142 **BOT CHORD** 1-5=-116/126, 4-5=-116/126

WEBS 2-5=-399/340

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 9-0-1 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.

- 6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 4 lb uplift at joint 1, 50 lb uplift at joint 4 and 209 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

November 1,2023

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

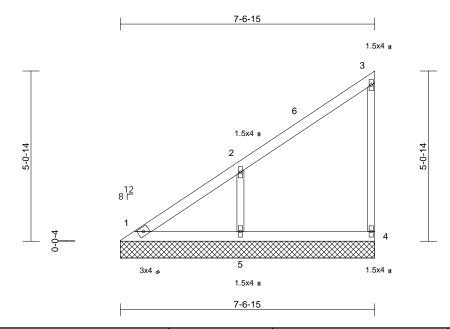
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



ſ	Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
	P240157-01	V4	Valley	2	1	Job Reference (optional)	161755146

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:45 ID:i76DDQo95qbyq0JWxj3vr4yGxRy-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:34.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%

LUMBER

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

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.

(size) REACTIONS 1=7-6-15, 4=7-6-15, 5=7-6-15

Max Horiz 1=199 (LC 9)

Max Uplift 1=-16 (LC 8), 4=-46 (LC 9), 5=-172 (LC 12)

1=132 (LC 20), 4=158 (LC 19), Max Grav 5=418 (LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-353/236, 2-3=-165/135, 3-4=-138/151

BOT CHORD 1-5=-96/105, 4-5=-96/105 **WEBS** 2-5=-330/305

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 1) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 7-6-1 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.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 1, 46 lb uplift at joint 4 and 172 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



November 1,2023

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

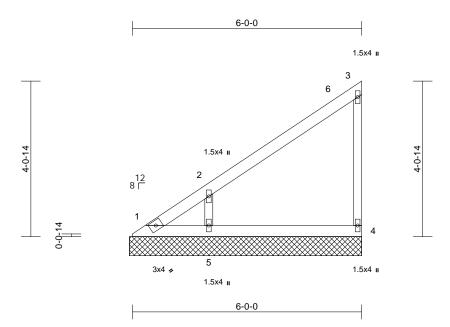
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	V5	Valley	2	1	Job Reference (optional)	161755147

Run: 8.63 S Aug 30 2023 Print: 8.630 S Aug 30 2023 MiTek Industries, Inc. Tue Oct 31 15:34:45 ID:mk_SpknvZDLEbi98pI1RmfyGxS_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:30.2

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%

LUMBER

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

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.

(size) REACTIONS 1=6-0-15, 4=6-0-15, 5=6-0-15

Max Horiz 1=157 (LC 9)

1=-56 (LC 10), 4=-41 (LC 9), Max Uplift

5=-156 (LC 12)

1=83 (LC 9), 4=159 (LC 19), 5=378 Max Grav

(LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-331/216, 2-3=-155/120, 3-4=-135/154

BOT CHORD 1-5=-76/82, 4-5=-76/82 **WEBS** 2-5=-298/299

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 1) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 6-0-1 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.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 1, 41 lb uplift at joint 4 and 156 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



November 1,2023

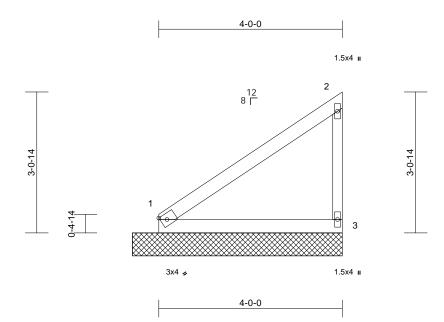
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	V6	Valley	2	1	Job Reference (optional)	161755148

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Scale = 1:25.1

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins, except end verticals. BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 1=4-6-15, 3=4-6-15

Max Horiz 1=114 (LC 9)

Max Uplift 1=-15 (LC 12), 3=-58 (LC 12) Max Grav 1=169 (LC 1), 3=186 (LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-163/120, 2-3=-154/185

BOT CHORD 1-3=-55/60

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 1 and 58 lb uplift at joint 3.

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



Page: 1

November 1,2023

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

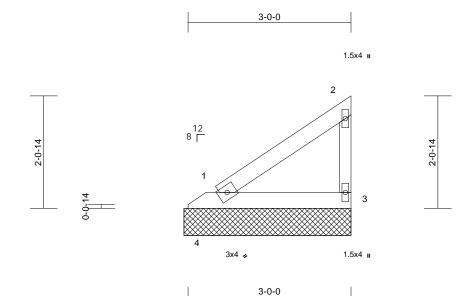
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84	
P240157-01	V7	Valley	2	1	Job Reference (optional)	l61755149

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Page: 1



Scale = 1:21.2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-1-5 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 1=3-0-15, 3=3-0-15, 4=3-0-15

Max Horiz 4=72 (LC 9)

Max Uplift 3=-39 (LC 12), 4=-47 (LC 3) Max Grav 1=143 (LC 3), 3=110 (LC 19),

4=-14 (LC 8)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-105/77, 2-3=-99/121 BOT CHORD 1-4=-160/107, 1-3=-35/38

NOTES

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

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 3 and 47 lb uplift at joint 4.
- 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 1,2023



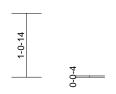
Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 84					
P240157-01	V8	Valley	2	1	Job Reference (optional)	161755150				

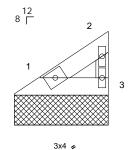
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1.5x4 II







1.5x4 II

1-6-15

Scale = 1:19.3

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 5 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-7-5 oc purlins, except end verticals. BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 1=1-6-15, 3=1-6-15

Max Horiz 1=29 (LC 9)

Max Uplift 1=-5 (LC 12), 3=-15 (LC 12) Max Grav 1=46 (LC 1), 3=50 (LC 19) (lb) - Maximum Compression/Maximum

FORCES Tension

TOP CHORD 1-2=-42/32, 2-3=-44/50

BOT CHORD 1-3=-14/15

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) 1) 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 5) chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 1 and 15 lb uplift at joint 3.

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 1,2023

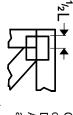
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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

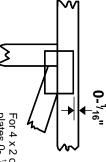


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

* Plate location details available in MiTek software or upon request

PLATE SIZE



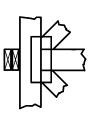
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

LATERAL BRACING LOCATION



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

BEARING



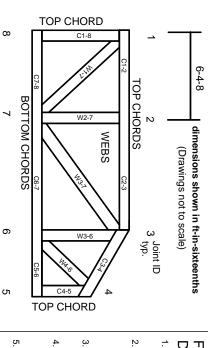
Min size shown is for crushing only reaction section indicates joint number/letter where bearings occur (supports) occur. Icons vary but Indicates location where bearings

Industry Standards:

National Design Specification for Metal Plate Connected Wood Trusses Installing, Restraining & Bracing of Metal Guide to Good Practice for Handling, Building Component Safety Information, Design Standard for Bracing. Plate Connected Wood Truss Construction.

DSB-22: ANSI/TPI1:

Numbering System



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

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

Product Code Approvals

ICC-ES Reports

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

Design General Notes

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

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

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Mile

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

General Safety Notices

Damage or Personal Injury Failure to Follow Could Cause Property

VELOPMENT SER LEE'S SUMMIT, MISSOURI

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

œ

Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- 10. Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.