

RE: Farmhouse-Roof -

Site Information:

Project Customer: Summit Homes Project Name: Sunflower - Farmhouse

Lot/Block: 111

Subdivision: Hawthorne Ridge

Model: Sunflower - Farmhouse

Address: 3209 SW Arbortree Dr

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

Design Program: MiTek 20/20 8.6

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

Floor Load: N/A psf

Mean Roof Height (feet): 35

Exposure Category: C

No.	Seal#	Truss Name	Date
1	I63187814	A01	1/23/24
2	I63187815	A02	1/23/24
3	I63187816	B01	1/23/24
4	I63187817	B02	1/23/24
5	I63187818	B03	1/23/24
6	I63187819	B04	1/23/24
7	I63187820	C01	1/23/24
8	I63187821	C02	1/23/24
9	I63187822	D01	1/23/24
10	I63187823	D02	1/23/24
11	I63187824	E01	1/23/24
12	I63187825	E02	1/23/24
13	I63187826	E03	1/23/24
14	I63187827	E04	1/23/24
15	I63187828	E05	1/23/24
16	I63187829	F01	1/23/24
17	I63187830	F02	1/23/24
18	I63187831	G01	1/23/24
19	I63187832	G02	1/23/24
20	I63187833	G03	1/23/24
21	I63187834	G04	1/23/24
22	I63187835	V01	1/23/24
23	I63187836	V02	1/23/24
24	I63187837	V03	1/23/24
25	I63187838	V04	1/23/24
26	I63187839	V05	1/23/24
27	I63187840	V06	1/23/24
28	I63187841	V07	1/23/24
29	I63187842	V08	1/23/24

**EVERSTEAD
SHOP DRAWINGS/SUBMITTAL REVIEW**

SUBMITTAL WAS REVIEWED FOR DESIGN CONFORMITY AND GENERAL CONFORMANCE TO CONTRACT DOCUMENTS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING DIMENSIONS AT JOBSITE FOR TOLERANCE, CLEARANCE, QUANTITIES, FABRICATION, COORDINATION OF HIS OR HER WORK WITH OTHER TRADES, AND FULL COMPLIANCE WITH CONTRACT DOCUMENTS.

STATUS:

APPROVED

01/26/2024

REVIEWED BY:

HCJ

ENGINEER, EVERSTEAD ENGINEERING & DESIGN LLC.

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: Nathan Fox

My license renewal date for the state of Missouri is December 31, 2024.

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.



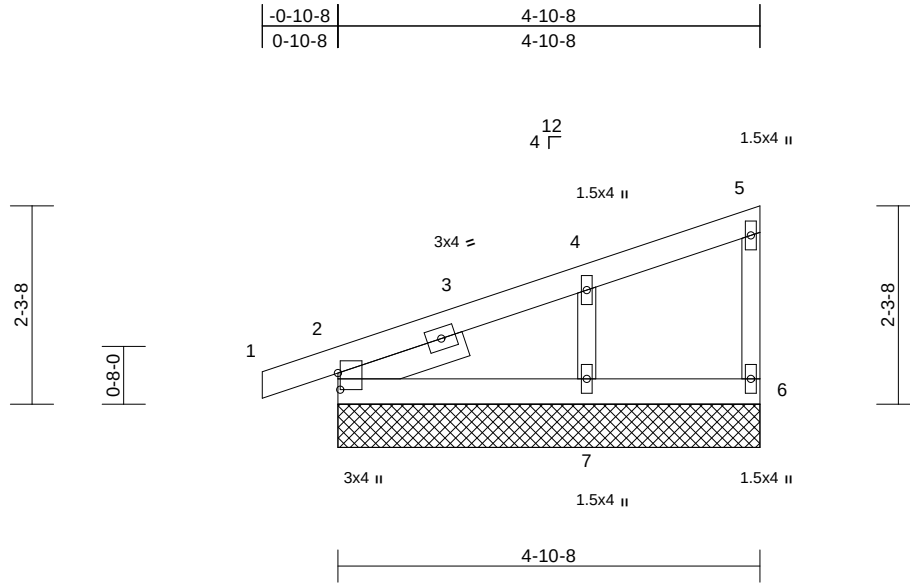
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	A01	Monopitch Supported Gable	1	1	
Job Reference (optional)					I63187814

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Scale = 1:26.6

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	0.17	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size) 2=4-10-8, 6=4-10-8, 7=4-10-8
Max Horiz	2=91 (LC 9)
Max Uplift	2=-54 (LC 8), 6=-10 (LC 9), 7=-77 (LC 12)
Max Grav	2=180 (LC 1), 6=54 (LC 1), 7=257 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-187/98, 4-5=-56/52, 5-6=-44/71
BOT CHORD	2-7=-40/54, 6-7=-40/54
WEBS	4-7=-195/355

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 4-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 6, 54 lb uplift at joint 2 and 77 lb uplift at joint 7.
- 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



January 23, 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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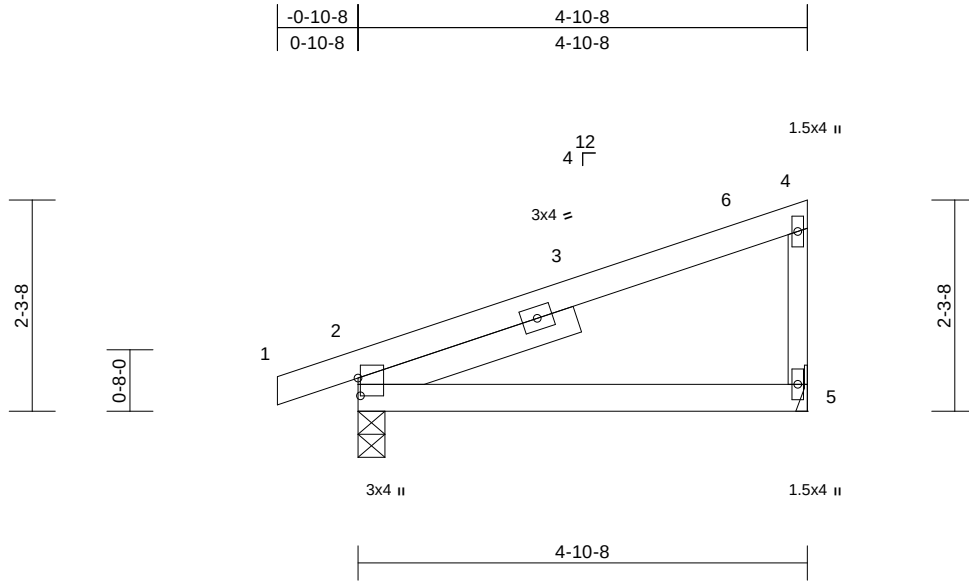
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	A02	Monopitch	8	1	
Job Reference (optional)					I63187815

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Scale = 1:25

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.56	Vert(LL)	-0.03	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.06	2-5	>921	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 -- 2-5-12

LOAD CASE(S) Standard

BRACING

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

REACTIONS (size) 2=0-3-8, 5= Mechanical
Max Horiz 2=91 (LC 9)
Max Uplift 2=-83 (LC 8), 5=-54 (LC 12)
Max Grav 2=282 (LC 1), 5=209 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-2=-5/0, 2-4=-123/73, 4-5=-161/249
BOT CHORD 2-5=-40/44

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8,
Interior (1) 4-1-8 to 4-9-4 zone; cantilever left and right
exposed; end vertical left and right exposed; C-C for
members and forces & MWFRS for reactions shown;
Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SP No.2 crushing
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 54 lb uplift at joint
5 and 83 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.



January 23, 2024

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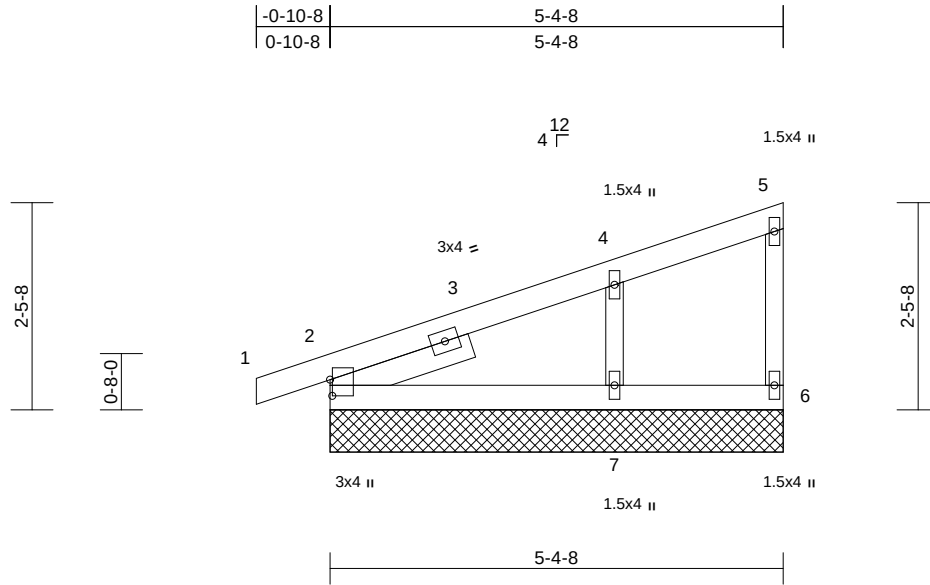
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	B01	Monopitch Supported Gable	1	1	
Job Reference (optional)					I63187816

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Scale = 1:27.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	6	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 1-8-15

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-4-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 2=5-4-8, 6=5-4-8, 7=5-4-8
Max Horiz	2=99 (LC 9)
Max Uplift	2=-57 (LC 8), 6=-9 (LC 9), 7=-87 (LC 12)
Max Grav	2=197 (LC 1), 6=43 (LC 1), 7=295 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-198/106, 4-5=-54/53, 5-6=-36/56
BOT CHORD	2-7=-44/59, 6-7=-44/59
WEBS	4-7=-224/395

NOTES

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

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 6, 57 lb uplift at joint 2 and 87 lb uplift at joint 7.
- 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



January 23, 2024

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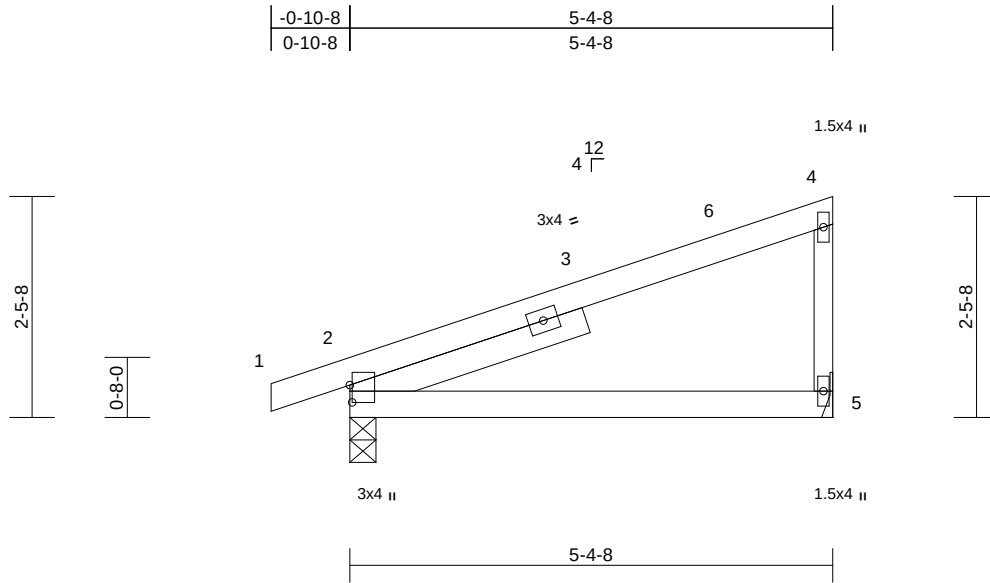
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	B02	Monopitch	6	1	
Job Reference (optional)					I63187817

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Scale = 1:25.6

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	0.69	Vert(LL)	-0.05	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.09	2-5	>684	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: 24 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 -- 2-8-15

BRACING

TOP CHORD Structural wood sheathing directly applied or
5-4-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc
bracing.

REACTIONS (size) 2=0-3-8, 5= Mechanical
Max Horiz 2=99 (LC 9)
Max Uplift 2=-87 (LC 8), 5=-59 (LC 12)
Max Grav 2=303 (LC 1), 5=232 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-2=-5/0, 2-4=-134/79, 4-5=-179/271
BOT CHORD 2-5=-44/47

NOTES

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



January 23, 2024

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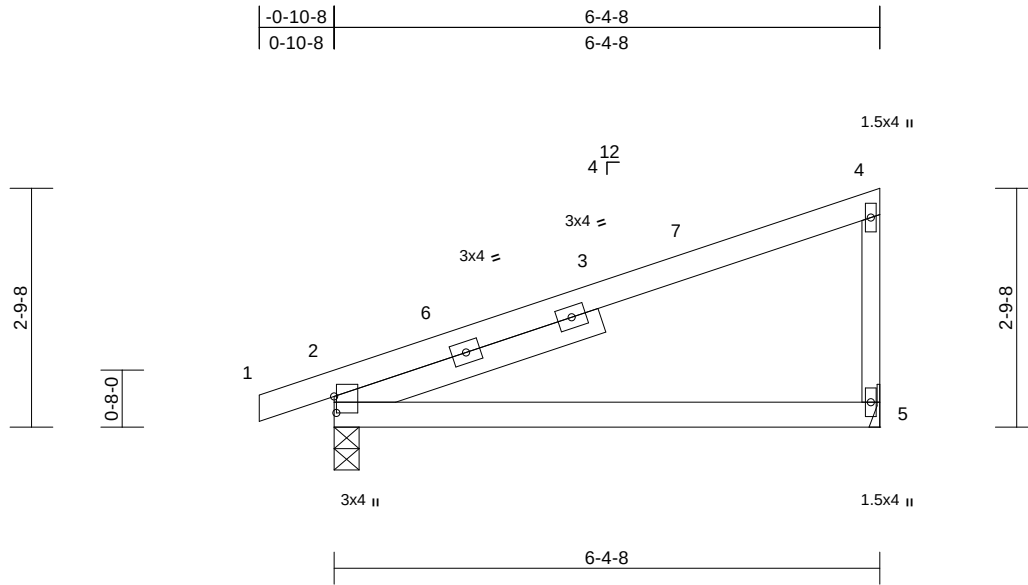
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	B03	Monopitch	3	1	
Job Reference (optional)					I63187818

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Scale = 1:26.9

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	0.95	Vert(LL)	-0.09	2-5	>812	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.19	2-5	>406	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: 28 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 -- 3-3-4

BRACING

TOP CHORD Structural wood sheathing directly applied or 1-4-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 5= Mechanical
Max Horiz 2=115 (LC 11)
Max Uplift 2=-95 (LC 8), 5=-71 (LC 12)
Max Grav 2=348 (LC 1), 5=278 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-153/91, 4-5=-215/306
BOT CHORD 2-5=-51/55

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8,
Interior (1) 4-1-8 to 6-3-4 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
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SP No.2 crushing
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 71 lb uplift at joint
5 and 95 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



January 23, 2024

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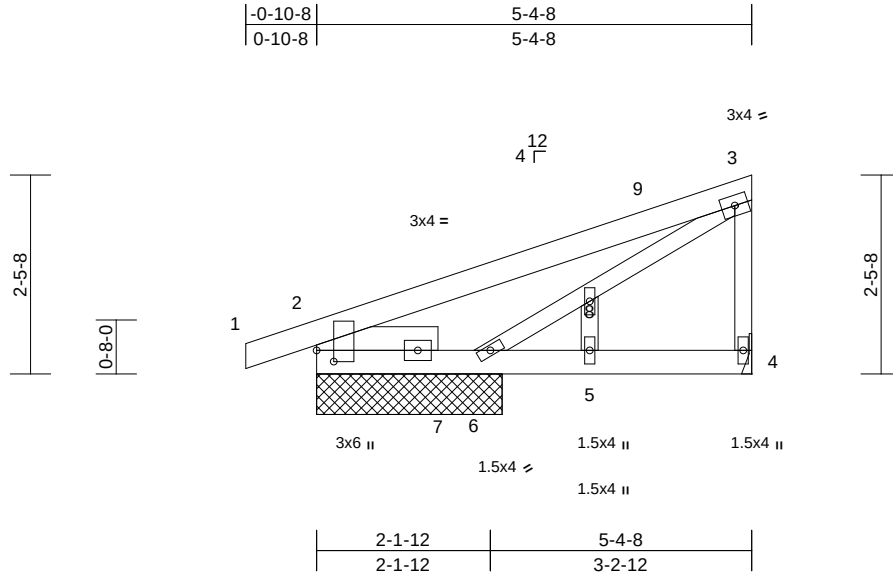
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	B04	Monopitch	1	1	I63187819
Job Reference (optional)					

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:42

Page: 1

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Scale = 1:28.5

Plate Offsets (X, Y): [2:0-1-10,0-2-9]

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	0.64	Vert(LL)	0.00	4-5	>999	240	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	4-5	>999	180	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	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
SLIDER	Left 2x4 SP No.2 -- 1-6-0

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-4-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS	(size) 2=2-3-8, 4= Mechanical, 6=2-3-8
	Max Horiz 2=99 (LC 9)
	Max Uplift 2=-114 (LC 8), 4=-75 (LC 12)
	Max Grav 2=259 (LC 1), 4=206 (LC 1), 6=131 (LC 3)

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

TOP CHORD	1-2=-5/0, 2-3=-112/62, 3-4=-181/278
BOT CHORD	2-6=-66/57, 5-6=-44/47, 4-5=-44/47
WEBS	6-8=-43/26, 3-8=-42/29, 5-8=0/11

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-3-4 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
- 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 studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 5) Bearings are assumed to be: Joint 6 SP No.2 crushing capacity of 565 psi.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 4 and 114 lb uplift at joint 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



January 23, 2024

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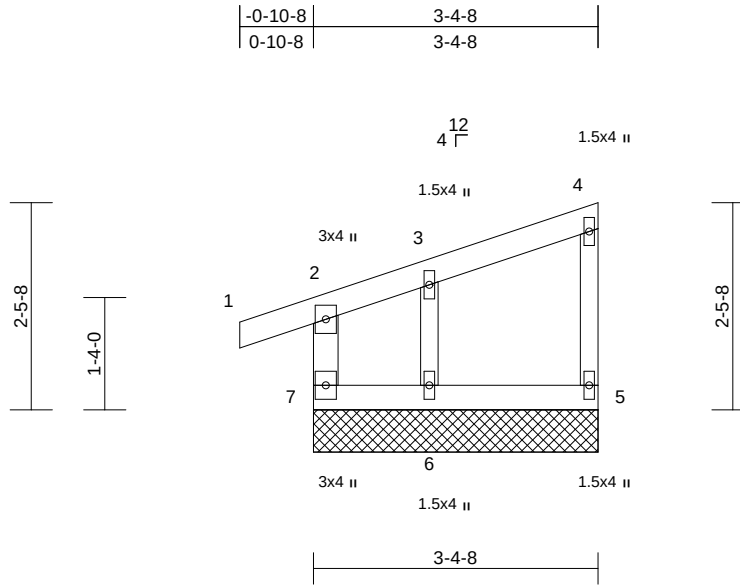
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	C01	Monopitch Supported Gable	1	1	163187820
Job Reference (optional)					

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

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Scale = 1:27.3

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	0.19	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 16 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2 *Except* 4-5:2x3 SPF No.2
OTHERS	2x3 SPF No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-4-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 5=3-4-8, 6=3-4-8, 7=3-4-8
	Max Horiz 7=102 (LC 11)
	Max Uplift 5=-13 (LC 12), 6=-76 (LC 9), 7=-46 (LC 8)
	Max Grav 5=75 (LC 1), 6=138 (LC 1), 7=140 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	2-7=-128/176, 1-2=0/23, 2-3=-145/90, 3-4=-52/50, 4-5=-59/94
BOT CHORD	6-7=-45/53, 5-6=-45/53
WEBS	3-6=-160/281

NOTES

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

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 7, 13 lb uplift at joint 5 and 76 lb uplift at joint 6.
- 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



January 23, 2024

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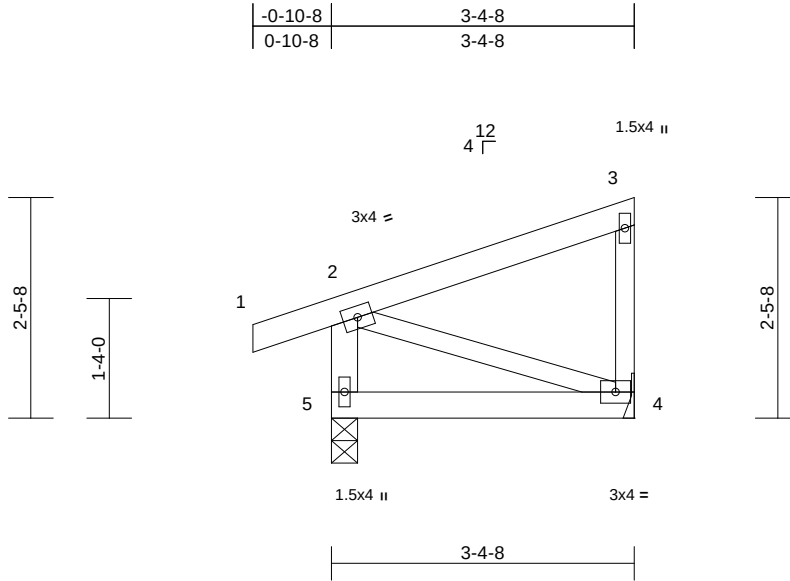
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	C02	Monopitch	5	1	
Job Reference (optional)					I63187821

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Scale = 1:25.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	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
WEBS 2x3 SPF No.2 *Except* 5-2:2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-4-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 5=0-3-8
Max Horiz 5=102 (LC 9)
Max Uplift 4=43 (LC 9), 5=76 (LC 8)
Max Grav 4=129 (LC 1), 5=224 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/23, 2-3=-87/61, 3-4=-98/145,
2-5=-192/222

BOT CHORD 4-5=-217/114

WEBS 2-4=-85/197

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) zone; cantilever left
and right exposed; end vertical left and right
exposed; C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 5 SP No.2 crushing
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 43 lb uplift at joint
4 and 76 lb uplift at joint 5.
- 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



January 23, 2024

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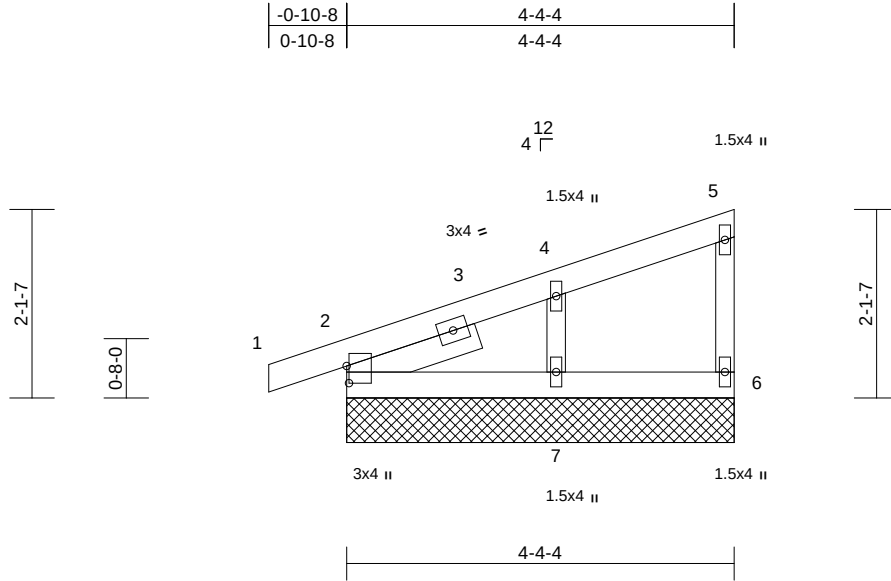
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	D01	Monopitch Supported Gable	2	1	
Job Reference (optional)					I63187822

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Scale = 1:25.9

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	0.10	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	6	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
OTHERS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 1-6-7

BRACING

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

REACTIONS	(size) 2=4-4-4, 6=4-4-4, 7=4-4-4
Max Horiz	2=83 (LC 9)
Max Uplift	2=-51 (LC 8), 6=-11 (LC 8), 7=-67 (LC 12)
Max Grav	2=161 (LC 1), 6=64 (LC 1), 7=219 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-177/89, 4-5=-58/50, 5-6=-51/84
BOT CHORD	2-7=-37/49, 6-7=-37/49
WEBS	4-7=-165/308

NOTES

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

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 6, 51 lb uplift at joint 2 and 67 lb uplift at joint 7.
- 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



January 23,2024

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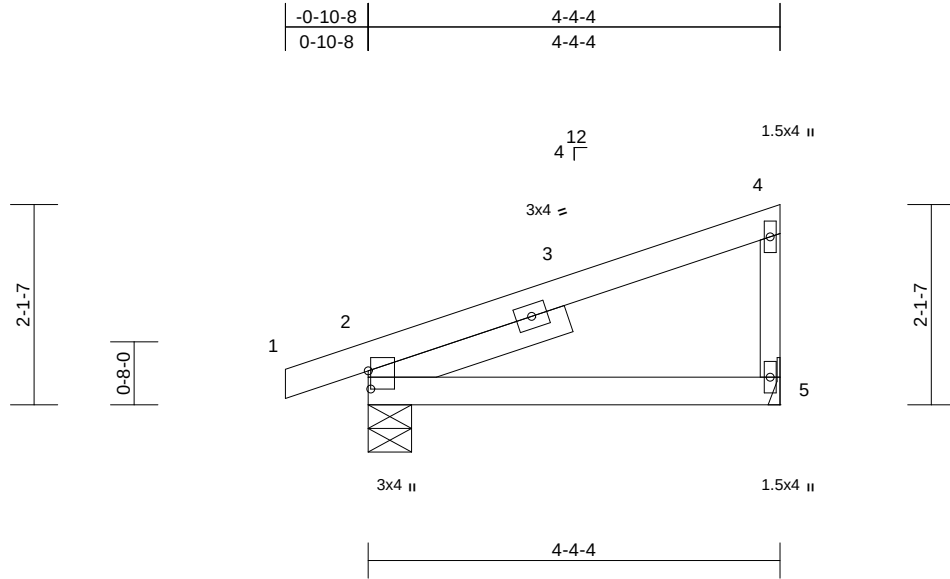
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	D02	Monopitch	7	1	
Job Reference (optional)					I63187823

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Scale = 1:24.4

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	0.43	Vert(LL)	-0.02	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.04	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 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 -- 2-2-8

BRACING

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

REACTIONS (size) 2=0-5-8, 5= Mechanical
Max Horiz 2=83 (LC 9)
Max Uplift 2=-79 (LC 8), 5=-48 (LC 12)
Max Grav 2=259 (LC 1), 5=185 (LC 1)

FORCES (lb) - Maximum Compression/Maximum
Tension

TOP CHORD 1-2=-5/0, 2-4=-110/66, 4-5=-142/221
BOT CHORD 2-5=-37/40

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) zone; cantilever left
and right exposed; end vertical left and right
exposed; C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SP No.2 crushing
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 48 lb uplift at joint
5 and 79 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018
International Residential Code sections R502.11.1 and
R802.10.2 and referenced standard ANSI/TPI 1.



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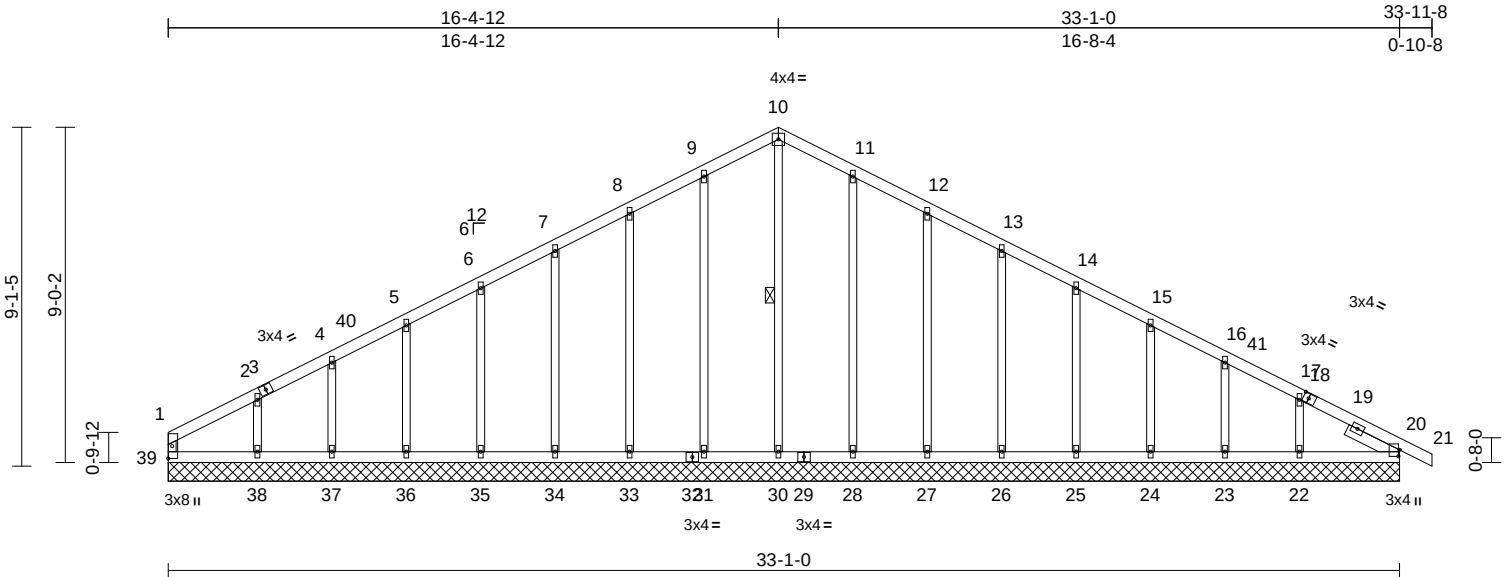
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	E01	Common Supported Gable	1	1	163187824
Job Reference (optional)					

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Scale = 1:61.9									
Plate Offsets (X, Y): [18:0-1-12,0-1-8], [20:0-2-1,0-0-5]									
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	-	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.01	20	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
PLATES GRIP									
MT20 244/190									
Weight: 166 lb FT = 20%									

LUMBER		TOP CHORD		1-39=92/30, 1-2=135/58, 2-4=96/73, 4-5=71/100, 5-6=63/139, 6-7=82/193, 7-8=100/246, 8-9=120/304, 9-10=137/351, 10-11=137/351, 11-12=120/304, 12-13=100/246, 13-14=82/193, 14-15=66/139, 15-16=78/104, 16-17=99/77, 17-20=158/63, 20-21=0/6	4) All plates are 1.5x4 MT20 unless otherwise indicated.
TOP CHORD	2x4 SP No.2	BOT CHORD		38-39=39/162, 37-38=39/162, 36-37=39/162, 35-36=39/162, 34-35=39/162, 33-34=39/162, 31-33=39/162, 30-31=39/162, 28-30=39/162, 27-28=39/162, 26-27=39/162, 25-26=39/162, 24-25=39/162, 23-24=39/162, 22-23=39/162, 20-22=39/162	5) Gable requires continuous bottom chord bearing.
BOT CHORD	2x4 SP No.2	WEBS		10-30=223/47, 9-31=148/82, 8-33=139/104, 7-34=140/95, 6-35=140/96, 5-36=142/100, 4-37=133/125, 2-38=167/202, 11-28=148/82, 12-27=139/104, 13-26=140/95, 14-25=140/96, 15-24=142/98, 16-23=132/95, 17-22=171/203	6) Gable studs spaced at 2-0-0 oc.
WEBS	2x3 SPF No.2	NOTES		1) Unbalanced roof live loads have been considered for this design.	7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
OTHERS	2x3 SPF No.2	2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-4-12 to 5-4-12, Exterior(2N) 5-4-12 to 16-8-4, Corner(3R) 16-8-4 to 21-8-4, Exterior(2N) 21-8-4 to 34-3-0 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		8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.	8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
SLIDER	Right 2x4 SP No.2 -- 1-6-6	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.		9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 39, 26 lb uplift at joint 20, 53 lb uplift at joint 31, 66 lb uplift at joint 33, 60 lb uplift at joint 34, 60 lb uplift at joint 35, 66 lb uplift at joint 36, 42 lb uplift at joint 37, 127 lb uplift at joint 38, 53 lb uplift at joint 28, 66 lb uplift at joint 27, 60 lb uplift at joint 26, 61 lb uplift at joint 25, 64 lb uplift at joint 24, 49 lb uplift at joint 23 and 107 lb uplift at joint 22.	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.
BRACING		LOAD CASE(S)		Standard	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.				
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.				
WEBS	1 Row at midpt 10-30				
REACTIONS (size)					
20=33-1-0, 22=33-1-0, 23=33-1-0, 24=33-1-0, 25=33-1-0, 26=33-1-0, 27=33-1-0, 28=33-1-0, 30=33-1-0, 31=33-1-0, 33=33-1-0, 34=33-1-0, 35=33-1-0, 36=33-1-0, 37=33-1-0, 38=33-1-0, 39=33-1-0					
Max Horiz	39=169 (LC 13)				
Max Uplift	20=26 (LC 12), 22=107 (LC 13), 23=49 (LC 13), 24=64 (LC 13), 25=61 (LC 13), 26=60 (LC 13), 27=66 (LC 13), 28=53 (LC 13), 31=53 (LC 12), 33=66 (LC 12), 34=60 (LC 12), 35=60 (LC 12), 36=66 (LC 12), 37=42 (LC 12), 38=127 (LC 12), 39=20 (LC 13)				
Max Grav	20=190 (LC 1), 22=228 (LC 26), 23=167 (LC 1), 24=183 (LC 26), 25=179 (LC 1), 26=180 (LC 1), 27=179 (LC 26), 28=188 (LC 26), 30=189 (LC 21), 31=188 (LC 25), 33=179 (LC 25), 34=180 (LC 1), 35=180 (LC 1), 36=182 (LC 25), 37=171 (LC 1), 38=216 (LC 25), 39=125 (LC 21)				
FORCES					
(lb) - Maximum Compression/Maximum Tension					



January 23, 2024

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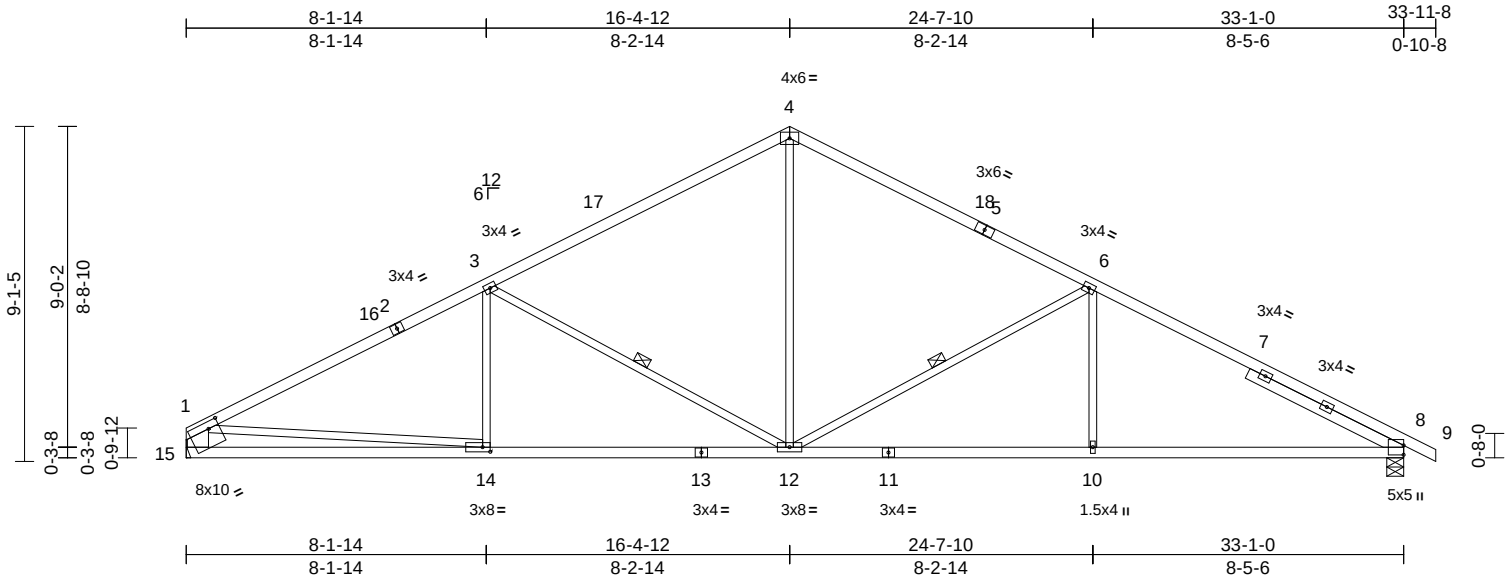
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
Farmhouse-Roof	E02	Common	12	1	163187825

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:44

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Scale = 1:62.6

Plate Offsets (X, Y): [14:0-2-8,0-1-8], [15:0-3-8,0-2-4]

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	0.76	Vert(LL)	-0.13	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.30	8-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 149 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 15-1:2x8 SPF No.2
SLIDER Right 2x4 SP No.2 -- 4-8-4

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-9-11 oc bracing.

WEBS 1 Row at midpt 6-12, 3-12

REACTIONS (size) 8=0-5-8, 15= Mechanical
Max Horiz 15=-169 (LC 17)
Max Uplift 8=-248 (LC 13), 15=-220 (LC 12)
Max Grav 8=1537 (LC 1), 15=1474 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2387/391, 3-4=-1735/383,
4-6=-1732/380, 6-8=-2509/398, 8-9=0/6,
1-15=-1395/278
BOT CHORD 14-15=-235/485, 12-14=-353/2037,
10-12=-247/2122, 8-10=-247/2122
WEBS 4-12=-101/894, 6-12=-835/319, 6-10=0/351,
3-12=-750/301, 3-14=0/247, 1-14=-182/1576

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: , Joint 8 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 220 lb uplift at joint 15 and 248 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



January 23, 2024

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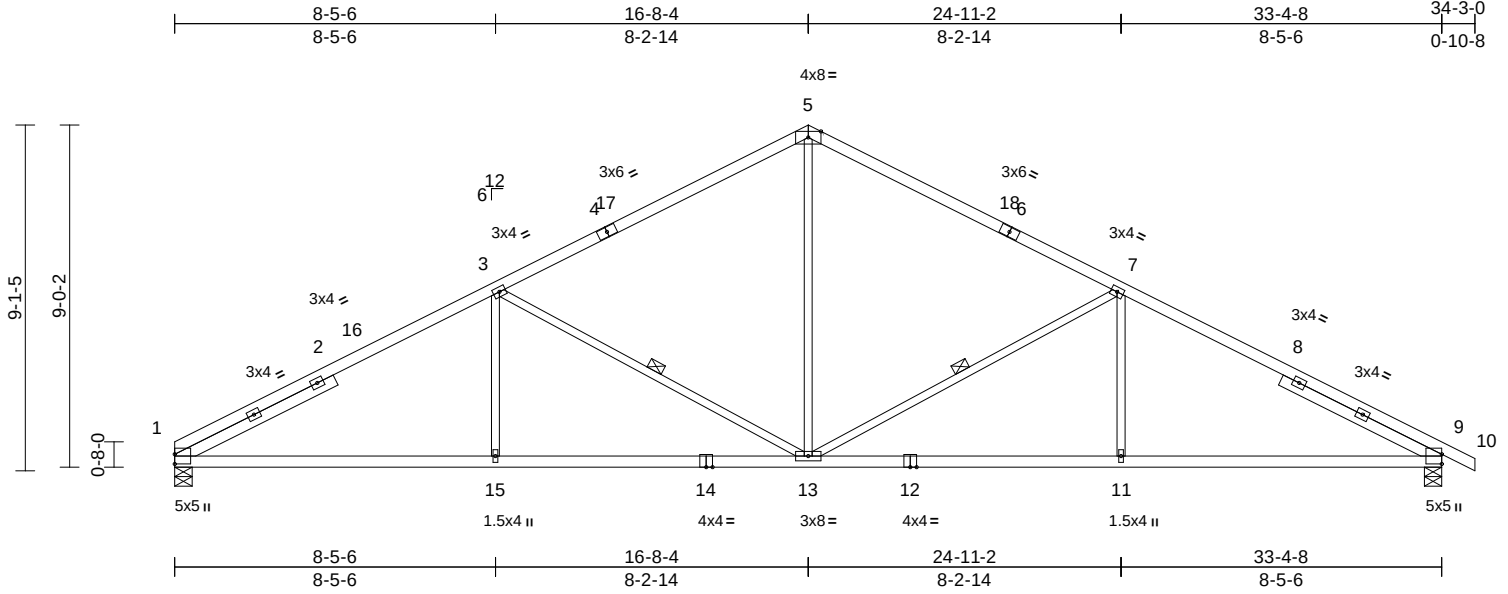
Job	Truss	Truss Type	Qty	Ply	163187826
Farmhouse-Roof	E03	Common	2	1	Job Reference (optional)

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	0.78	Vert(LL)	-0.14	1-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.31	1-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.12	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 150 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 1650F 1.5E
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2
SLIDER Left 2x4 SP No.2 -- 4-8-4, Right 2x4 SP No.2 -- 4-8-4

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-5-12 oc bracing.

REACTIONS (size) 1=0-5-8, 9=0-5-8
Max Horiz 1=-167 (LC 17)
Max Uplift 1=-228 (LC 12), 9=-250 (LC 13)
Max Grav 1=1501 (LC 1), 9=1564 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-3=-2567/415, 3-5=-1789/391,
5-7=-1789/388, 7-9=-2564/405, 9-10=0/6
BOT CHORD 1-15=-377/2174, 13-15=-377/2174,
11-13=-254/2170, 9-11=-254/2170
WEBS 5-13=-108/934, 7-13=-832/318, 7-11=0/352,
3-13=-837/320, 3-15=0/354

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 16-8-4, Exterior(2R) 16-8-4 to 21-8-4, Interior (1) 21-8-4 to 34-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 228 lb uplift at joint 1 and 250 lb uplift at joint 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



January 23, 2024

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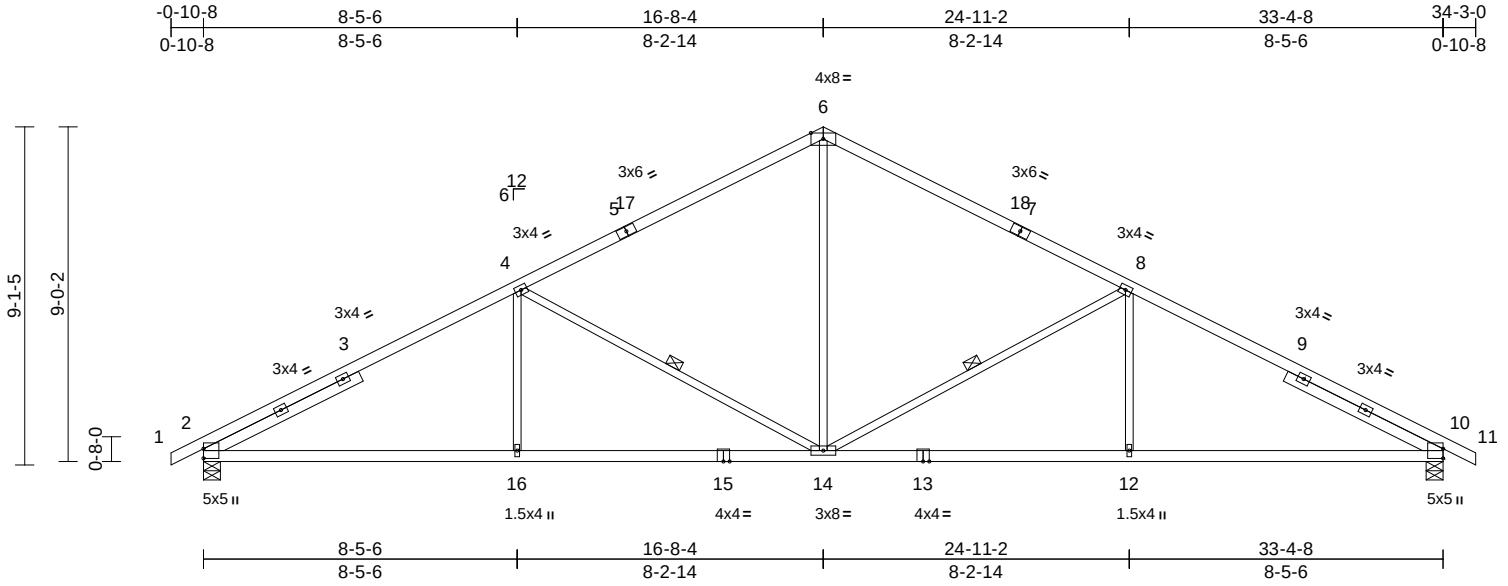
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Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
Farmhouse-Roof	E04	Common	1	1	163187827

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Scale = 1:62

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	0.77	Vert(LL)	-0.13	2-16	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.30	2-16	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.12	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
											Weight: 151 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP 1650F 1.5E
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 4-8-4, Right 2x4 SP No.2 -- 4-8-4

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 9-6-4 oc bracing.
WEBS	1 Row at midpt 8-14, 4-14

REACTIONS

(size)	2=0-5-8, 10=0-5-8
Max Horiz	2=-166 (LC 13)
Max Uplift	2=-250 (LC 12), 10=-250 (LC 13)
Max Grav	2=1563 (LC 1), 10=1563 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=0/6, 2-4=-2563/405, 4-6=-1787/387, 6-8=-1787/387, 8-10=-2562/405, 10-11=0/6
BOT CHORD	2-16=-375/2168, 14-16=-375/2168, 12-14=-251/2168, 10-12=-251/2168
WEBS	6-14=-103/932, 8-14=-832/319, 8-12=0/352, 4-14=-832/318, 4-16=0/352

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-10-8 to 4-1-8, Interior (1) 4-1-8 to 16-8-4, Exterior(2R) 16-8-4 to 21-8-4, Interior (1) 21-8-4 to 34-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 250 lb uplift at joint 2 and 250 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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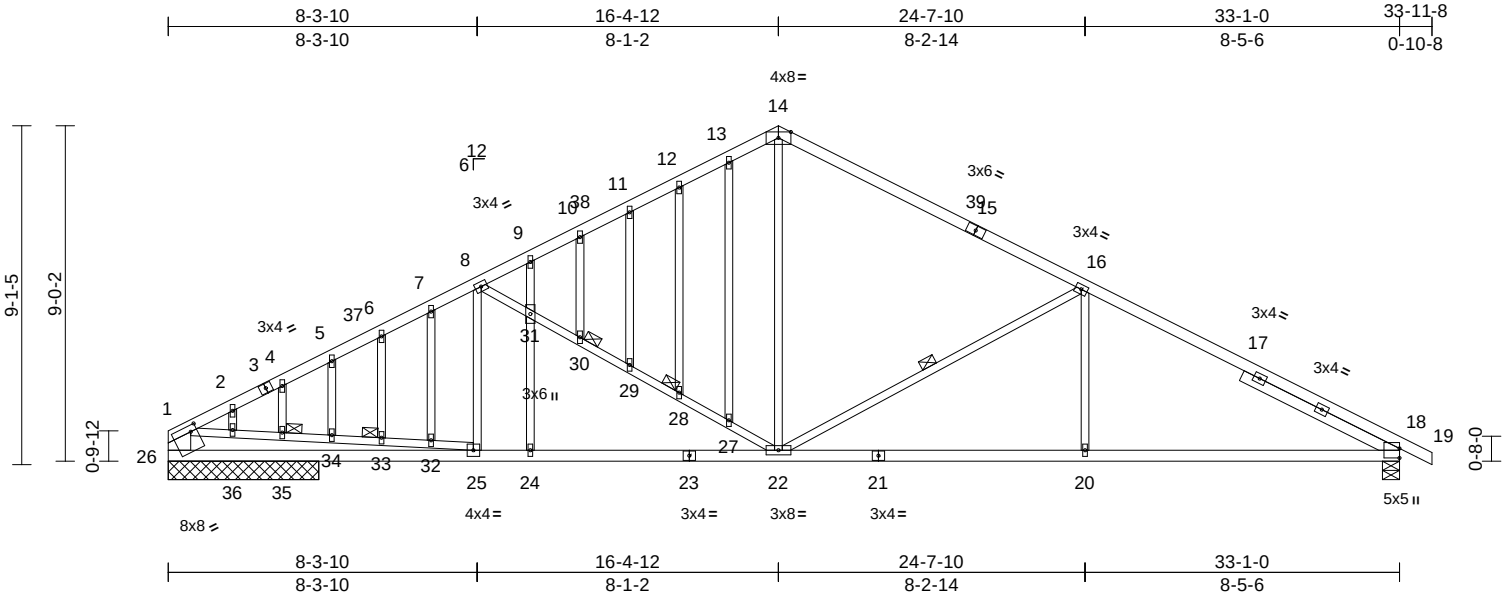
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	E05	Common Structural Gable	1	1	Job Reference (optional)
					163187828

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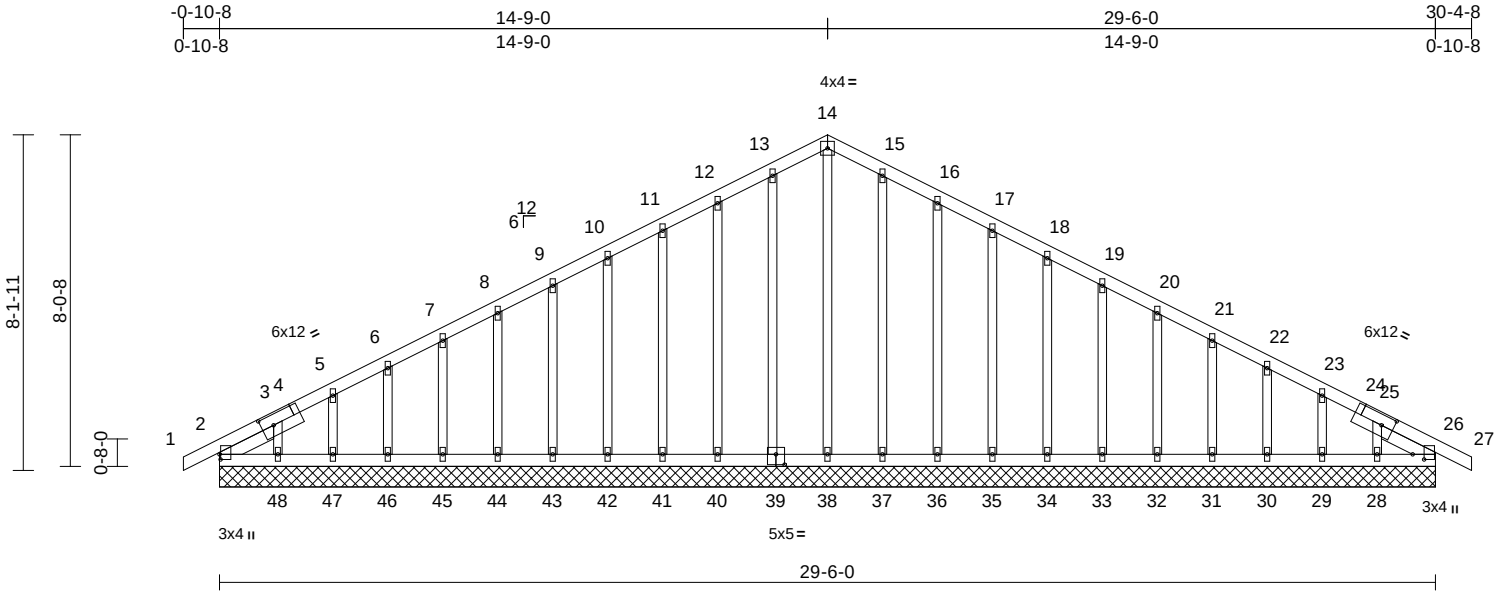
Job	Truss	Truss Type	Qty	Ply	163187829
Farmhouse-Roof	F01	Common Supported Gable	1	1	Job Reference (optional)

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Scale = 1:55.9												
Plate Offsets (X, Y): [2:0-1-8,0-0-5], [4:0-3-8,0-3-0], [24:0-3-8,0-3-0], [26:0-1-8,0-3-5], [39:0-2-8,0-3-0]												
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	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 169 lb	FT = 20%

LUMBER		Max Grav	2=155 (LC 21), 26=144 (LC 1), 28=111 (LC 26), 29=121 (LC 26), 30=120 (LC 1), 31=120 (LC 26), 32=120 (LC 1), 33=120 (LC 26), 34=120 (LC 1), 35=120 (LC 1), 36=121 (LC 26), 37=123 (LC 26), 38=147 (LC 22), 39=122 (LC 25), 40=123 (LC 25), 41=120 (LC 1), 42=120 (LC 1), 43=120 (LC 25), 44=120 (LC 1), 45=120 (LC 25), 46=120 (LC 1), 47=121 (LC 25), 48=111 (LC 25)	WEBS	14-38=-156/29, 13-39=-95/41, 12-40=-95/74, 11-41=-93/65, 10-42=-93/64, 9-43=-93/64, 8-44=-93/64, 7-45=-93/64, 6-46=-93/81, 5-47=-94/103, 3-48=-83/130, 15-37=-96/37, 16-36=-95/74, 17-35=-93/64, 18-34=-93/64, 19-33=-93/64, 20-32=-93/64, 21-31=-93/64, 22-30=-93/81, 23-29=-94/103, 25-28=-83/126
TOP CHORD	2x4 SP No.2				
BOT CHORD	2x4 SP No.2				
OTHERS	2x3 SPF No.2				
SLIDER	Left 2x4 SP No.2 -- 1-5-14, Right 2x4 SP No.2 -- 1-5-14				
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=29-6-0, 26=29-6-0, 28=29-6-0, 29=29-6-0, 30=29-6-0, 31=29-6-0, 32=29-6-0, 33=29-6-0, 34=29-6-0, 35=29-6-0, 36=29-6-0, 37=29-6-0, 38=29-6-0, 39=29-6-0, 40=29-6-0, 41=29-6-0, 42=29-6-0, 43=29-6-0, 44=29-6-0, 45=29-6-0, 46=29-6-0, 47=29-6-0, 48=29-6-0	FORCES	(lb) - Maximum Compression/Maximum Tension	
Max Horiz	2=147 (LC 16)				
Max Uplift	2=-29 (LC 8), 28=-70 (LC 13), 29=-42 (LC 13), 30=-40 (LC 13), 31=-41 (LC 13), 32=-41 (LC 13), 33=-41 (LC 13), 34=-40 (LC 13), 35=-41 (LC 13), 36=-49 (LC 13), 37=-18 (LC 13), 39=-25 (LC 12), 40=-46 (LC 12), 41=-41 (LC 12), 42=-40 (LC 12), 43=-41 (LC 12), 44=-41 (LC 12), 45=-41 (LC 12), 46=-40 (LC 12), 47=-42 (LC 12), 48=-84 (LC 12)	TOP CHORD	1-2=0/6, 2-3=-218/71, 3-5=-155/68, 5-6=-121/77, 6-7=-93/86, 7-8=-74/103, 8-9=-59/122, 9-10=-51/140, 10-11=-60/169, 11-12=-73/205, 12-13=-87/245, 13-14=-95/268, 14-15=-95/268, 15-16=-86/244, 16-17=-72/205, 17-18=-60/169, 18-19=-47/133, 19-20=-35/97, 20-21=-34/61, 21-22=-44/26, 22-23=-62/18, 23-25=-93/28, 25-26=-155/52, 26-27=0/6	BOT CHORD	2-48=-43/169, 47-48=-43/169, 46-47=-43/169, 45-46=-43/169, 44-45=-43/169, 43-44=-43/169, 42-43=-43/169, 41-42=-43/169, 40-41=-43/169, 38-40=-44/169, 37-38=-44/169, 36-37=-44/169, 35-36=-44/169, 34-35=-44/169, 33-34=-44/169, 32-33=-44/169, 31-32=-44/169, 30-31=-44/169, 29-30=-44/169, 28-29=-44/169, 26-28=-44/169



January 23, 2024

Continued on page 2

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

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DEVELOPMENT SERVICES
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02/08/2024 3:46:30

Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	F01	Common Supported Gable	1	1	I63187829
					Job Reference (optional)

- 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 studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 2, 25 lb uplift at joint 39, 46 lb uplift at joint 40, 41 lb uplift at joint 41, 40 lb uplift at joint 42, 41 lb uplift at joint 43, 41 lb uplift at joint 44, 41 lb uplift at joint 45, 40 lb uplift at joint 46, 42 lb uplift at joint 47, 84 lb uplift at joint 48, 18 lb uplift at joint 37, 49 lb uplift at joint 36, 41 lb uplift at joint 35, 40 lb uplift at joint 34, 41 lb uplift at joint 33, 41 lb uplift at joint 32, 41 lb uplift at joint 31, 40 lb uplift at joint 30, 42 lb uplift at joint 29 and 70 lb uplift at joint 28.
- 9) N/A
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

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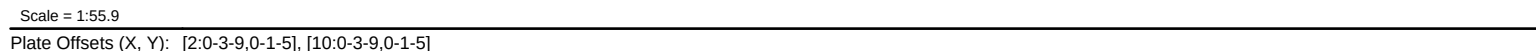
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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

16023 Swindley Ridge Rd
Missouri City, MO 63050
816-424-1200 / www.MiTek-US.com

02/08/2024 3:46:30

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:47 Page: 1
ID:??Q0lA5CdOpJwivhZ Ge?JzFtaw-RfC?PsB70Hg3NSaPqnL8w3ulTXbGKWRcDoi7J4zJC?f



LUMBER		4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
TOP CHORD	2x4 SP 1650F 1.5E *Except* 1-5,7-11:2x4 SP No.2	5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
BOT CHORD	2x4 SP No.2	6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 224 lb uplift at joint 2 and 224 lb uplift at joint 10.
WEBS	2x3 SPF No.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.
SLIDER	Left 2x4 SP No.2 -- 4-1-13, Right 2x4 SP No.2 -- 4-1-13	
BRACING		LOAD CASE(S) Standard
TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins.	
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.	
REACTIONS	(size) 2=0-5-8, 10=0-5-8	
	Max Horiz 2=147 (LC 16)	
	Max Uplift 2=-224 (LC 12), 10=-224 (LC 13)	
	Max Grav 2=1389 (LC 1), 10=1389 (LC 1)	
FORCES		
	(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/6, 2-4=-2210/391, 4-6=-1952/411, 6-8=-1952/411, 8-10=-2210/391, 10-11=0/6	
BOT CHORD	2-14=-346/1865, 12-14=-97/1279, 10-12=-250/1865	
WEBS	6-12=-166/709, 8-12=-463/307, 6-14=-166/709, 4-14=-463/307	

- ## 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; BC DL=6.0psf; h=35ft;
 Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
 Exterior cat and C-C Exterior(2E) -0-10-8 to 4-1-8,
 Interior (1) 4-1-8 to 14-9-0, Exterior(2R) 14-9-0 to
 19-9-0, Interior (1) 19-9-0 to 30-4-8 zone; cantilever left
 and right exposed ; end vertical left and right
 exposed; C-C for members and forces & MWFRS for
 reactions shown; Lumber DOL=1.60 plate grip
 DOL=1.60
 - 3) All plates are 3x4 MT20 unless otherwise indicated.



January 23, 2024

 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 WITH REFERENCE PAGE MP-7473 Rev. 12/2023 BEFORE USE.

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

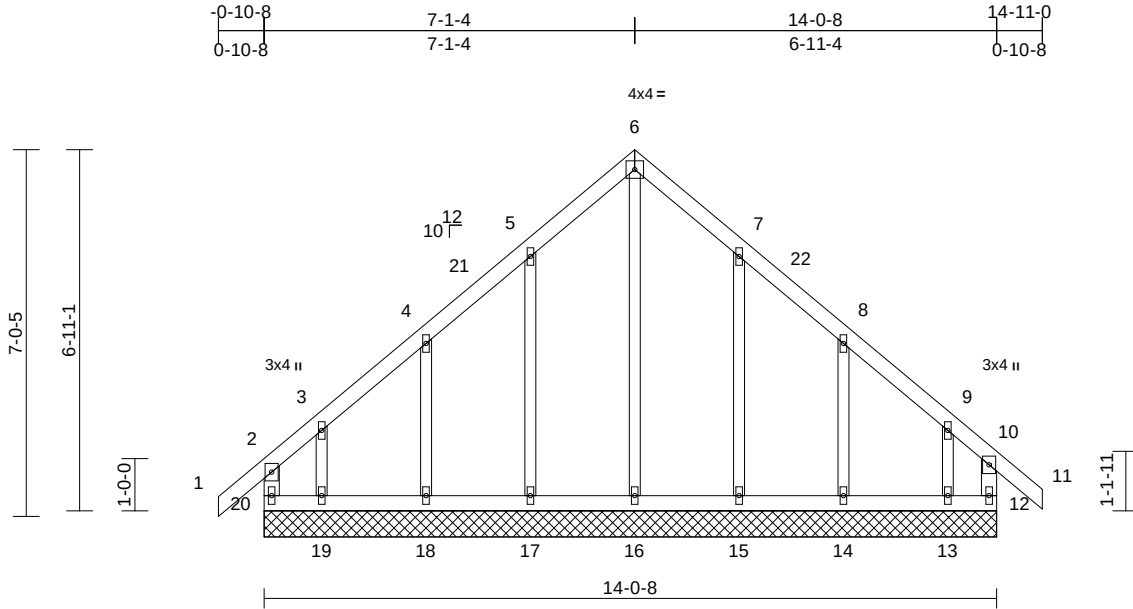
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16023 Swinley Ridge Rd
Crestwood, MO 63017
844-420-7767 MiTekUS.com
LEE'S SUMMIT, MISSOURI
02/08/2024 3:46:30

Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	G01	Common Supported Gable	1	1	Job Reference (optional)
					I63187831

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:48
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Page: 1



Scale = 1:44.2

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	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.00	12	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 74 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 6-0-0 oc bracing.

REACTIONS	(size)	12=14-0-8, 13=14-0-8, 14=14-0-8, 15=14-0-8, 16=14-0-8, 17=14-0-8, 18=14-0-8, 19=14-0-8, 20=14-0-8
	Max Horiz	20=220 (LC 11)
	Max Uplift	12=-119 (LC 9), 13=-179 (LC 13), 14=-101 (LC 13), 15=-97 (LC 13), 17=-99 (LC 12), 18=-98 (LC 12), 19=-173 (LC 12), 20=-153 (LC 8)
	Max Grav	12=193 (LC 19), 13=198 (LC 11), 14=197 (LC 20), 15=203 (LC 20), 16=225 (LC 22), 17=206 (LC 19), 18=194 (LC 19), 19=210 (LC 10), 20=225 (LC 20)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-20=-175/114, 1-2=0/46, 2-3=-168/159, 3-4=-113/115, 4-5=-95/201, 5-6=-145/311, 6-7=-145/311, 7-8=-90/201, 8-9=-76/81, 9-10=-121/106, 10-11=0/46, 10-12=-147/82
BOT CHORD	19-20=-97/118, 18-19=-97/118, 17-18=-97/118, 16-17=-97/118, 15-16=-97/118, 14-15=-97/118, 13-14=-97/118, 12-13=-97/118
WEBS	6-16=-298/78, 5-17=-165/151, 4-18=-157/205, 3-19=-139/159, 7-15=-163/152, 8-14=-159/206, 9-13=-130/158

NOTES

- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 7-1-4, Corner(3R) 7-1-4 to 12-1-4, Exterior(2N) 12-1-4 to 14-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 20, 119 lb uplift at joint 12, 99 lb uplift at joint 17, 98 lb uplift at joint 18, 173 lb uplift at joint 19, 97 lb uplift at joint 15, 101 lb uplift at joint 14 and 179 lb uplift at joint 13.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



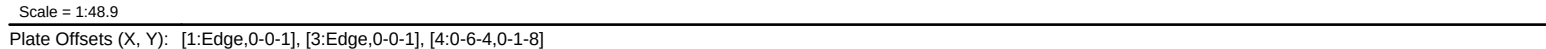
January 23, 2024

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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DEVELOPMENT SERVICES
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:48 Page: 1
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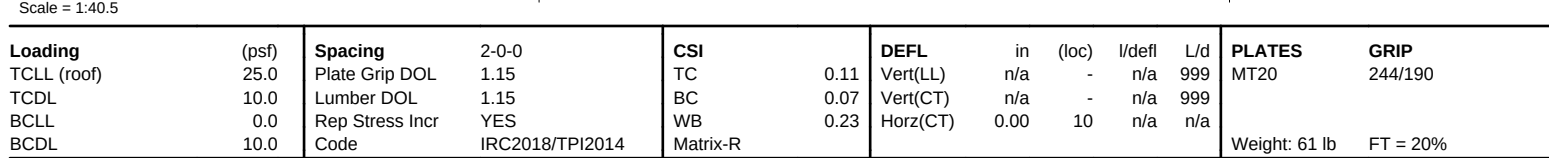
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A large, semi-transparent stamp is overlaid on the drawing. It features the Mitel logo at the top, followed by the text "RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW" in bold, capital letters. Below this, the address "16023 Swinley Ridge Rd, Chesterfield, MO 63005" and the phone number "636-434-1200" are listed. The bottom of the stamp says "MITEL US, INC." and "LEE'S SUMMIT, MISSOURI". A large timestamp "02/08/2024 3:46:30" is at the very bottom.

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:49 ID:6H_N6JKFDZ4IYhPLMFDcbmzsVYA-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCdoi7J4zJC?f Page: 1



STATE OF MISSOURI
NATHANIEL
FOX
PROFESSIONAL ENGINEER
NUMBER
PE-2022042259

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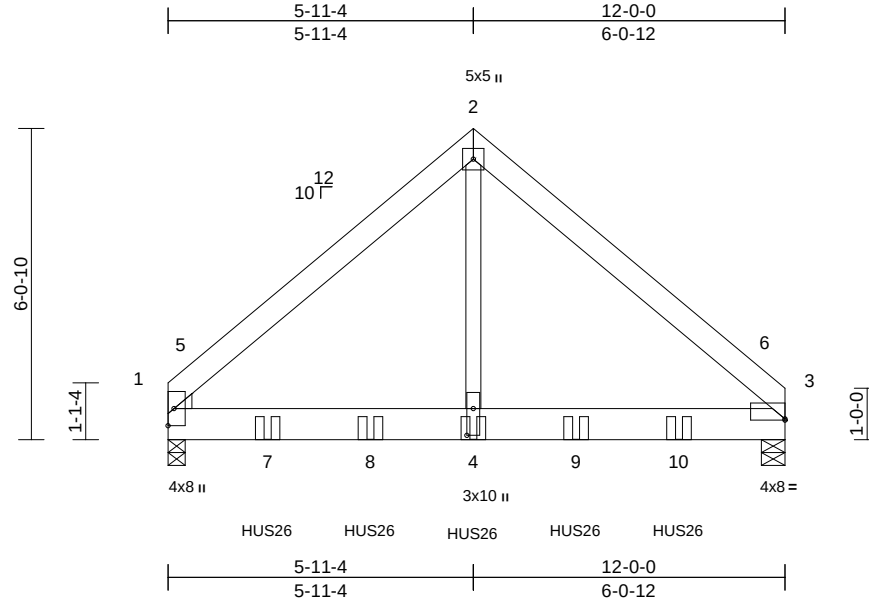
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	G04	Common Girder	1	2	
Job Reference (optional)					I63187834

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:49

Page: 1

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Scale = 1:44.8

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

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	0.56	Vert(LL)	-0.05	3-4	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.09	3-4	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.63	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 131 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x8 SPF No.2
WEBS 2x4 SP 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=0-4-0, 3=0-5-8
Max Horiz 1=152 (LC 11)
Max Uplift 1=-646 (LC 12), 3=-641 (LC 13)
Max Grav 1=4178 (LC 1), 3=4139 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-4219/762, 2-3=-4199/759
BOT CHORD 1-4=-437/3018, 3-4=-437/3018
WEBS 2-4=-764/5136

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: 2x8 - 3 rows staggered at 0-8-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-0 to 5-2-0, Interior (1) 5-2-0 to 5-11-4, Exterior(2R) 5-11-4 to 10-11-4, Interior (1) 10-11-4 to 11-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 641 lb uplift at joint 3 and 646 lb uplift at joint 1.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-11-4 from the left end to 9-11-4 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-2=-70, 2-3=-70, 1-3=-20
Concentrated Loads (lb)
Vert: 4=-1454 (B), 7=-1454 (B), 8=-1454 (B), 9=-1454 (B), 10=-1454 (B)



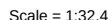
January 23, 2024

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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:49 Page: 1
ID: j4AmYDktmKaVuZKjKTaW8yEGtP-RfC?PsB70Hq3NSaPanL8w3uITXbGKWRCd0i7J4zJC?f



LUMBER

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=9-3-2, 3=9-3-2, 4=9-3-2
 Max Horiz 1=99 (LC 9)
 Max Uplift 1=-42 (LC 12), 3=-53 (LC 13),
 4=-16 (LC 12)
 Max Grav 1=213 (LC 1), 3=213 (LC 1), 4=339
 (LC 1)

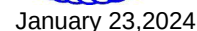
FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-178/89, 2-3=-175/98
BOT CHORD	1-4=-23/84, 3-4=-23/84
WEBS	2-4=-208/104

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) zone; cantilever left
and right exposed ; end vertical left and right
exposed; C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 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/TP1.
- 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) 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 42 lb uplift at joint 1, 53 lb uplift at joint 3 and 16 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1

LOAD CASE(S) Standard

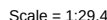


 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

WARNING – verify design parameters and READ NOTES on this and INCLUDED WITH REFERENCE PAGE MP-7473 Rev. 12/2023 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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Crestwood, MO 63017
866-442-0000 MiTekUS.com
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Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:50 Page: 1
ID: j4AmYDktmKaVuZKjKTaW8yEGtP-RfC?PsB70Hq3NSaPanL8w3uITXbGKWRCd0i7J4zJC?f



- 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 43 lb uplift at joint 1 and 52 lb uplift at joint 3.
- 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

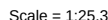
- January 23, 2024

 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 WITH REFERENCE PAGE MP-7473 Rev. 12/2023 BEFORE USE.
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404-420-0100 MiTekUSA.com
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ID: j4AmYDktmKaVuZKjKTaW8yEGtP-RfC?PsB70Hq3NSaPanL8w3uITXbGKWRCd0i7J4zJC?f



LUMBER

BRACING

REACTIONS (size) 1=5-0-11, 3=5-0-11, 4=5-0-11
 Max Horiz 1=50 (LC 9)
 Max Uplift 1=-28 (LC 12), 3=-34 (LC 13)
 Max Grav 1=117 (LC 1), 3=117 (LC 1), 4=154 (LC 1)

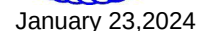
TOP CHORD 1-2=-82/55, 2-3=-78/60
BOT CHORD 1-4=-12/39, 3-4=-12/39
WFRS 2-4=-100/65

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDFL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) zone; cantilever left
and right exposed ; end vertical left and right
exposed; C-C for members and forces & MWFRS for
reactions shown; Lumber DOL=1.60 plate grip
DOL=1.60
- 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/TP1 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) 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 28 lb uplift at joint 1 and 34 lb uplift at joint 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1

LOAD CASE(S) Standard



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

WARNING – Verify design parameters and READ NOTES on this and INCLUDED MITER REFERENCE PAGE MIT-7475 REV. 12/2023 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.tpiinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

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844-420-7767 MiTekUS.com
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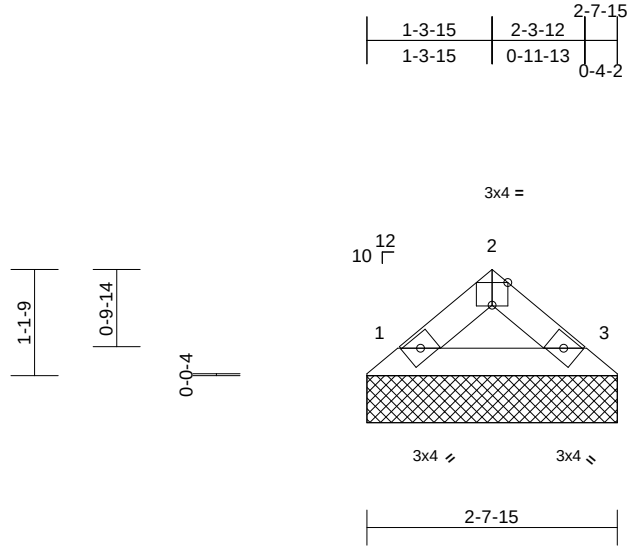
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	V04	Valley	1	1	I63187838
Job Reference (optional)					

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:50

Page: 1

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Scale = 1:24.5

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	0.03	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.04	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: 8 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 2-8-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=2-7-15, 3=2-7-15
Max Horiz 1=22 (LC 9)
Max Uplift 1=-11 (LC 12), 3=-11 (LC 13)
Max Grav 1=86 (LC 1), 3=86 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-69/52, 2-3=-69/56
BOT CHORD 1-3=-10/41

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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 11 lb uplift at joint 1 and 11 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



January 23, 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)

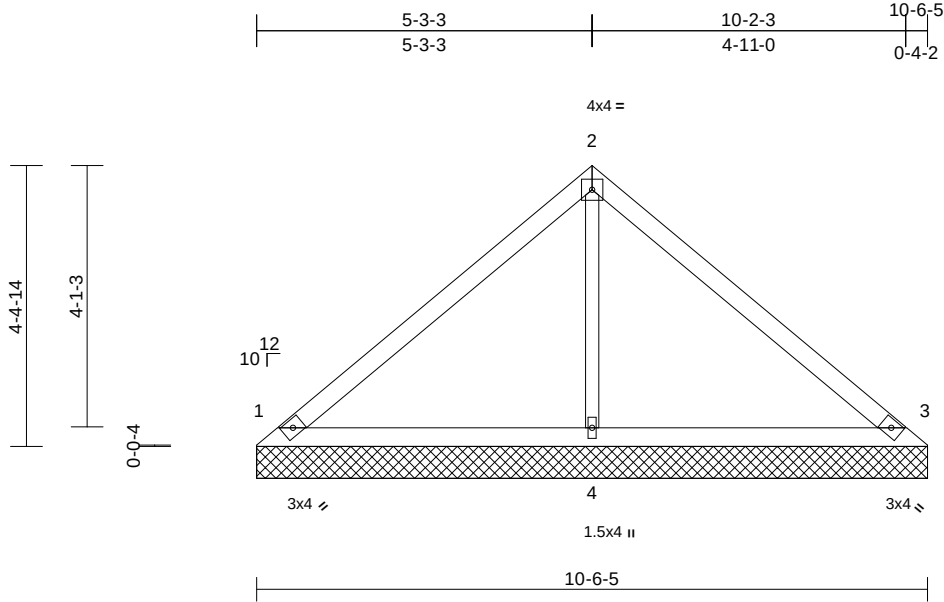
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Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	V05	Valley	1	1	163187839
Job Reference (optional)					

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

Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Jan 23 10:28:50
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Page: 1



Scale = 1:36.2

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	0.40	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%

LUMBER

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

BRACING

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

REACTIONS	(size)	1=10-6-5, 3=10-6-5, 4=10-6-5
	Max Horiz	1=-114 (LC 8)
	Max Uplift	1=-48 (LC 12), 3=-61 (LC 13), 4=-18 (LC 12)
	Max Grav	1=245 (LC 1), 3=245 (LC 1), 4=389 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-205/100, 2-3=-201/106
BOT CHORD	1-4=-26/96, 3-4=-26/96
WEBS	2-4=-239/109

NOTES

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

- 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 48 lb uplift at joint 1, 61 lb uplift at joint 3 and 18 lb uplift at joint 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S) Standard



January 23, 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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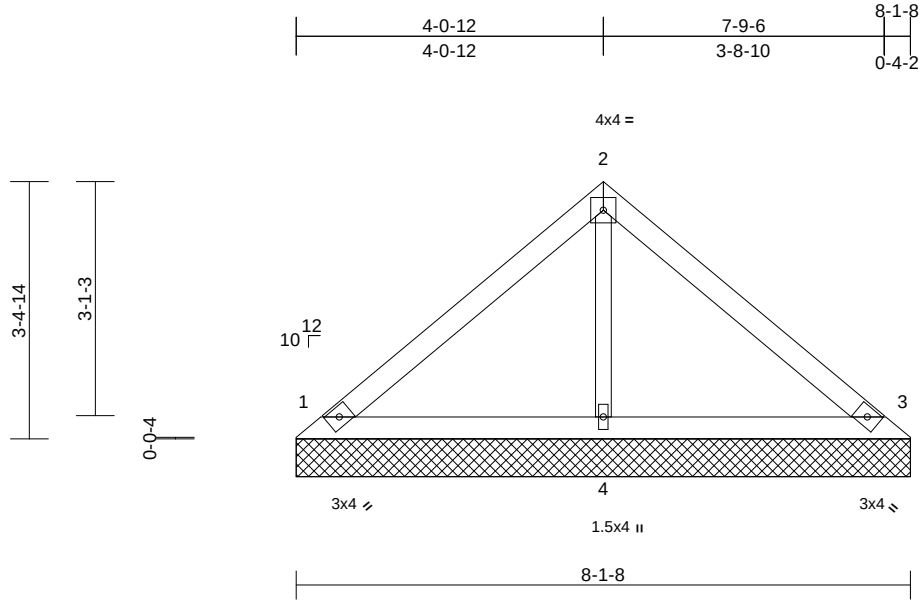
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	V06	Valley	1	1	Job Reference (optional)
					I63187840

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

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Page: 1

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Scale = 1:30.5

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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x3 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=8-1-8, 3=8-1-8, 4=8-1-8
Max Horiz 1=-86 (LC 8)
Max Uplift 1=-47 (LC 12), 3=-57 (LC 13)
Max Grav 1=200 (LC 1), 3=200 (LC 1), 4=263 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-141/79, 2-3=-134/87
BOT CHORD 1-4=-20/68, 3-4=-20/68
WEBS 2-4=-171/90

NOTES

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

- 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 47 lb uplift at joint 1 and 57 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



January 23, 2024

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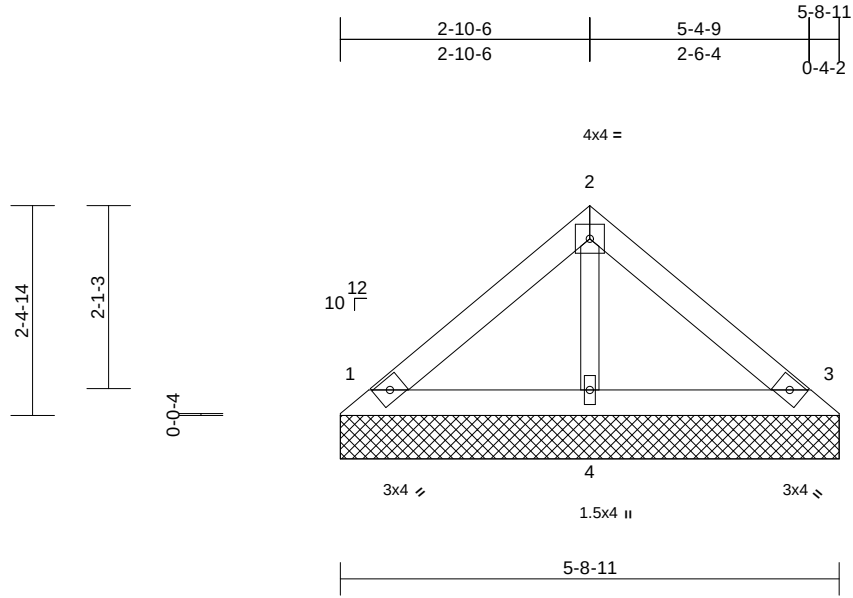
Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	V07	Valley	1	1	Job Reference (optional)
					I63187841

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

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Scale = 1:26.4

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	0.16	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	0.02	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 20 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-9-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-8-11, 3=5-8-11, 4=5-8-11
Max Horiz 1=-58 (LC 8)
Max Uplift 1=-32 (LC 12), 3=-39 (LC 13)
Max Grav 1=135 (LC 1), 3=135 (LC 1), 4=178 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-95/62, 2-3=-90/68
BOT CHORD 1-4=-13/46, 3-4=-13/46
WEBS 2-4=-116/73

NOTES

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

- 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 32 lb uplift at joint 1 and 39 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



January 23, 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)

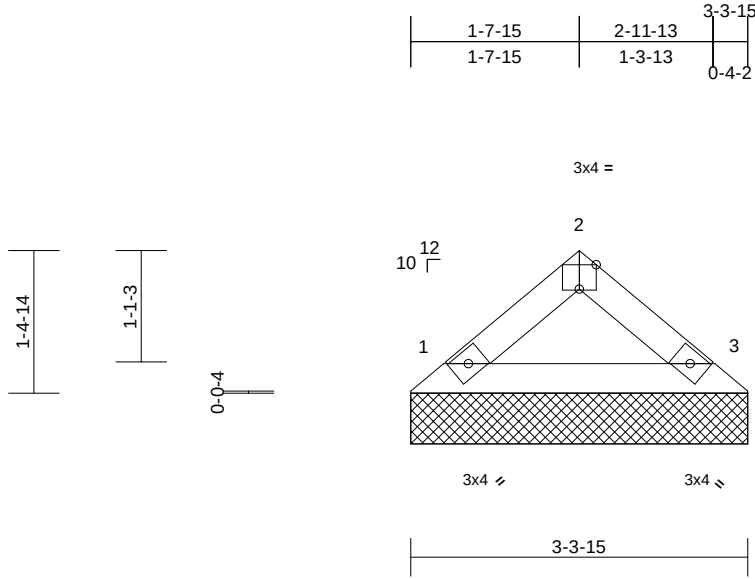
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Job	Truss	Truss Type	Qty	Ply	
Farmhouse-Roof	V08	Valley	1	1	
Job Reference (optional)					I63187842

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

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Scale = 1:22.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.08	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: 10 lb FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-4-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-3-15, 3=3-3-15
Max Horiz 1=-30 (LC 8)
Max Uplift 1=-15 (LC 12), 3=-15 (LC 13)
Max Grav 1=116 (LC 1), 3=116 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-93/67, 2-3=-93/72
BOT CHORD 1-3=-13/56

NOTES

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

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 15 lb uplift at joint 1 and 15 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.

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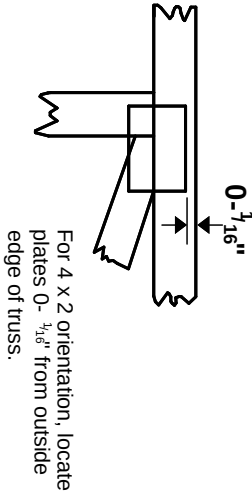
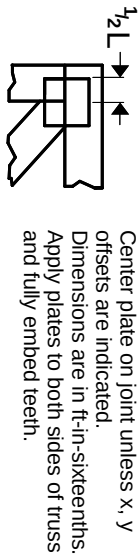
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Symbols

PLATE LOCATION AND ORIENTATION



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

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

PLATE SIZE

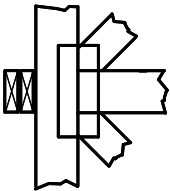
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

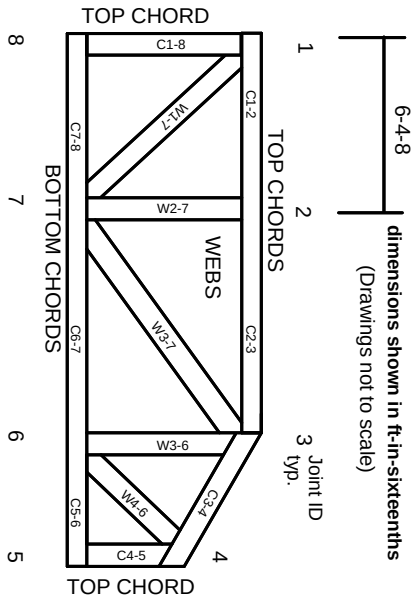
BEARING



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/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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: MIL-7473 rev. 1/12/2023

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.

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