

RE: P240242-01

Roof - Osage Lot 66

MiTek, Inc.

16023 Swingley Ridge Rd. Chesterfield, MO 63017

Date

3/19/2024

3/19/2024

3/19/2024

3/19/2024

314.434.1200

Truss Name

A4

A5

A6

Α7

Site Information:

Customer: Clayton Properties Project Name: P240242-01 Lot/Block: 66 Model:

Address: 3828 SW Ravengate Pl. Subdivision: Osage

City: Lee's Summit State: MO

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.6

Wind Code: ASCE 7-16 Wind Speed: 115 mph Floor Load: N/A psf Roof Load: 45.0 psf

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

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.



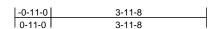
Truss Type Ply Job Truss Qty Roof - Osage Lot 66 P240242-01 D4 Monopitch Supported Gable Job Reference (optional

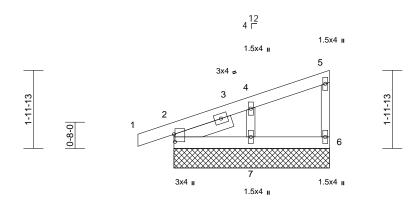
S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307706 LEE'S SUMMIT. MISSOURI

RELEASE FOR CONSTRUCTION

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:kPne3ZBHTkl?h0BzBbqQCDzZj0G-RfC?PsB70Hq3NSgPqnL8w3ulTXbG (WrCDoi





Scale = 1:29.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

3-11-8

LUMBER

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

SLIDER Left 2x4 SP No.2 -- 1-6-7

BRACING

TOP CHORD Structural wood sheathing directly applied or

3-11-8 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 2=3-11-8, 6=3-11-8, 7=3-11-8

Max Horiz 2=77 (LC 9)

Max Uplift 2=-52 (LC 8), 6=-13 (LC 8), 7=-59

(LC 12)

Max Grav 2=151 (LC 1), 6=68 (LC 1), 7=192

(LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-4/0, 2-4=-169/83, 4-5=-58/48, 5-6=-54/91

BOT CHORD 2-7=-34/46 6-7=-34/46

WEBS 4-7=-144/275

NOTES

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

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 6, 52 lb uplift at joint 2 and 59 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



March 19,2024



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

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



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

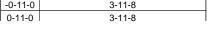
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

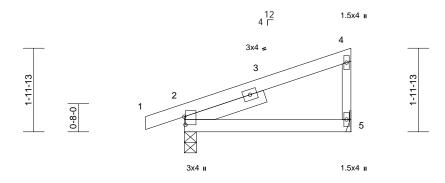
LEE'S SUMMIT. MISSOURI Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 228:242 3/2 ID:kPne3ZBHTkl?h0BzBbqQCDzZj0G-RfC?PsB70Hq3NSgPqnL8w3uITXbG WrCDoix

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES 164307707

-0-11-0 3-11-8





3-11-8

Scale = 1:27.4

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

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

LOAD CASE(S) Standard

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

SLIDER Left 2x4 SP No.2 -- 2-0-0

BRACING

LUMBER

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

bracing.

REACTIONS (size) 2=0-3-8, 5= Mechanical

Max Horiz 2=77 (LC 9)

Max Uplift 2=-78 (LC 8), 5=-43 (LC 12) Max Grav 2=245 (LC 1), 5=166 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-4/0, 2-4=-100/61, 4-5=-127/200

BOT CHORD 2-5=-34/37

NOTES

- 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
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 5 and 78 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Ply Job Truss Truss Type Qty Roof - Osage Lot 66 P240242-01 E1 Monopitch Supported Gable

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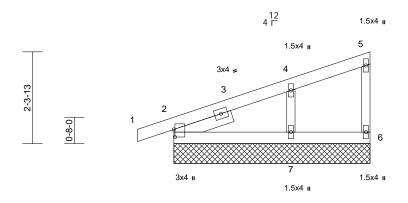
LEE'S SUMMIT. MISSOURI Job Reference (optional Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:kPne3ZBHTkl?h0BzBbqQCDzZj0G-RfC?PsB70Hq3NSgPqnL8w3uITXbG (WrCDoi

2-3-13

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES 164307708





4-11-8

Scale = 1:29.1

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%

LUMBER

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

SLIDER Left 2x4 SP No.2 -- 1-6-6

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-11-8 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 2=4-11-8, 6=4-11-8, 7=4-11-8

Max Horiz 2=93 (LC 9)

Max Uplift 2=-57 (LC 8), 6=-10 (LC 9), 7=-79 (LC 12)

2=186 (LC 1), 6=53 (LC 1), 7=262 Max Grav

(LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-4/0, 2-4=-188/99, 4-5=-56/52,

5-6=-43/68

BOT CHORD 2-7=-41/55. 6-7=-41/55

WFBS 4-7=-199/362

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 4-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 6, 57 lb uplift at joint 2 and 79 lb uplift at joint 7.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 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



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Truss Type Ply Job Truss Qty Roof - Osage Lot 66 P240242-01 E2 Monopitch

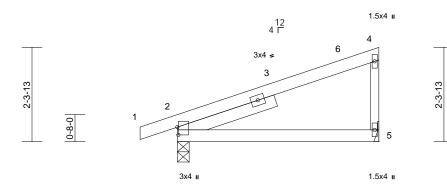
DEVELOPMENT SERVICES 164307709 LEE'S SUMMIT. MISSOURI Job Reference (optional

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Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:kPne3ZBHTkl?h0BzBbqQCDzZj0G-RfC?PsB70Hq3NSgPqnL8w3uITXbG (WrCDoi





4-11-8

Scale = 1:28.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.03	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	2-5	>875	180	1	
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a	1	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%

LOAD CASE(S) Standard

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

Left 2x4 SP No.2 -- 2-6-5 SLIDER

BRACING

LUMBER

TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 2=0-3-8, 5= Mechanical

Max Horiz 2=93 (LC 9)

Max Uplift 2=-86 (LC 8), 5=-55 (LC 12) Max Grav 2=289 (LC 1), 5=212 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

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

BOT CHORD 2-5=-41/44

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 4-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 5 and 86 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 19,2024



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Truss Type Job Truss Qty Ply Roof - Osage Lot 66 P240242-01 E3 Monopitch

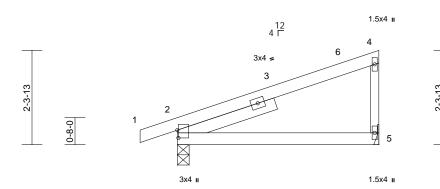
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

LEE'S SUMMIT. MISSOURI Job Reference (optional Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:kPne3ZBHTkl?h0BzBbqQCDzZj0G-RfC?PsB70Hq3NSgPqnL8w3uITXbG (WrCDoi

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DEVELOPMENT SERVICES 164307710

-0-11-0 4-11-8 0-11-0 4-11-8



4-11-8

Scale = 1:28.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.03	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07	2-5	>875	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%

LOAD CASE(S) Standard

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

SLIDER Left 2x4 SP No.2 -- 2-6-5

BRACING

LUMBER

TOP CHORD Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 2=0-3-8, 5= Mechanical

Max Horiz 2=93 (LC 9)

Max Uplift 2=-86 (LC 8), 5=-55 (LC 12) Max Grav 2=289 (LC 1), 5=212 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

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

BOT CHORD 2-5=-41/44

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 4-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 55 lb uplift at joint 5 and 86 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 19,2024



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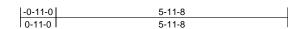
Truss Type Job Truss Qty Ply Roof - Osage Lot 66 P240242-01 D2 5 Monopitch

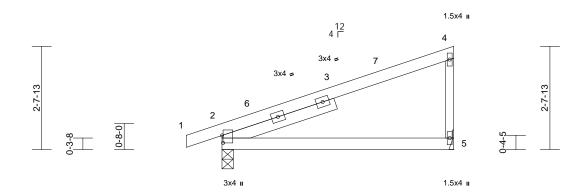
DEVELOPMENT SERVICES 164307711 LEE'S SUMMIT. MISSOURI Job Reference (optional

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5-11-8

Scale = 1:29.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.07	2-5	>997	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.14	2-5	>499	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 26 lb	FT = 20%

LOAD CASE(S) Standard

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

SLIDER Left 2x4 SP No.2 -- 3-0-10

BRACING

LUMBER

TOP CHORD Structural wood sheathing directly applied or 4-1-15 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 2=0-3-8, 5= Mechanical

Max Horiz 2=109 (LC 9)

Max Uplift 2=-94 (LC 8), 5=-66 (LC 12) Max Grav 2=333 (LC 1), 5=258 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

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

BOT CHORD 2-5=-48/52

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 5 and 94 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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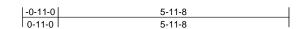
Job Truss Truss Type Qty Ply Roof - Osage Lot 66 P240242-01 D1 Monopitch Supported Gable

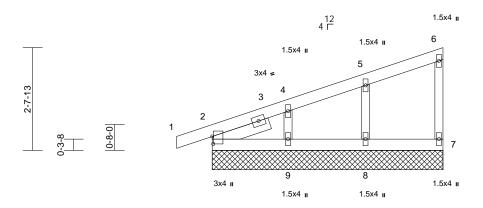
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

DEVELOPMENT SERVICES 164307712 LEE'S SUMMIT. MISSOURI Job Reference (optional Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 18

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

ID:kPne3ZBHTkl?h0BzBbqQCDzZj0G-RfC?PsB70Hq3NSgPqnL8w3ulTXbG (WrCDoi





5-11-8

Scale = 1:29.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	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	0.06	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 26 lb	FT = 20%

LUMBER

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

SLIDER Left 2x4 SP No.2 -- 1-6-7

BRACING

TOP CHORD Structural wood sheathing directly applied or

5-11-8 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 2=5-11-8, 7=5-11-8, 8=5-11-8, 9=5-11-8

Max Horiz 2=109 (LC 9)

Max Uplift 2=-41 (LC 8), 7=-14 (LC 9), 8=-54

(LC 8), 9=-59 (LC 12)

2=154 (LC 1), 7=67 (LC 1), 8=198 Max Grav

(LC 1), 9=172 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-2=-4/0, 2-4=-255/119, 4-5=-148/89,

5-6=-68/63, 6-7=-56/91

BOT CHORD 2-9=-48/64, 8-9=-48/64, 7-8=-48/64 WEBS 5-8=-155/234, 4-9=-137/259

NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 3-11-8, Exterior(2N) 3-11-8 to 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom 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 14 lb uplift at joint 7, 41 lb uplift at joint 2, 54 lb uplift at joint 8 and 59 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502 11 1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024



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

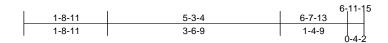
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

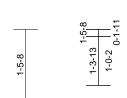


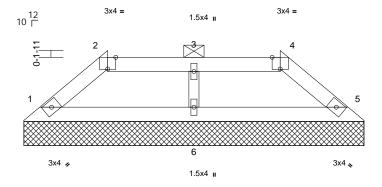
Truss Type Job Truss Qty Ply Roof - Osage Lot 66 P240242-01 V6 Valley Job Reference (optional RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307713 LEE'S SUMMIT. MISSOURI

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 1 12 14 15 ID:DbK0HuCvD1QsI9m9lJLfkQzZj0F-RfC?PsB70Hq3NSgPqnL8w3uITXbGK VrCDoi7







6-11-15

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 22 lb	FT = 20%

LUMBER

Scale = 1:23.7

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, except

2-0-0 oc purlins (6-0-0 max.): 2-4.

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

bracing.

REACTIONS (size) 1=6-11-15, 5=6-11-15, 6=6-11-15

Max Horiz 1=-29 (LC 8)

Max Uplift 1=-30 (LC 12), 5=-31 (LC 13), 6=-28 (LC 9)

Max Grav 1=162 (LC 1), 5=162 (LC 1), 6=238

(LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-174/116, 2-3=-121/121, 3-4=-121/121,

4-5=-174/119

BOT CHORD 1-6=-59/120, 5-6=-59/120

WEBS 3-6=-160/125

NOTES

- 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) 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.
- Provide adequate drainage to prevent water ponding.

- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1, 31 lb uplift at joint 5 and 28 lb uplift at joint 6.
- 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





Truss Type Job Truss Qty Ply Roof - Osage Lot 66 P240242-01 V5 Valley Job Reference (optiona S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307714 LEE'S SUMMIT. MISSOURI

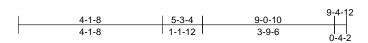
RELEASE FOR CONSTRUCTION

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

3-3-13

3-5-8

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:DbK0HuCvD1QsI9m9lJLfkQzZj0F-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7



1.5x4 II

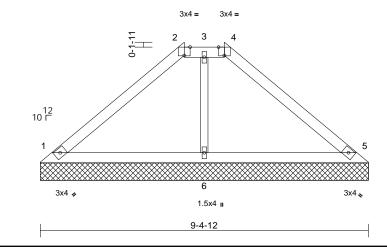


Plate Offsets (X, Y): [2:0-2-0,Edge], [4:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 lb	FT = 20%

LUMBER

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

BRACING

Structural wood sheathing directly applied or TOP CHORD

6-0-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 2-4.

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

bracing.

REACTIONS (size) 1=9-4-12, 5=9-4-12, 6=9-4-12

Max Horiz 1=-85 (LC 8)

Max Uplift 1=-66 (LC 12), 5=-74 (LC 13) Max Grav

1=258 (LC 1), 5=258 (LC 1), 6=262 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-252/149, 2-3=-137/195, 3-4=-137/194,

4-5=-252/162

1-6=-42/134, 5-6=-42/134 BOT CHORD

WEBS 3-6=-136/40

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) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face). see Standard Industry Gable End Details as applicable or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.

- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 1 and 74 lb uplift at joint 5.
- 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.
- 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 66 P240242-01 В1 Common Supported Gable Job Reference (optiona

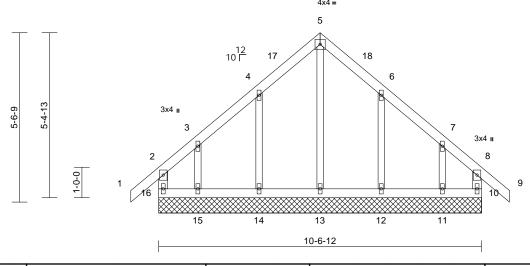
DEVELOPMENT SERVICES 164307715 LEE'S SUMMIT. MISSOURI

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 18 ID:o0fuetA1x62HRi1a3Aoy7ozZj0I-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4





Scale = 1:37.7

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 54 lb	FT = 20%

LUMBER

2x4 SP No.2 TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP 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 6-0-0 oc

bracing.

REACTIONS (size) 10=10-6-12, 11=10-6-12, 12=10-6-12, 13=10-6-12,

14=10-6-12, 15=10-6-12,

16=10-6-12

Max Horiz 16=-176 (LC 10)

Max Uplift 10=-73 (LC 9), 11=-130 (LC 13),

12=-99 (LC 13), 14=-98 (LC 12), 15=-134 (LC 12), 16=-94 (LC 8)

Max Grav 10=160 (LC 19), 11=177 (LC 20), 12=210 (LC 20), 13=196 (LC 22),

14=209 (LC 19), 15=186 (LC 19),

16=177 (LC 20)

FORCES (lb) - Maximum Compression/Maximum

TOP CHORD 2-16=-142/100, 1-2=0/48, 2-3=-106/104,

3-4=-72/137, 4-5=-123/270, 5-6=-123/270,

6-7=-59/136, 7-8=-85/85, 8-9=0/48,

8-10=-129/101

BOT CHORD 15-16=-85/110, 14-15=-85/110, 13-14=-85/110. 12-13=-85/110.

11-12=-85/110. 10-11=-85/110

WEBS 5-13=-238/45, 4-14=-171/221, 3-15=-140/184, 6-12=-171/221,

7-11=-139/184

NOTES

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 5-3-6, Corner(3R) 5-3-6 to 10-5-0, Exterior(2N) 10-5-0 to 11-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 16, 73 lb uplift at joint 10, 98 lb uplift at joint 14, 134 lb uplift at joint 15, 99 lb uplift at joint 12 and 130 lb uplift at
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024



M 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

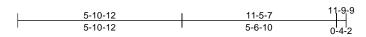


Job Truss Truss Type Qty Ply Roof - Osage Lot 66 P240242-01 V4 Valley Job Reference (optional

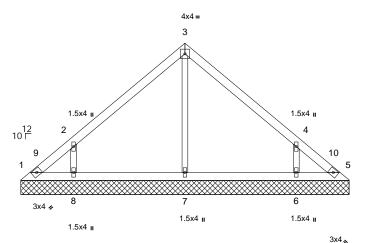
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307716 LEE'S SUMMIT. MISSOURI

ID:DbK0HuCvD1QsI9m9lJLfkQzZj0F-RfC?PsB70Hq3NSgPqnL8w3uITXbGK VrCDoi7







11-9-9

Scale = 1:41.4

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

LUMBER

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

1=11-9-9, 5=11-9-9, 6=11-9-9, 7=11-9-9, 8=11-9-9

Max Horiz 1=-128 (LC 8)

Max Uplift 1=-58 (LC 10), 5=-35 (LC 11),

6=-195 (LC 13), 8=-195 (LC 12)

1=94 (LC 12), 5=79 (LC 22), 6=358 (LC 20), 7=257 (LC 1), 8=359 (LC

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-143/109, 2-3=-172/126, 3-4=-167/118,

4-5=-119/74 **BOT CHORD** 1-8=-37/92, 7-8=-37/92, 6-7=-37/92,

5-6=-37/92

WEBS

3-7=-171/16, 2-8=-299/291, 4-6=-299/291

NOTES

- Unbalanced roof live loads have been considered for 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) 0-4-13 to 5-4-13. Interior (1) 5-4-13 to 5-11-1. Exterior(2R) 5-11-1 to 10-11-1, Interior (1) 10-11-1 to 11-5-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

LOAD CASE(S) Standard





Truss Type Job Truss Qty Ply Roof - Osage Lot 66 P240242-01 V3 Valley

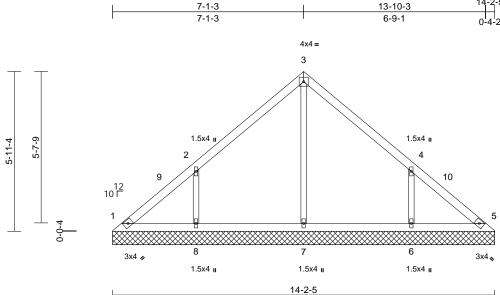
DEVELOPMENT SERVICES 164307717 LEE'S SUMMIT. MISSOURI Job Reference (optional Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 18

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

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

7-1-3 13-10-3

ID:DbK0HuCvD1QsI9m9IJLfkQzZj0F-RfC?PsB70Hq3NSgPqnL8w3uITXbGK VrCDoi7



Scale = 1:42.8

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	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 55 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 2x4 SP No.2 **BOT CHORD** 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) 1=14-2-5, 5=14-2-5, 6=14-2-5,

7=14-2-5, 8=14-2-5 Max Horiz 1=156 (LC 9)

Max Uplift 1=-30 (LC 8), 5=-3 (LC 9), 6=-207

(LC 13), 8=-207 (LC 12)

1=151 (LC 20), 5=130 (LC 19), Max Grav 6=389 (LC 20), 7=253 (LC 1),

8=389 (LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-162/116, 2-3=-175/136, 3-4=-166/128,

4-5=-138/74

BOT CHORD 1-8=-50/114, 7-8=-50/114, 6-7=-50/114,

5-6=-50/114

WEBS 3-7=-171/0, 2-8=-312/261, 4-6=-312/261

NOTES

- Unbalanced roof live loads have been considered for 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) 0-4-13 to 5-4-13, Interior (1) 5-4-13 to 7-1-8, Exterior(2R) 7-1-8 to 12-1-8, Interior (1) 12-1-8 to 13-10-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable or consult qualified building designer as per ANSI/TPI 1.

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

LOAD CASE(S) Standard



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

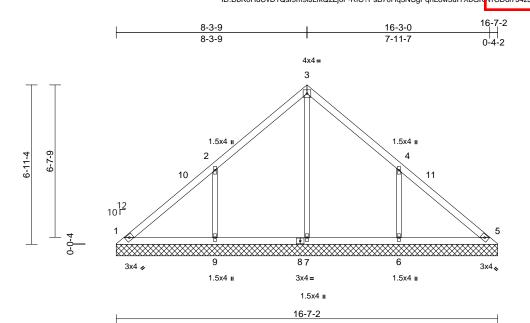


Job	Truss	Truss Type	Qty	Ply	Roof - Osage Lot 66
P240242-01	V2	Valley	1	1	Job Reference (optional)

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

LEE'S SUMMIT. MISSOURI Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 18 2:01:24 D:DbK0HuCvD1QsI9m9IJLfkQzZj0F-RfC?PsB70Hq3NSgPqnL8w3uITXbGK vrCDoi7s zzjCFP

RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307718



Scale = 1:50.1

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	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 65 lb	FT = 20%

LUMBER

2x4 SP No.2 TOP CHORD **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) 1=16-7-2, 5=16-7-2, 6=16-7-2,

7=16-7-2, 9=16-7-2 Max Horiz 1=-184 (LC 8)

Max Uplift 1=-20 (LC 8), 6=-240 (LC 13),

9=-241 (LC 12)

1=195 (LC 20), 5=177 (LC 1), Max Grav 6=459 (LC 20), 7=235 (LC 22),

9=459 (LC 19)

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-186/136, 2-3=-177/152, 3-4=-166/135,

4-5=-158/88

BOT CHORD 1-9=-63/144, 7-9=-63/144, 6-7=-63/144,

5-6=-63/144

WEBS 3-7=-162/0, 2-9=-360/284, 4-6=-360/283

NOTES

FORCES

- 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) 0-4-13 to 5-4-13. Interior (1) 5-4-13 to 8-3-14. Exterior(2R) 8-3-14 to 13-3-14, Interior (1) 13-3-14 to 16-2-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

LOAD CASE(S) Standard



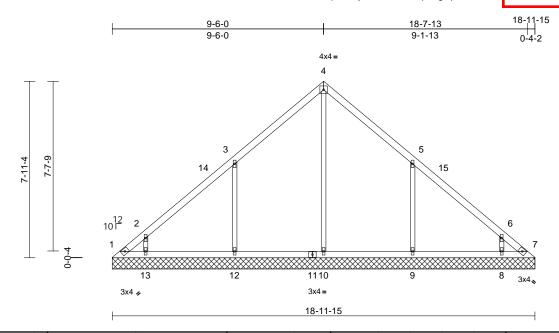




Job Truss Truss Type Qty Ply Roof - Osage Lot 66 P240242-01 V1 Valley Job Reference (optional RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307719 LEE'S SUMMIT. MISSOURI

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:kPne3ZBHTkl?h0BzBbqQCDzZj0G-RfC?PsB70Hq3NSgPqnL8w3uITXbG (WrCDoi



Scale = 1:51.8

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	0.25	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	0.25	Horiz(TL)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 77 lb	FT = 20%

LUMBER

2x4 SP No.2 TOP CHORD **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)

1=18-11-15, 7=18-11-15, 8=18-11-15, 9=18-11-15, 10=18-11-15, 12=18-11-15,

13=18-11-15

Max Horiz 1=-212 (LC 8)

Max Uplift 1=-120 (LC 10), 7=-83 (LC 11),

8=-163 (LC 13), 9=-223 (LC 13), 12=-224 (LC 12), 13=-162 (LC 12)

Max Grav 1=181 (LC 12), 7=156 (LC 13),

8=321 (LC 20), 9=425 (LC 20), 10=256 (LC 22), 12=425 (LC 19),

13=321 (LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-275/179, 2-3=-215/132, 3-4=-181/174, 4-5=-167/151, 5-6=-172/75, 6-7=-236/121

BOT CHORD 1-13=-75/169, 12-13=-75/169,

10-12=-75/169, 9-10=-75/169, 8-9=-75/169,

7-8=-75/169

WEBS 4-10=-178/0, 3-12=-343/273, 2-13=-258/209,

5-9=-342/273. 6-8=-259/210

NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-13 to 5-6-4, Interior (1) 5-6-4 to 9-6-4, Exterior(2R) 9-6-4 to 14-6-4, Interior (1) 14-6-4 to 18-7-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable. or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 1, 83 lb uplift at joint 7, 224 lb uplift at joint 12, 162 Ib uplift at joint 13, 223 lb uplift at joint 9 and 163 lb uplift at joint 8.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024



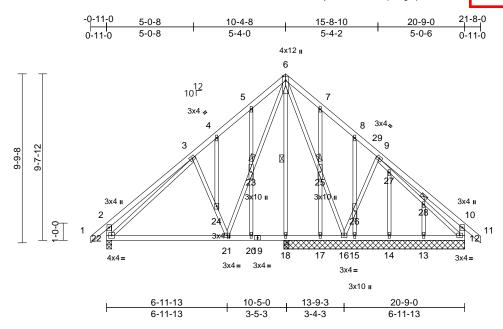
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job Truss Truss Type Qty Ply Roof - Osage Lot 66 P240242-01 C1 Common Structural Gable Job Reference (optional RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307720 LEE'S SUMMIT. MISSOURI

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:GDDGsDBfiQA83scmduJBf?zZj0H-RfC?PsB70Hq3NSgPqnL8w3uITXbGl WrCDoi 34zJQ?



Scale = 1:66.8

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	0.28	Vert(LL)	-0.06	21-22	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.11	21-22	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 143 lb	FT = 20%

LUMBER

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

2x3 SPF No.2 *Except* 22-2,12-10:2x4 SP WEBS

No.2

OTHERS 2x3 SPF No.2

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.

WEBS 1 Row at midnt 6-18 **JOINTS**

1 Brace at Jt(s): 23,

25, 28

REACTIONS (size) 12=10-5-12, 13=10-5-12, 14=10-5-12, 15=10-5-12,

16=10-5-12, 17=10-5-12, 18=10-5-12, 22=0-3-8

Max Horiz 22=292 (LC 11)

Max Uplift 12=-113 (LC 13), 16=-179 (LC 13),

17=-80 (LC 13), 18=-43 (LC 12), 22=-98 (LC 12)

Max Grav 12=346 (LC 26), 13=93 (LC 3),

14=81 (LC 17), 15=64 (LC 3), 16=416 (LC 1), 17=186 (LC 26),

18=413 (LC 19), 22=581 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=0/48, 2-3=-363/220, 3-4=-359/195, TOP CHORD 4-5=-330/229. 5-6=-381/288. 6-7=-167/247.

7-8=-116/168, 8-9=-125/134, 9-10=-269/233, 10-11=0/48, 2-22=-413/230, 10-12=-351/239

BOT CHORD 21-22=-137/413, 20-21=-105/195,

18-20=-105/195, 17-18=-105/193, 16-17=-105/193, 15-16=-23/114, 14-15=-23/114, 13-14=-23/114,

12-13=-23/114

WEBS 6-25=-185/38, 16-25=-200/41,

16-26=-306/290, 9-26=-284/268, 21-23=-225/492, 6-23=-243/517,

3-24=-261/228, 21-24=-290/262, 3-22=-244/91, 9-27=-191/113,

27-28=-152/93, 12-28=-150/91 6-18=-283/15, 5-23=-152/97, 20-23=-125/79,

4-24=-32/41, 7-25=-177/110,

17-25=-171/117, 8-26=-28/36, 15-26=-10/18,

14-27=-51/28, 13-28=-3/4

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) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 10-2-13, Exterior(2R) 10-2-13 to 15-2-13. Interior (1) 15-2-13 to 21-8-0 zone: cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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. Truss to be fully sheathed from one face or securely
- braced against lateral movement (i.e. diagonal web). Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 179 lb uplift at joint 16, 98 lb uplift at joint 22, 113 lb uplift at joint 12, 43 Ib uplift at joint 18 and 80 lb uplift at joint 17.

10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024



Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to use only with recks colline tools. This design is based only upon parameters shown, and is not an individual busining denipolinit, 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)



 Job
 Truss
 Truss Type
 Qty
 Ply
 Roof - Osage Lot 66

 P240242-01
 C2
 Common
 3
 1
 Job Reference (optional

RELEASE FOR CONSTRUCTION

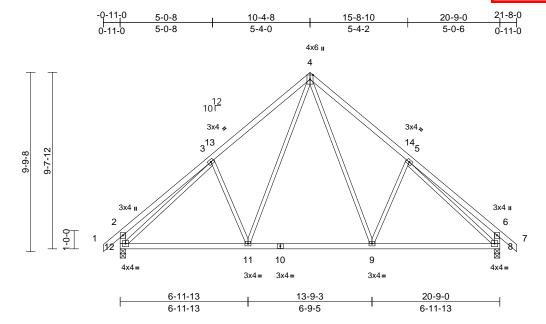
AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES
164307721

LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Non Mar 18 12 21:35 2 3 / 2 9 2 4 ID:kPne3ZBHTkl?h0BzBbqQCDzZj0G-RfC?PsB70Hq3NSgPqnL8w3ulTXbG_WrCDon-4zJc.ff



Scale = 1:63

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

LUMBER

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

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-4-14 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 8=0-3-8, 12=0-3-8

Max Horiz 12=295 (LC 11)

Max Uplift 8=-141 (LC 13), 12=-141 (LC 12) Max Grav 8=995 (LC 1), 12=995 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/48, 2-3=-376/192, 3-4=-957/298, 4-5=-957/298, 5-6=-374/190, 6-7=0/48,

2-12=-413/203, 6-8=-411/202

BOT CHORD 11-12=-157/808, 9-11=-10/548, 8-9=-44/726

WEBS 4-9=-192/434, 5-9=-290/289, 4-11=-193/434, 3-11=-290/289, 3-12=-745/51, 5-8=-747/51

NOTES

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

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 12 and 141 lb uplift at joint 8.
- 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







Job Truss Truss Type Qty Ply Roof - Osage Lot 66 P240242-01 C3 Common Girder Job Reference (optiona RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307722 LEE'S SUMMIT. MISSOURI

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 18 12:18:28 ID:houPUEDX_LYjwJLLI0suHezZj0E-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7

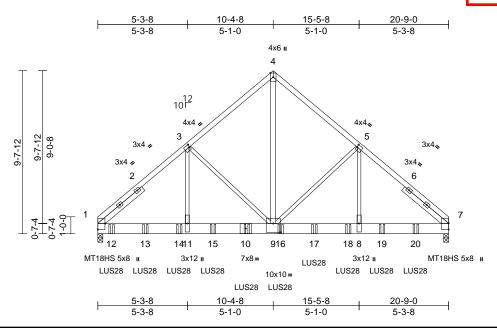


Plate Offsets (X, Y): [1:Edge,0-5-4], [3:0-0-8,0-2-0], [5:0-0-8,0-2-0], [7:Edge,0-0-0], [7:0-0-0,0-0-0], [7:0-0-0,0-0-0], [9:0-5-0,0-6-4]

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

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E **BOT CHORD** 2x8 SP 2400F 2.0E

2x3 SPF No.2 *Except* 9-4:2x4 SP No.2 WEBS **SLIDER** Left 2x4 SP No.2 -- 3-4-10, Right 2x4 SP

No.2 -- 3-4-10

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-4-9 oc purlins.

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

bracing

REACTIONS (size) 1=0-3-8, 7=0-3-8

Max Horiz 1=-256 (LC 10)

Max Uplift 1=-1148 (LC 12), 7=-1042 (LC 13) Max Grav 1=7232 (LC 1), 7=6575 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-3=-7976/1315, 3-4=-5536/1028,

4-5=-5536/1028 5-7=-7918/1306

BOT CHORD 1-11=-993/5816, 9-11=-993/5816, 8-9=-868/5770, 7-8=-868/5770

WEBS 3-11=-438/3034, 3-9=-2234/553

4-9=-1145/6509. 5-9=-2170/543.

5-8=-427/2955

NOTES

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

- Unbalanced roof live loads have been considered for
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-3-8, Interior (1) 5-3-8 to 10-4-8, Exterior(2R) 10-4-8 to 15-5-8, Interior (1) 15-5-8 to 20-9-0 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1148 lb uplift at joint 1 and 1042 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Use Simpson Strong-Tie LUS28 (6-10d Girder, 3-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-9-12 from the left end to 18-9-12 to connect truss(es) to back face of bottom chord.
- 11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (lb/ft)

Vert: 1-4=-70, 4-7=-70, 1-7=-20

Concentrated Loads (lb)

Vert: 10=-1194 (B), 12=-1196 (B), 13=-1194 (B), 14=-1194 (B), 15=-1194 (B), 16=-1194 (B), 17=-1194 (B), 18=-1194 (B), 19=-1194 (B), 20=-1194 (B)



March 19,2024



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

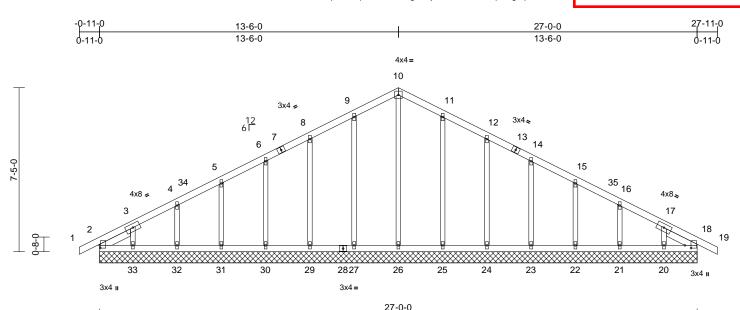
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job Truss Truss Type Qty Ply Roof - Osage Lot 66 P240242-01 A1 Common Supported Gable Job Reference (optional RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307723 LEE'S SUMMIT. MISSOURI

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:CKpbi4?FEpHGmYzuFEYgYrzZj0W-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDc



Scale = 1:52.1

LUMBER

9-9-2

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	18	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 131 lb	FT = 20%

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

SLIDER Left 2x4 SP No.2 -- 1-7-0, Right 2x4 SP No.2 -- 1-7-0

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins

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

bracing. REACTIONS (size) 2=27-0-0, 18=27-0-0, 20=27-0-0, 21=27-0-0, 22=27-0-0, 23=27-0-0,

24=27-0-0, 25=27-0-0, 26=27-0-0, 27=27-0-0, 29=27-0-0, 30=27-0-0,

31=27-0-0, 32=27-0-0, 33=27-0-0 Max Horiz 2=136 (LC 12)

Max Uplift 2=-29 (LC 8), 18=-2 (LC 9), 20=-81

(LC 13), 21=-62 (LC 13), 22=-61 (LC 13), 23=-61 (LC 13), 24=-64

(LC 13), 25=-57 (LC 13), 27=-60 (LC 12), 29=-63 (LC 12), 30=-61

(LC 12), 31=-61 (LC 12), 32=-62 (LC 12), 33=-93 (LC 12)

Max Grav 2=148 (LC 21), 18=147 (LC 1),

20=150 (LC 26), 21=183 (LC 26), 22=179 (LC 1), 23=180 (LC 1), 24=179 (LC 1), 25=189 (LC 26), 26=182 (LC 22), 27=189 (LC 25),

29=179 (LC 1), 30=180 (LC 1), 31=179 (LC 1), 32=183 (LC 25),

33=150 (LC 25)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/7, 2-3=-198/65, 3-4=-128/69

4-5=-96/83, 5-6=-71/111, 6-8=-59/142, 8-9=-74/197, 9-10=-93/248, 10-11=-93/248,

11-12=-74/197, 12-14=-55/142, 14-15=-52/88, 15-16=-54/35, 16-17=-80/21,

17-18=-142/47, 18-19=0/7

2-33=-38/158, 32-33=-38/158,

BOT CHORD 31-32=-38/158, 30-31=-38/158,

29-30=-38/158, 27-29=-38/158, 26-27=-38/158, 25-26=-38/158,

24-25=-38/158, 23-24=-38/158,

22-23=-38/158, 21-22=-38/158, 20-21=-38/158, 18-20=-38/158

10-26=-142/15, 9-27=-149/90, 8-29=-139/101, 6-30=-140/96, 5-31=-140/96,

4-32=-142/138, 3-33=-114/164, 11-25=-149/90, 12-24=-139/101,

14-23=-140/96, 15-22=-140/96 16-21=-142/138, 17-20=-114/159

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) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 13-6-0, Corner(3R) 13-6-0 to 18-6-0, Exterior(2N) 18-6-0 to 27-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 2, 60 lb uplift at joint 27, 63 lb uplift at joint 29, 61 lb uplift at joint 30, 61 lb uplift at joint 31, 62 lb uplift at joint 32, 93 lb uplift at joint 33, 57 lb uplift at joint 25, 64 lb uplift at joint 24, 61 lb uplift at joint 23, 61 lb uplift at joint 22, 62 lb uplift at joint 21, 81 lb uplift at joint 20 and 2 lb uplift at joint 18.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024



Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to use only with recks colline tools. This design is based only upon parameters shown, and is not an individual busining denipolinit, 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)

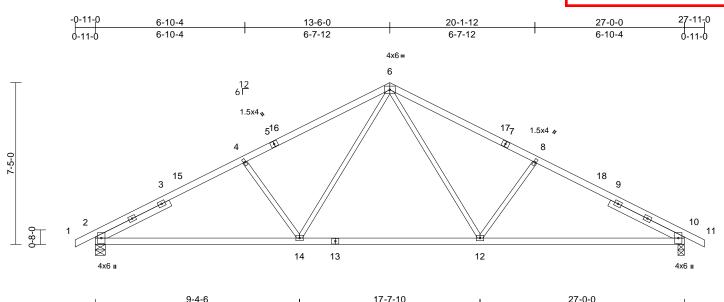


Job Truss Truss Type Qty Ply Roof - Osage Lot 66 P240242-01 A2 2 Common Job Reference (optional RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307724 LEE'S SUMMIT. MISSOURI

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:seX7EB8mPVnZCOtCyImU1NzZj0K-RfC?PsB70Hq3NSgPqnL8w3uITXbCKWrCD

9-4-6



Scale = 1:52.8 Plate Offsets (X, Y): [2:0-3-9,0-1-5], [10:0-3-9,0-1-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.20	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.42	2-14	>776	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.07	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 120 lb	FT = 20%

8-3-4

LUMBER

9-9-2

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

SLIDER Left 2x4 SP No.2 -- 3-9-10, Right 2x4 SP

No.2 -- 3-9-10

BRACING TOP CHORD

Structural wood sheathing directly applied or

2-2-0 oc purlins.

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

bracing

REACTIONS (size) 2=0-5-8, 10=0-3-8

Max Horiz 2=136 (LC 12)

Max Uplift 2=-207 (LC 12), 10=-207 (LC 13)

Max Grav 2=1279 (LC 1), 10=1279 (LC 1) (lb) - Maximum Compression/Maximum

FORCES Tension

1-2=0/7, 2-4=-2001/390, 4-6=-1743/396, TOP CHORD

6-8=-1743/396, 8-10=-2000/390, 10-11=0/7

BOT CHORD 2-14=-317/1684. 12-14=-85/1167. 10-12=-255/1684

6-12=-142/613, 8-12=-422/281, 6-14=-142/613, 4-14=-422/281

WEBS

NOTES

- Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 13-6-0, Exterior(2R) 13-6-0 to 18-6-0, Interior (1) 18-6-0 to 27-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 3x4 MT20 unless otherwise indicated.

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

LOAD CASE(S) Standard

9-4-6



March 19,2024



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

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



Job Truss Truss Type Qty Ply Roof - Osage Lot 66 P240242-01 **A3** Roof Special Job Reference (optiona RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307725 LEE'S SUMMIT. MISSOURI

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

Run; 8.63 S Nov 1 2023 Print; 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 18 ID:Kq5WRX9PApvQqYSOWTHjaazZj0J-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCD

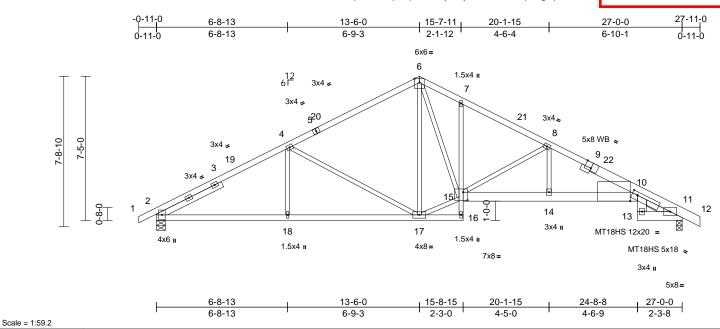


Plate Offsets (X, Y): [2:0-3-9,0-1-5], [9:0-4-0,Edge], [10:0-4-8,Edge], [10:0-3-5,0-2-0], [15:0-2-12,0-5-0]

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

LUMBER

BRACING

TOP CHORD 2x4 SP No.2 *Except* 6-9:2x4 SP 1650F

1.5E, 9-12:2x6 SP 2400F 2.0E

2x6 SPF No.2 *Except* 2-16:2x4 SP No.2, **BOT CHORD**

16-7:2x3 SPF No.2, 15-10:2x6 SP 2400F

2.0E

WFBS 2x3 SPF No 2 2x4 SP No.2 OTHERS

SLIDER Left 2x4 SP No.2 -- 3-8-12, Right 2x4 SP

No.2 -- 1-4-7

TOP CHORD Structural wood sheathing directly applied.

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

bracing, Except: 6-0-0 oc bracing: 15-16.

REACTIONS (size) 2=0-5-8, 11=0-3-8

Max Horiz 2=-140 (LC 17)

Max Uplift 2=-207 (LC 12), 11=-209 (LC 13)

Max Grav 2=1272 (LC 1), 11=1283 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/7, 2-4=-2029/365, 4-6=-1416/342,

6-7=-1752/449. 7-8=-1858/384.

8-10=-2662/447, 10-11=-714/157, 11-12=0/19

BOT CHORD 2-18=-296/1707, 17-18=-296/1707, 16-17=-19/83, 15-16=-13/0, 7-15=-153/133,

14-15=-307/2420, 10-14=-307/2414,

10-13=-5/130, 11-13=-2/23 6-15=-241/1196, 8-15=-988/230, 8-14=0/323,

6-17=-155/47, 15-17=-70/1213,

4-17=-645/251, 4-18=0/286

NOTES

WEBS

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 13-6-0, Exterior(2R) 13-6-0 to 18-6-0, Interior (1) 18-6-0 to 27-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi, Joint 11 SPF No.2 crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 207 lb uplift at joint 2 and 209 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

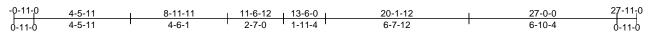
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not



Job Truss Truss Type Qty Ply Roof - Osage Lot 66 P240242-01 A4 Roof Special Job Reference (optional RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307726 LEE'S SUMMIT. MISSOURI

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:seX7EB8mPVnZCOtCyImU1NzZj0K-RfC?PsB70Hq3NSgPqnL8w3uITXbCKWrCD



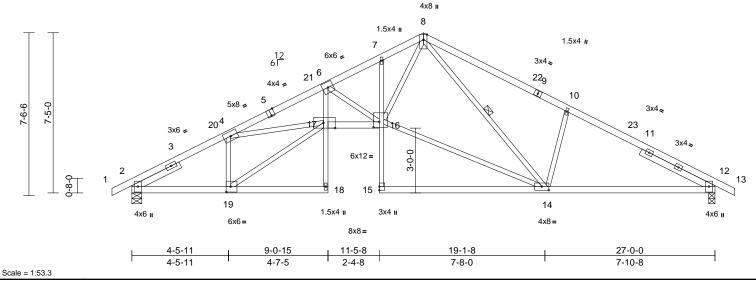


Plate Offsets (X, Y): [2:0-3-9,0-1-5], [5:0-2-0,Edge], [12:0-3-9,0-1-5], [14:0-3-14,0-2-0], [16:0-3-4,0-3-0], [17:0-6-8,Edge], [19:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.28	16-17	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.51	16-17	>631	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.34	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 138 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2

2x4 SP No.2 *Except* 18-6,7-15:2x3 SPF **BOT CHORD**

No.2, 17-16:2x4 SP 1650F 1.5E

WFBS 2x3 SPF No 2

SLIDER Left 2x4 SP No.2 -- 2-5-9, Right 2x4 SP No.2

-- 3-9-10

BRACING

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

bracing

WEBS 1 Row at midpt

8-14 REACTIONS (size) 2=0-5-8, 12=0-3-8

Max Horiz 2=136 (LC 12)

Max Uplift 2=-207 (LC 12), 12=-207 (LC 13)

Max Grav 2=1279 (LC 1), 12=1279 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/7, 2-4=-2101/364, 4-6=-4541/715,

6-7=-2889/500. 7-8=-2804/540. 8-10=-1914/458, 10-12=-2031/371,

12-13=0/7

BOT CHORD 2-19=-327/1752, 18-19=-4/37, 17-18=0/82,

6-17=-210/1513, 16-17=-559/4011,

15-16=0/128, 7-16=-92/66, 14-15=0/31, 12-14=-238/1708

6-16=-1808/373, 14-16=-138/1780,

8-16=-303/1958, 8-14=-267/145,

10-14=-416/288, 4-19=-1085/283

4-17=-251/2273, 17-19=-390/2071

NOTES

WEBS

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 13-6-0, Exterior(2R) 13-6-0 to 18-6-0, Interior (1) 18-6-0 to 27-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 207 lb uplift at joint 2 and 207 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



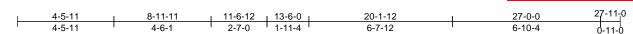


Job Truss Truss Type Qty Ply Roof - Osage Lot 66 P240242-01 A5 Roof Special Job Reference (optiona S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307727 LEE'S SUMMIT. MISSOURI

RELEASE FOR CONSTRUCTION

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:Kq5WRX9PApvQqYSOWTHjaazZj0J-RfC?PsB70Hq3NSgPqnL8w3uITXb **GKWrC**E



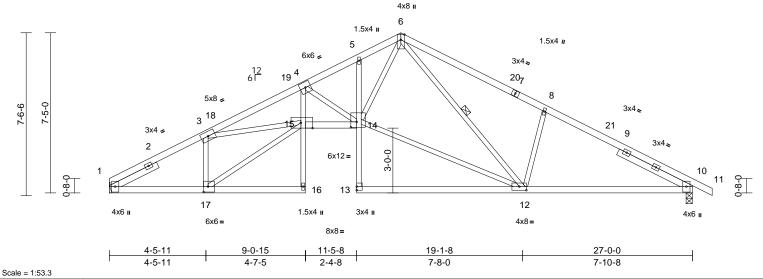


Plate Offsets (X, Y): [1:0-3-0,0-1-5], [10:0-3-9,0-1-5], [12:0-3-14,0-2-0], [14:0-3-4,0-3-0], [15:0-6-8,Edge], [17:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.29	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.51	14-15	>629	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.34	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 137 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2

2x4 SP No.2 *Except* 16-4,5-13:2x3 SPF **BOT CHORD**

No.2, 15-14:2x4 SP 1650F 1.5E

WFBS 2x3 SPF No 2

SLIDER Left 2x4 SP No.2 -- 2-5-9, Right 2x4 SP No.2

-- 3-9-10

TOP CHORD

BRACING

Structural wood sheathing directly applied. **BOT CHORD** Rigid ceiling directly applied or 9-7-12 oc

bracing.

WEBS 1 Row at midpt 6-12 REACTIONS (size) 1= Mechanical, 10=0-3-8

Max Horiz 1=-138 (LC 13)

Max Uplift 1=-184 (LC 12), 10=-208 (LC 13)

Max Grav 1=1214 (LC 1), 10=1280 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-3=-2111/379, 3-4=-4567/718,

4-5=-2895/502, 5-6=-2810/542,

6-8=-1916/462, 8-10=-2033/373, 10-11=0/7 **BOT CHORD**

1-17=-331/1763, 16-17=-4/37, 15-16=0/82,

4-15=-213/1520, 14-15=-562/4021, 13-14=0/128, 5-14=-93/66, 12-13=0/31,

10-12=-241/1710

WEBS 4-14=-1814/375, 12-14=-140/1783,

6-14=-305/1963, 6-12=-269/145,

8-12=-416/288, 3-17=-1090/286

3-15=-250/2271, 15-17=-395/2084

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 13-6-0, Exterior(2R) 13-6-0 to 18-6-0, Interior (1) 18-6-0 to 27-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 10 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 1 and 208 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024



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

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



Truss Type Job Truss Qty Ply Roof - Osage Lot 66 P240242-01 A6 Common 9 Job Reference (optiona RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307728 LEE'S SUMMIT. MISSOURI

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:Kq5WRX9PApvQqYSOWTHjaazZj0J-RfC?PsB70Hq3NSgPqnL8w3uITXb **GKWrCD**

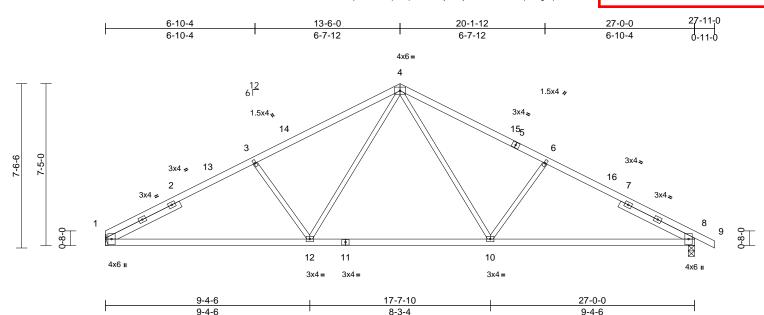


Plate Offsets (X, Y): [1:0-3-0,0-1-5], [8:0-3-9,0-1-5]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.20	1-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.43	1-12	>757	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 118 lb	FT = 20%

LUMBER

Scale = 1:52.8

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

SLIDER Left 2x4 SP No.2 -- 3-9-10, Right 2x4 SP

No.2 -- 3-9-10

BRACING TOP CHORD

Structural wood sheathing directly applied or

2-2-0 oc purlins.

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

bracing

REACTIONS (size) 1= Mechanical, 8=0-3-8

Max Horiz 1=-138 (LC 17)

Max Uplift 1=-184 (LC 12), 8=-208 (LC 13)

Max Grav 1=1214 (LC 1), 8=1280 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-3=-2006/400, 3-4=-1748/405,

4-6=-1745/397, 6-8=-2003/393, 8-9=0/7

BOT CHORD 1-12=-320/1691, 10-12=-86/1169,

8-10=-258/1686

4-10=-143/613, 6-10=-422/281, 4-12=-144/618, 3-12=-425/283

WEBS

NOTES

- Unbalanced roof live loads have been considered for this design
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 13-6-0, Exterior(2R) 13-6-0 to 18-6-0, Interior (1) 18-6-0 to 27-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 3x4 MT20 unless otherwise indicated.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 8 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 1 and 208 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024



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 66 P240242-01 Α7 Common Supported Gable Job Reference (optiona

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 164307729 LEE'S SUMMIT. MISSOURI

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Mon Mar 16 ID:o0fuetA1x62HRi1a3Aoy7ozZj0I-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4

13-6-0 27-0-0 13-6-0 13-6-0 4x4= 8 9 1<u>2</u> 6Г 3x4 6 10 11 5 12 9-9-2 13 334 3 14 4x8 16 0-8-0 17 30 31 29 28 23 20 19 18 2625 24 22 21 27 3x4 ı 3x6 II 3x4 = 27-0-0 Scale = 1:51

Plate Offsets (X, Y): [16:0-1-8,0-3-5]

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

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

BRACING TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

REACTIONS (size)

16=27-0-0, 18=27-0-0, 19=27-0-0, 20=27-0-0, 21=27-0-0, 22=27-0-0, 23=27-0-0, 24=27-0-0, 25=27-0-0, 27=27-0-0, 28=27-0-0, 29=27-0-0, 30=27-0-0, 31=27-0-0, 32=27-0-0 Max Horiz 32=-139 (LC 13)

Max Uplift 16=-17 (LC 9), 18=-81 (LC 13),

19=-62 (LC 13), 20=-61 (LC 13), 21=-61 (LC 13), 22=-64 (LC 13), 23=-58 (LC 13), 25=-59 (LC 12), 27=-64 (LC 12), 28=-60 (LC 12), 29=-63 (LC 12), 30=-53 (LC 12), 31=-111 (LC 12), 32=-15 (LC 17)

Max Grav 16=146 (LC 1), 18=150 (LC 26),

19=183 (LC 26), 20=179 (LC 1), 21=180 (LC 1), 22=179 (LC 1), 23=189 (LC 26), 24=178 (LC 22), 25=189 (LC 25), 27=179 (LC 1), 28=180 (LC 1), 29=179 (LC 25), 30=184 (LC 1), 31=165 (LC 25),

32=104 (LC 21)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-32=-77/19, 1-2=-148/50, 2-3=-100/61, 3-4=-75/81, 4-5=-57/108, 5-6=-63/160, 6-7=-82/216, 7-8=-101/266, 8-9=-101/266,

9-10=-82/216, 10-12=-63/160, 12-13=-50/107, 13-14=-59/59, 14-15=-84/39,

15-16=-139/41, 16-17=0/7

BOT CHORD 31-32=-32/142, 30-31=-32/142, 29-30=-32/142, 28-29=-32/142, 27-28=-32/142, 25-27=-32/142,

24-25=-32/142, 23-24=-32/142 22-23=-32/142, 21-22=-32/142 20-21=-32/142, 19-20=-32/142 18-19=-32/142. 16-18=-32/142

8-24=-154/21, 7-25=-149/89, 6-27=-139/101, 5-28=-140/96, 4-29=-139/113, 3-30=-143/150, 2-31=-128/161

9-23=-149/89, 10-22=-139/101 12-21=-140/96, 13-20=-140/96 14-19=-142/138, 15-18=-115/156

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) 0-1-4 to 5-1-4, Exterior(2N) 5-1-4 to 13-6-0, Corner(3R) 13-6-0 to 18-6-0, Exterior(2N) 18-6-0 to 27-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 32, 59 lb uplift at joint 25, 64 lb uplift at joint 27, 60 lb uplift at joint 28, 63 lb uplift at joint 29, 53 lb uplift at joint 30, 111 lb uplift at joint 31, 58 lb uplift at joint 23, 64 lb uplift at joint 22, 61 lb uplift at joint 21, 61 lb uplift at joint 20, 62 lb uplift at joint 19, 81 lb uplift at joint 18 and 17 lb uplift at joint 16.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



March 19,2024



M 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



RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMILE MISSOURI Offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.

connector plates.
* Plate location details available in MiTek

This symbol indicates the required direction of slots in ₹

edge of truss.

For 4 x 2 orientation, locate plates 0- "46" from outside

software or upon request. PLATE SIZE

4 × 4

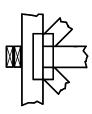
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

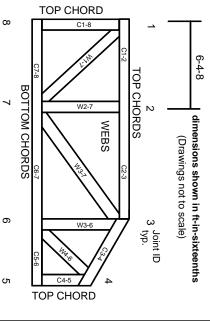
Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction Design Standard for Bracing.

Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-22:

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- 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.

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- 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.

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- 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.

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

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- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 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 specified.
- 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.
- 15. 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 environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.