



RE: P240832 -

Site Information:

Project Customer: Clayton Properties

Lot/Block: 190

Model:

Address: 3207 Arboridge Cir

City: Lee's Summit

State: MO

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

Design Code: IRC2018/TPI2014

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

Roof Load: 45.0 psf

Mean Roof Height (feet): 25

MiTek, Inc.

16023 Swingley Ridge Rd.

Chesterfield, MO 63017

314.434.1200

Project Name: Riverside - Modern Farmhouse 3 car

Subdivision: Hawthorne Ridge

Design Program: MiTek 20/20 8.6

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

Floor Load: N/A psf

Exposure Category: B

No.	Seal#	Truss Name	Date
1	I67129649	B1	7/29/24
2	I67129650	B2	7/29/24
3	I67129651	C1	7/29/24
4	I67129652	C2	7/29/24
5	I67129653	D1	7/29/24
6	I67129654	D2	7/29/24
7	I67129655	E1	7/29/24
8	I67129656	E2	7/29/24
9	I67129657	E3	7/29/24
10	I67129658	G1	7/29/24
11	I67129659	G2	7/29/24
12	I67129660	G3	7/29/24
13	I67129661	H1	7/29/24
14	I67129662	H2	7/29/24
15	I67129663	H3	7/29/24
16	I67129664	H4	7/29/24
17	I67129665	H5	7/29/24
18	I67129666	H8	7/29/24
19	I67129667	R1	7/29/24
20	I67129668	VE1	7/29/24
21	I67129669	VE2	7/29/24
22	I67129670	VE3	7/29/24
23	I67129671	VE7	7/29/24
24	I67129672	VE8	7/29/24
25	I67129673	VE9	7/29/24
26	I67129674	VG10	7/29/24
27	I67129675	VG11	7/29/24
28	I67129676	VG12	7/29/24
29	I67129677	VG13	7/29/24
30	I67129678	VG14	7/29/24

The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision based on the parameters
provided by Premier Building Supply (Springhill, KS)20300 W 207th Street.

Truss Design Engineer's Name: Sevier, Scott

My license renewal date for the state of Missouri is December 31, 2025.

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



Job	Truss	Truss Type	Qty	Ply	
P240832	B1	Monopitch	7	1	
					Job Reference (optional)

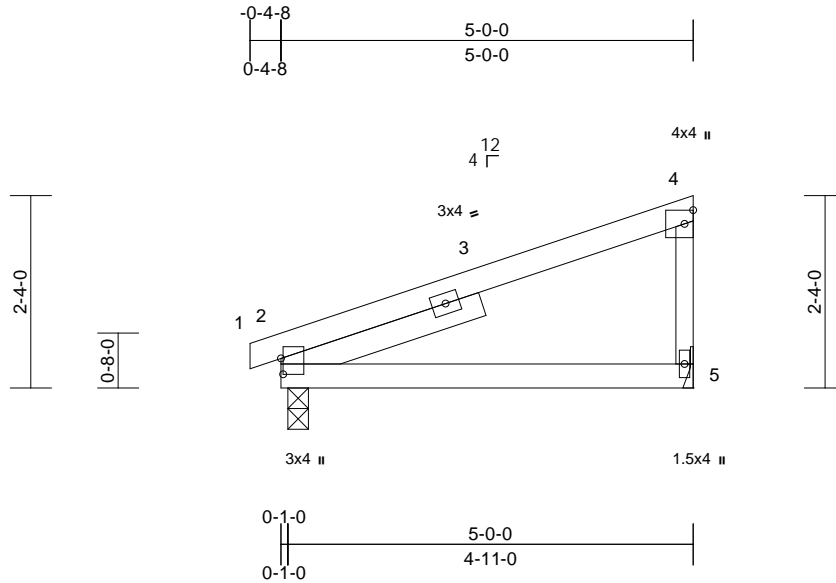
I67129649

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

Run: 8.63 E Apr 26 2024 Print: 8.630 E Apr 26 2024 MiTek Industries, Inc. Fri Jul 26 14:17:43

Page: 1

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Scale = 1:27.9

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	0.54	Vert(LL)	-0.03	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07	2-5	>853	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: 21 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 -- 2-6-9

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=248/0-3-0, 5=219/ Mechanical
Max Horiz 2=52 (LC 9)
Max Uplift 2=-3 (LC 12)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250
(lb) or less except when shown.

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) and C-C Exterior(2E)
-0-4-8 to 2-7-8, Interior (1) 2-7-8 to 4-10-12 zone;
cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 2.



July 29, 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. For additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

MiTek®
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:00

Job	Truss	Truss Type	Qty	Ply	
P240832	B2	Monopitch	3	1	
					Job Reference (optional)

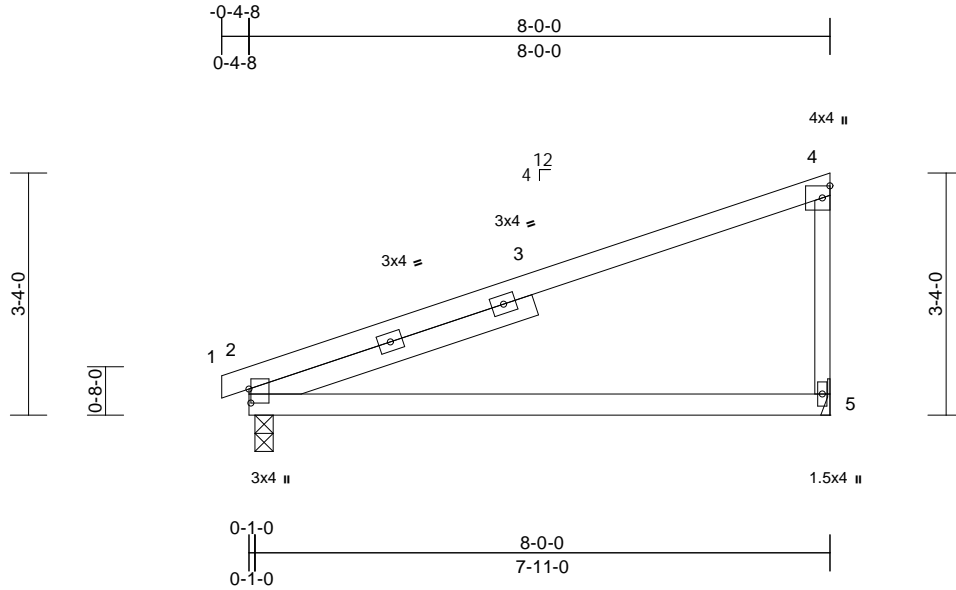
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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Page: 1

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Scale = 1:31.7

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

Loading	(psf)	Spacing	2'-0"	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.23	2-5	>406	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.47	2-5	>203	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: 34 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4'-1'-9"

BRACING

TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9'-0" oc bracing.

REACTIONS (lb/size) 2=382/0'-3'-0, 5=355/ Mechanical
Max Horiz 2=79 (LC 9)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250
(lb) or less except when shown.

TOP CHORD 4-5=-276/183

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) and C-C Exterior(2E)
-0'-4'-8 to 2'-7'-8, Interior (1) 2'-7'-8 to 7'-10'-12 zone;
cantilever left and right exposed ; end vertical left and
right exposed;C-C for members and forces & MWFRS
for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3'-0"-0" tall by 2'-0"-0" wide will fit between the bottom
chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate at joint(s) 2.
- 6) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 29, 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)

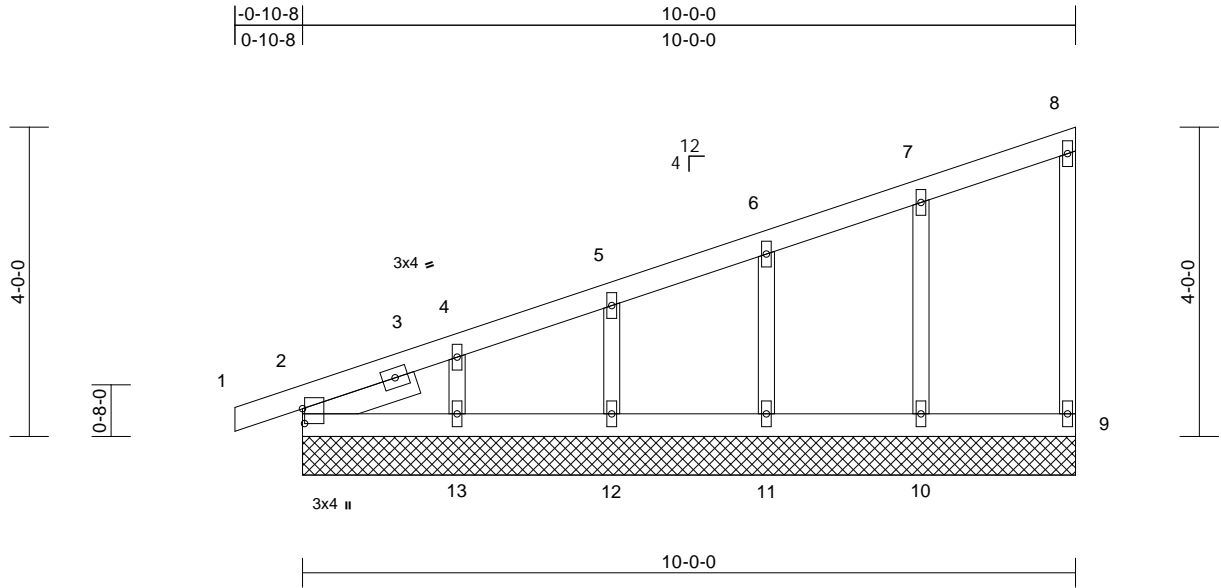
MiTek®
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:00

Job	Truss	Truss Type	Qty	Ply	
P240832	C1	Monopitch Supported Gable	1	1	
Job Reference (optional)					I67129651

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

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Page: 1



Scale = 1:29.8

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	0.14	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	0.04	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 43 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 6-0-0 oc purlins, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
REACTIONS		
(size)	2=10-0-0, 9=10-0-0, 10=10-0-0, 11=10-0-0, 12=10-0-0, 13=10-0-0	
Max Horiz	2=99 (LC 11)	
Max Uplift	2=-2 (LC 12), 9=-3 (LC 9), 10=-2 (LC 12), 11=-2 (LC 12), 12=-3 (LC 12), 13=-6 (LC 12)	
Max Grav	2=151 (LC 1), 9=69 (LC 1), 10=193 (LC 1), 11=177 (LC 1), 12=182 (LC 1), 13=179 (LC 1)	
FORCES		
(lb) - Maximum Compression/Maximum Tension		
TOP CHORD	1-2=-5/0, 2-4=-238/116, 4-5=-174/97, 5-6=-136/86, 6-7=-97/76, 7-8=-53/58, 8-9=-54/42	
BOT CHORD	2-13=-49/66, 12-13=-49/66, 11-12=-49/66, 10-11=-49/66, 9-10=-49/66	
WEBS	7-10=-150/117, 6-11=-138/103, 5-12=-143/99, 4-13=-136/145	

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 9-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) All plates are 1.5x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 9, 2 lb uplift at joint 2, 2 lb uplift at joint 10, 2 lb uplift at joint 11, 3 lb uplift at joint 12 and 6 lb uplift at joint 13.
- 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 29, 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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LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:00

Job	Truss	Truss Type	Qty	Ply	
P240832	C2	Monopitch	10	1	
					Job Reference (optional)

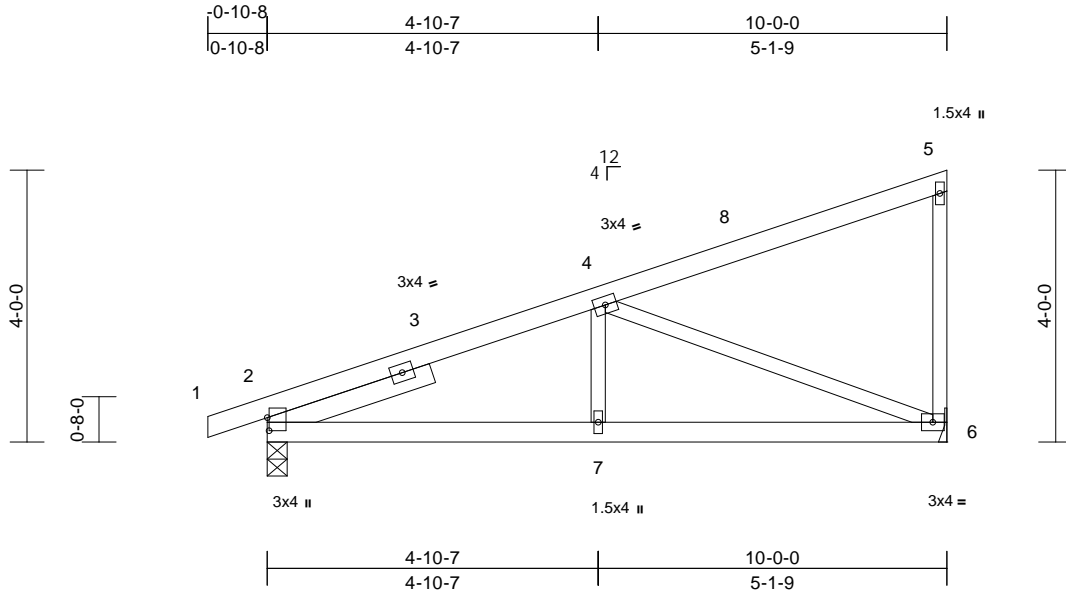
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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Page: 1

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Scale = 1:33.9

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	0.36	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.05	6-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 44 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 -- 2-6-6

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) 2=0-3-8, 6= Mechanical
Max Horiz 2=99 (LC 9)
Max Uplift 2=-10 (LC 12)
Max Grav 2=509 (LC 1), 6=443 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-734/117, 4-5=-95/54, 5-6=-150/79

BOT CHORD 2-7=-196/636, 6-7=-196/636

WEBS 4-6=-669/170, 4-7=0/225

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) and C-C Exterior(2E)
-0-10-8 to 2-1-8, Interior (1) 2-1-8 to 9-10-12 zone;
cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 4) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.

- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 2.
- 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

July 29, 2024

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MiTek®
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:00

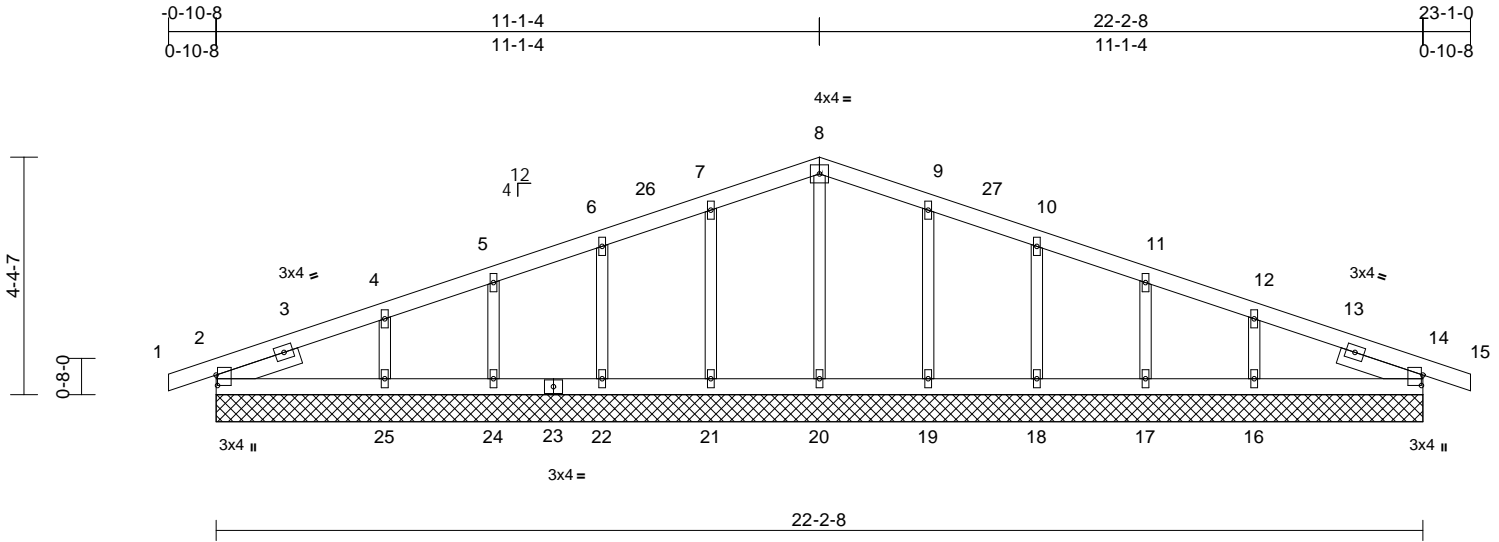
Job	Truss	Truss Type	Qty	Ply	
P240832	D1	Common Supported Gable	1	1	Job Reference (optional)
					I67129653

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. Thu Jul 25 18:40:28

Page: 1

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Scale = 1:42.4									
Plate Offsets (X, Y): [2:0-2-5,0-0-5], [14:0-2-5,0-0-5]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	999
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	999
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	14	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
						PLATES		GRIP	
						MT20		197/144	
						Weight: 93 lb		FT = 20%	

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 1-7-4, Right 2x4 SP No.2 -- 1-7-4

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=22-2-8, 14=22-2-8, 16=22-2-8, 17=22-2-8, 18=22-2-8, 19=22-2-8, 20=22-2-8, 21=22-2-8, 22=22-2-8, 24=22-2-8, 25=22-2-8
Max Horiz 2=-33 (LC 10)
Max Uplift 2=-16 (LC 12), 14=-16 (LC 12), 16=-2 (LC 12), 17=-3 (LC 12), 18=-2 (LC 12), 19=-2 (LC 12), 21=-2 (LC 12), 22=-2 (LC 12), 24=-3 (LC 12), 25=-2 (LC 12)
Max Grav 2=210 (LC 1), 14=210 (LC 1), 16=259 (LC 24), 17=155 (LC 1), 18=185 (LC 1), 19=189 (LC 24), 20=139 (LC 1), 21=189 (LC 23), 22=185 (LC 1), 24=155 (LC 1), 25=259 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5/0, 2-4=-101/18, 4-5=-73/45, 5-6=-68/66, 6-7=-69/90, 7-8=-71/113, 8-9=-71/110, 9-10=-69/84, 10-11=-68/61, 11-12=-73/39, 12-14=-101/10, 14-15=-5/0
BOT CHORD 2-25=0/46, 24-25=0/46, 22-24=0/46, 21-22=0/46, 20-21=0/46, 19-20=0/46, 18-19=0/46, 17-18=0/46, 16-17=0/46, 14-16=0/46

WEBS
8-20=-99/0, 7-21=-149/77, 6-22=-142/54, 5-24=-125/44, 4-25=-194/73, 9-19=-149/77, 10-18=-142/54, 11-17=-125/44, 12-16=-194/72

- 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=25ft; B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 11-1-4, Corner (3R) 11-1-4 to 14-1-4, Exterior(2N) 14-1-4 to 23-1-0 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 2, 16 lb uplift at joint 14, 2 lb uplift at joint 21, 2 lb uplift at joint 22, 3 lb uplift at joint 24, 2 lb uplift at joint 25, 2 lb uplift at joint 19, 2 lb uplift at joint 18, 3 lb uplift at joint 17 and 2 lb uplift at joint 16.

- 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



July 29,2024

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 the design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

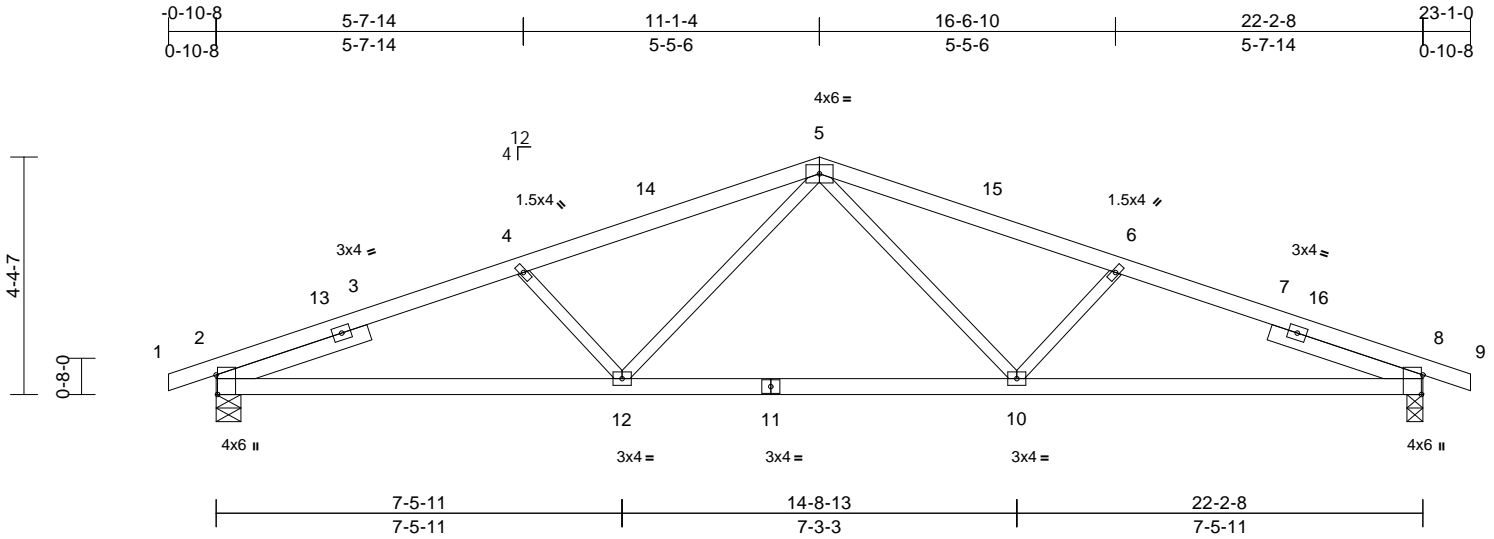
MiTek®
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:00

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
P240832	D2	Common	5	1	167129654

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. Thu Jul 25 18:40:28
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Page: 1



Scale = 1:42.4

Plate Offsets (X, Y): [2:0-4-5,Edge], [8:0-4-5,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	0.61	Vert(LL)	-0.11	10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.22	10-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 93 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 -- 2-11-5, Right 2x4 SP No.2 -- 2-11-5

BRACING

TOP CHORD	Structural wood sheathing directly applied or 3-2-15 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 2=0-5-8, 8=0-3-8
	Max Horiz 2=-33 (LC 10)
	Max Uplift 2=-3 (LC 12), 8=-3 (LC 12)
	Max Grav 2=1061 (LC 1), 8=1061 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-5/0, 2-4=-2089/149, 4-5=-1854/127, 5-6=-1854/127, 6-8=-2089/149, 8-9=-5/0
BOT CHORD	2-12=-103/1890, 10-12=-37/1376, 8-10=-97/1890
WEBS	5-10=0/534, 6-10=-328/111, 5-12=0/534, 4-12=-328/111

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=25ft; B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 11-1-4, Exterior(2R) 11-1-4 to 14-1-4, Interior (1) 14-1-4 to 23-1-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 2 and 3 lb uplift at joint 8.
- 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



July 29, 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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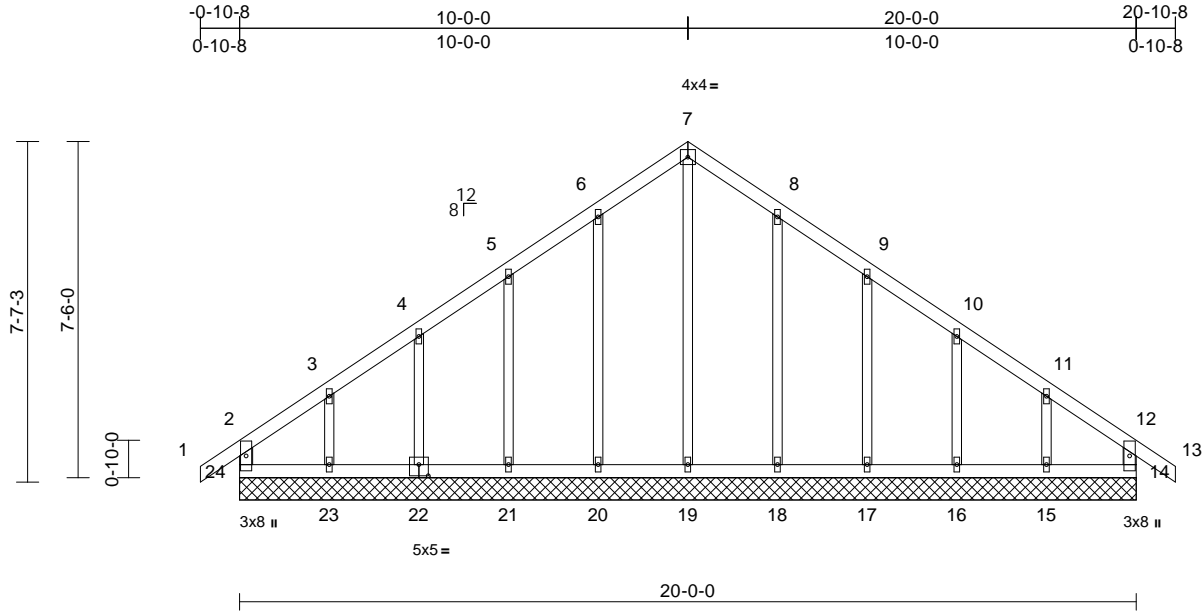
Job	Truss	Truss Type	Qty	Ply	
P240832	E1	Common Supported Gable	1	1	I67129655
Job Reference (optional)					

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

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Page: 1

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Scale = 1:51.4									
Plate Offsets (X, Y): [22:0-2-8,0-3-0]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	PLATES
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	GRIP
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	MT20
BCLL	0.0*	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	14	197/144
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R					
Weight: 99 lb FT = 20%									

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

BRACING	
TOP CHORD	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)	14=20-0-0, 15=20-0-0, 16=20-0-0, 17=20-0-0, 18=20-0-0, 19=20-0-0, 20=20-0-0, 21=20-0-0, 22=20-0-0, 23=20-0-0, 24=20-0-0
Max Horiz		24=129 (LC 10)
Max Uplift		14=5 (LC 9), 15=30 (LC 12), 16=14 (LC 12), 17=21 (LC 12), 18=11 (LC 12), 20=11 (LC 12), 21=21 (LC 12), 22=14 (LC 12), 23=30 (LC 12), 24=14 (LC 8)
Max Grav		14=167 (LC 1), 15=176 (LC 18), 16=184 (LC 1), 17=178 (LC 24), 18=190 (LC 24), 19=160 (LC 1), 20=190 (LC 23), 21=178 (LC 23), 22=184 (LC 1), 23=183 (LC 17), 24=174 (LC 18)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-24=-148/43, 1-2=0/40, 2-3=-97/80, 3-4=-79/66, 4-5=-73/83, 5-6=-79/134, 6-7=-104/178, 7-8=-104/178, 8-9=-79/134, 9-10=-55/83, 10-11=-61/49, 11-12=-77/56, 12-13=0/40, 12-14=-148/41
BOT CHORD	23-24=-52/73, 21-23=-52/73, 20-21=-52/73, 19-20=-52/73, 18-19=-52/73, 17-18=-52/73, 16-17=-52/73, 15-16=-52/73, 14-15=-52/73

WEBS	7-19=-149/46, 6-20=-150/56, 5-21=-138/68, 4-22=-144/61, 3-23=-133/75, 8-18=-150/56, 9-17=-138/68, 10-16=-144/61, 11-15=-129/75
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- 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=25ft; B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 10-0-0, Corner (3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 24, 5 lb uplift at joint 14, 11 lb uplift at joint 20, 21 lb uplift at joint 21, 14 lb uplift at joint 22, 30 lb uplift at joint 23, 11 lb uplift at joint 18, 21 lb uplift at joint 17, 14 lb uplift at joint 16 and 30 lb uplift at joint 15.

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



July 29,2024

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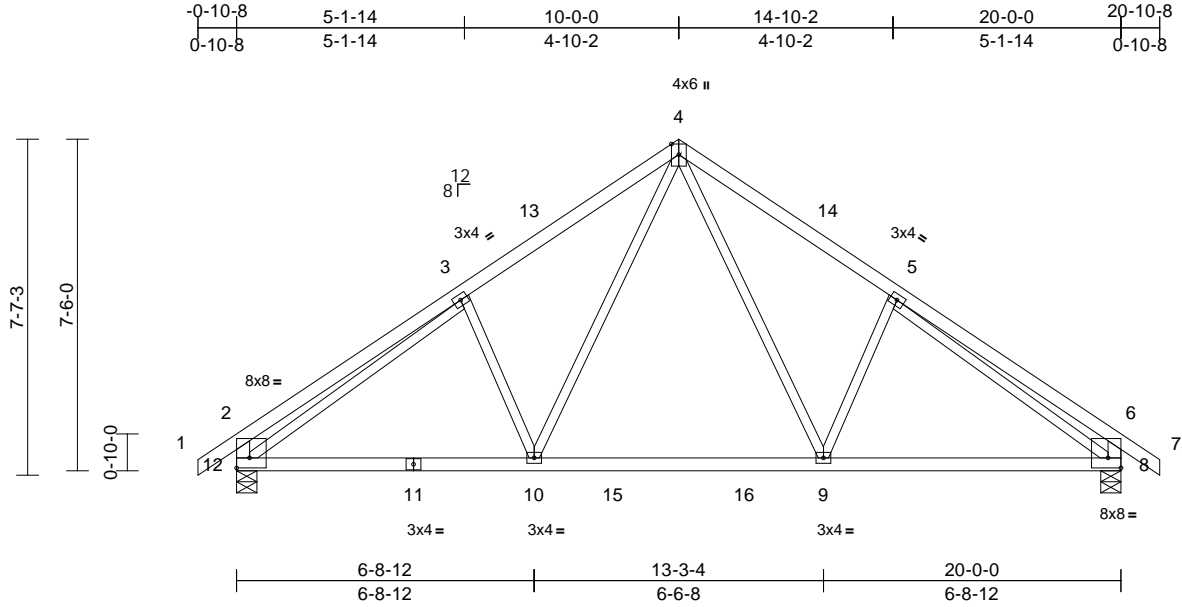
Job	Truss	Truss Type	Qty	Ply	
P240832	E2	Common	3	1	
Job Reference (optional)					I67129656

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

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Page: 1

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Scale = 1:52.1

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

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)	-0.08	9-10	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.12	9-10	>999	180	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.03	8	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 99 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
2400F 2.0E

BRACING

TOP CHORD Structural wood sheathing directly applied or
5-4-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 8=0-5-8, 12=0-5-8
Max Horiz 12=129 (LC 10)
Max Uplift 8=8 (LC 12), 12=8 (LC 12)
Max Grav 8=1011 (LC 18), 12=1011 (LC 17)

FORCES

(lb) - Maximum Compression/Maximum
Tension
TOP CHORD 1-2=0/40, 2-3=-492/72, 3-4=-1109/83,
4-5=-1109/83, 5-6=-492/72, 6-7=0/40,
2-12=-451/74, 6-8=-451/74
BOT CHORD 10-12=0/994, 9-10=0/694, 8-9=0/924
WEBS 3-12=-783/0, 5-8=-783/0, 3-10=-263/104,
4-10=-16/515, 4-9=-16/515, 5-9=-263/105

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=25ft;
B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) and C-C Exterior(2E)
-0-10-8 to 2-1-8, Interior (1) 2-1-8 to 10-0-0, Exterior(2R)
10-0-0 to 13-0-0, Interior (1) 13-0-0 to 20-10-8 zone;
cantilever left and right exposed ; end vertical left and
right exposed;C-C for members and forces & MWFRS
for reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.

- 4) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members, with BCDL = 10.0psf.
- 5) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 8 lb uplift at joint
12 and 8 lb uplift at joint 8.
- 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



July 29,2024

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Job	Truss	Truss Type	Qty	Ply	
P240832	E3	Common Girder	1	3	
					Job Reference (optional)

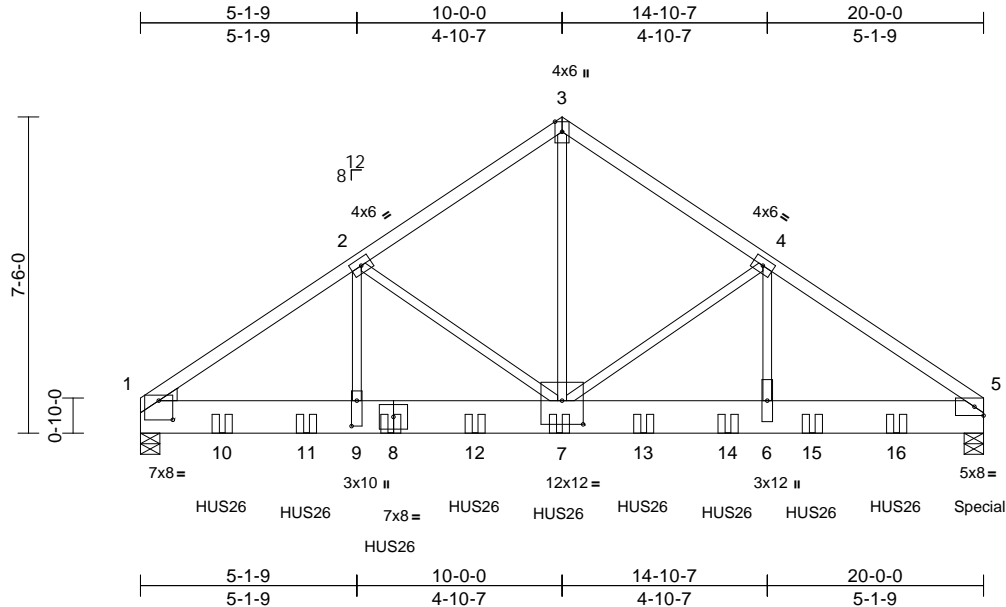
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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Page: 1

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Scale = 1:54.7

Plate Offsets (X, Y): [1:0-4-0,0-5-7], [7:0-6-0,0-6-12], [9:0-7-4,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.08	6-7	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.15	6-7	>999	180	
BCLL	0.0*	Rep Stress Incr	NO	WB	0.80	Horz(CT)	0.03	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 355 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x10 HF No.2
WEBS 2x3 SPF No.2
WEDGE Left: 2x4 SP No.2

BRACING

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

REACTIONS (size) 1=0-5-8, 5=0-5-8
Max Horiz 1=108 (LC 6)
Max Grav 1=6971 (LC 1), 5=8269 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-9403/0, 2-3=-6685/0, 3-4=-6685/0, 4-5=-9413/0

BOT CHORD 1-9=0/7451, 7-9=0/7451, 6-7=0/7459, 5-6=0/7459

WEBS 2-9=0/3109, 2-7=-2494/0, 3-7=0/6967, 4-7=-2505/0, 4-6=0/3122

NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be HF No.2 crushing capacity of 405 psi.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 17-11-4 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1359 lb down at 19-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-70, 3-5=-70, 1-5=-20
Concentrated Loads (lb)
Vert: 5=-1359 (F), 8=-1347 (F), 7=-1347 (F), 10=-1347 (F), 11=-1347 (F), 12=-1347 (F), 13=-1347 (F), 14=-1347 (F), 15=-1347 (F), 16=-1347 (F)



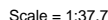
July 29, 2024

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)

MiTek®
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:00

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. Thu Jul 25 18:40:29 Page: 1
ID:Ra??scXYbZ1xerByBMoV9mtyxia-RfC?PsB70Hq3NSaPqnL8w3ulTXbGKWCrDoi7J4zJC?f



LUMBER		2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCdL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 6-6-0, Corner(3R) 6-6-0 to 9-6-0, Exterior(2N) 9-6-0 to 13-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x4 SP No.2	
WEBS	2x4 SP No.2	
OTHERS	2x3 SPF No.2	
BRACING		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.
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.	4) All plates are 1.5x4 MT20 unless otherwise indicated.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	5) Gable requires continuous bottom chord bearing.
REACTIONS (size)		6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
	10=13-0-0, 11=13-0-0, 12=13-0-0, 13=13-0-0, 14=13-0-0, 15=13-0-0, 16=13-0-0	7) Gable studs spaced at 2-0-0 oc.
Max Horiz	16=-92 (LC 10)	8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
Max Uplift	10=-27 (LC 12), 11=-24 (LC 12), 12=-14 (LC 12), 14=-14 (LC 12), 15=-24 (LC 12), 16=-27 (LC 12)	9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
Max Grav	10=190 (LC 1), 11=200 (LC 18), 12=185 (LC 24), 13=152 (LC 1), 14=185 (LC 23), 15=203 (LC 17), 16=190 (LC 1)	10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
FORCES (lb) - Maximum Compression/Maximum Tension		11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 16, 27 lb uplift at joint 10, 14 lb uplift at joint 14, 24 lb uplift at joint 15, 14 lb uplift at joint 12 and 24 lb uplift at joint 11.
TOP CHORD	2-16=-168/98, 1-2=0/40, 2-3=-87/52, 3-4=-67/104, 4-5=-95/159, 5-6=-95/159, 6-7=-68/104, 7-8=-77/42, 8-9=0/40, 8-10=-168/98	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.
BOT CHORD	15-16=-34/48, 14-15=-34/48, 13-14=-34/48, 12-13=-34/48, 11-12=-34/48, 10-11=-34/48	
WEBS	5-13=-118/25, 4-14=-148/76, 3-15=-149/104, 6-12=-148/76, 7-11=-148/104	
NOTES		
1) Unbalanced roof live loads have been considered for this design.		



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

WARNING – verify design parameters and noted notes on this and included MiTek Reference Tag M7473 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/TP1 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

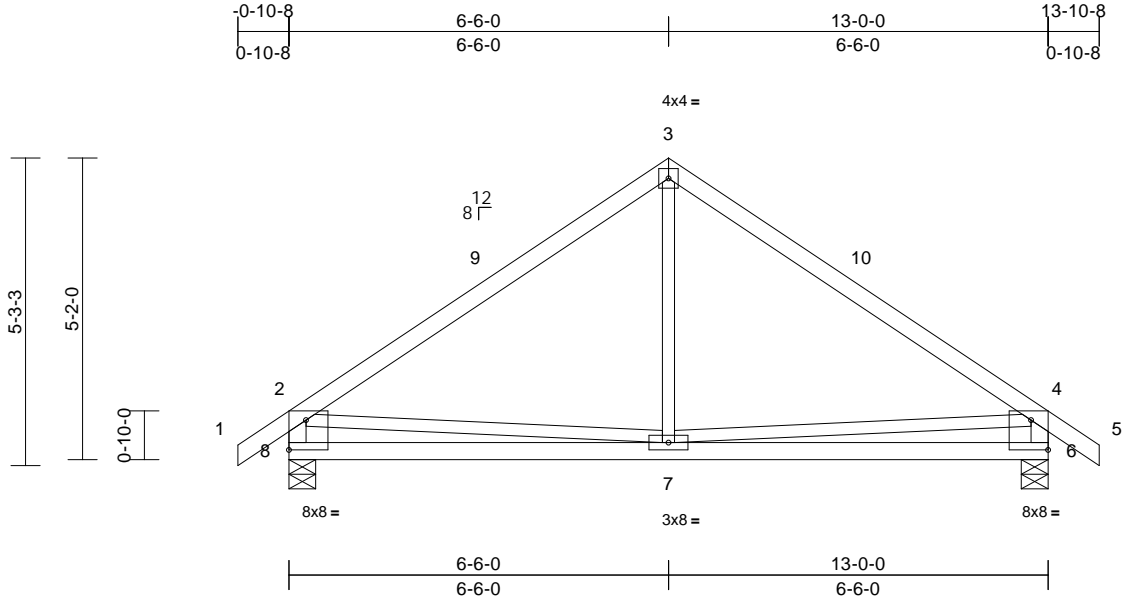
MiTek®
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
16023 Swingley Ridge Rd
Crestwood, MO 63070
P: 636.412.0100
LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:01

Job	Truss	Truss Type	Qty	Ply	
P240832	G2	Common	1	1	
Job Reference (optional)					I67129659

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. Thu Jul 25 18:40:29
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Page: 1



Scale = 1:39.5

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	-0.03	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.07	6-7	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 61 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 8-2,6-4:2x4 SP No.2

BRACING

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

REACTIONS

(size) 6=0-5-8, 8=0-5-8
Max Horiz 8=-92 (LC 10)
Max Uplift 6=-13 (LC 12), 8=-13 (LC 12)
Max Grav 6=643 (LC 1), 8=643 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/40, 2-3=-628/62, 3-4=-628/62,
4-5=0/40, 2-8=-588/97, 4-6=-588/97
BOT CHORD 7-8=-119/444, 6-7=-99/415
WEBS 3-7=0/271, 2-7=-115/170, 4-7=-115/170

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=25ft;
B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) and C-C Exterior(2E)
-0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-6-0, Exterior(2R)
6-6-0 to 9-6-0, Interior (1) 9-6-0 to 13-10-8 zone;
cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- 5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 8 and 13 lb uplift at joint 6.
- 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



July 29,2024

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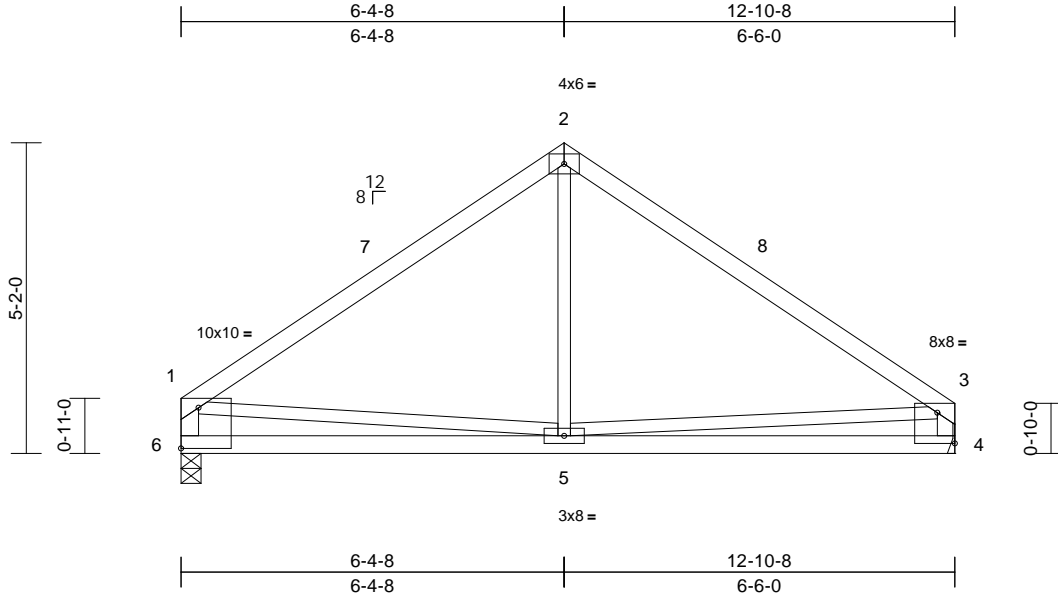
MiTek®
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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:01

Job	Truss	Truss Type	Qty	Ply	
P240832	G3	Common	4	1	
					I67129660
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. Thu Jul 25 18:40:29
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Page: 1



Scale = 1:38.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.03	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.07	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 58 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 6-1,4-3:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-3-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6=0-4-0
Max Horiz 6=-83 (LC 10)
Max Grav 4=566 (LC 1), 6=566 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-619/62, 2-3=-622/62, 1-6=-511/65, 3-4=-510/66

BOT CHORD 5-6=-77/293, 4-5=-64/305

WEBS 2-5=0/257, 1-5=0/217, 3-5=-13/194

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=25ft; B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-4 to 3-3-4, Interior (1) 3-3-4 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior (1) 9-6-0 to 12-10-4 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- Bearings are assumed to be: Joint 6 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



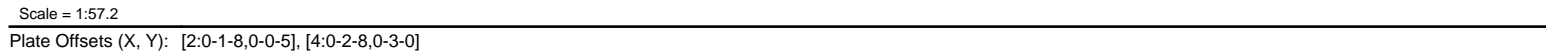
July 29,2024

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09/03/2024 1:32:01

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.630 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Jul 25 18:40:29 Page: 1
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LUMBER		TOP CHORD	1-2=0/6, 2-3=-120/100, 3-5=-103/83, 5-6=-97/76, 6-7=-91/69, 7-8=-84/83, 8-9=-78/119, 9-10=-80/156, 10-11=-97/188, 11-12=-97/188, 12-13=-80/156, 13-14=-61/119, 14-15=-50/83, 15-16=-50/48, 16-17=-51/19, 17-19=-56/25, 19-20=-92/42, 20-21=-49/7	6) Gable studs spaced at 2'-0" oc.
TOP CHORD	2x4 SP No.2			7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
BOT CHORD	2x4 SP No.2			8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00 tall by 2'-00"-00 wide will fit between the bottom chord and any other members.
WEBS	2x3 SPF No.2			9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
OTHERS	2x3 SPF No.2 "Except" 4-4:2x4 SP No.2			10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3 lb uplift at joint 2, 3 lb uplift at joint 31, 11 lb uplift at joint 32, 8 lb uplift at joint 33, 9 lb uplift at joint 34, 8 lb uplift at joint 35, 9 lb uplift at joint 36, 15 lb uplift at joint 37, 3 lb uplift at joint 28, 11 lb uplift at joint 27, 8 lb uplift at joint 26, 8 lb uplift at joint 25, 9 lb uplift at joint 24, 5 lb uplift at joint 23 and 30 lb uplift at joint 22.
SLIDER	Left 2x4 SP No.2 -- 1'-7-0	BOT CHORD	2-37=-28/81, 36-37=-28/81, 35-36=-28/81, 34-35=-28/81, 33-34=-28/81, 32-33=-28/81, 31-32=-28/81, 29-31=-28/81, 28-29=-28/81, 27-28=-28/81, 26-27=-28/81, 25-26=-28/81, 24-25=-28/81, 23-24=-28/81, 22-23=-28/81, 21-22=-28/81	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
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		WEBS	11-29=-117/25, 10-31=-149/48, 9-32=-139/59, 8-33=-140/55, 7-34=-140/55, 6-35=-140/55, 5-36=-142/58, 3-37=-120/89, 12-28=-149/48, 13-27=-139/59, 14-26=-140/55, 15-25=-140/56, 16-24=-139/55, 17-23=-143/71, 19-22=-128/102	
(size)	2=31'-0-0, 21=31'-0-0, 22=31'-0-0, 23=31'-0-0, 24=31'-0-0, 25=31'-0-0, 26=31'-0-0, 27=31'-0-0, 28=31'-0-0, 29=31'-0-0, 31=31'-0-0, 32=31'-0-0, 33=31'-0-0, 34=31'-0-0, 35=31'-0-0, 36=31'-0-0, 37=31'-0-0			
Max Horiz	2=120 (LC 11)			
Max Uplift	2=-3 (LC 10), 22=-30 (LC 12),			

LOAD CASE(S) Standard

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=25ft;
 B=45ft; L=31ft; eave=2ft; K_e=1.00; Cat II; Exp B;
 Enclosed; MWFRS (directional) and C-C Corner(3E)
 -0-10-8 to 2-2-11, Exterior(2N) 2-2-11 to 15-6-0, Corner
 (3R) 15-6-0 to 18-7-3, Exterior(2N) 18-7-3 to 30-10-12
 zone; cantilever left and right exposed ; end vertical left
 and right exposed;C-C for members and forces &
 MWFRS for reactions shown; Lumber DOL=1.60 plate
 grip DOL=1.60
- 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.



July 29, 2024

FORCES (lb) - Maximum Compression/Maximum Tension

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

WARNING – Verify design parameters and READ NOTES ON THIS and INCLUDED MITER KNOT REFERENCE ASSEMBLY PHOTO PRIOR TO 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.tpinet.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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16023 Swingley Ridge Rd
Crestwood, MO 63070
844.620.1111
LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:01

Job	Truss	Truss Type	Qty	Ply	
P240832	H2	Common	6	1	
					Job Reference (optional)

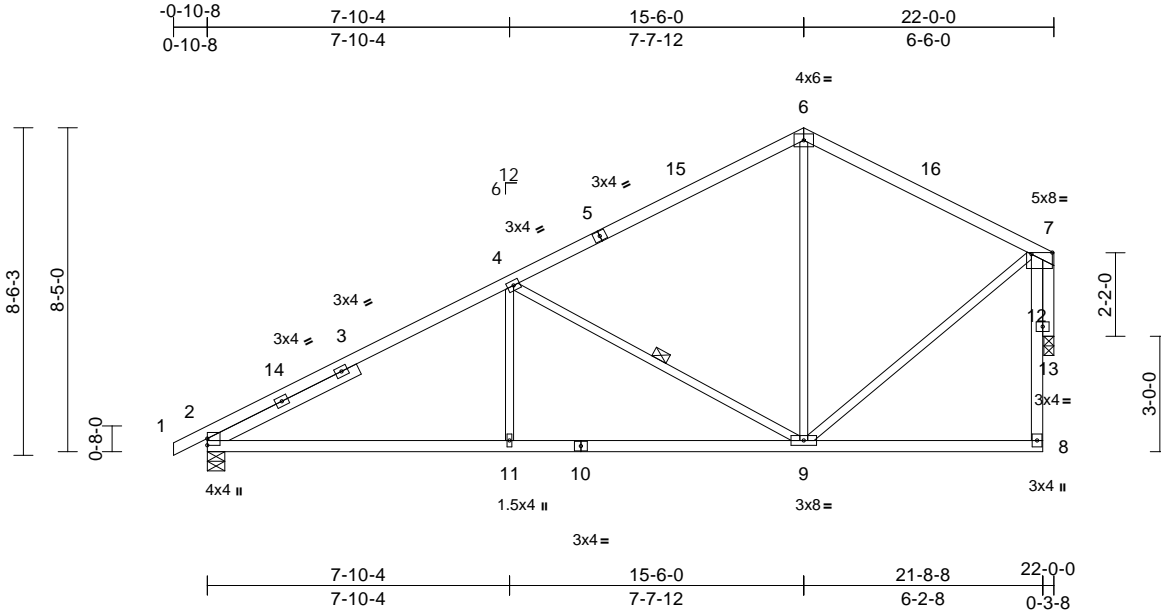
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Jul 25 18:40:29

Page: 1

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Scale = 1:59.9

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

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	0.85	Vert(LL)	-0.09	2-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.20	2-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.10	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 110 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2 *Except* 8-7:2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 -- 4-4-4

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-2-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS	1 Row at midpt	4-9
------	----------------	-----

REACTIONS	(size)	2=0-5-8, 13=0-3-2
	Max Horiz	2=135 (LC 11)
	Max Grav	2=1046 (LC 1), 13=955 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/6, 2-4=-1527/61, 4-6=-776/95, 6-7=-733/90, 8-12=0/103, 7-12=0/103
BOT CHORD	2-11=-153/1262, 9-11=-153/1262, 8-9=-47/92
WEBS	6-9=0/252, 4-9=-800/98, 4-11=0/333, 7-9=-27/643, 7-13=-968/57

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=25ft; B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior (1) 18-6-0 to 21-6-12 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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 29,2024

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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LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:01

Job	Truss	Truss Type	Qty	Ply	
P240832	H3	Common Girder	1	2	Job Reference (optional)

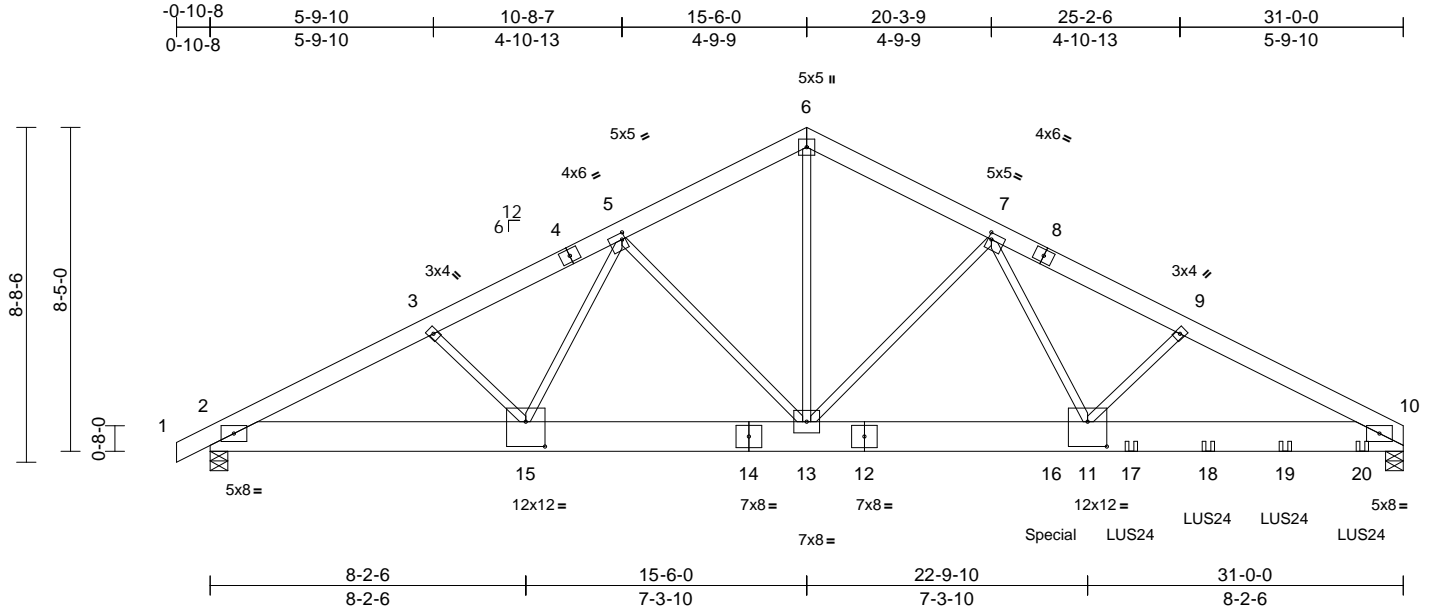
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Jul 25 18:40:29

Page: 1

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Scale = 1:59.9

Plate Offsets (X, Y): [5:0-1-0,0-2-0], [7:0-1-0,0-2-0], [11:0-6-0,0-7-12], [15:0-6-0,0-7-12]

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	0.38	Vert(LL)	-0.15	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.27	11-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 382 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-8-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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

Max Horiz 2=113 (LC 7)

Max Grav 2=2737 (LC 1), 10=5740 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/27, 2-3=-5134/0, 3-5=-4897/0,
5-6=-4511/0, 6-7=-4511/0, 7-9=-9514/0,
9-10=-9721/0

BOT CHORD 2-15=0/4465, 13-15=0/4238, 11-13=0/6340,
10-11=0/8545

WEBS 6-13=0/3587, 3-15=-245/105, 5-15=-63/246,
5-13=-412/136, 7-13=-3568/0, 7-11=0/5038,
9-11=-136/172

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 4 rows staggered at 0-5-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft;
B=45ft; L=31ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be HF No.2 crushing capacity of 405 psi.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 23-11-4 from the left end to 29-11-4 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3464 lb down at 21-10-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-70, 6-10=-70, 2-10=-20
Concentrated Loads (lb)
Vert: 16=-3464 (F), 17=-546 (F), 18=-546 (F),
19=-546 (F), 20=-548 (F)



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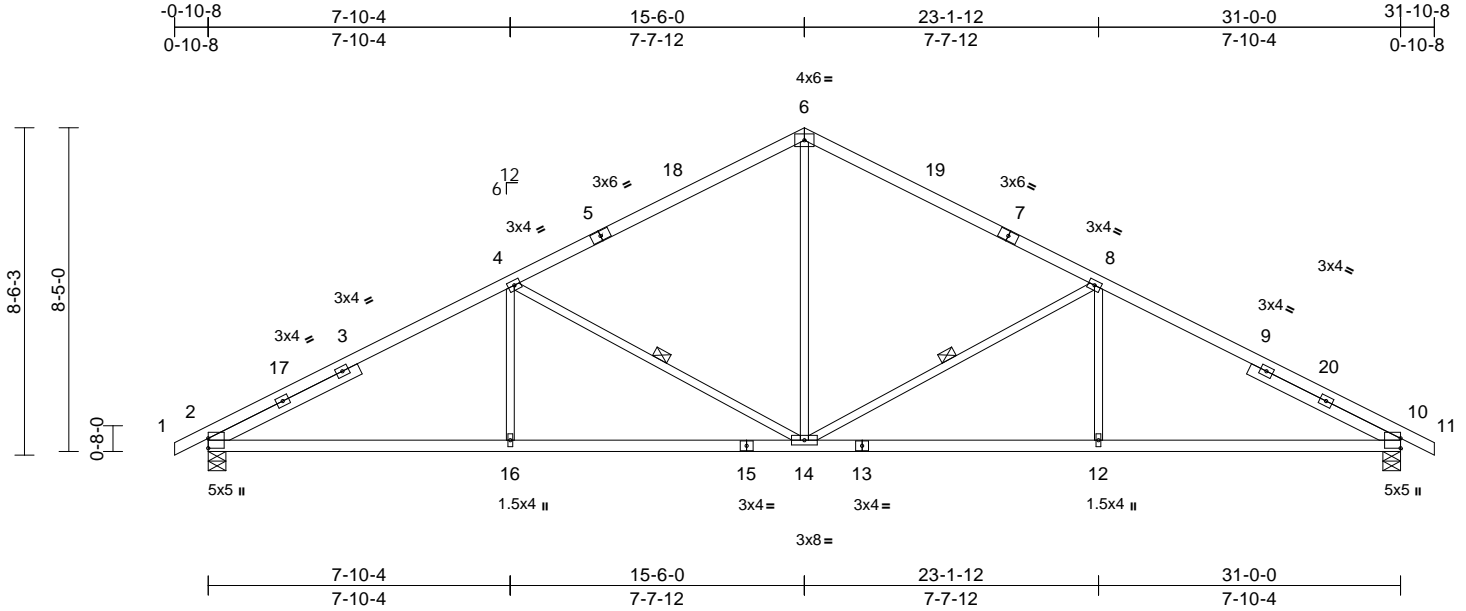
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
P240832	H4	Common	3	1	167129664

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Page: 1

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Scale = 1:59.9

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	0.83	Vert(LL)	-0.10	14-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.23	10-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 141 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP 1650F 1.5E *Except* 1-5,7-11:2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x3 SPF No.2
 SLIDER Left 2x4 SP No.2 -- 4-4-4, Right 2x4 SP No.2 -- 4-4-4

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.

WEBS 1 Row at midpt 8-14, 4-14

REACTIONS (size) 2=0-5-8, 10=0-5-8
 Max Horiz 2=114 (LC 10)
 Max Grav 2=1456 (LC 1), 10=1456 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-4=-2365/28, 4-6=-1654/86,
 6-8=-1654/86, 8-10=-2365/28, 10-11=0/6
 BOT CHORD 2-16=0/1996, 14-16=0/1996, 12-14=0/1996,
 10-12=0/1996

WEBS 6-14=0/857, 8-14=-760/57, 8-12=0/326,
 4-14=-760/57, 4-16=0/326

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=25ft;
 B=45ft; L=31ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
 Enclosed; MWFRS (directional) and C-C Exterior(2E)
 -0-10-8 to 2-2-11, Interior (1) 2-2-11 to 15-6-0, Exterior (2R) 15-6-0 to 18-7-3, Interior (1) 18-7-3 to 31-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 29,2024

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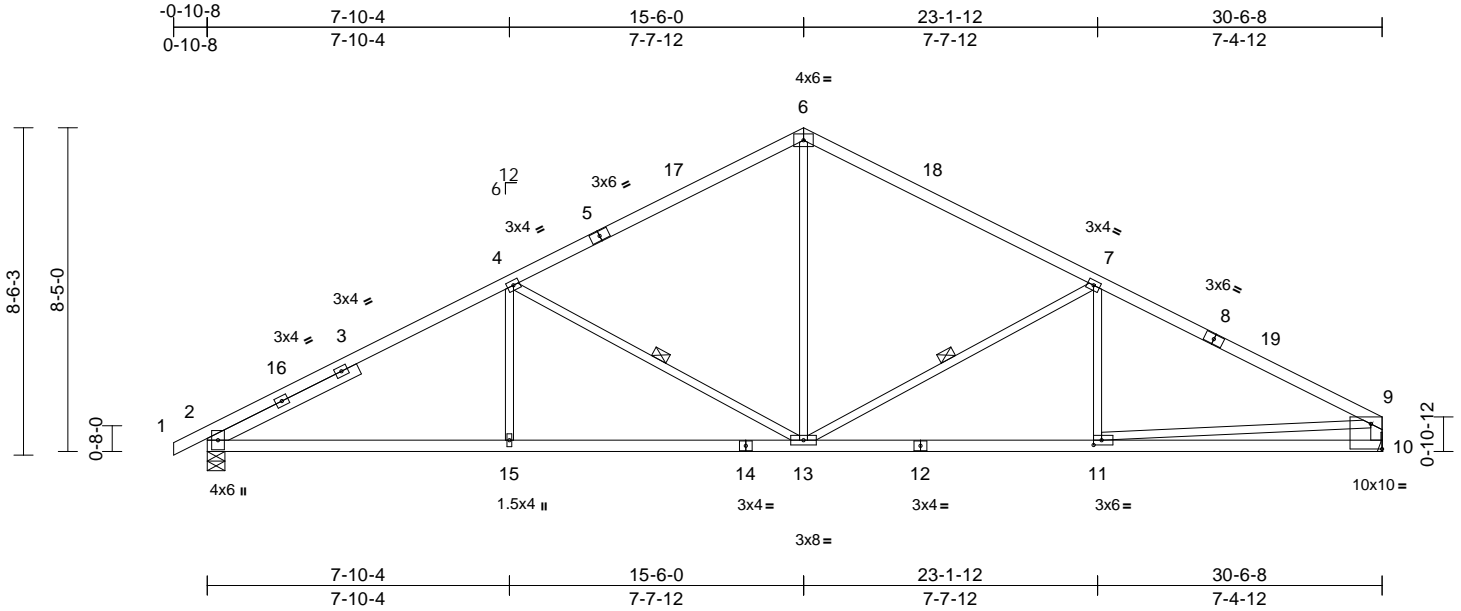
Job	Truss	Truss Type	Qty	Ply	
P240832	H5	Common	10	1	
Job Reference (optional)					I67129665

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Page: 1

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Scale = 1:59.9

Plate Offsets (X, Y): [2:0-3-9,0-1-5], [10:Edge,0-7-13], [11:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.11	11-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.24	11-13	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 138 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 5-6:2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 10-9:2x4 SP No.2
SLIDER Left 2x4 SP No.2 -- 4-4-4

BRACING

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

WEBS 1 Row at midpt 7-13, 4-13

REACTIONS (size) 2=0-5-8, 10= Mechanical
Max Horiz 2=123 (LC 11)
Max Grav 2=1430 (LC 1), 10=1367 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/6, 2-4=-2311/28, 4-6=-1598/86,
6-7=-1602/87, 7-9=-2187/34, 9-10=-1293/45
BOT CHORD 2-15=0/1949, 13-15=0/1949, 11-13=0/1866,
10-11=-25/383
WEBS 6-13=0/820, 7-13=-680/58, 7-11=0/220,
4-13=-764/57, 4-15=0/325, 9-11=0/1489

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=25ft;
B=45ft; L=31ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) and C-C Exterior(2E)
-0-10-8 to 2-2-2, Interior (1) 2-2-2 to 15-6-0, Exterior(2R)
15-6-0 to 18-6-10, Interior (1) 18-6-10 to 30-4-12 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 5) Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 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



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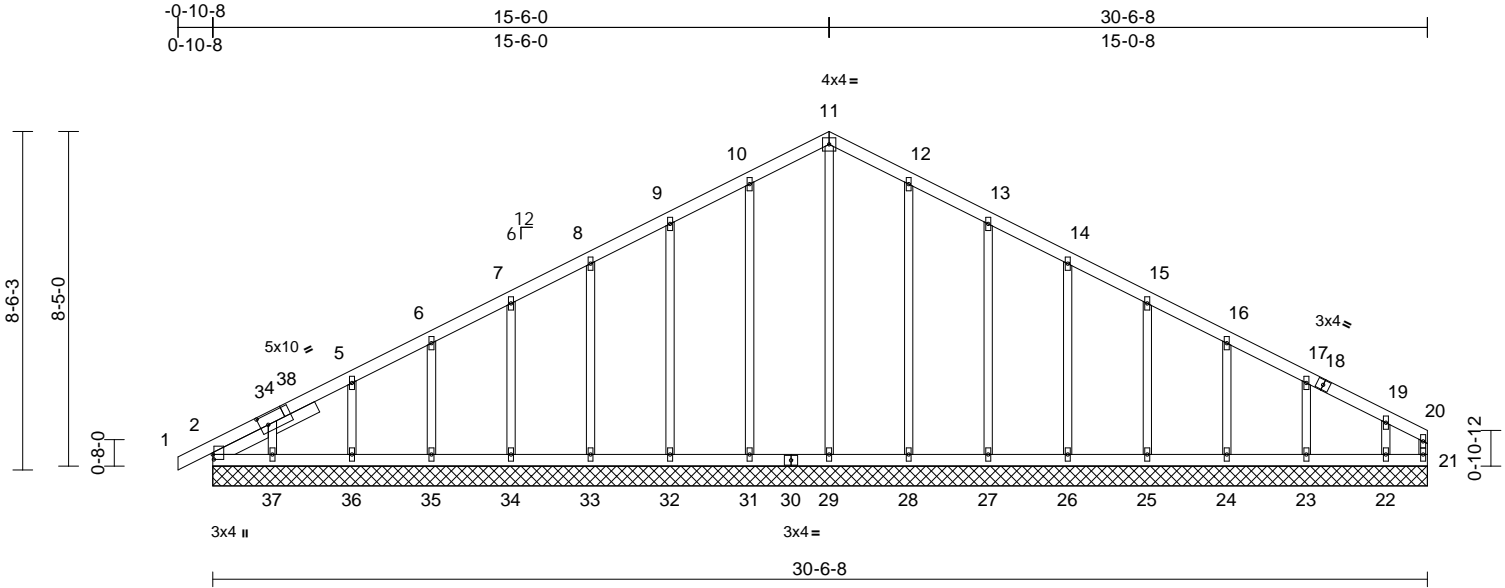
Job	Truss	Truss Type	Qty	Ply	
P240832	H8	Common Supported Gable	1	1	I67129666
Job Reference (optional)					

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Page: 1

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Scale = 1:57.9

Plate Offsets (X, Y): [2'-0-1-8, 0'-0-5], [4'-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	0.06	Vert(LL)	n/a	-	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.00	21	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 153 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 *Except* 4-4:2x4 SP No.2
SLIDER Left 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)
2=30-6-8, 21=30-6-8, 22=30-6-8, 23=30-6-8, 24=30-6-8, 25=30-6-8, 26=30-6-8, 27=30-6-8, 28=30-6-8, 29=30-6-8, 31=30-6-8, 32=30-6-8, 33=30-6-8, 34=30-6-8, 35=30-6-8, 36=30-6-8, 37=30-6-8
Max Horiz 2=122 (LC 11)
Max Uplift 2=8 (LC 10), 21=12 (LC 11), 22=42 (LC 12), 23=6 (LC 12), 24=9 (LC 12), 25=8 (LC 12), 26=8 (LC 12), 27=11 (LC 12), 28=3 (LC 12), 31=3 (LC 12), 32=11 (LC 12), 33=8 (LC 12), 34=9 (LC 12), 35=8 (LC 12), 36=9 (LC 12), 37=13 (LC 12)
Max Grav 2=151 (LC 18), 21=50 (LC 17), 22=146 (LC 18), 23=187 (LC 1), 24=178 (LC 24), 25=180 (LC 1), 26=180 (LC 1), 27=179 (LC 24), 28=189 (LC 24), 29=158 (LC 17), 31=189 (LC 23), 32=179 (LC 23), 33=180 (LC 1), 34=180 (LC 23), 35=179 (LC 1), 36=183 (LC 23), 37=158 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/6, 2-3=-122/107, 3-5=-104/90, 5-6=-98/82, 6-7=-92/75, 7-8=-85/94, 8-9=-79/129, 9-10=-81/166, 10-11=-99/198, 11-12=-99/198, 12-13=-81/166, 13-14=-63/129, 14-15=-49/94, 15-16=-45/59, 16-17=-46/23, 17-19=-48/24, 19-20=-85/40, 20-21=-50/18
BOT CHORD 2-37=-26/70, 36-37=-26/70, 35-36=-26/70, 34-35=-26/70, 33-34=-26/70, 32-33=-26/70, 31-32=-26/70, 29-31=-26/70, 28-29=-26/70, 27-28=-26/70, 26-27=-26/70, 25-26=-26/70, 24-25=-26/70, 23-24=-26/70, 22-23=-26/70, 21-22=-26/70
WEBS 11-29=-126/26, 10-31=-149/48, 9-32=-139/59, 8-33=-140/55, 7-34=-140/55, 6-35=-140/55, 5-36=-142/57, 3-37=-121/86, 12-28=-149/48, 13-27=-139/59, 14-26=-140/55, 15-25=-140/56, 16-24=-139/55, 17-23=-145/73, 19-22=-114/104

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=31ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-2-2, Exterior(2N) 2-2-2 to 15-6-0, Corner (3R) 15-6-0 to 18-6-10, Exterior(2N) 18-6-10 to 30-5-4 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 21, 8 lb uplift at joint 2, 3 lb uplift at joint 31, 11 lb uplift at joint 32, 8 lb uplift at joint 33, 9 lb uplift at joint 34, 8 lb uplift at joint 35, 9 lb uplift at joint 36, 13 lb uplift at joint 37, 3 lb uplift at joint 28, 11 lb uplift at joint 27, 8 lb uplift at joint 26, 8 lb uplift at joint 25, 9 lb uplift at joint 24, 6 lb uplift at joint 23 and 42 lb uplift at joint 22.
- 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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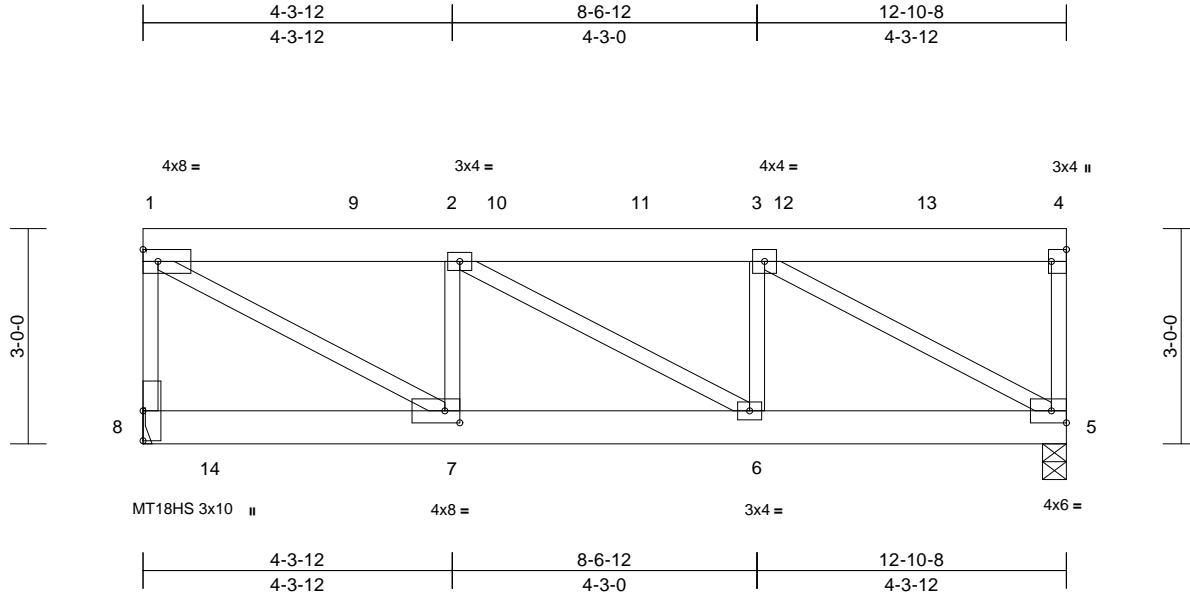
Job	Truss	Truss Type	Qty	Ply	
P240832	R1	Flat Girder	1	2	Job Reference (optional)

I67129667

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Page: 1



Scale = 1:32.1

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

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	0.44	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.47	Vert(CT)	-0.09	6-7	>999	180	MT18HS	197/144
BCLL	0.0*	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
Weight: 128 lb											FT = 20%	

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6'-0" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS (size) 5=0-4-0, 8= Mechanical
Max Horiz 8=-64 (LC 4)
Max Grav 5=3020 (LC 1), 8=3484 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-8=-2677/0, 1-2=-3973/0, 2-3=-3937/0, 3-4=-67/10, 4-5=-570/0
BOT CHORD 7-8=-32/87, 6-7=0/3973, 5-6=0/3937
WEBS 3-5=-4535/0, 2-7=-2045/0, 1-7=0/4564, 2-6=-45/3, 3-6=-15/108

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x3 - 1 row at 0-9'-0" oc, 2x6 - 2 rows staggered at 0-9'-0" oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9'-0" oc.
Web connected as follows: 2x3 - 1 row at 0-9'-0" oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-06"-00" tall by 2'-00"-00" wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: , Joint 5 SPF No.2 crushing capacity of 425 psi.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 5-8=-20
Concentrated Loads (lb)
Vert: 9=-885, 10=-885, 11=-885, 12=-885, 13=-885, 14=-937



July 29, 2024

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Job	Truss	Truss Type	Qty	Ply	
P240832	VE1	Valley	1	1	Job Reference (optional)

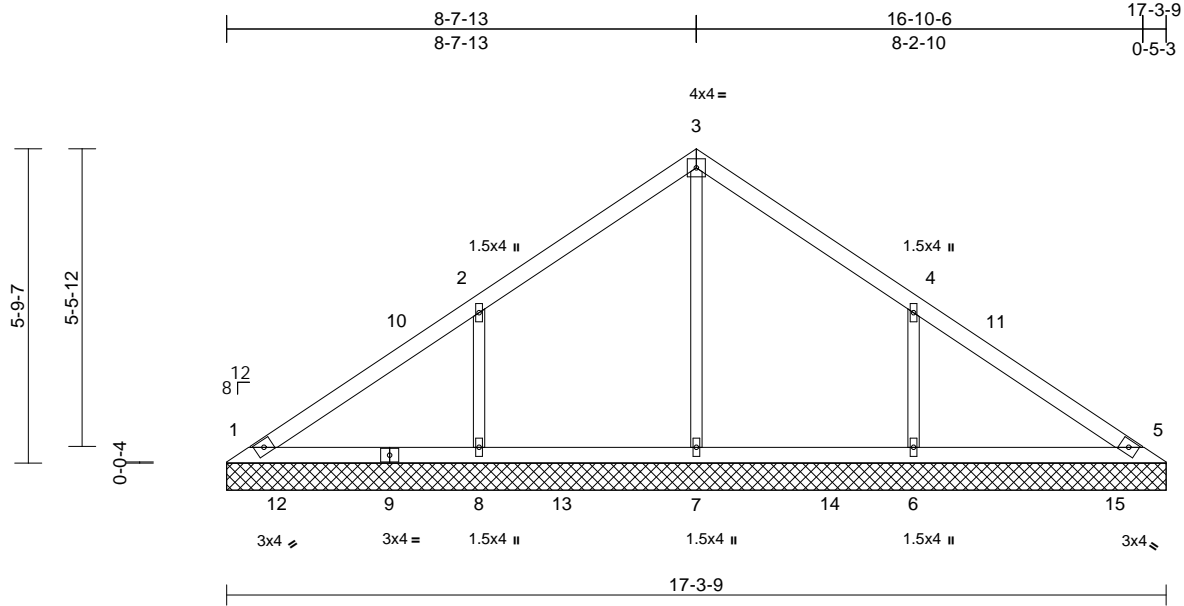
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Jul 25 18:40:30

Page: 1

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	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: 63 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=17-3-9, 5=17-3-9, 6=17-3-9, 7=17-3-9, 8=17-3-9
Max Horiz 1=-85 (LC 10)
Max Uplift 6=-44 (LC 12), 8=-44 (LC 12)
Max Grav 1=181 (LC 18), 5=175 (LC 1), 6=500 (LC 18), 7=342 (LC 17), 8=500 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-123/80, 2-3=-140/108, 3-4=-140/109, 4-5=-102/64
BOT CHORD 1-8=-21/72, 7-8=-21/72, 6-7=-21/72, 5-6=-21/72

WEBS 3-7=-180/0, 2-8=-340/174, 4-6=-340/174

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=25ft; B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-5-12 to 3-5-12, Exterior(2N) 3-5-12 to 8-8-3, Corner (3R) 8-8-3 to 11-8-3, Exterior(2N) 11-8-3 to 16-10-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 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 8 and 44 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



July 29, 2024

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Job	Truss	Truss Type	Qty	Ply	
P240832	VE2	Valley	1	1	Job Reference (optional)

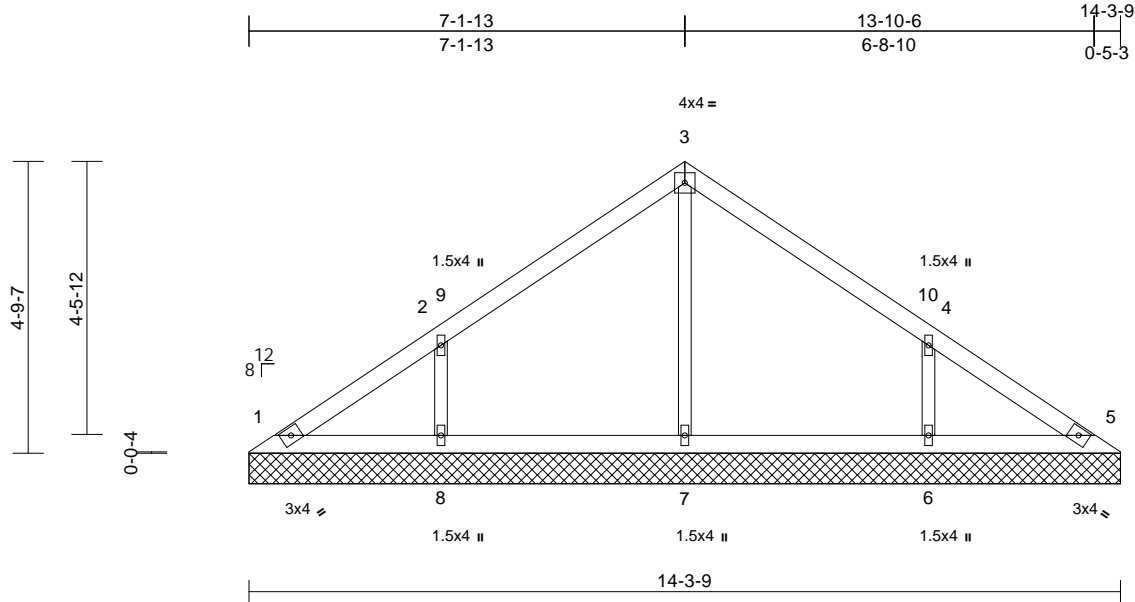
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Page: 1

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	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	0.10	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS (size) 1=14-3-9, 5=14-3-9, 6=14-3-9, 7=14-3-9, 8=14-3-9
Max Horiz 1=70 (LC 11)
Max Uplift 6=37 (LC 12), 8=37 (LC 12)
Max Grav 1=110 (LC 1), 5=110 (LC 1), 6=361 (LC 24), 7=280 (LC 1), 8=361 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-102/53, 2-3=-140/96, 3-4=-140/96, 4-5=-85/35

BOT CHORD 1-8=-12/58, 7-8=-12/58, 6-7=-12/58, 5-6=-12/58

WEBS 3-7=-198/0, 2-8=-285/170, 4-6=-285/170

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=25ft; B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-5-12 to 3-5-12, Exterior(2N) 3-5-12 to 7-2-3, Corner (3R) 7-2-3 to 10-2-3, Exterior(2N) 10-2-3 to 13-10-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 8 and 37 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



July 29, 2024

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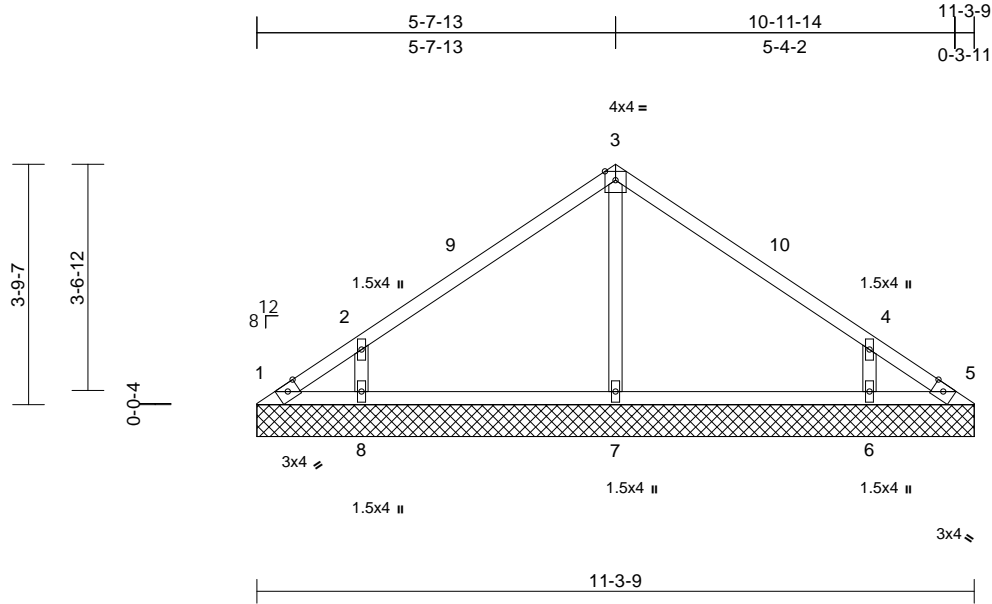
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Job	Truss	Truss Type	Qty	Ply	
P240832	VE3	Valley	1	1	167129670
Job Reference (optional)					

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

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	n/a	-	n/a	999	197/144
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 24 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size)	1=11-3-9, 5=11-3-9, 6=11-3-9, 7=11-3-9, 8=11-3-9
	Max Horiz	1=-56 (LC 10)
	Max Uplift	1=-30 (LC 10), 5=-19 (LC 11), 6=-37 (LC 12), 8=-37 (LC 12)
	Max Grav	1=30 (LC 11), 5=21 (LC 12), 6=339 (LC 24), 7=298 (LC 1), 8=339 (LC 23)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-70/53, 2-3=-128/84, 3-4=-128/83, 4-5=-65/41
BOT CHORD	1-8=-9/46, 7-8=-9/46, 6-7=-9/46, 5-6=-9/46
WEBS	3-7=-212/31, 2-8=-281/201, 4-6=-281/201

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=25ft; B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-4-3 to 3-4-3, Exterior(2N) 3-4-3 to 5-8-3, Corner(3R) 5-8-3 to 8-8-3, Exterior(2N) 8-8-3 to 11-0-2 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 1, 19 lb uplift at joint 5, 37 lb uplift at joint 8 and 37 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



July 29, 2024

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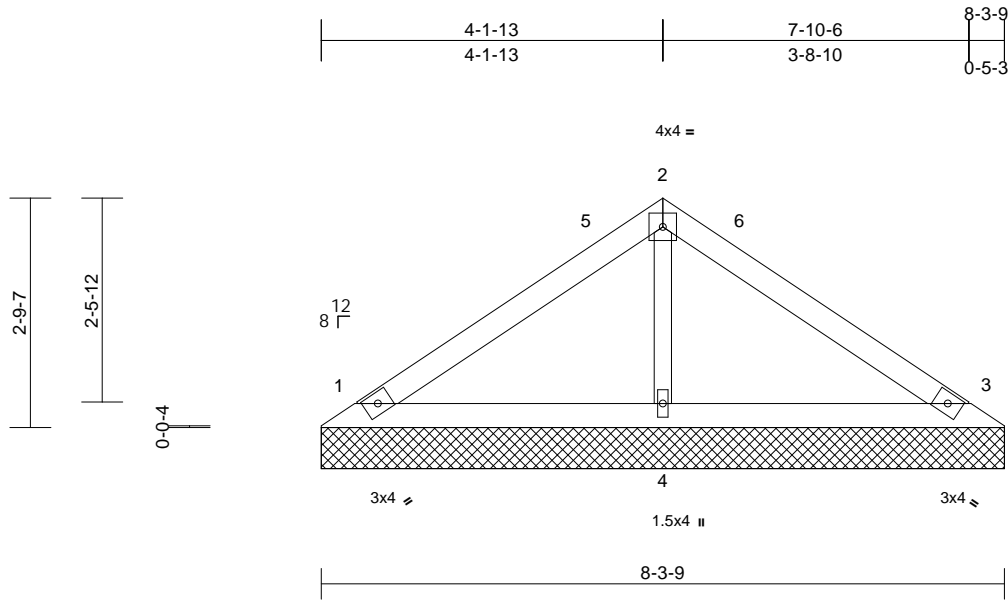
Job	Truss	Truss Type	Qty	Ply	
P240832	VE7	Valley	1	1	Job Reference (optional)

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

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size)	1=8-3-9, 3=8-3-9, 4=8-3-9
	Max Horiz	1=-39 (LC 10)
	Max Uplift	1=-13 (LC 12), 3=-13 (LC 12)
	Max Grav	1=187 (LC 1), 3=187 (LC 1), 4=291 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
---------------	--------------------------------------------

TOP CHORD	1-2=-112/65, 2-3=-112/58
BOT CHORD	1-4=-1/47, 3-4=-1/47
WEBS	2-4=-199/80

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=25ft; B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-5-12 to 3-5-12, Exterior(2N) 3-5-12 to 4-2-3, Corner (3R) 4-2-3 to 7-2-3, Exterior(2N) 7-2-3 to 7-10-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
 - 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint 1 and 13 lb uplift at joint 3.
 - 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 29, 2024

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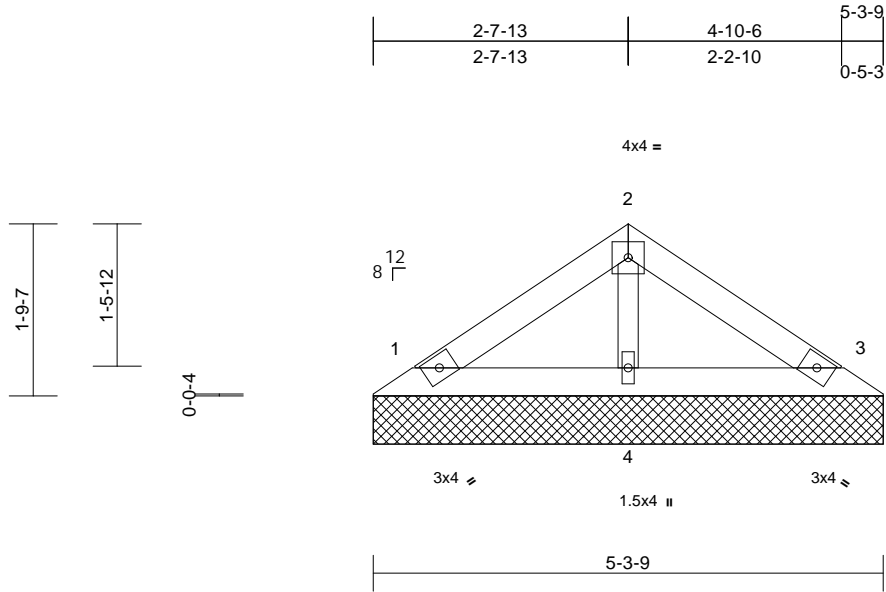
Job	Truss	Truss Type	Qty	Ply	
P240832	VE8	Valley	1	1	Job Reference (optional)

I67129672

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. Thu Jul 25 18:40:30
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 17 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-4-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 1=5-3-9, 3=5-3-9, 4=5-3-9
Max Horiz 1=23 (LC 11)
Max Uplift 1=-8 (LC 12), 3=-8 (LC 12)
Max Grav 1=111 (LC 1), 3=111 (LC 1), 4=173 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-66/32, 2-3=-66/32
BOT CHORD 1-4=-1/28, 3-4=-1/28
WEBS 2-4=-118/43

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=25ft; B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1 and 8 lb uplift at joint 3.
- 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 29, 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)

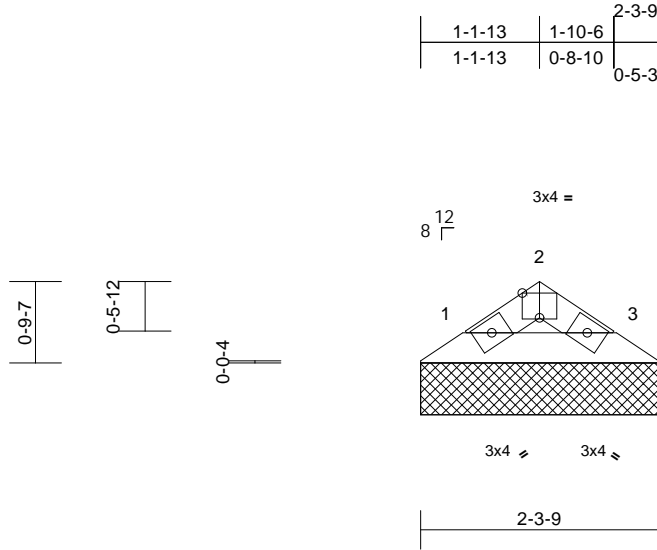
MiTek®
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LEE'S SUMMIT, MISSOURI
09/03/2024 1:32:02

Job	Truss	Truss Type	Qty	Ply	
P240832	VE9	Valley	1	1	167129673
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. Thu Jul 25 18:40:30
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Page: 1



Scale = 1:22.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 6 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-4-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-3-9, 3=2-3-9
Max Horiz 1=-7 (LC 10)
Max Grav 1=63 (LC 1), 3=63 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

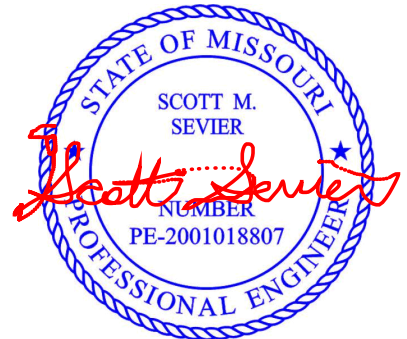
TOP CHORD 1-2=-55/23, 2-3=-55/23
BOT CHORD 1-3=-7/37

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=25ft; B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

LOAD CASE(S) Standard



July 29,2024

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Job	Truss	Truss Type	Qty	Ply	
P240832	VG10	Valley	1	1	Job Reference (optional)

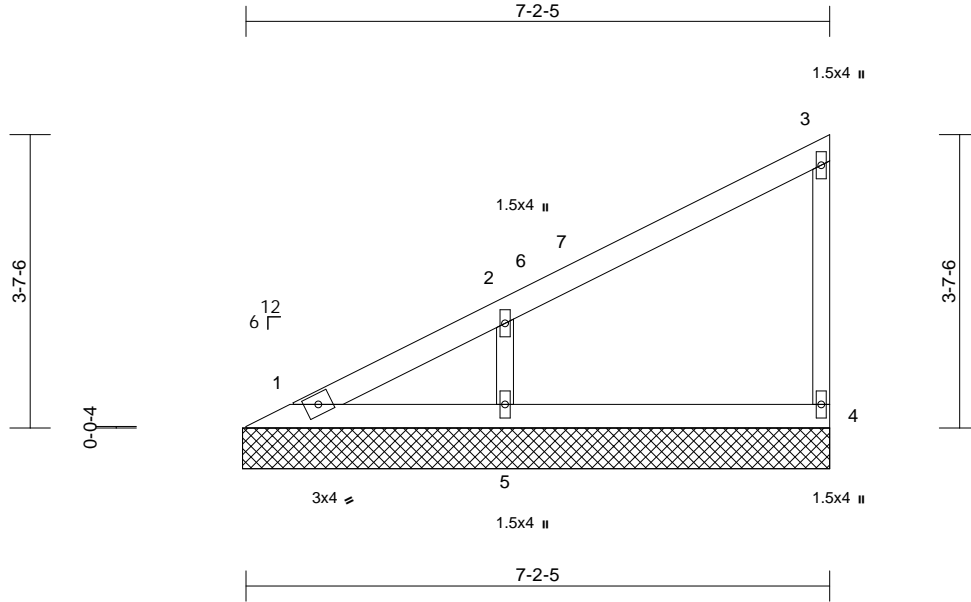
I67129674

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. Thu Jul 25 18:40:30

Page: 1

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	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	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size)	1=7-2-13, 4=7-2-13, 5=7-2-13
	Max Horiz	1=89 (LC 9)
	Max Uplift	4=-3 (LC 9), 5=-18 (LC 12)
	Max Grav	1=73 (LC 18), 4=141 (LC 1), 5=377 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
---------------	--------------------------------------------

TOP CHORD	1-2=-230/126, 2-3=-102/77, 3-4=-110/120
BOT CHORD	1-5=-44/59, 4-5=-44/59
WEBS	2-5=-293/258

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) and C-C Corner(3E)
0-7-9 to 3-7-9, Exterior(2N) 3-7-9 to 7-1-9 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 4-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.

- 6) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- 7) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 3 lb uplift at joint 4
and 18 lb uplift at joint 5.
- 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 29, 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	
P240832	VG11	Valley	1	1	Job Reference (optional)

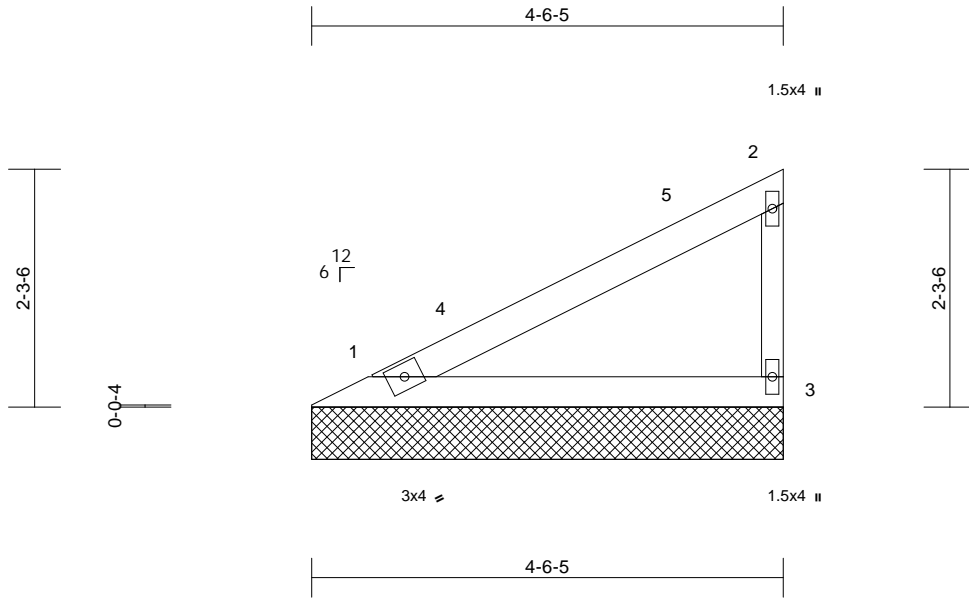
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Jul 25 18:40:30

Page: 1

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 4-6-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=4-6-5, 3=4-6-5

Max Horiz 1=53 (LC 9)
Max Grav 1=172 (LC 1), 3=172 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-107/66, 2-3=-134/161

BOT CHORD 1-3=-26/35

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) and C-C Corner(3E)
0-7-9 to 3-7-9, Exterior(2N) 3-7-9 to 4-5-9 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 4-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.

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

LOAD CASE(S) Standard



July 29, 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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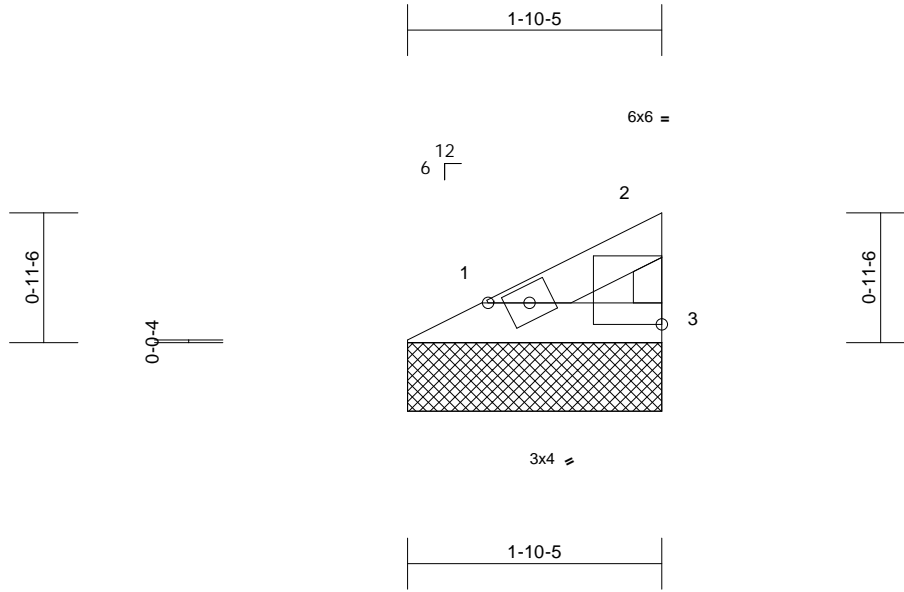
Job	Truss	Truss Type	Qty	Ply	
P240832	VG12	Valley	1	1	I67129676
Job Reference (optional)					

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. Thu Jul 25 18:40:31

Page: 1

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Scale = 1:16.8

Plate Offsets (X, Y): [2:Edge,0-1-14]

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	0.02	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 5 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-10-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=1-10-5, 3=1-10-5
Max Horiz 1=16 (LC 9)
Max Grav 1=52 (LC 1), 3=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-25/18, 2-3=-41/32
BOT CHORD 1-3=-8/9

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) 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) 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) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.

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

LOAD CASE(S) Standard



July 29,2024

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Job	Truss	Truss Type	Qty	Ply	
P240832	VG13	Valley	1	1	Job Reference (optional)

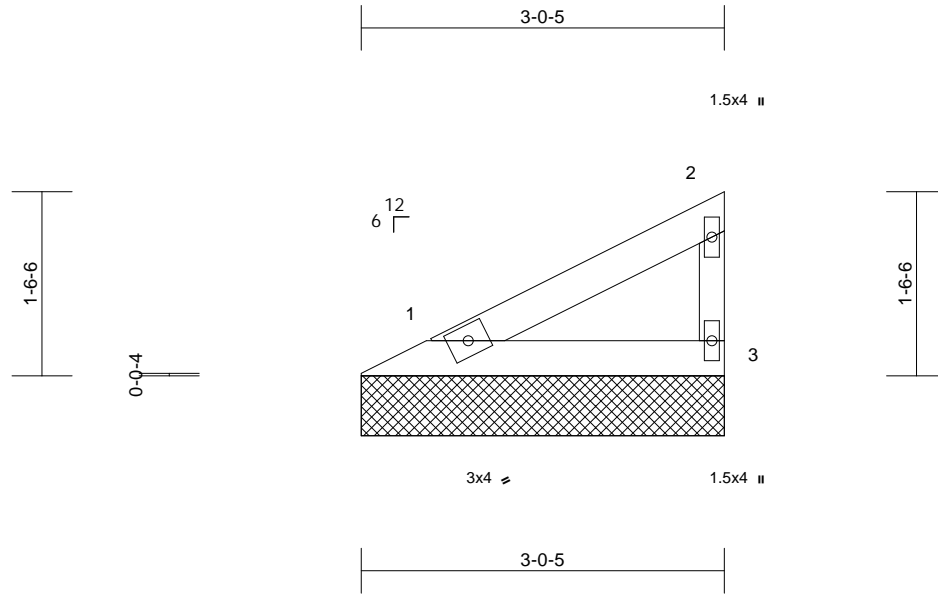
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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Page: 1

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Scale = 1:19.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-0-5, 3=3-0-5

Max Horiz 1=32 (LC 9)
Max Grav 1=105 (LC 1), 3=105 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-50/35, 2-3=-82/65
BOT CHORD 1-3=-16/17

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=4ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) 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) 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) * This truss has been designed for a live load of 20.0psf
on the bottom chord in all areas where a rectangle
3-06-00 tall by 2-00-00 wide will fit between the bottom
chord and any other members.
- 7) All bearings are assumed to be SP No.2 crushing
capacity of 565 psi.



July 29, 2024

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

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09/03/2024 1:32:02

Job	Truss	Truss Type	Qty	Ply	
P240832	VG14	Valley	1	1	Job Reference (optional)

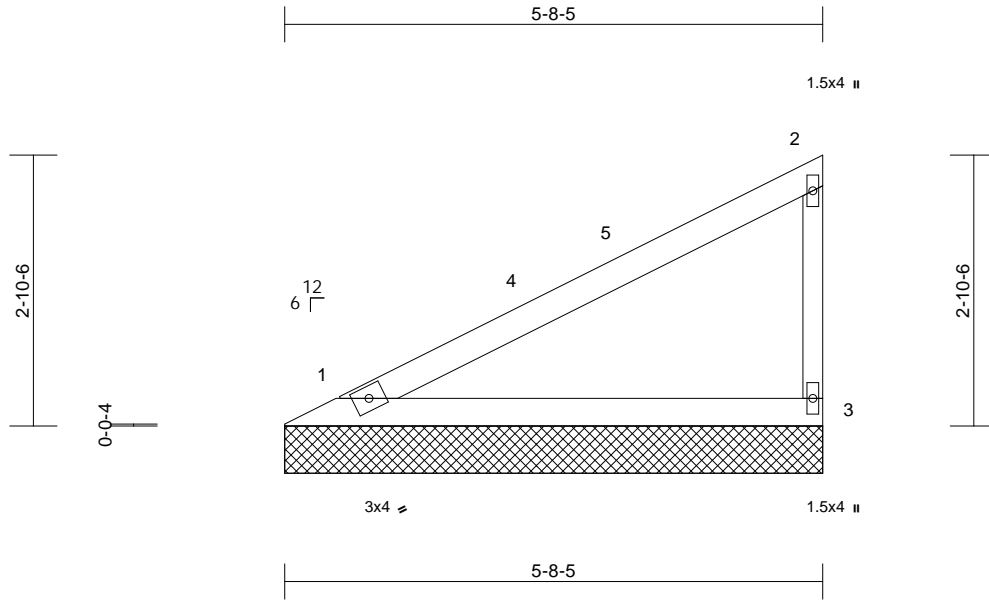
I67129678

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

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Scale = 1:24.4

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-8-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-8-5, 3=5-8-5

Max Horiz 1=68 (LC 11)
Max Grav 1=225 (LC 1), 3=225 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-133/85, 2-3=-175/195
BOT CHORD 1-3=-34/45

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft;
B=45ft; L=24ft; eave=2ft; Ke=1.00; Cat. II; Exp B;
Enclosed; MWFRS (directional) and C-C Corner(3E)
0-7-9 to 3-7-9, Exterior(2N) 3-7-9 to 5-7-9 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 4-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

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

LOAD CASE(S) Standard



July 29, 2024

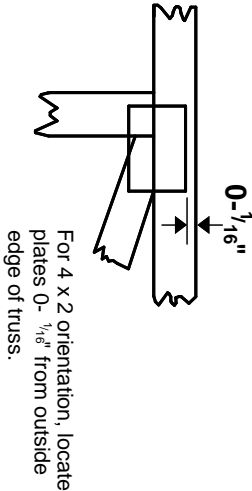
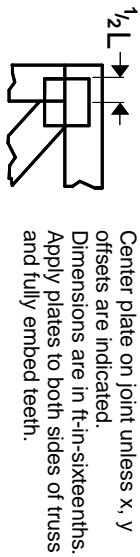
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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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Symbols

PLATE LOCATION AND ORIENTATION



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 SIZE

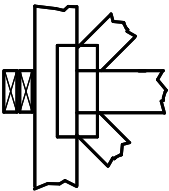
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

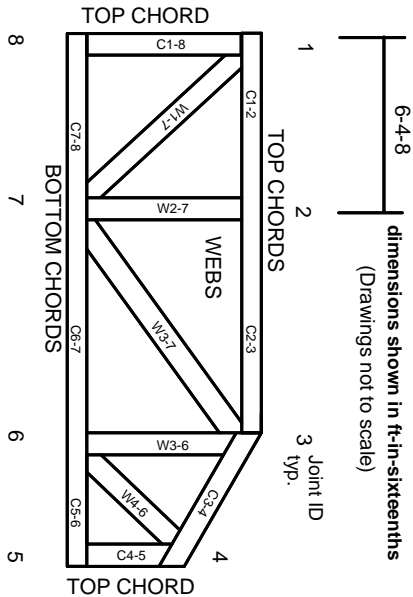
BEARING



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

Industry Standards:
ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:
ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.