

RE: P250367-01
Roof - BY Lot 1340

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

Site Information:

Customer: Clayton Properties Project Name: P250367-01
Lot/Block: 1340 Model: Saffron - Farmhouse
Address: 1304 SE Windbreak Dr. Subdivision: Bailey Farms
City: Lee's Summit State: MO

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

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

This package includes 13 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I66930056	A1	7/18/2024
2	I66930057	A2	7/18/2024
3	I66930058	A3	7/18/2024
4	I66930059	B1	7/18/2024
5	I66930060	B2	7/18/2024
6	I66930061	B3	7/18/2024
7	I66930062	J1	7/18/2024
8	I66930063	J2	7/18/2024
9	I66930064	J3	7/18/2024
10	I66930065	J4	7/18/2024
11	I66930066	J5	7/18/2024
12	I66930067	J6	7/18/2024
13	I66930068	J7	7/18/2024

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

Truss Design Engineer's Name: Gilbert, Eric

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.



July 18, 2024

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340
P250367-01	A1	Common Structural Gable	1	1	Job Reference (optional)

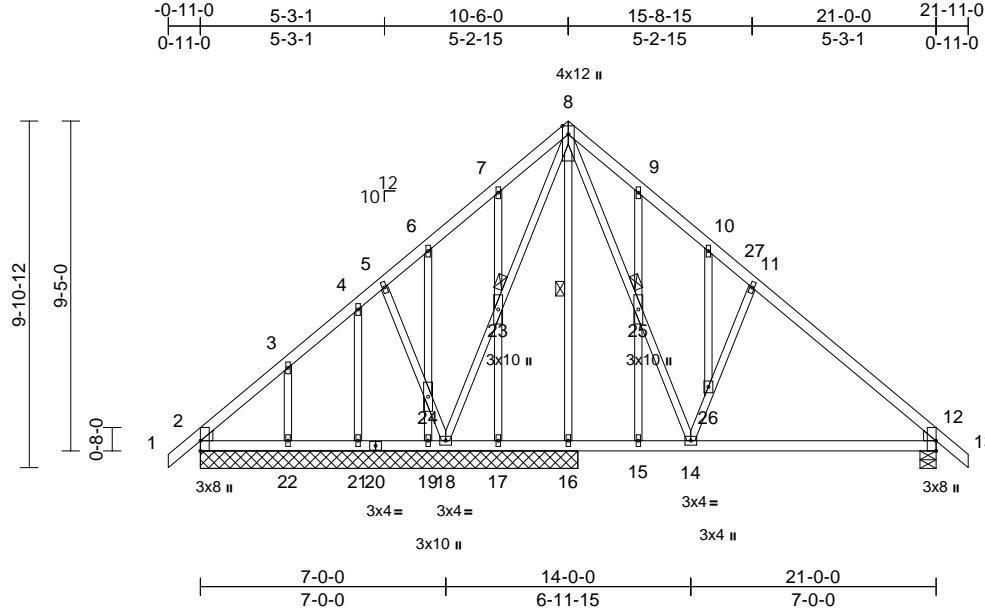
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
166930056
LEE'S SUMMIT, MISSOURI

05/20/2025



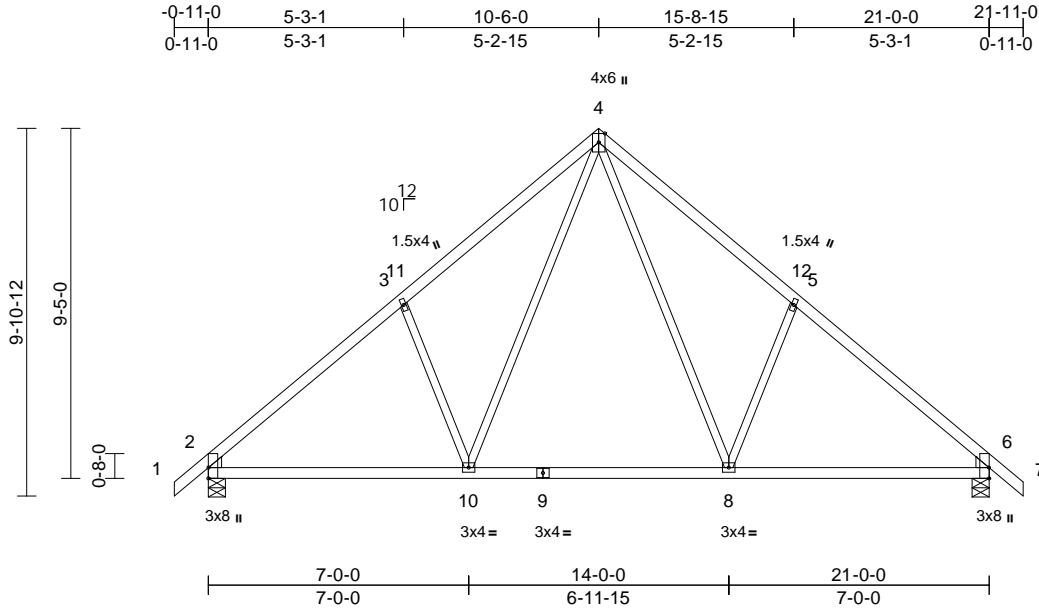
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340	RELEASE FOR CONSTRUCTION
P250367-01	A2	Common	20	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						166930057
						LEE'S SUMMIT, MISSOURI

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05/20/2025



Scale = 1:62									
Plate Offsets (X, Y): [2:Edge,0-0-1], [6:Edge,0-0-1]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.06 2-10	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.12 2-10	>999	180
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.02 6	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
Weight: 100 lb FT = 20%									
PLATES MT20 GRIP 197/144									

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP 2400F 2.0E
Right: 2x4 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 6=0-5-8
Max Horiz 2=-266 (LC 10)
Max Uplift 2=-145 (LC 12), 6=-145 (LC 13)
Max Grav 2=1005 (LC 1), 6=1005 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-1158/193, 3-4=-1011/305, 4-5=-1011/305, 5-6=-1158/193, 6-7=0/28
BOT CHORD 2-10=-169/840, 8-10=0/554, 6-8=-49/772
WEBS 4-8=-206/480, 5-8=-316/293, 4-10=-206/480, 3-10=-316/293

- 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 145 lb uplift at joint 2 and 145 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

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior (1) 4-1-0 to 10-6-0, Exterior(2R) 10-6-0 to 15-6-0, Interior (1) 15-6-0 to 21-11-0 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.



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

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

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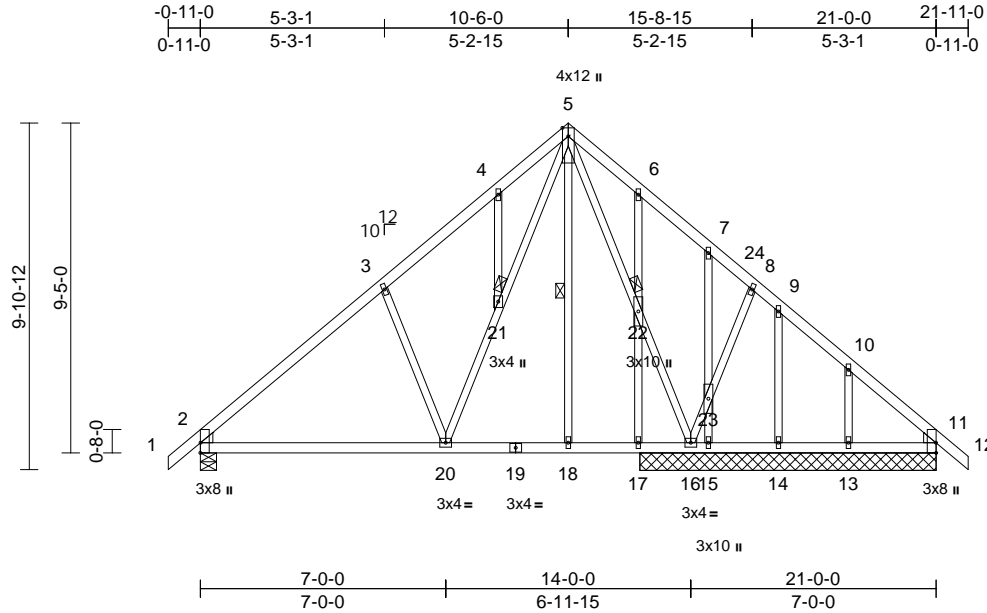
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166930058 LEE'S SUMMIT, MISSOURI
P250367-01	A3	Common Structural Gable	1	1	Job Reference (optional)	

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05/20/2025



Scale = 1:65.8

Plate Offsets (X, Y): [2:Edge,0-0-1], [11:Edge,0-0-1]

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	0.37	Vert(LL)	-0.06	2-20	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.13	2-20	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 125 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2
WEDGE	Left: 2x4 SP 2400F 2.0E Right: 2x4 SP No.2

WEBS

5-22=-437/69, 16-22=-467/74, 16-23=-69/79,
8-23=-61/70, 20-21=-208/477,
5-21=-241/527, 3-20=-317/278, 5-18=-7/36,
4-21=-53/36, 6-22=-163/100,
17-22=-144/108, 7-23=-122/97,
15-23=-114/87, 9-14=-92/49, 10-13=-194/179

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0,
Interior (1) 4-1-0 to 10-4-6, Exterior(2R) 10-4-6 to
15-4-6, Interior (1) 15-4-6 to 21-11-0 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 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 99 lb uplift at joint
2, 90 lb uplift at joint 16, 67 lb uplift at joint 17, 61 lb
uplift at joint 15, 23 lb uplift at joint 14 and 158 lb uplift at
joint 13.
- 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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-18
JOINTS	1 Brace at Jt(s): 21, 22

REACTIONS

(size)	2=0-5-8, 11=8-5-8, 13=8-5-8, 14=8-5-8, 15=8-5-8, 16=8-5-8, 17=8-5-8
Max Horiz	2=-263 (LC 10)
Max Uplift	2=-99 (LC 12), 13=-158 (LC 13), 14=-23 (LC 13), 15=-61 (LC 13), 16=-90 (LC 12), 17=-67 (LC 13)
Max Grav	2=693 (LC 1), 11=210 (LC 1), 13=250 (LC 20), 14=128 (LC 1), 15=171 (LC 1), 16=396 (LC 19), 17=225 (LC 20)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/28, 2-3=-699/98, 3-4=-556/205, 4-5=-437/245, 5-6=-143/195, 6-7=-102/130, 7-8=-59/66, 8-9=-83/44, 9-10=-115/33, 10-11=-187/87, 11-12=0/27
BOT CHORD	2-20=-133/548, 18-20=-73/282, 17-18=-72/282, 16-17=-72/282, 15-16=-72/192, 14-15=-72/192, 13-14=-72/192, 11-13=-72/192



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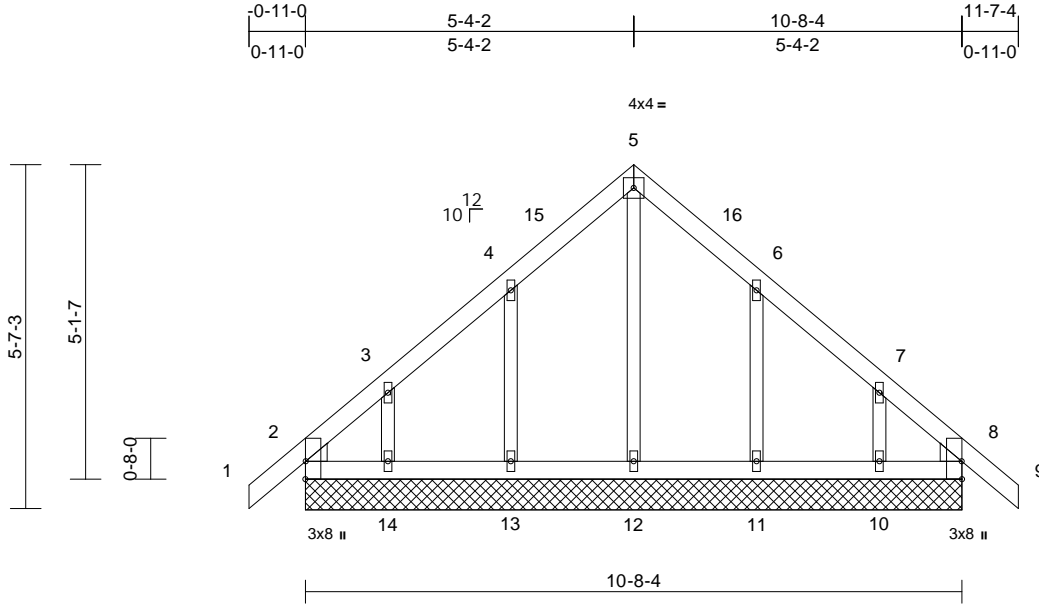
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166930059 LEE'S SUMMIT, MISSOURI
P250367-01	B1	Common Supported Gable	1	1	Job Reference (optional)	

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05/20/2025



Scale = 1:37.5

Plate Offsets (X, Y): [2:Edge,0-0-1], [8:Edge,0-0-1]

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	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	8	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 52 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING

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

REACTIONS (size) 2=10-8-4, 8=10-8-4, 10=10-8-4, 11=10-8-4, 12=10-8-4, 13=10-8-4, 14=10-8-4
Max Horiz 2=-146 (LC 10)
Max Uplift 2=-44 (LC 8), 8=-16 (LC 9), 10=-105 (LC 13), 11=-106 (LC 13), 13=-108 (LC 12), 14=-109 (LC 12)
Max Grav 2=167 (LC 20), 8=161 (LC 1), 10=155 (LC 20), 11=212 (LC 20), 12=143 (LC 22), 13=214 (LC 19), 14=160 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-0/27, 2-3=-163/106, 3-4=-112/71, 4-5=-104/185, 5-6=-104/185, 6-7=-84/36, 7-8=-145/65, 8-9=0/27
BOT CHORD 2-14=-59/191, 13-14=-59/191, 12-13=-59/191, 11-12=-59/191, 10-11=-59/191, 8-10=-59/191
WEBS 5-12=-134/23, 4-13=-171/225, 3-14=-139/214, 6-11=-170/224, 7-10=-140/212

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 Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 5-4-2, Corner(3R) 5-4-2 to 10-4-2, Exterior(2N) 10-4-2 to 11-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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 44 lb uplift at joint 2, 16 lb uplift at joint 8, 108 lb uplift at joint 13, 109 lb uplift at joint 14, 106 lb uplift at joint 11 and 105 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



July 18, 2024

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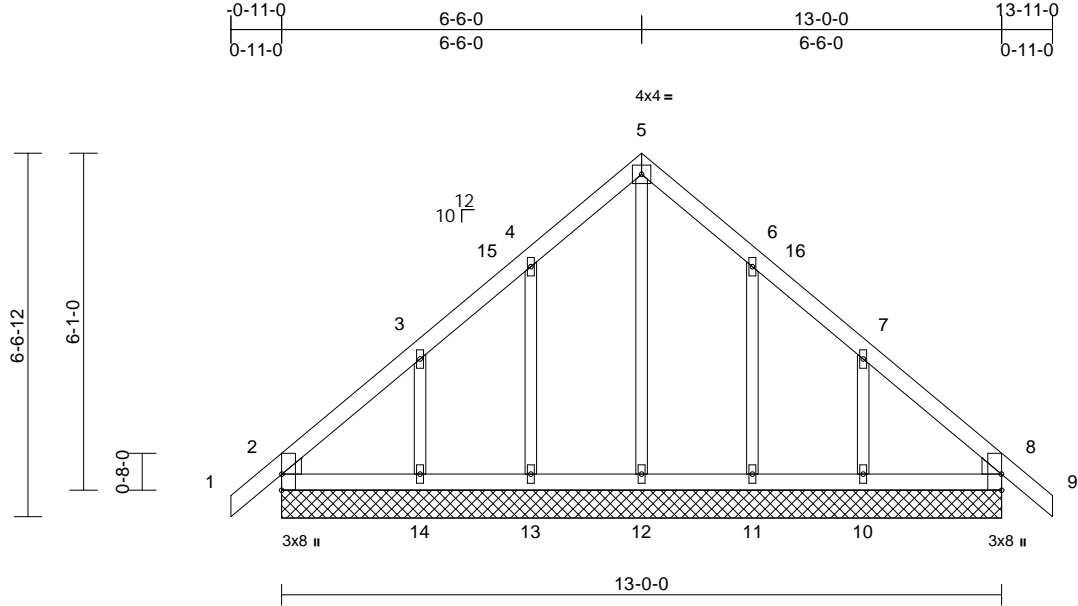
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340	RELEASE FOR CONSTRUCTION
P250367-01	B2	Common Supported Gable	1	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						166930060
						LEE'S SUMMIT, MISSOURI

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05/20/2025



Scale = 1:41.6

Plate Offsets (X, Y): [2:Edge,0-0-1], [8:Edge,0-0-1]

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	0.09	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	8	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 64 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2
Right: 2x4 SP No.2

BRACING

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

REACTIONS

(size) 2=13-0-0, 8=13-0-0, 10=13-0-0, 11=13-0-0, 12=13-0-0, 13=13-0-0, 14=13-0-0
Max Horiz 2=-173 (LC 10)
Max Uplift 2=-32 (LC 8), 8=-1 (LC 9), 10=-145 (LC 13), 11=-91 (LC 13), 13=-93 (LC 12), 14=-147 (LC 12)
Max Grav 2=199 (LC 20), 8=198 (LC 1), 10=243 (LC 20), 11=189 (LC 20), 12=160 (LC 22), 13=191 (LC 19), 14=245 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/27, 2-3=-166/123, 3-4=-121/86, 4-5=-111/198, 5-6=-112/199, 6-7=-87/80, 7-8=-141/76, 8-9=0/27
BOT CHORD 2-14=-67/206, 13-14=-67/206, 12-13=-67/206, 11-12=-67/206, 10-11=-67/206, 8-10=-67/206
WEBS 5-12=-155/32, 4-13=-156/162, 3-14=-188/262, 6-11=-155/161, 7-10=-186/261

NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 6-6-0, Corner(3R) 6-6-0 to 11-6-0, Exterior(2N) 11-6-0 to 13-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 2, 1 lb uplift at joint 8, 93 lb uplift at joint 13, 147 lb uplift at joint 14, 91 lb uplift at joint 11 and 145 lb uplift at joint 10.
- 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



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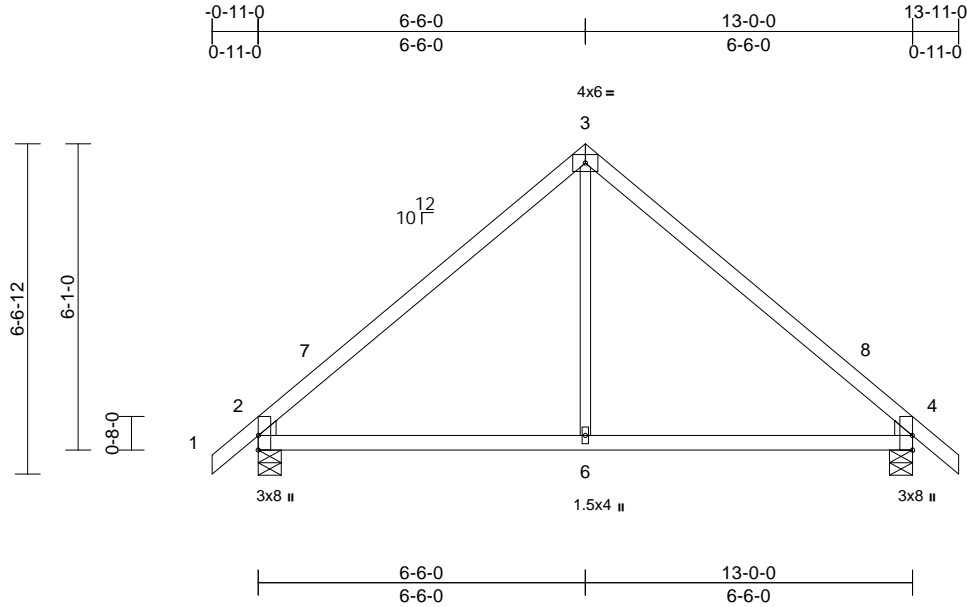
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166930061 LEE'S SUMMIT, MISSOURI
P250367-01	B3	Common	3	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Wed Jul 17 12:49:41 Page: 1

ID:Z439A57nPC5JopMU3Y?xGy4k3W-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcD0rJ42JG?

05/20/2025



Scale = 1:45.8

Plate Offsets (X, Y): [2:Edge,0-0-1], [4:Edge,0-0-1]																
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		0.68	Vert(LL)		0.06	2-6	>999	240	MT20	197/144
TCDL		10.0	Lumber DOL		1.15	BC		0.42	Vert(CT)		-0.09	2-6	>999	180		
BCLL		0.0	Rep Stress Incr		YES	WB		0.10	Horz(CT)		0.01	4	n/a	n/a		
BCDL		10.0	Code		IRC2018/TPI2014	Matrix-S									Weight: 54 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP 2400F 2.0E
Right: 2x4 SP 2400F 2.0E

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-11-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-5-8, 4=0-5-8
Max Horiz 2=-173 (LC 10)
Max Uplift 2=-99 (LC 12), 4=-99 (LC 13)
Max Grav 2=645 (LC 1), 4=645 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/28, 2-3=-621/172, 3-4=-621/172, 4-5=0/28
BOT CHORD 2-6=0/372, 4-6=0/372
WEBS 3-6=0/308

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 99 lb uplift at joint 2 and 99 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

- 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 6-6-0, Exterior(2R) 6-6-0 to 11-6-0, Interior (1) 11-6-0 to 13-11-0 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.



July 18, 2024

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

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

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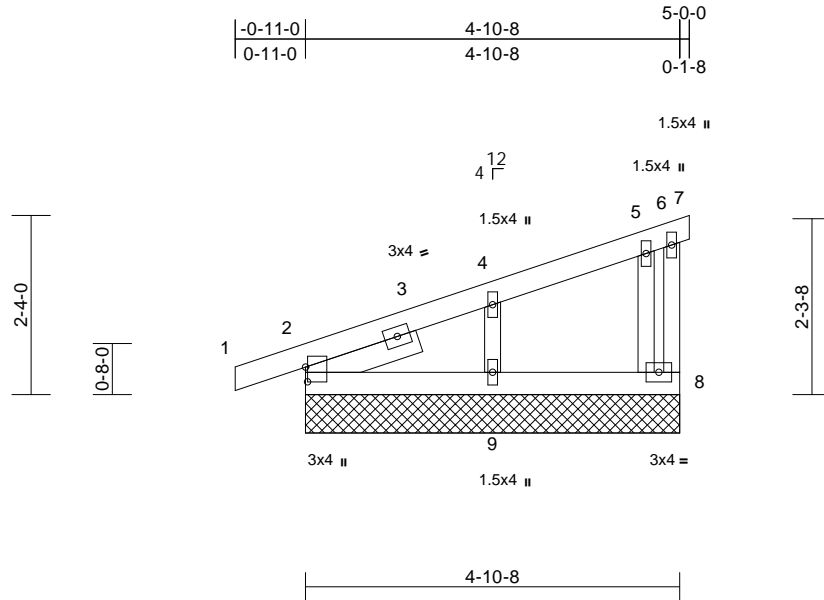
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340
P250367-01	J1	Monopitch Supported Gable	2	1	Job Reference (optional)

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Wed Jul 17 12:49:41 Page: 1

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05/20/2025



Scale = 1:30

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	0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size)	2=4-10-8, 8=4-10-8, 9=4-10-8
	Max Horiz	2=94 (LC 9)
	Max Uplift	2=-54 (LC 8), 8=-27 (LC 12), 9=-65 (LC 12)
	Max Grav	2=173 (LC 1), 8=100 (LC 1), 9=221 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-4/0, 2-4=-192/92, 4-5=-74/55, 5-6=-48/70, 6-7=-1/0, 6-8=-55/20
BOT CHORD	2-9=-41/48, 8-9=-41/48
WEBS	4-9=-163/309, 5-8=-99/153

NOTES

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

- 5) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 27 lb uplift at joint
8, 54 lb uplift at joint 2 and 65 lb uplift at joint 9.
- 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

July 18, 2024

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

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340
P250367-01	J2	Monopitch	16	1	Job Reference (optional)

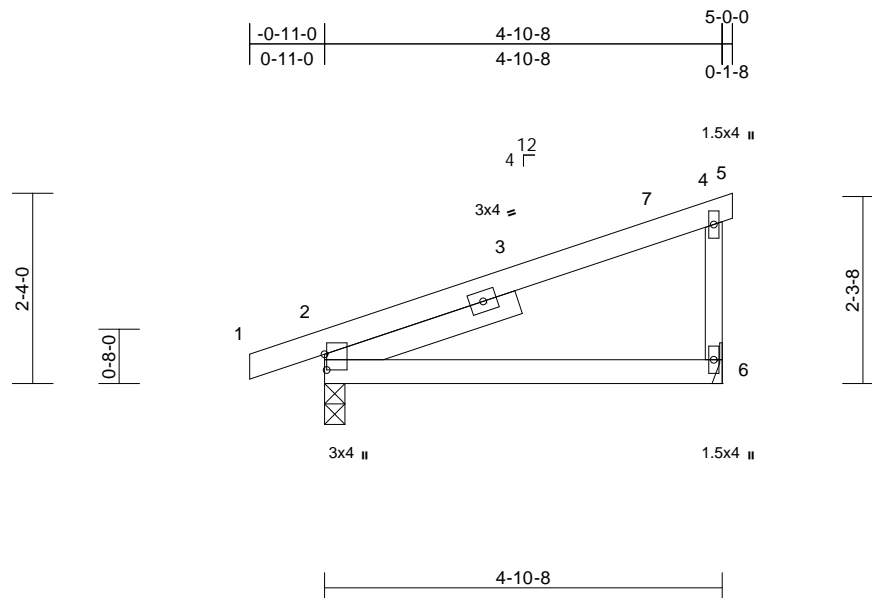
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
166930063
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Wed Jul 17 12:49:41 Page: 1

ID:Z439A57nPC5JopMU3Xy?xGy4k3W-RfC?PsB70Hq3NSgPqnL8w3uITXb6KWrcD6rJ42JG?

05/20/2025



Scale = 1:28.2

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	0.56	Vert(LL)	-0.03	2-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.06	2-6	>921	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 2-5-12

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**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-10-8 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=94 (LC 9)
Max Uplift 2=-84 (LC 8), 6=-61 (LC 12)
Max Grav 2=285 (LC 1), 6=213 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-4/0, 2-4=-131/73, 4-5=-1/0,
4-6=-166/270

BOT CHORD 2-6=-40/44

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) -0-11-0 to 4-1-0,
Interior (1) 4-1-0 to 5-0-0 zone; cantilever left and right
exposed; end vertical left and right exposed; C-C for
members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SP No.2 crushing
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 61 lb uplift at joint
6 and 84 lb uplift at joint 2.



July 18, 2024

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

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

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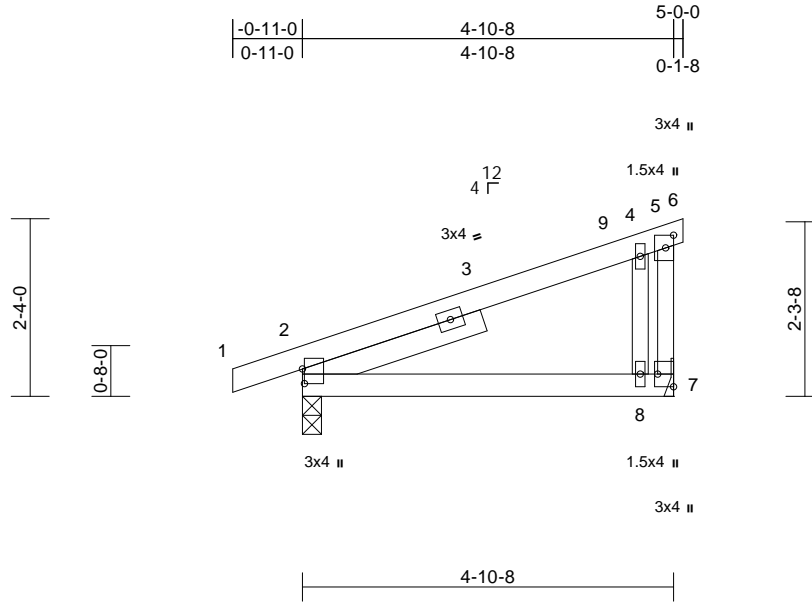
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340
P250367-01	J3	Monopitch	1	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
166930064
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Wed Jul 17 12:49:41 Page: 1
ID:Z439A57nPC5JopMU3Xy?xGy4k3W-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDn7J42JG?

05/20/2025



Scale = 1:30.3

Plate Offsets (X, Y): [2:0-2-5,0-0-5], [5:0-2-0,0-1-4], [7: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	0.34	Vert(LL)	0.02	2-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	2-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 23 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-5-12

BRACING

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

REACTIONS (size)	2=0-3-0, 7= Mechanical
Max Horiz	2=94 (LC 9)
Max Uplift	2=-84 (LC 8), 7=-61 (LC 12)
Max Grav	2=285 (LC 1), 7=213 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-4/0, 2-4=-117/33, 4-5=-67/121, 5-6=-1/0, 5-7=-120/0
BOT CHORD	2-8=-77/75, 7-8=-77/75
WEBS	4-8=-155/392

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 5-0-0 zone; cantilever left and right
exposed; end vertical left and right exposed; C-C for
members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
- 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 2-0-0 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 61 lb uplift at joint
7 and 84 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



July 18, 2024

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

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

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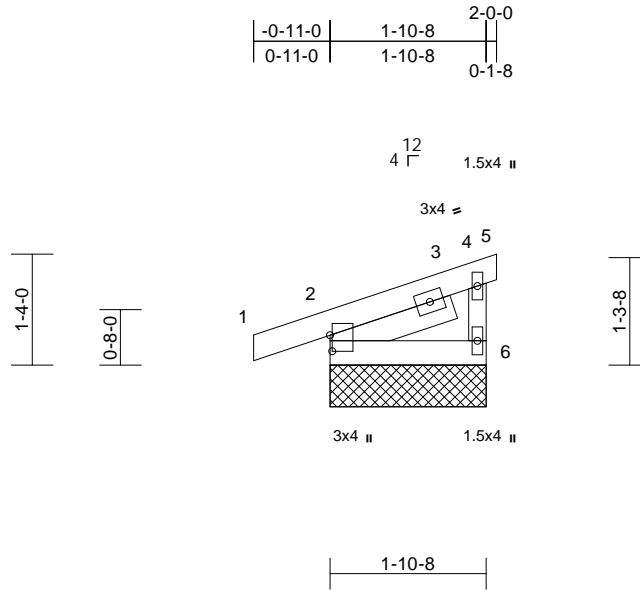
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166930065 LEE'S SUMMIT, MISSOURI
P250367-01	J4	Monopitch Supported Gable	1	1	Job Reference (optional)	

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

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05/20/2025



Scale = 1:27.7

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	0.08	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	0.00	Horz(CT)	0.00	6	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
SLIDER Left 2x4 SP No.2 -- 1-6-7

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=1-10-8, 6=1-10-8
Max Horiz 2=46 (LC 9)
Max Uplift 2=-63 (LC 8), 6=-25 (LC 12)
Max Grav 2=160 (LC 1), 6=68 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-4/0, 2-4=-75/39, 4-5=-1/0, 4-6=-70/129
BOT CHORD 2-6=-20/26

NOTES

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

- 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 25 lb uplift at joint
6 and 63 lb uplift at joint 2.
- 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



July 18, 2024

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

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

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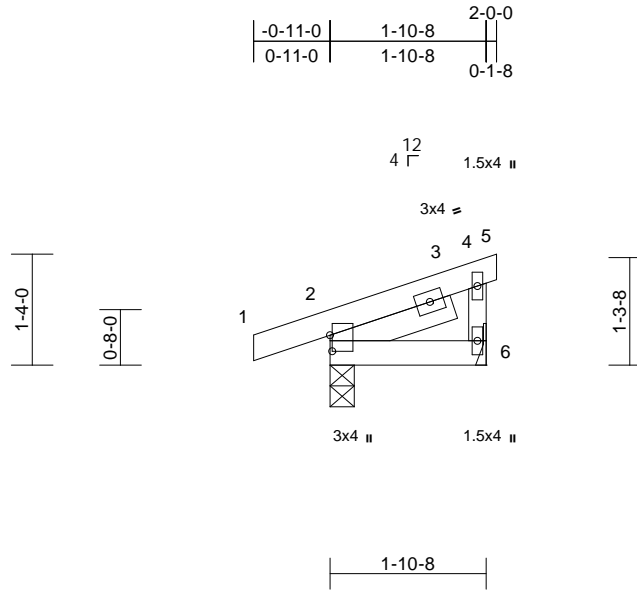
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340
P250367-01	J5	Monopitch	5	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
166930066
LEE'S SUMMIT, MISSOURI

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

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05/20/2025



Scale = 1:27.7

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	0.06	Vert(LL)	0.00	2-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	2-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	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
SLIDER Left 2x4 SP No.2 -- 1-6-7

BRACING

TOP CHORD Structural wood sheathing directly applied or
1-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 2=0-3-8, 6= Mechanical
Max Horiz 2=46 (LC 9)
Max Uplift 2=-63 (LC 8), 6=-25 (LC 12)
Max Grav 2=160 (LC 1), 6=68 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-2=-4/0, 2-4=-69/33, 4-5=-1/0, 4-6=-67/112
BOT CHORD 2-6=-20/21

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) zone; cantilever left
and right exposed; end vertical left and right
exposed; C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SP No.2 crushing
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 25 lb uplift at joint
6 and 63 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.



July 18, 2024

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

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

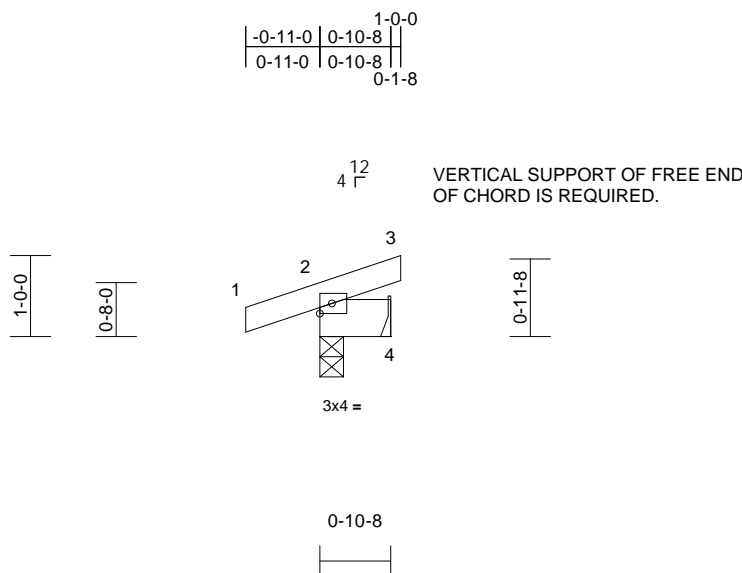
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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340
P250367-01	J6	Monopitch	5	1	Job Reference (optional)

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Wed Jul 17 12:40:41 Page: 1
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05/20/2025

[illegible]

LOAD CASE(S) Standard



July 18, 2024



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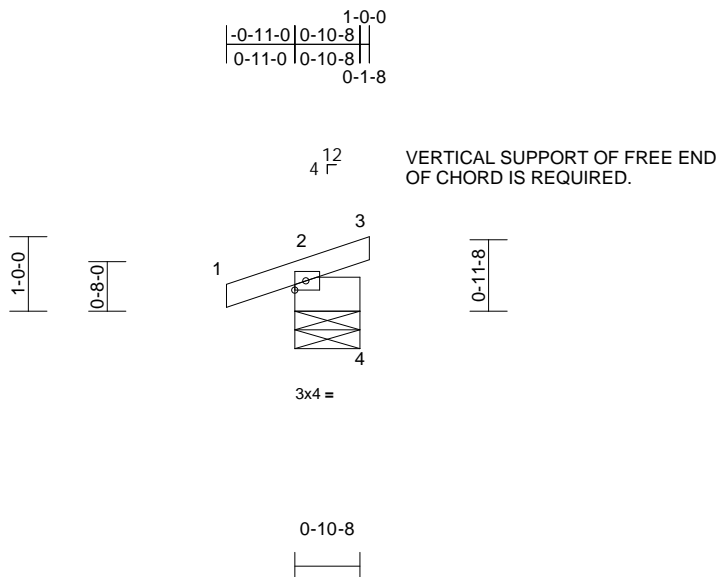
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1340
P250367-01	J7	Monopitch Supported Gable	1	1	Job Reference (optional)

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
166930068
LEE'S SUMMIT, MISSOURI

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

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05/20/2025



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	0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 5 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SPF No.2

BRACING

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

REACTIONS (size) 2=0-10-8, 4=0-10-8

Max Horiz 2=37 (LC 8)
Max Uplift 2=-112 (LC 8), 4=-67 (LC 1)
Max Grav 2=212 (LC 1), 4=30 (LC 8)

FORCES

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/2, 2-3=-32/0

BOT CHORD 2-4=0/0

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Corner(3E) zone; cantilever left
and right exposed; end vertical left and right
exposed; C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss
only. For studs exposed to wind (normal to the face),
see Standard Industry Gable End Details as applicable,
or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely
braced against lateral movement (i.e. diagonal web).
- 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.
- 7) All bearings are assumed to be SPF No.2 crushing
capacity of 425 psi.

- 8) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 112 lb uplift at joint
2 and 67 lb uplift at joint 4.
- 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



July 18, 2024

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2

1

2

1

0-1/16"

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

—

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

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

4 X 4

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

LATERAL BRACING LOCATION

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

BEARING

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

Industry Standards:

ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-22: Design Standard for Bracing.

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

PLATE LOCATION AND ORIENTATION

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

6-4-8

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

1

2

3

TOP CHORDS

Joint ID typ.

TOP CHORD

8

7

6

5

BOTTOM CHORDS

C1-8

C1-2

C2-3

C3-4

C4-5

C5-6

C6-7

C7-8

W1-7

W2-7

W3-7

W3-6

W4-6

WEBS

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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282

ESR-4722, ESL-1388

Design General Notes

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

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

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

1

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.

2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.

3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.

4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

5. Cut members to bear tightly against each other.

6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.

7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.

8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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

10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.

11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.

12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.

13. Top chords must be sheathed or purlins provided at spacing indicated on design.

14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.

15. Connections not shown are the responsibility of others.

16. Do not cut or alter truss member or plate without prior approval of an engineer.

17. Install and load vertically unless indicated otherwise.

18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.

19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.

20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.

21. The design does not take into account any dynamic or other loads other than those expressly stated.