

RE: P250398-01 - Roof - BY Lot 2290

Site Information:

Project Customer: Clayton Properties Project Name: Twin Tupelo - Farmhouse
Lot/Block: 2290 Subdivision: Bailey Farms
Model:

Address: 1222/1224 SE Windbreak 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

Mean Roof Height (feet): 35

Design Program: MiTek 20/20 8.6

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

Floor Load: N/A psf

Exposure Category: C

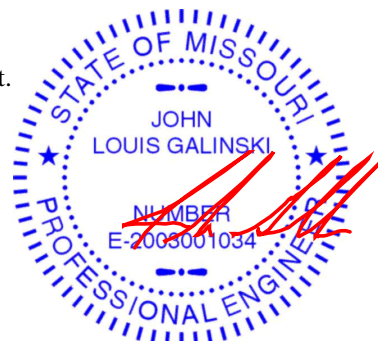
No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I74494408	A1	6/27/25	35	I74494442	V12	6/27/25
2	I74494409	A2	6/27/25	36	I74494443	V13	6/27/25
3	I74494410	A3	6/27/25	37	I74494444	V14	6/27/25
4	I74494411	A4	6/27/25				
5	I74494412	A5	6/27/25				
6	I74494413	A6	6/27/25				
7	I74494414	A7	6/27/25				
8	I74494415	A8	6/27/25				
9	I74494416	A9	6/27/25				
10	I74494417	A10	6/27/25				
11	I74494418	A11	6/27/25				
12	I74494419	B1	6/27/25				
13	I74494420	B2	6/27/25				
14	I74494421	B3	6/27/25				
15	I74494422	B4	6/27/25				
16	I74494423	C1	6/27/25				
17	I74494424	C2	6/27/25				
18	I74494425	D1	6/27/25				
19	I74494426	D2	6/27/25				
20	I74494427	D3	6/27/25				
21	I74494428	J1	6/27/25				
22	I74494429	LG1	6/27/25				
23	I74494430	LG2	6/27/25				
24	I74494431	V1	6/27/25				
25	I74494432	V2	6/27/25				
26	I74494433	V3	6/27/25				
27	I74494434	V4	6/27/25				
28	I74494435	V5	6/27/25				
29	I74494436	V6	6/27/25				
30	I74494437	V7	6/27/25				
31	I74494438	V8	6/27/25				
32	I74494439	V9	6/27/25				
33	I74494440	V10	6/27/25				
34	I74494441	V11	6/27/25				

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: Galinski, John

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.



June 27, 2025



Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 174494408 LEE'S SUMMIT, MISSOURI
P250398-01	A1	Common Supported Gable	2	1	Job Reference (optional)	

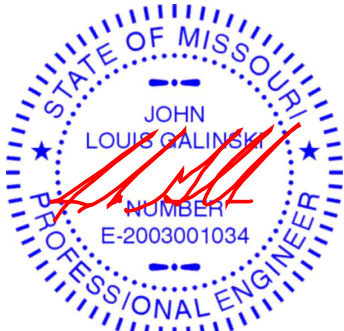
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

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- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 49, 38 lb uplift at joint 39, 72 lb uplift at joint 41, 60 lb uplift at joint 42, 61 lb uplift at joint 43, 61 lb uplift at joint 44, 61 lb uplift at joint 45, 63 lb uplift at joint 46, 55 lb uplift at joint 47, 106 lb uplift at joint 48, 47 lb uplift at joint 37, 68 lb uplift at joint 36, 60 lb uplift at joint 35, 61 lb uplift at joint 33, 61 lb uplift at joint 32, 61 lb uplift at joint 31, 60 lb uplift at joint 30, 64 lb uplift at joint 29, 48 lb uplift at joint 28, 120 lb uplift at joint 27 and 84 lb uplift at joint 25.
- 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



June 27,2025

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

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

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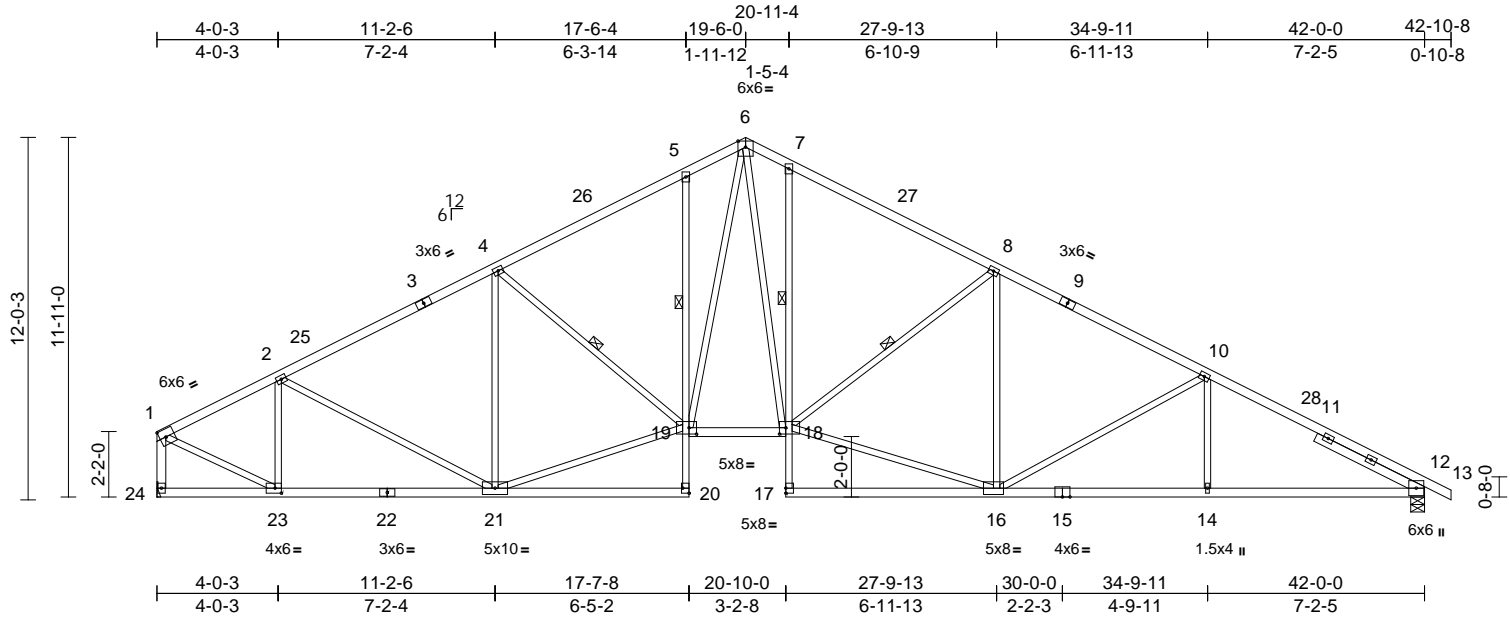
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 174494410 LEE'S SUMMIT, MISSOURI
P250398-01	A3	Roof Special	2	1	Job Reference (optional)	

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07/07/2025



Scale = 1:76.3

Plate Offsets (X, Y): [12:0-3-9,0-0-5], [18:0-2-8,0-2-8], [19:0-3-0,0-2-8], [20:Edge,0-2-8], [23:0-2-8,0-2-0]

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	0.80	Vert(LL)	-0.23	7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.44	16-17	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.21	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 233 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2 *Except* 20-5-7-17:2x3 SP No.2
WEBS	2x3 SPF No.2 *Except* 24-1:2x4 SP No.2
SLIDER	Right 2x4 SP No.2 -- 3-11-13

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 9-8-14 oc bracing. Except:

1 Row at midpt	5-19, 7-18
WEBS	1 Row at midpt 4-19, 8-18

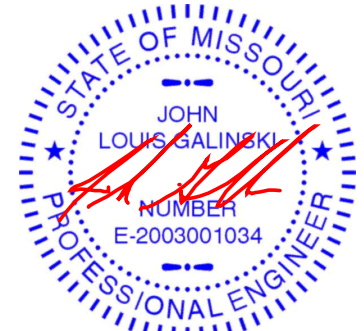
REACTIONS	(size) 12=0-5-8, 24= Mechanical
	Max Horiz 24=-229 (LC 13)
	Max Uplift 12=-319 (LC 13), 24=-269 (LC 12)
	Max Grav 12=1945 (LC 1), 24=1883 (LC 1)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-2028/314, 2-4=-2462/436, 4-5=-2606/494, 5-6=-2536/592, 6-7=-2541/600, 7-8=-2612/505, 8-10=-2809/491, 10-12=-3378/519, 12-13=0/6, 1-24=-1851/301
BOT CHORD	23-24=-133/246, 21-23=-362/1781, 20-21=0/28, 19-20=0/104, 5-19=-300/214, 18-19=-107/2039, 17-18=0/120, 7-18=-339/257, 16-17=0/40, 14-16=-348/2883, 12-14=-348/2883
WEBS	2-23=-764/207, 2-21=-30/370, 4-21=-684/149, 19-21=-310/2180, 4-19=-48/281, 16-18=-219/2487, 8-18=-380/280, 8-16=-286/112, 10-16=-557/229, 10-14=0/284, 1-23=-292/1963, 6-18=-402/1280, 6-19=-345/952

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) 3-1-12 to 8-1-12, Interior (1) 8-1-12 to 22-6-0, Exterior(2R) 22-6-0 to 27-6-0, Interior (1) 27-6-0 to 45-10-8 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.
- Bearings are assumed to be: , Joint 12 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 269 lb uplift at joint 24 and 319 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 27, 2025

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

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

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	A5	Common	4	1	Job Reference (optional)

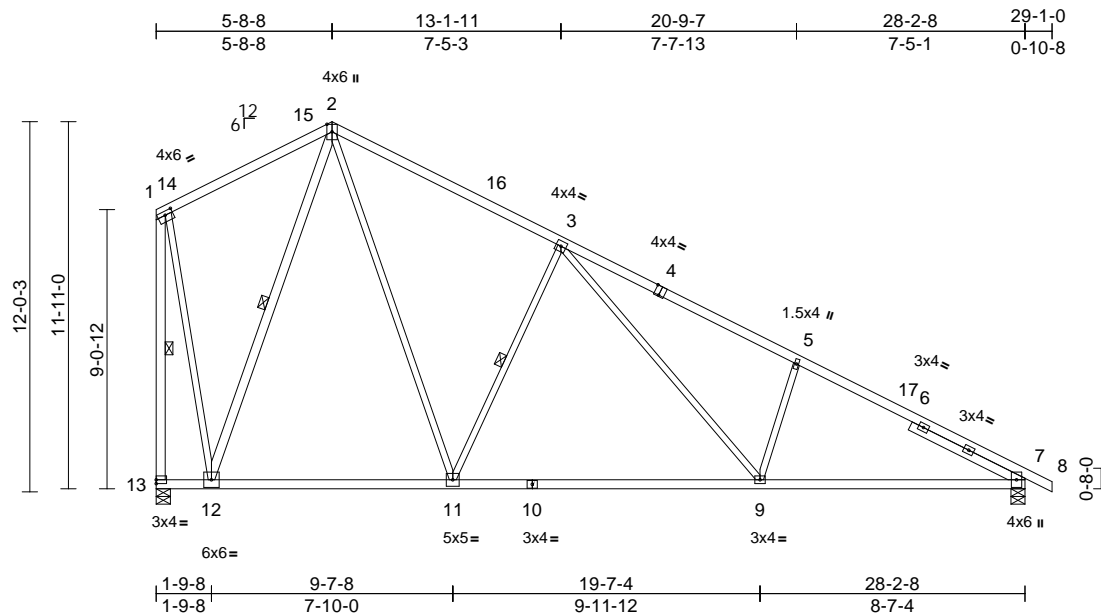
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494412
LEE'S SUMMIT, MISSOURI

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07/07/2025



Scale = 1:74.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.19	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.42	9-11	>810	180		
BCLL	0.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 162 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 12-2,13-1:2x4 SP No.2
SLIDER Right 2x4 SP No.2 -- 4-1-7

BRACING

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

WEBS 1 Row at midpt 3-11, 2-12, 1-13

REACTIONS (size) 7=0-5-8, 13=0-5-8
Max Horiz 13=433 (LC 8)
Max Uplift 7=238 (LC 13), 13=231 (LC 13)
Max Grav 7=1325 (LC 1), 13=1262 (LC 1)

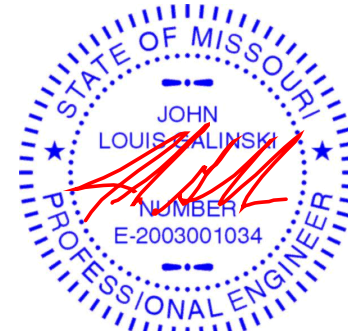
FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-372/308, 2-3=-1042/377, 3-5=-1951/448, 5-7=-2101/361, 7-8=0/6, 1-13=-1254/285
BOT CHORD 12-13=-267/438, 11-12=0/548, 9-11=-65/1155, 7-9=-210/1766
WEBS 2-11=-266/1015, 3-11=-844/399, 3-9=-210/775, 5-9=-418/292, 2-12=-940/358, 1-12=-186/997

NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 16-11-4 to 21-11-4, Interior (1) 21-11-4 to 22-6-0, Exterior(2R) 22-6-0 to 27-6-0, Interior (1) 27-6-0 to 45-10-8 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 231 lb uplift at joint 13 and 238 lb uplift at joint 7.
- 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

June 27, 2025

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

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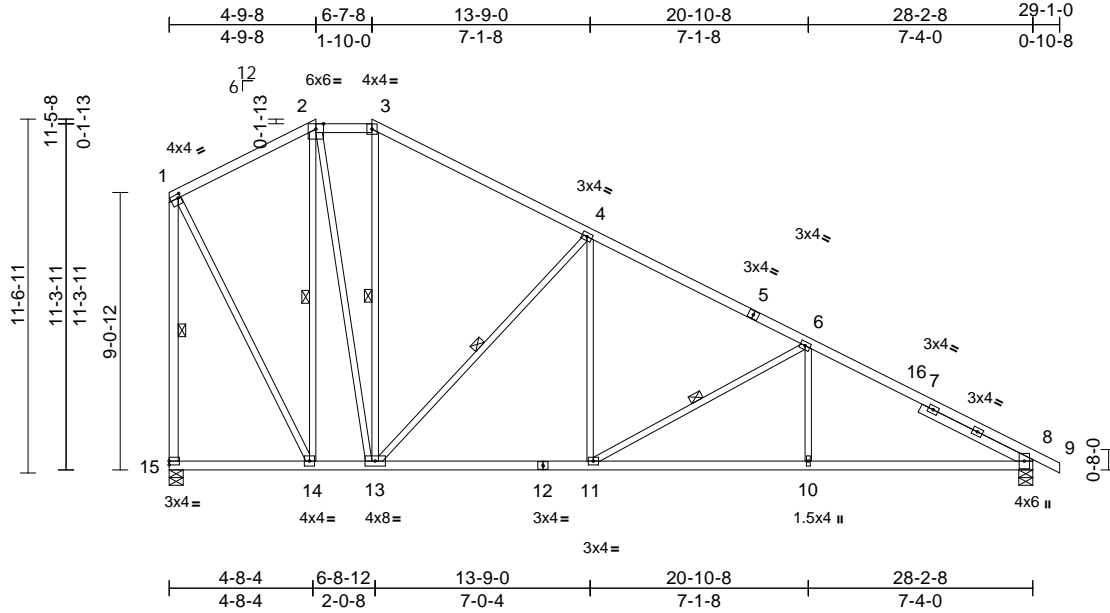
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION
P250398-01	A6	Hip	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						174494413
						LEE'S SUMMIT, MISSOURI

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07/07/2025



Scale = 1:75.3

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.08	11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.19	11-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 167 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 15-1:2x4 SP No.2
SLIDER Right 2x4 SP No.2 -- 4-0-12

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-10-9 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 2-14, 3-13, 4-13, 6-11, 1-15

REACTIONS (size) 8=0-5-8, 15=0-5-8
Max Horiz 15=424 (LC 8)
Max Uplift 8=238 (LC 13), 15=213 (LC 13)
Max Grav 8=1325 (LC 1), 15=1262 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-561/290, 2-3=-590/298, 3-4=-780/292, 4-6=-1471/308, 6-8=-2108/352, 8-9=0/6, 1-15=-1223/302

BOT CHORD 14-15=-272/425, 13-14=0/514, 11-13=-37/1223, 10-11=-201/1770, 8-10=-201/1770

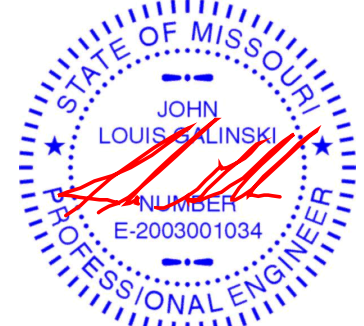
WEBS 2-14=-776/297, 2-13=-214/818, 3-13=-44/124, 4-13=-936/330, 4-11=-32/500, 6-11=-631/241, 6-10=0/301, 1-14=-263/963

NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 16-11-4 to 23-5-0, Exterior(2R) 23-5-0 to 30-6-8, Interior (1) 30-6-8 to 45-10-8 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) Provide adequate drainage to prevent water ponding.
- 4) All plates are 3x4 MT20 unless otherwise indicated.
- 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 213 lb uplift at joint 15 and 238 lb uplift at joint 8.
- 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 27, 2025

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

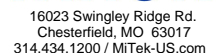
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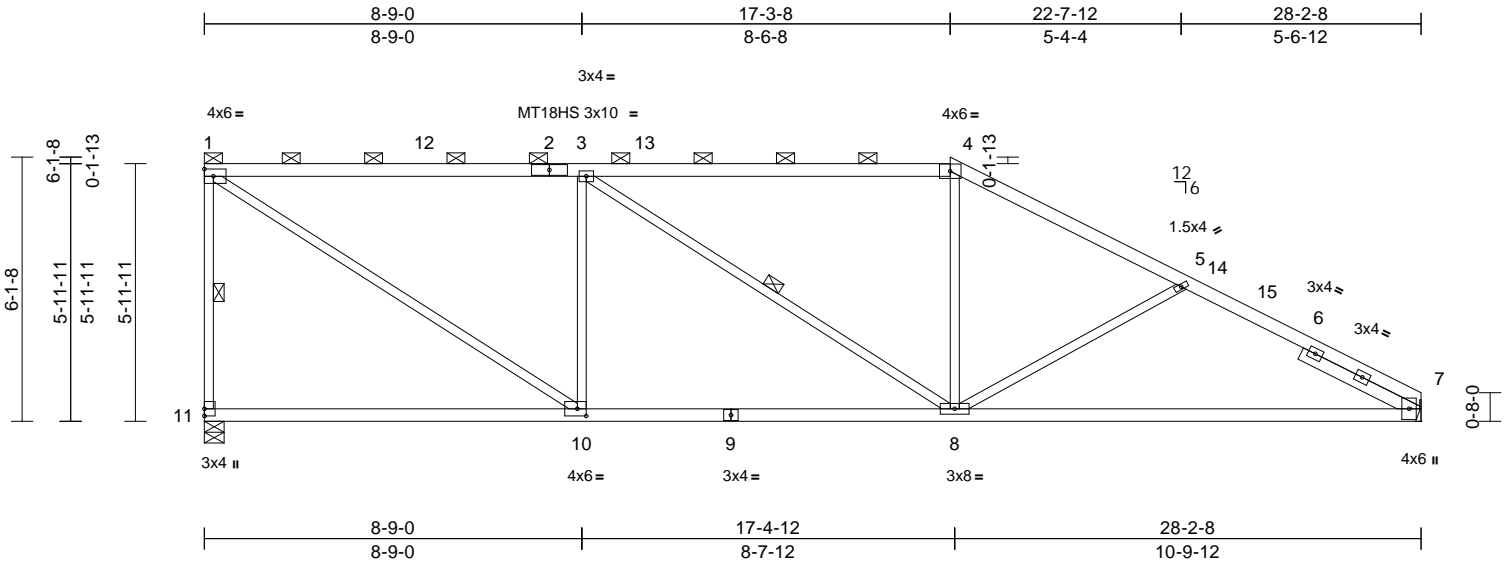
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION
P250398-01	A10	Half Hip	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 174494417 LEE'S SUMMIT, MISSOURI

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

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07/07/2025



Scale = 1:53.4

Plate Offsets (X, Y): [7:0-3-9,0-1-5], [10:0-2-8,0-2-0]												
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	0.74	Vert(LL)	-0.25	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.52	7-8	>643	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.04	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 125 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E *Except* 4-7:2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except* 9-7:2x4 SP 2400F 2.0E
WEBS 2x3 SPF No.2
SLIDER Right 2x4 SP No.2 -- 3-0-13

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-13 oc purlins, except end verticals, and 2-0-0 oc purlins (5-8-3 max.): 1-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-11, 3-8

REACTIONS (size) 7= Mechanical, 11=0-5-8
Max Horiz 11=252 (LC 8)
Max Uplift 7=164 (LC 13), 11=265 (LC 8)
Max Grav 7=1265 (LC 1), 11=1265 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-11=-1187/305, 1-3=-1454/335, 3-4=-1529/326, 4-5=-1784/327, 5-7=-2118/399
BOT CHORD 10-11=-173/297, 8-10=-209/1454, 7-8=-267/1788
WEBS 1-10=-365/1716, 3-10=-767/314, 3-8=-112/174, 4-8=0/391, 5-8=-295/253

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-1-4 to 5-1-4, Interior (1) 5-1-4 to 17-3-8, Exterior(2R) 17-3-8 to 24-4-6, Interior (1) 24-4-6 to 28-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearings are assumed to be: Joint 11 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 265 lb uplift at joint 11 and 164 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard

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



June 27, 2025

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	Job Reference (optional)
P250398-01	A11	Flat Girder	2	1		

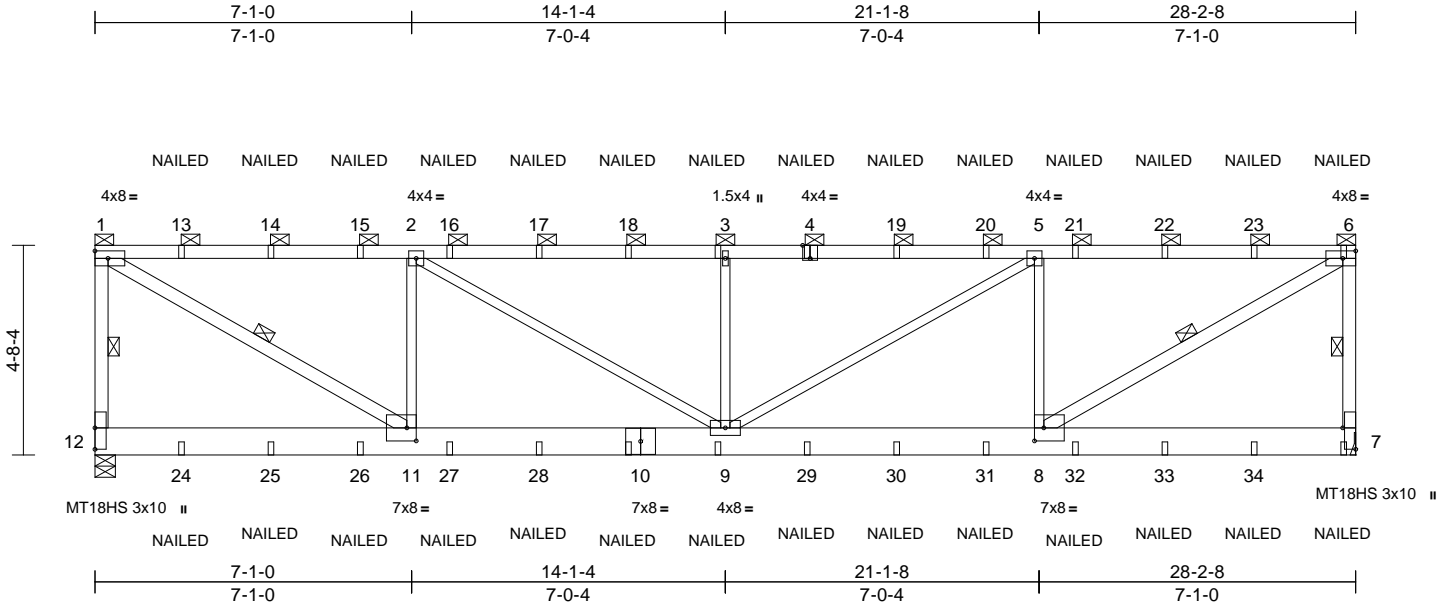
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:53:35 Page: 1

ID:VEPE2mPpfvgTJ3Or1y2CWzlt8c-RfC?PsB70Hq3NSgPqnL8w3uITXbGK?WrCDoi7J42JC?r

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494418
LEE'S SUMMIT, MISSOURI

07/07/2025



Scale = 1:51.5												
Plate Offsets (X, Y): [4:0-2-0,Edge], [7:Edge,0-3-8], [8:0-2-8,0-3-8], [11:0-2-8,0-3-8]												
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	0.77	Vert(LL)	0.21	9	>999	240	MT18HS	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.33	9	>999	180	MT20	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.87	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 165 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP 2400F 2.0E
BOT CHORD 2x8 SPF No.2
WEBS 2x3 SPF No.2 *Except* 12-1,6-7,6-8,11-1:2x4 SP No.2

BRACING
TOP CHORD 2-0-0 oc purlins (3-6-0 max.): 1-6, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-0-3 oc bracing.
WEBS 1 Row at midpt 1-12, 6-7, 6-8, 1-11

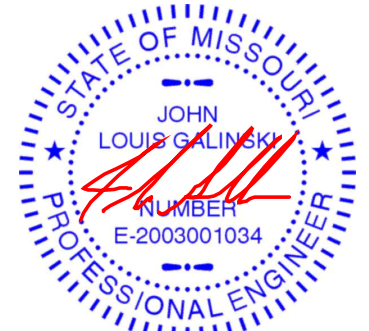
REACTIONS (size) 7= Mechanical, 12=0-5-8
Max Horiz 12=-173 (LC 8)
Max Uplift 7=-878 (LC 9), 12=-802 (LC 8)
Max Grav 7=2496 (LC 1), 12=2316 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-2182/1013, 1-2=-3088/1317, 2-3=-4015/1653, 3-5=-4015/1653, 5-6=-3092/1317, 6-7=-2308/1104
BOT CHORD 11-12=-244/265, 9-11=-1438/3088, 8-9=-1359/3092, 7-8=-97/115
WEBS 6-8=-1479/3559, 2-11=-1506/963, 1-11=-1479/3553, 2-9=-484/1083, 3-9=-833/622, 5-9=-486/1078, 5-8=-1506/965

- 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 (3) 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) Provide adequate drainage to prevent water ponding.
 - 3) All plates are MT20 plates unless otherwise indicated.
 - 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 12 SPF No.2 crushing capacity of 425 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 802 lb uplift at joint 12 and 878 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.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-6=-70, 7-12=-20
Concentrated Loads (lb)
Vert: 4=-109 (B), 6=-140 (B), 7=-61 (B), 10=-52 (B), 9=-52 (B), 3=-109 (B), 13=-109 (B), 14=-109 (B), 15=-109 (B), 16=-109 (B), 17=-109 (B), 18=-109 (B), 19=-109 (B), 20=-109 (B), 21=-109 (B), 22=-109 (B), 23=-109 (B), 24=-52 (B), 25=-52 (B), 26=-52 (B), 27=-52 (B), 28=-52 (B), 29=-52 (B), 30=-52 (B), 31=-52 (B), 32=-52 (B), 33=-52 (B), 34=-52 (B)



June 27, 2025

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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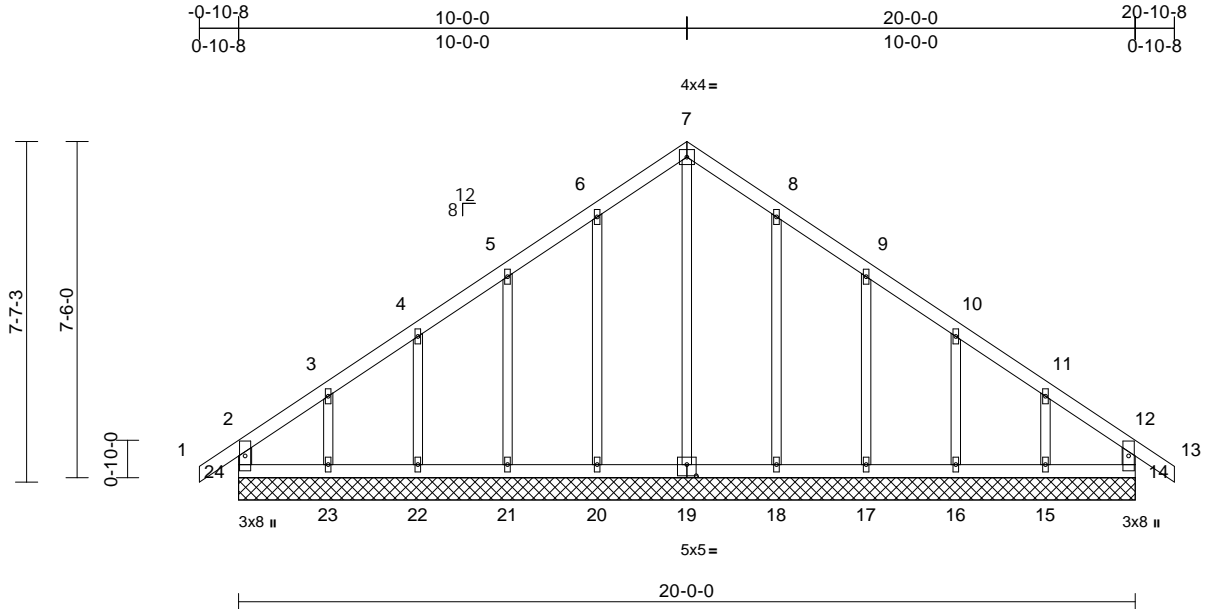
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 174494419 LEE'S SUMMIT, MISSOURI
P250398-01	B1	Common Supported Gable	2	1	Job Reference (optional)	

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:58:55 Page: 1

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Scale = 1:51.4

Plate Offsets (X, Y): [19:0-2-8,0-3-0]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 99 lb	FT = 20%

LUMBER		WEBS	7-19=-219/66, 6-20=-159/98, 5-21=-148/115, 4-22=-147/117, 3-23=-160/138, 8-18=-157/98, 9-17=-148/115, 10-16=-148/117, 11-15=-153/139	LOAD CASE(S)	Standard
TOP CHORD	2x4 SP No.2				
BOT CHORD	2x4 SP No.2				
WEBS	2x4 SP No.2				
OTHERS	2x3 SPF No.2				
BRACING		NOTES	<ol style="list-style-type: none">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 4-0-0, Exterior(2N) 4-0-0 to 10-0-0, Corner(3R) 10-0-0 to 15-0-0, Exterior(2N) 15-0-0 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=1.60Truss 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 80 lb uplift at joint 24, 45 lb uplift at joint 14, 73 lb uplift at joint 20, 85 lb uplift at joint 21, 64 lb uplift at joint 22, 134 lb uplift at joint 23, 72 lb uplift at joint 18, 85 lb uplift at joint 17, 66 lb uplift at joint 16 and 125 lb uplift at joint 15.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.		
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=-227 (LC 10)				
Max Uplift	14=-45 (LC 9), 15=-125 (LC 13), 16=-66 (LC 13), 17=-85 (LC 13), 18=-72 (LC 13), 20=-73 (LC 12), 21=-85 (LC 12), 22=-64 (LC 12), 23=-134 (LC 12), 24=-80 (LC 8)				
Max Grav	14=174 (LC 19), 15=207 (LC 20), 16=185 (LC 20), 17=189 (LC 20), 18=197 (LC 20), 19=210 (LC 22), 20=198 (LC 19), 21=189 (LC 19), 22=184 (LC 1), 23=220 (LC 19), 24=203 (LC 20)				
FORCES	(lb) - Maximum Compression/Maximum Tension				
TOP CHORD	2-24=-168/71, 1-2=0/40, 2-3=-153/141, 3-4=-115/109, 4-5=-102/136, 5-6=-113/204, 6-7=-150/272, 7-8=-150/272, 8-9=-113/204, 9-10=-73/127, 10-11=-81/75, 11-12=-109/94, 12-13=0/40, 12-14=-148/69				
BOT CHORD	23-24=-96/117, 22-23=-96/117, 21-22=-96/117, 20-21=-96/117, 18-20=-96/117, 17-18=-96/117, 16-17=-96/117, 15-16=-96/117, 14-15=-96/117				



June 27, 2025

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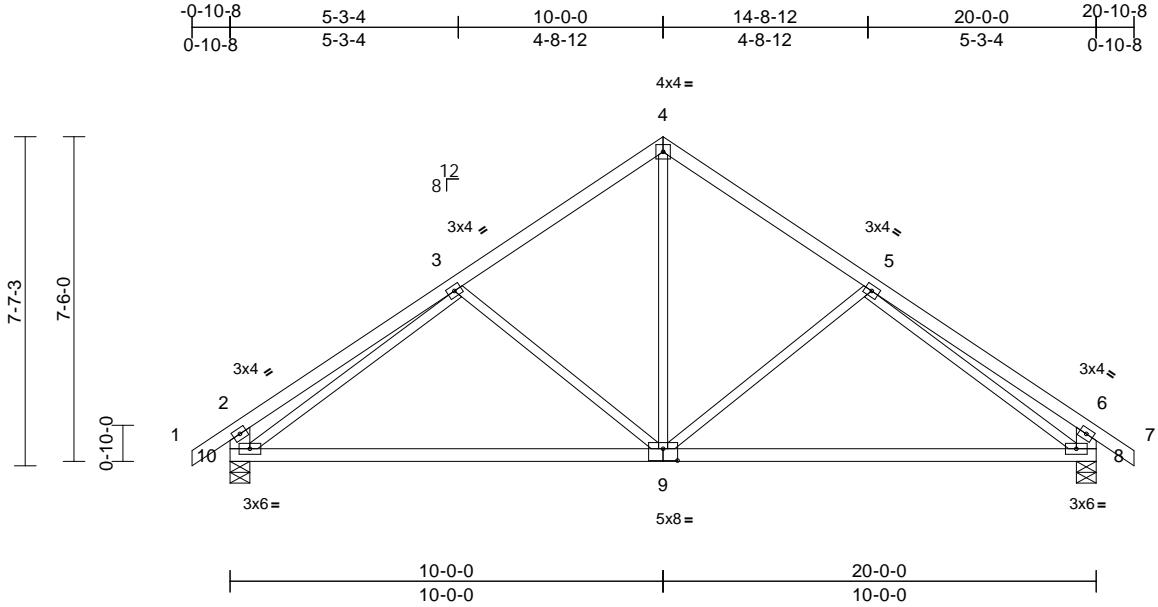
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 174494420 LEE'S SUMMIT, MISSOURI
P250398-01	B2	Common	6	1	Job Reference (optional)	

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:58:35 Page: 1

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07/07/2025



Scale = 1:53.2

Plate Offsets (X, Y): [9:0-4-0,0-3-4]

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	0.34	Vert(LL)	-0.18	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.36	8-9	>660	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 97 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 10-2,8-6:2x6 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS (size) 8=0-5-8, 10=0-5-8
Max Horiz 10=-230 (LC 10)
Max Uplift 8=-150 (LC 13), 10=-150 (LC 12)
Max Grav 8=957 (LC 1), 10=957 (LC 1)

FORCES

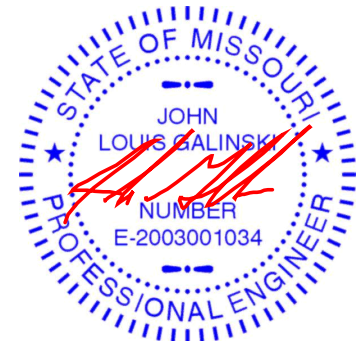
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-477/153, 3-4=-858/199, 4-5=-858/199, 5-6=-477/152, 6-7=0/43, 2-10=-463/177, 6-8=-463/177
BOT CHORD 8-10=-169/857
WEBS 4-9=-84/524, 3-10=-651/114, 5-8=-651/114, 3-9=-286/233, 5-9=-287/233

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 10-0-0, Exterior(2R) 10-0-0 to 14-10-3, Interior (1) 14-10-3 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
- 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 150 lb uplift at joint 10 and 150 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



June 27, 2025

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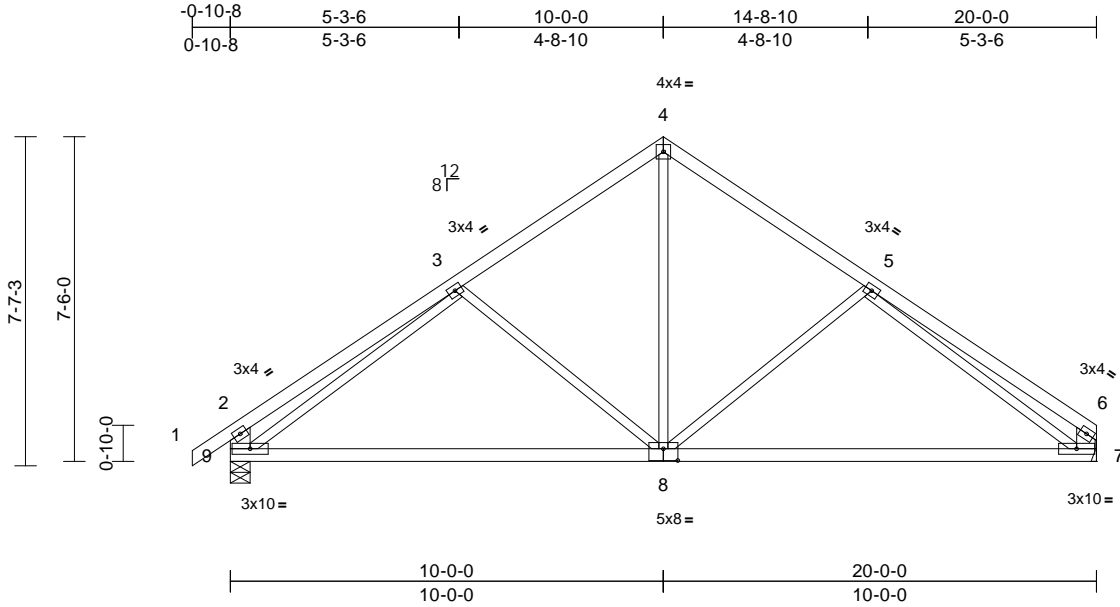
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 174494421 LEE'S SUMMIT, MISSOURI
P250398-01	B3	Common	2	1	Job Reference (optional)	

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:58:35 Page: 1

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07/07/2025



Scale = 1:53.2

Plate Offsets (X, Y): [8:0-4-0,0-3-4]

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	0.35	Vert(LL)	-0.18	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.36	8-9	>659	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 95 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 9-2,7-6:2x6 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS

(size) 7= Mechanical, 9=0-5-8
Max Horiz 9=223 (LC 9)
Max Uplift 7=122 (LC 13), 9=150 (LC 12)
Max Grav 7=877 (LC 1), 9=959 (LC 1)

FORCES

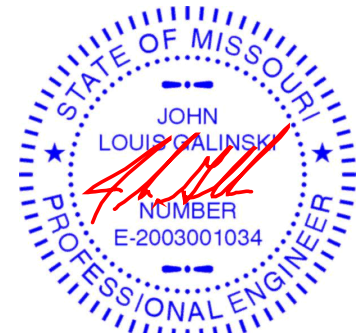
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-479/154, 3-4=-861/199, 4-5=-863/201, 5-6=-419/98, 2-9=-464/178, 6-7=-348/113
BOT CHORD 7-9=-183/849
WEBS 4-8=-87/533, 3-9=-653/114, 5-7=-715/152, 3-8=-287/233, 5-8=-299/238

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 10-0-0, Exterior(2R) 10-0-0 to 14-10-1, Interior (1) 14-10-1 to 19-9-4 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.
- Bearings are assumed to be: , Joint 9 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 150 lb uplift at joint 9 and 122 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



June 27, 2025

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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Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	B4	Common	14	1	Job Reference (optional)

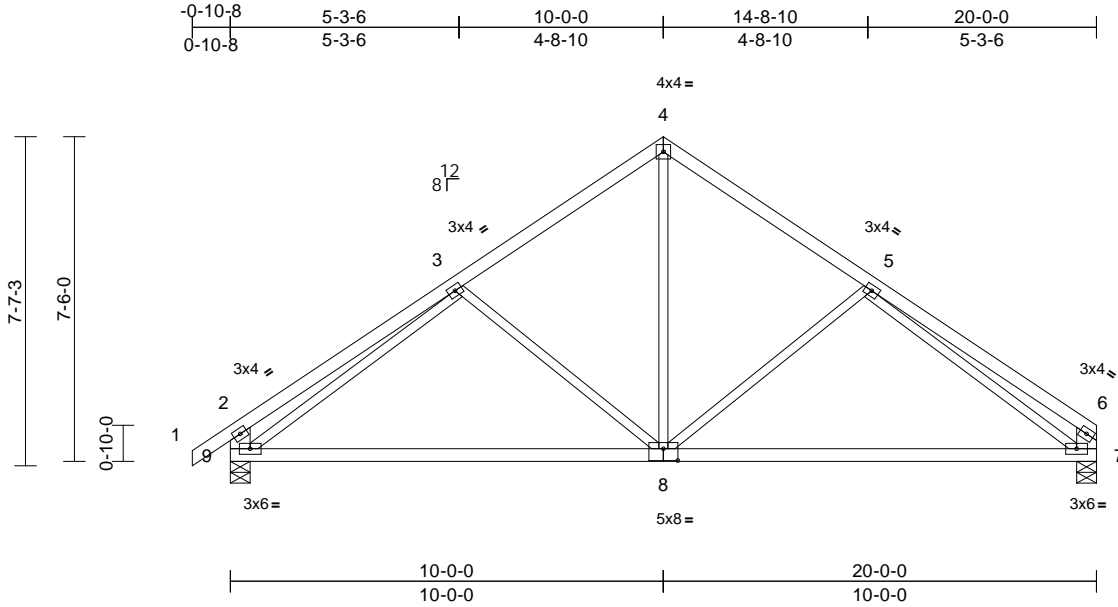
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494422
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:58:35 Page: 1

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07/07/2025



Scale = 1:53.2

Plate Offsets (X, Y): [8:0-4:0,0-3-4]

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	0.35	Vert(LL)	-0.18	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.36	8-9	>659	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 95 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x3 SPF No.2 *Except* 9-2,7-6:2x6 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS

(size) 7=0-5-8, 9=0-5-8
Max Horiz 9=223 (LC 9)
Max Uplift 7=122 (LC 13), 9=150 (LC 12)
Max Grav 7=877 (LC 1), 9=959 (LC 1)

FORCES

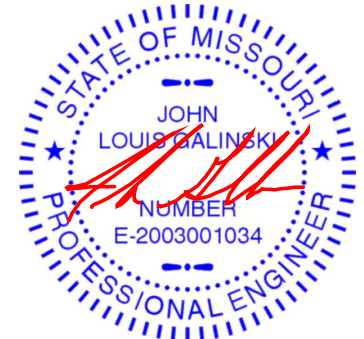
(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-479/154, 3-4=-861/199, 4-5=-863/201, 5-6=-419/98, 2-9=-464/178, 6-7=-348/113
BOT CHORD 7-9=-183/849
WEBS 4-8=-87/533, 3-9=-653/114, 5-7=-715/152, 3-8=-287/233, 5-8=-299/238

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 10-0-0, Exterior(2R) 10-0-0 to 14-10-1, Interior (1) 14-10-1 to 19-9-4 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 SP No.2 crushing capacity of 565 psi.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 150 lb uplift at joint 9 and 122 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



June 27, 2025

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

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

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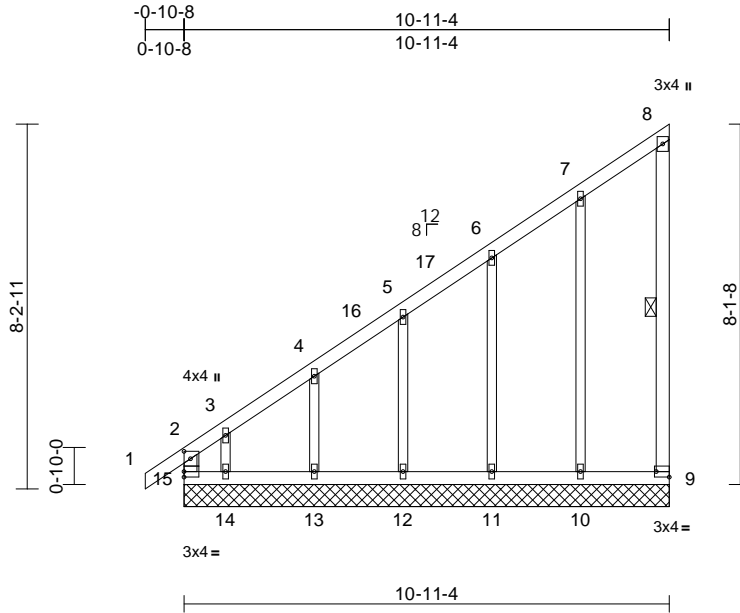
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	C1	Monopitch Supported Gable	2	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494423
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:53:55 Page: 1
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07/07/2025



Scale = 1:51.9

Plate Offsets (X, Y): [2:0-2-0,0-1-12], [9:Edge,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)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	n/a	-	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.00	9	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 64 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.
WEBS	1 Row at midpt 8-9

REACTIONS	(size)	9=10-11-4, 10=10-11-4, 11=10-11-4, 12=10-11-4, 13=10-11-4, 14=10-11-4, 15=10-11-4
Max Horiz		15=340 (LC 9)
Max Uplift		9=-67 (LC 11), 10=-84 (LC 12), 11=-75 (LC 12), 12=-82 (LC 12), 13=-67 (LC 12), 14=-260 (LC 12), 15=-186 (LC 10)
Max Grav		9=95 (LC 19), 10=193 (LC 19), 11=191 (LC 19), 12=188 (LC 19), 13=191 (LC 19), 14=231 (LC 10), 15=373 (LC 9)

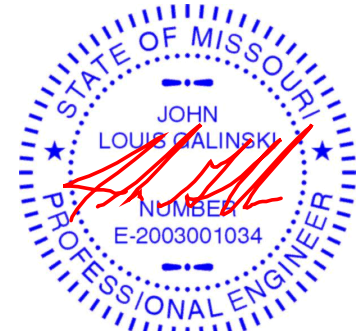
FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-15=-566/398, 1-2=0/40, 2-3=-810/524, 3-4=-599/395, 4-5=-508/350, 5-6=-407/302, 6-7=-298/263, 7-8=-148/167, 8-9=-80/94
BOT CHORD	14-15=-152/198, 13-14=-152/198, 12-13=-152/198, 11-12=-152/198, 10-11=-152/198, 9-10=-152/198
WEBS	7-10=-209/245, 6-11=-147/173, 5-12=-148/157, 4-13=-153/186, 3-14=-273/371

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 10-9-8 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
- 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 186 lb uplift at joint 15, 67 lb uplift at joint 9, 84 lb uplift at joint 10, 75 lb uplift at joint 11, 82 lb uplift at joint 12, 67 lb uplift at joint 13 and 260 lb uplift at joint 14.
- 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



June 27, 2025

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.sbcscomponents.com)

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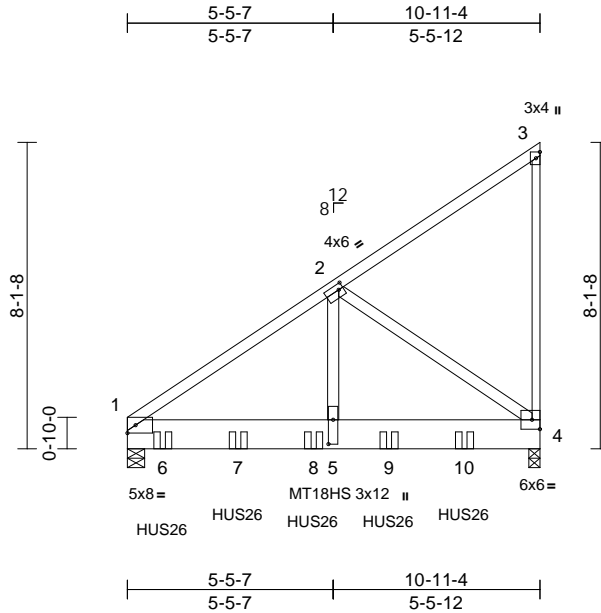
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	C2	Monopitch Girder	2	2	Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1

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07/07/2025



Scale = 1:61.1

Plate Offsets (X, Y): [2:0-1-8,0-1-12], [5:0-7-12,0-1-8]

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	0.77	Vert(LL)	-0.04	4-5	>999	240	MT20 244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07	4-5	>999	180	MT18HS 244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.01	4	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 166 lb FT = 20%											

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except* 3-4:2x3 SPF No.2

BRACING

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

REACTIONS

(size) 1=0-5-8, 4=0-3-8
Max Horiz 1=319 (LC 28)
Max Uplift 1=-825 (LC 12), 4=-788 (LC 12)
Max Grav 1=5658 (LC 1), 4=4613 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5208/841, 2-3=-215/186, 3-4=-188/171
BOT CHORD 1-5=-891/4117, 4-5=-891/4117
WEBS 2-5=-798/5625, 2-4=-5081/969

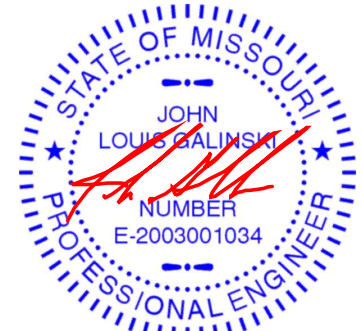
NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-2-12 to 5-5-7, Interior (1) 5-5-7 to 10-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP 2400F 2.0E crushing capacity of 805 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 825 lb uplift at joint 1 and 788 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.
- Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-11-4 from the left end to 8-11-4 to connect truss(es) to front 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: 1-3=-70, 1-4=-20
Concentrated Loads (lb)
Vert: 6=-1866 (F), 7=-1863 (F), 8=-1863 (F), 9=-1863 (F), 10=-1863 (F)



June 27, 2025

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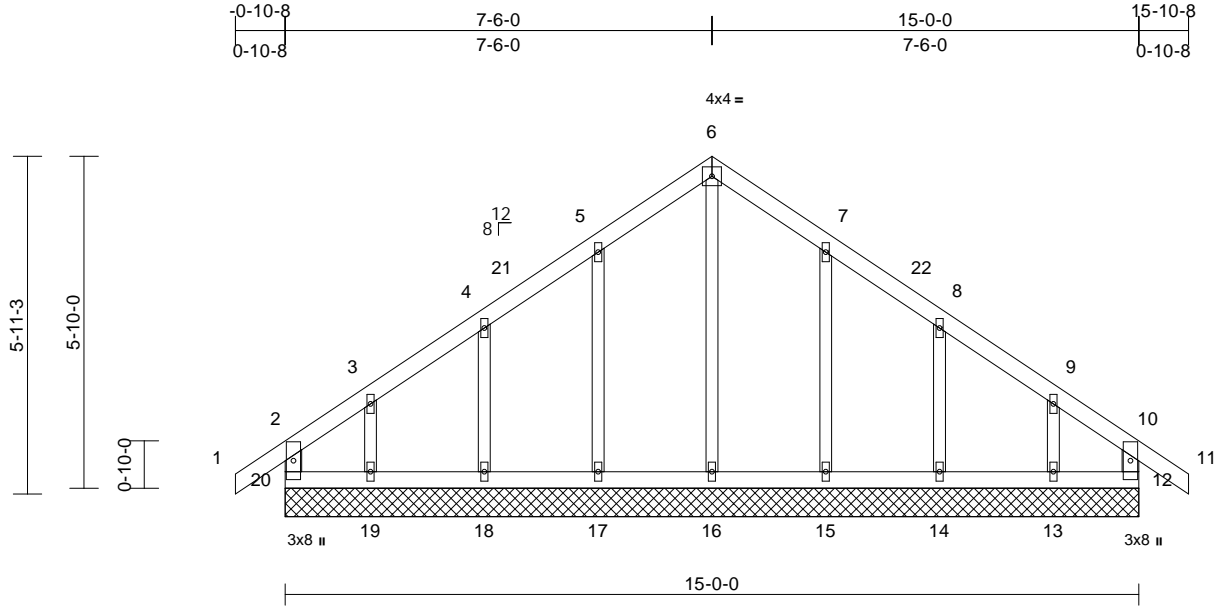
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION
P250398-01	D1	Common Supported Gable	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 174494425 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 08:59:00 Page: 1

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07/07/2025



Scale = 1:40.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TOP CHORD	25.0	Plate Grip DOL	1.15	TC	0.09	n/a	-	n/a	999	MT20	197/144
TCLL (roof)	10.0	Lumber DOL	1.15	BC	0.05	n/a	-	n/a	999		
TCDL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	12	n/a		
BCLL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 71 lb	FT = 20%
BCDL											

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=15-0-0, 13=15-0-0, 14=15-0-0, 15=15-0-0, 16=15-0-0, 17=15-0-0, 18=15-0-0, 19=15-0-0, 20=15-0-0
	Max Horiz	20=181 (LC 11)
	Max Uplift	12=44 (LC 9), 13=106 (LC 13), 14=76 (LC 13), 15=79 (LC 13), 17=80 (LC 12), 18=75 (LC 12), 19=113 (LC 12), 20=74 (LC 8)
	Max Grav	12=148 (LC 19), 13=174 (LC 20), 14=191 (LC 20), 15=197 (LC 20), 16=190 (LC 22), 17=199 (LC 19), 18=189 (LC 19), 19=186 (LC 19), 20=172 (LC 20)

FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-20=-141/79, 1-2=0/40, 2-3=-116/110, 3-4=-85/86, 4-5=-75/152, 5-6=-116/234, 6-7=-117/234, 7-8=-75/152, 8-9=-61/69, 9-10=-82/74, 10-11=0/40, 10-12=-130/79, 19-20=-79/99, 18-19=-79/99, 17-18=-79/99, 16-17=-79/99, 15-16=-79/99, 14-15=-79/99, 13-14=-79/99, 12-13=-79/99
BOT CHORD	6-16=-168/28, 5-17=-159/123, 4-18=-150/158, 3-19=-134/136, 7-15=-157/123, 8-14=-152/158, 9-13=-128/136
WEBS	

NOTES

- 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; 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 7-6-0, Corner(3R) 7-6-0 to 12-6-0, Exterior(2N) 12-6-0 to 15-10-8 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.
- 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 74 lb uplift at joint 20, 44 lb uplift at joint 12, 80 lb uplift at joint 17, 75 lb uplift at joint 18, 113 lb uplift at joint 19, 79 lb uplift at joint 15, 76 lb uplift at joint 14 and 106 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



June 27, 2025

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)

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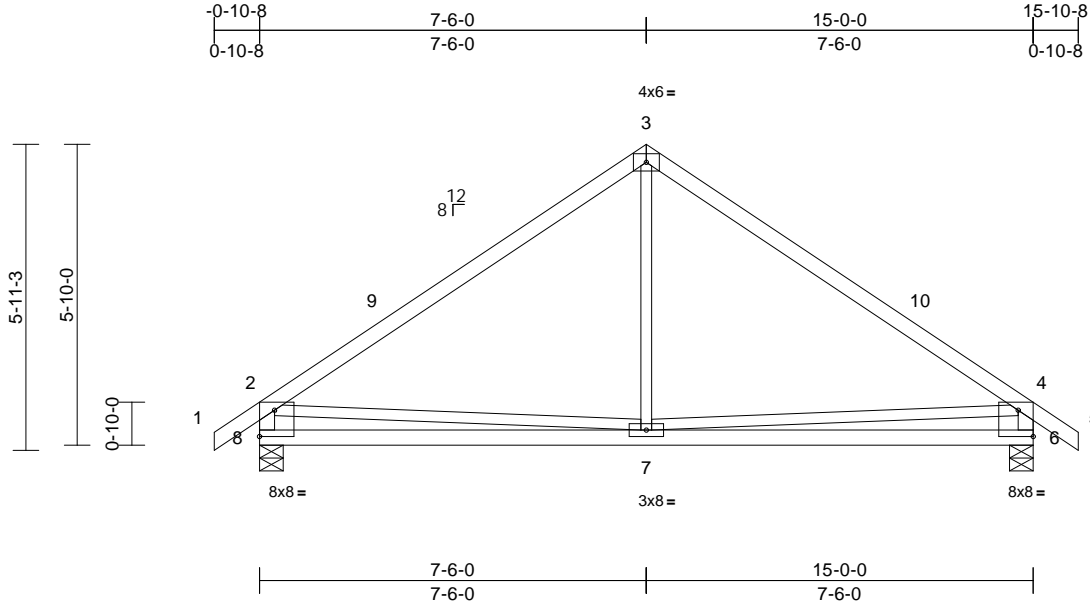
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 174494426 LEE'S SUMMIT, MISSOURI
P250398-01	D2	Common	8	1	Job Reference (optional)	

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1

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07/07/2025



Scale = 1:44.7

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	0.80	Vert(LL)	-0.06	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.12	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 70 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

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

LOAD CASE(S) Standard

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-5-0 oc bracing.

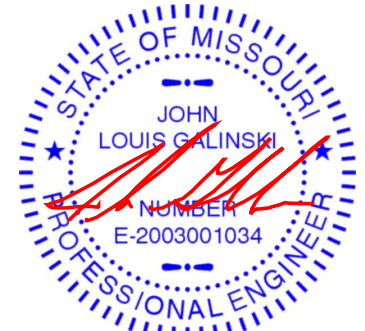
REACTIONS (size) 6=0-5-8, 8=0-5-8
Max Horiz 8=181 (LC 10)
Max Uplift 6=117 (LC 13), 8=117 (LC 12)
Max Grav 6=733 (LC 1), 8=733 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/40, 2-3=-740/161, 3-4=-740/161, 4-5=0/40, 2-8=-670/211, 4-6=-670/211
BOT CHORD 7-8=-386/711, 6-7=-308/585
WEBS 3-7=0/322, 2-7=-223/385, 4-7=-236/391

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 7-6-0, Exterior(2R) 7-6-0 to 12-6-0, Interior (1) 12-6-0 to 15-10-8 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
- 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 117 lb uplift at joint 8 and 117 lb uplift at joint 6.



June 27, 2025

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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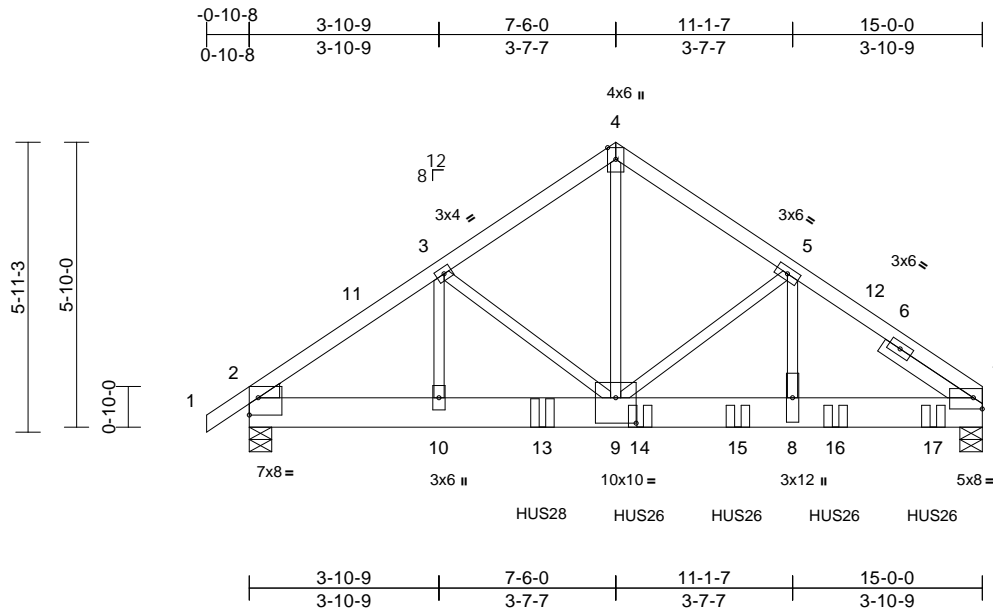
16023 Swingley Ridge Rd.
Chesterfield, MO 63017
314.434.1200 / MiTek-US.com

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	D3	Common Girder	2	2	Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 08:59:00 Page: 1

ID:vp4Ngorh0aHFKmozX9Wlq9zlt8Z-RfC?PsB70Hq3NSgPqnL8w3uITXbGkWrCdoi7J4zJC?



Scale = 1:47.2

Plate Offsets (X, Y): [2:Edge,0-4-4], [7:Edge,0-2-12], [9:0-5-0,0-6-4]

[illegible]

LUMBER

TOP CHORD 2x4 SP No.2 *Except* 4-7:2x4 SP 2400F
2.0E

BOT CHORD 2x8 SPF No.2

WEBS 2x3 SPF No.2

WEDGE Left: 2x4 SP No.2

SLIDER Right 2x4 SP No.2 -- 2-1-15

BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-4-1 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	2=0-5-8, 7=0-5-8
Max Horiz	2=154 (LC 9)
Max Uplift	2=-855 (LC 12), 7=-1051 (LC 13)
Max Grav	2=3518 (LC 1), 7=5319 (LC 1)

FORCES

Tension

TOP CHORD 1-2=0/16, 2-3=-5316/1371, 3-4=-4561/1162,
4-5=-4522/1155, 5-7=-6066/1289

BOT CHORD 2-10=-1047/4066, 9-10=-1047/4066,
8-9=-946/4735, 7-8=-946/4735

WEBS 3-10=-287/835, 3-9=-494/292,
4-9=-1151/4619, 5-9=-1282/230,
5-8=-199/1862

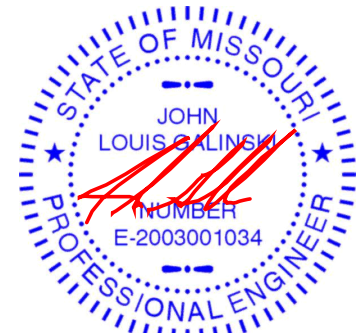
NOTES

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-5-0 oc.
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
- 2) 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.

- 3) Unbalanced roof live loads have been considered for this design.
- 4) 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 3-10-9,
Interior (1) 3-10-9 to 7-6-0, Exterior(2R) 7-6-0 to 12-6-0,
Interior (1) 12-6-0 to 14-9-4 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
- 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 SPF No.2 crushing
capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to
bearing plate capable of withstanding 1051 lb uplift at
joint 7 and 855 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.
- 9) Use Simpson Strong-Tie HUS28 (22-16d Girder, 8-16d
Truss, Single Ply Girder) or equivalent at 6-0-0 from the
left end to connect truss(es) to back face of bottom
chord.
- 10) Use Simpson Strong-Tie HUS26 (14-16d Girder, 4-16d
Truss) or equivalent spaced at 2-0-0 oc max. starting at
8-0-0 from the left end to 14-0-0 to connect truss(es) to
back face of bottom chord.
- 11) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15,
Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-4=-70, 4-7=-70, 2-7=-20
Concentrated Loads (lb)
Vert: 13=-2476 (B), 14=-1245 (B), 15=-1243 (B),
16=-1243 (B), 17=-1245 (B)



June 27, 2025



WARNING – Verify design parameters and READ NOTES ON THIS and INCLUDED MITER KEEPER REFERENCE ASIDE WITH 47516V, 11/20/23 BELT ONE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcscomponents.com)

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ID: g41znjK28p9WlOCvEMreyFzlt8i-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKW CDoi7J4zCf1



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	0.63	Vert(LL)	0.08	4-5	>826	240	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.11	4-5	>600	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.05	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 22 lb	FT = 20%

LOAD CASE(S) Standard

STATE OF MISSOURI

JOHN
LOUIS GALINSKI

NUMBER
E-2003001034

PROFESSIONAL ENGINEER

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 Components Association (www.sbcscomponents.com)

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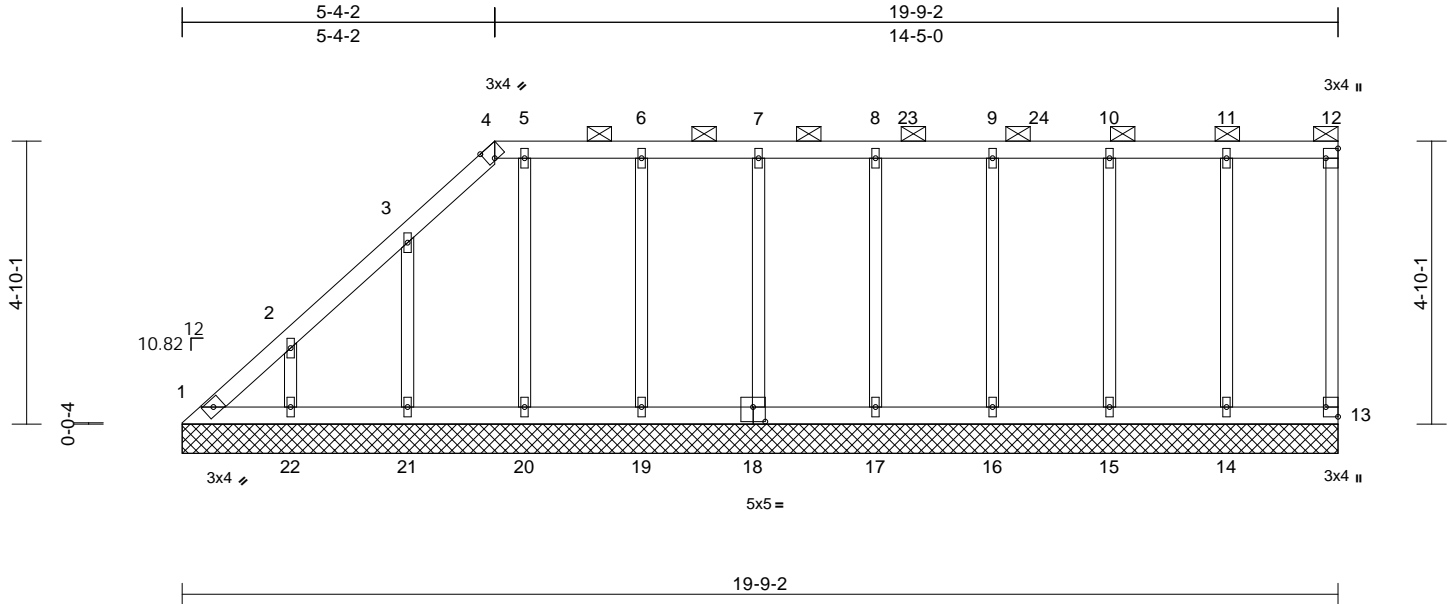
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION
P250398-01	LG1	Lay-In Gable	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 174494429 LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1

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07/07/2025



Scale = 1:39.4

Plate Offsets (X, Y): [4:0-1-11,Edge], [12:Edge,0-2-8], [13:Edge,0-2-8], [18:0-2-8,0-3-0]

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	0.26	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horiz(TL)	0.00	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 92 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, and 2-0-0 oc purlins (6-0-0 max.): 4-12.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS	(size)	1=19-9-2, 13=19-9-2, 14=19-9-2, 15=19-9-2, 16=19-9-2, 17=19-9-2, 18=19-9-2, 19=19-9-2, 20=19-9-2, 21=19-9-2, 22=19-9-2
	Max Horiz	1=194 (LC 9)
	Max Uplift	1=48 (LC 10), 13=-16 (LC 9), 14=-43 (LC 8), 15=-41 (LC 9), 16=40 (LC 8), 17=-39 (LC 9), 18=40 (LC 9), 19=-52 (LC 8), 20=-77 (LC 9), 21=-102 (LC 12), 22=-110 (LC 12)
	Max Grav	1=127 (LC 9), 13=66 (LC 1), 14=187 (LC 26), 15=180 (LC 1), 16=180 (LC 26), 17=182 (LC 26), 18=180 (LC 1), 19=183 (LC 26), 20=183 (LC 1), 21=204 (LC 19), 22=191 (LC 19)

FORCES

TOP CHORD	(lb) - Maximum Compression/Maximum Tension
	1-2=314/201, 2-3=227/168, 3-4=117/107, 4-5=92/100, 5-6=92/100, 6-7=92/100, 7-8=94/101, 8-9=94/101, 9-10=94/101, 10-11=94/101, 11-12=94/101, 12-13=55/46

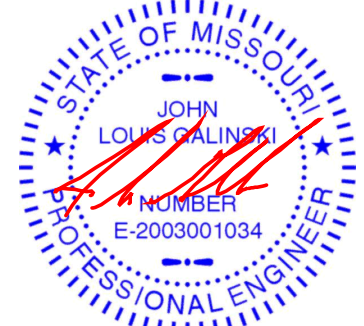
BOT CHORD	1-22=95/103, 21-22=95/103, 20-21=95/103, 19-20=95/103, 17-19=95/103, 16-17=93/102, 15-16=93/102, 14-15=93/102, 13-14=93/102
WEBS	2-22=148/129, 3-21=164/142, 5-20=146/124, 6-19=145/75, 7-18=140/64, 8-17=140/63, 9-16=140/64, 10-15=140/66, 11-14=145/80

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) 0-4-9 to 5-4-6, Exterior(2R) 5-4-6 to 12-5-4, Interior (1) 12-5-4 to 19-8-2 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 1, 16 lb uplift at joint 13, 110 lb uplift at joint 22, 102 lb uplift at joint 21, 77 lb uplift at joint 20, 52 lb uplift at joint 19, 40 lb uplift at joint 18, 39 lb uplift at joint 17, 40 lb uplift at joint 16, 41 lb uplift at joint 15 and 43 lb uplift at joint 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



June 27, 2025

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

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

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	LG2	Lay-In Gable	2	1	Job Reference (optional)

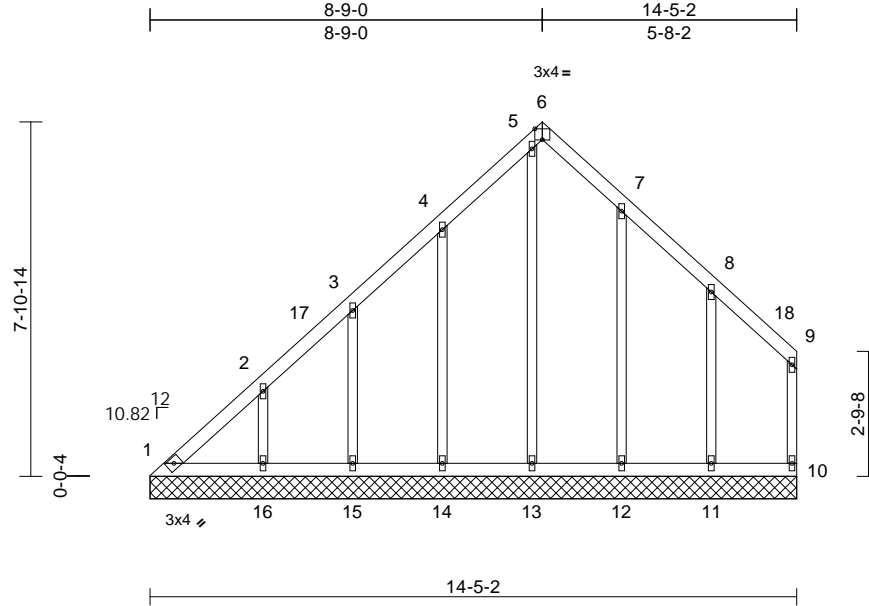
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494430
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1

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07/07/2025



Scale = 1:51.4

Plate Offsets (X, Y): [6:0-2-0,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	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horiz(TL)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 74 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

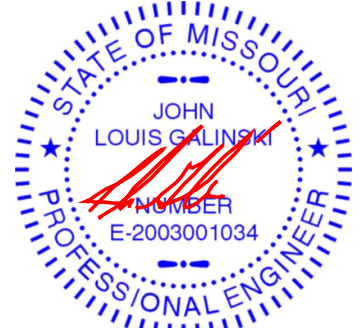
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=14-5-2, 10=14-5-2, 11=14-5-2, 12=14-5-2, 13=14-5-2, 14=14-5-2, 15=14-5-2, 16=14-5-2
Max Horiz 1=249 (LC 9)
Max Uplift 1=-130 (LC 8), 10=-30 (LC 12), 11=-138 (LC 13), 12=-63 (LC 13), 13=-117 (LC 11), 14=-128 (LC 12), 15=-104 (LC 12), 16=-131 (LC 12)
Max Grav 1=202 (LC 11), 10=92 (LC 20), 11=218 (LC 20), 12=184 (LC 26), 13=269 (LC 8), 14=203 (LC 19), 15=186 (LC 19), 16=236 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-280/254, 2-3=-245/227, 3-4=-215/235, 4-5=-226/344, 5-6=-84/111, 6-7=-210/311, 7-8=-175/241, 8-9=-100/112, 9-10=-95/91
BOT CHORD 1-16=-56/64, 15-16=-56/64, 14-15=-56/64, 13-14=-56/64, 12-13=-56/64, 11-12=-56/64, 10-11=-56/64
WEBS 2-16=-181/152, 3-15=-151/139, 4-14=-162/165, 5-13=-353/173, 7-12=-144/87, 8-11=-167/171

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-9 to 5-4-9, Interior (1) 5-4-9 to 8-9-4, Exterior(2R) 8-9-4 to 13-9-4, Interior (1) 13-9-4 to 14-4-2 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 1, 30 lb uplift at joint 10, 131 lb uplift at joint 16, 104 lb uplift at joint 15, 128 lb uplift at joint 14, 117 lb uplift at joint 13, 63 lb uplift at joint 12 and 138 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



June 27, 2025

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®

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Chesterfield, MO 63017
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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	V1	Valley	2	1	Job Reference (optional)

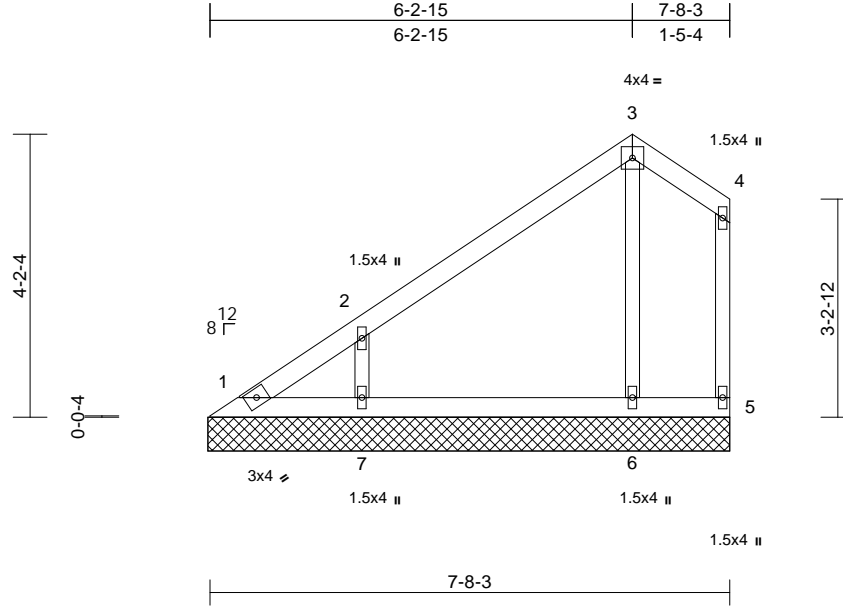
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494431
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1

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07/07/2025



Scale = 1:34.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999	244/190
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-P							Weight: 31 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=7-8-9, 5=7-8-9, 6=7-8-9, 7=7-8-9
	Max Horiz 1=152 (LC 9)
	Max Uplift 1=-50 (LC 10), 5=-41 (LC 8), 6=-24 (LC 9), 7=-167 (LC 12)
	Max Grav 1=85 (LC 9), 5=69 (LC 20), 6=248 (LC 19), 7=376 (LC 19)

FORCES

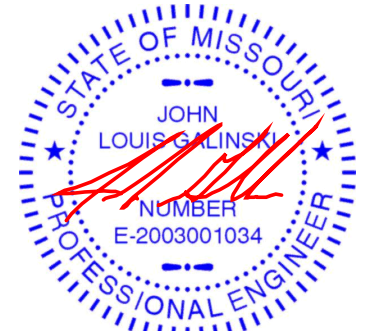
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-258/195, 2-3=-141/80, 3-4=-98/115, 4-5=-87/93
BOT CHORD	1-7=-61/66, 6-7=-61/66, 5-6=-61/66
WEBS	3-6=-181/155, 2-7=-306/300

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 6-3-5, Exterior(2E) 6-3-5 to 7-7-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 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 50 lb uplift at joint 1, 41 lb uplift at joint 5, 24 lb uplift at joint 6 and 167 lb uplift at joint 7.
- 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



June 27, 2025

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

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

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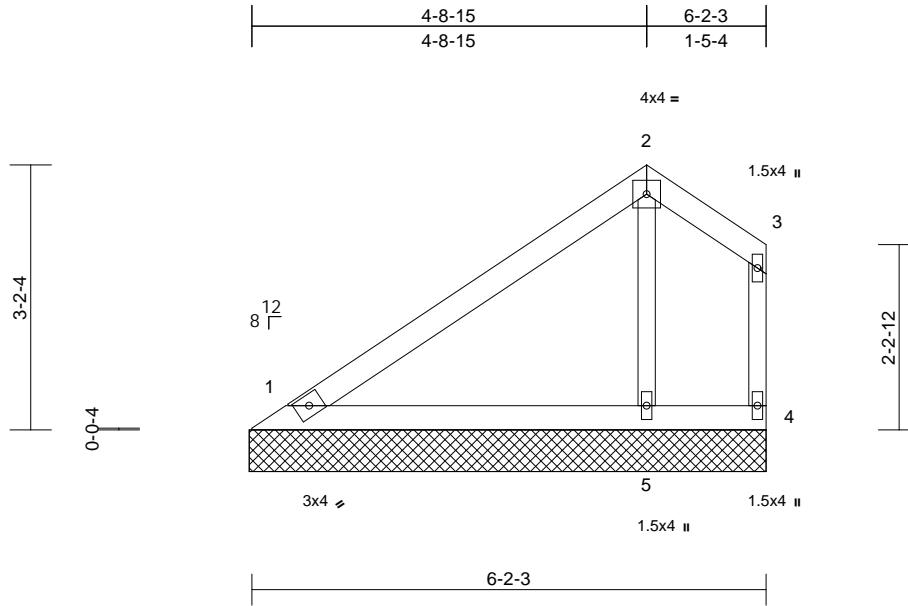
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	V2	Valley	2	1	Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:11 Page: 1

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07/07/2025



Scale = 1:27.7

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	0.42	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	4	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

BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-2-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	1=6-2-9, 4=6-2-9, 5=6-2-9
Max Horiz	1=109 (LC 9)
Max Uplift	1=-34 (LC 12), 4=-39 (LC 8), 5=-13 (LC 12)
Max Grav	1=185 (LC 1), 4=51 (LC 20), 5=303 (LC 19)

FORCES

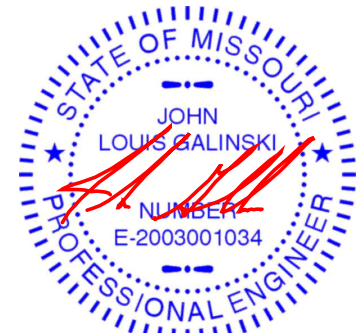
(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-110/94, 2-3=-74/92, 3-4=-75/84
BOT CHORD	1-5=-41/44, 4-5=-41/44
WEBS	2-5=-211/192

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 34 lb uplift at joint 1, 39 lb uplift at joint 4 and 13 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 27, 2025

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

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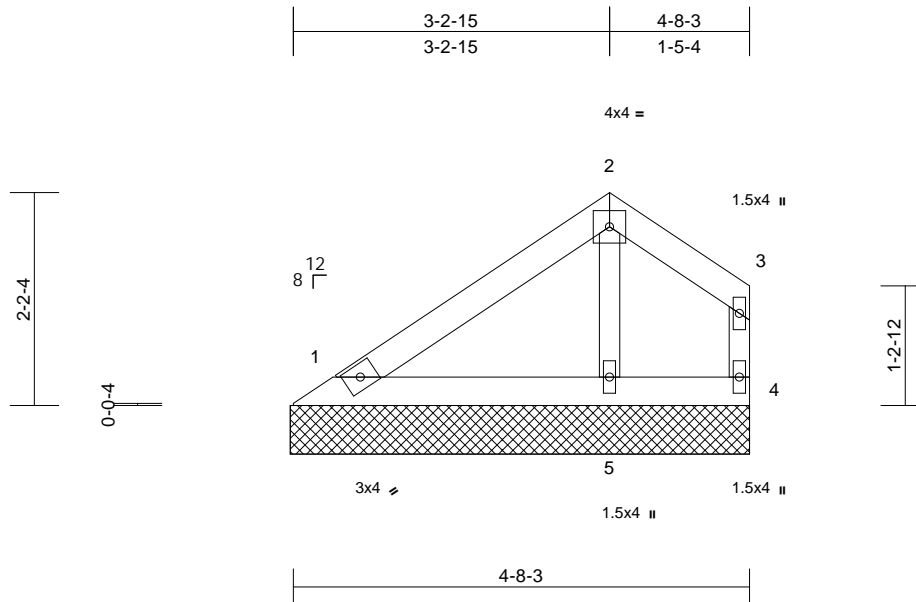
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	V3	Valley	2	1	Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1

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07/07/2025



Scale = 1:23.7

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)	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	0.03	Horiz(TL)	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
OTHERS	2x3 SPF No.2

BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-8-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size)	1=4-8-9, 4=4-8-9, 5=4-8-9
Max Horiz	1=66 (LC 9)
Max Uplift	1=-25 (LC 12), 4=-28 (LC 13), 5=-9 (LC 12)
Max Grav	1=121 (LC 1), 4=59 (LC 20), 5=207 (LC 19)

FORCES

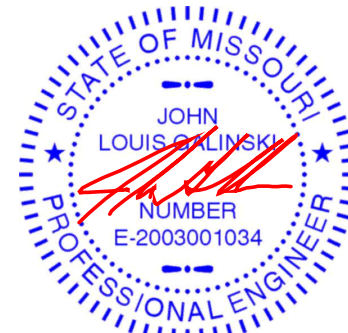
(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-72/63, 2-3=-50/67, 3-4=-63/73
BOT CHORD	1-5=-20/22, 4-5=-20/22
WEBS	2-5=-150/118

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 25 lb uplift at joint 1, 28 lb uplift at joint 4 and 9 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

June 27, 2025

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

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

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	V4	Valley	2	1	Job Reference (optional)

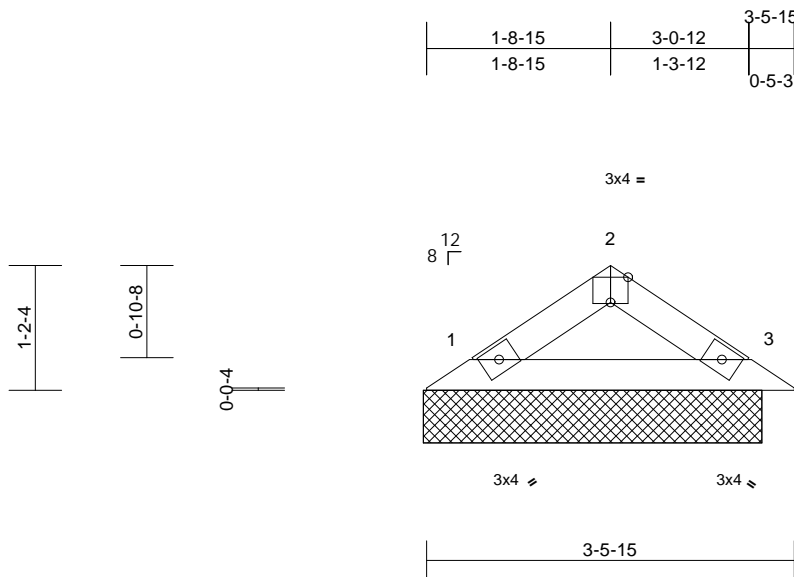
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494434
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1

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07/07/2025



Scale = 1:21.9

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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-2-9 oc purlins.

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

REACTIONS (size) 1=3-2-9, 3=3-2-9

Max Horiz 1=-24 (LC 8)

Max Uplift 1=-17 (LC 12), 3=-17 (LC 13)

Max Grav 1=117 (LC 1), 3=117 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

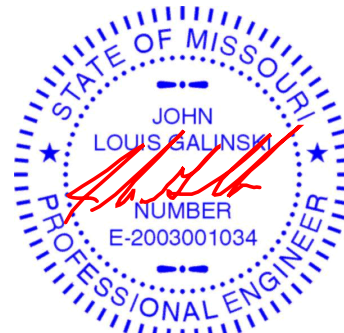
TOP CHORD 1-2=-102/70, 2-3=-102/70

BOT CHORD 1-3=-26/68

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 17 lb uplift at joint 1 and 17 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

June 27, 2025

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	V5	Valley	1	1	Job Reference (optional)

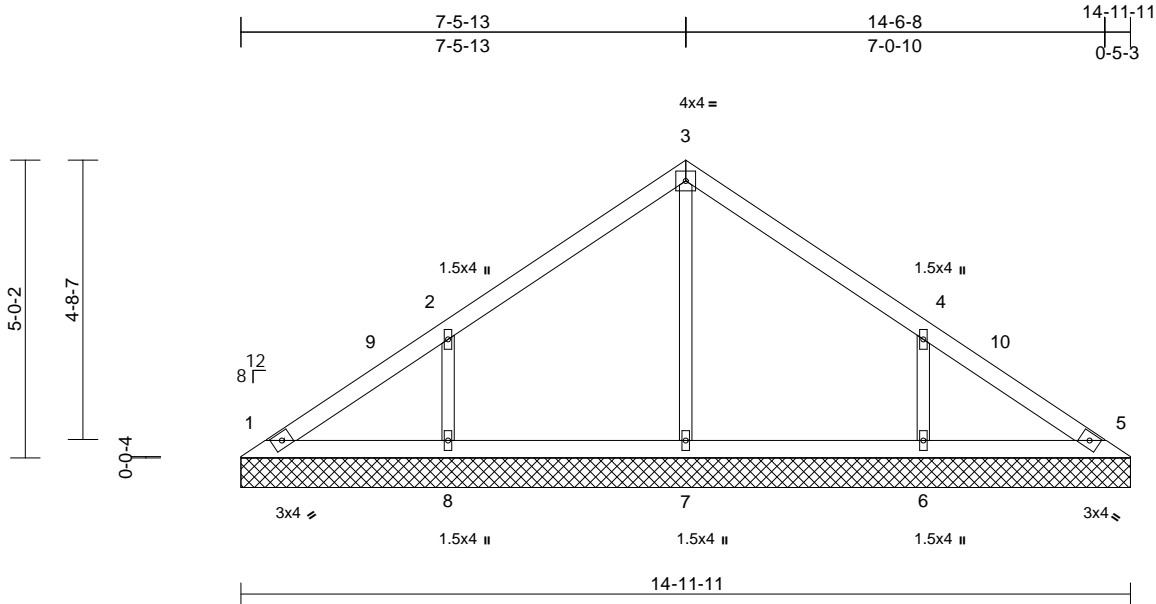
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494435
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1

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07/07/2025



Scale = 1:38.8

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	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 54 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
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=14-11-11, 5=14-11-11, 6=14-11-11, 7=14-11-11, 8=14-11-11
Max Horiz	1=131 (LC 8)
Max Uplift	1=16 (LC 13), 6=169 (LC 13), 8=169 (LC 12)
Max Grav	1=136 (LC 20), 5=127 (LC 1), 6=392 (LC 20), 7=275 (LC 1), 8=392 (LC 19)

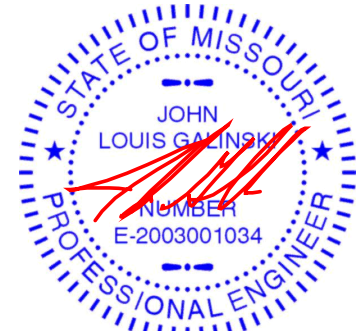
FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-137/96, 2-3=-148/119, 3-4=-140/110, 4-5=-104/52
BOT CHORD	1-8=-36/83, 7-8=-36/83, 6-7=-36/83, 5-6=-36/83
WEBS	3-7=-195/10, 2-8=-310/211, 4-6=-310/211

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) 0-5-12 to 5-5-12,
Interior (1) 5-5-12 to 7-6-3, Exterior(2R) 7-6-3 to 12-6-3,
Interior (1) 12-6-3 to 14-6-10 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 16 lb uplift at joint 1, 169 lb uplift at joint 8 and 169 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

June 27, 2025

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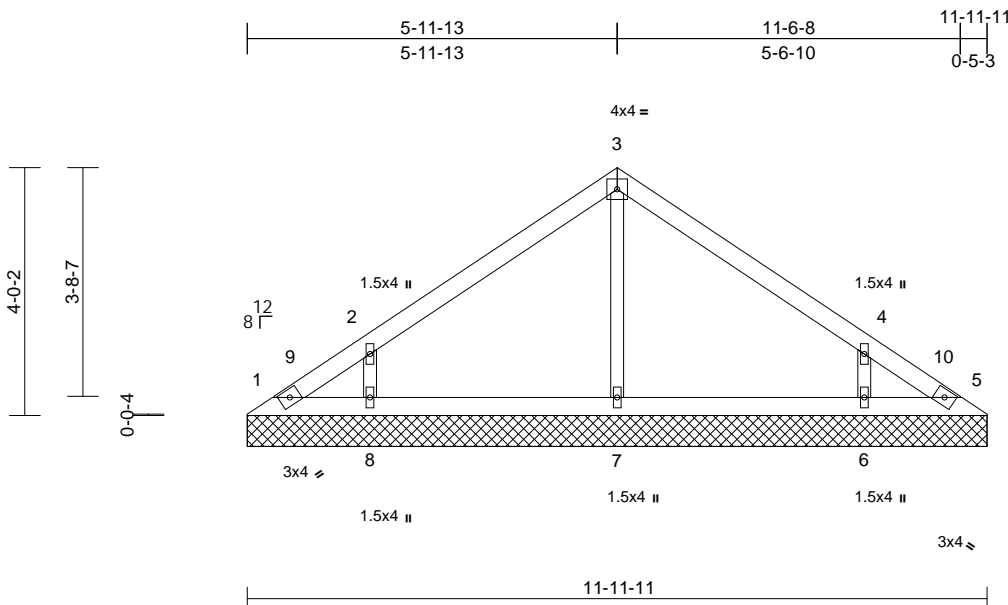
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	V6	Valley	1	1	Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:11 Page: 1

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07/07/2025



Scale = 1:37.3

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	0.20	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 42 lb	FT = 20%

LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
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=11-11-11, 5=11-11-11, 6=11-11-11, 7=11-11-11, 8=11-11-11
Max Horiz	1=-103 (LC 8)
Max Uplift	1=-38 (LC 10), 5=-19 (LC 11), 6=-154 (LC 13), 8=-154 (LC 12)
Max Grav	1=62 (LC 20), 5=50 (LC 22), 6=347 (LC 20), 7=285 (LC 1), 8=347 (LC 19)

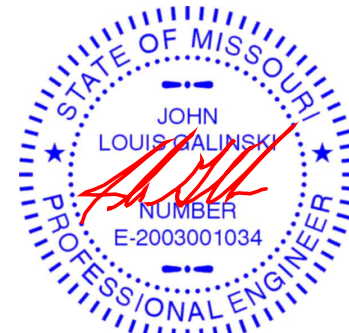
FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-106/86, 2-3=-145/99, 3-4=-140/97, 4-5=-85/51
BOT CHORD	1-8=-25/71, 7-8=-25/71, 6-7=-25/71, 5-6=-25/71
WEBS	3-7=-199/39, 2-8=-287/215, 4-6=-286/215

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) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 6-0-3, Exterior(2R) 6-0-3 to 11-0-3, Interior (1) 11-0-3 to 11-6-10 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 38 lb uplift at joint 1, 19 lb uplift at joint 5, 154 lb uplift at joint 8 and 154 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

June 27, 2025

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.sbcscomponents.com)

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 Chesterfield, MO 63017
 314.434.1200 / MiTek-US.com

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Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1
ID:4fj5PkMwRkX5crlpAuPLauztlf8f-RfC?PsB70Hq3NSgPqnL8w3ulTxbGKWCDoi7J4z0C7

Scale = 1:28.9

LUMBER

BRACING

REACTIONS

FORCES

NOTES

- 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 52 lb uplift at joint 1, 61 lb uplift at joint 3 and 1 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 WITH REFERENCE TO AISC MHP-475 (rev. 12/2022) BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only on 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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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	V8	Valley	1	1	Job Reference (optional)

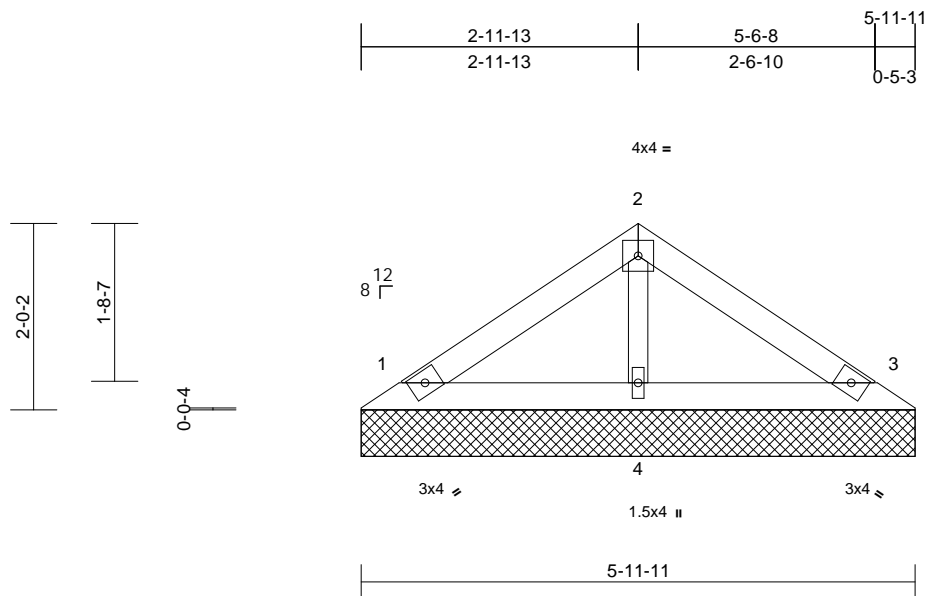
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494438
LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:07 Page: 1

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07/07/2025



Scale = 1:24.8

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	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 19 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=5-11-11, 3=5-11-11, 4=5-11-11
Max Horiz 1=-47 (LC 10)
Max Uplift 1=-32 (LC 12), 3=-38 (LC 13)
Max Grav 1=128 (LC 1), 3=128 (LC 1), 4=200 (LC 1)

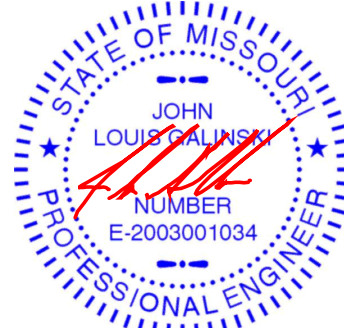
FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-81/55, 2-3=-77/55
BOT CHORD 1-4=-10/38, 3-4=-10/38
WEBS 2-4=-136/85

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 38 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

June 27, 2025

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

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

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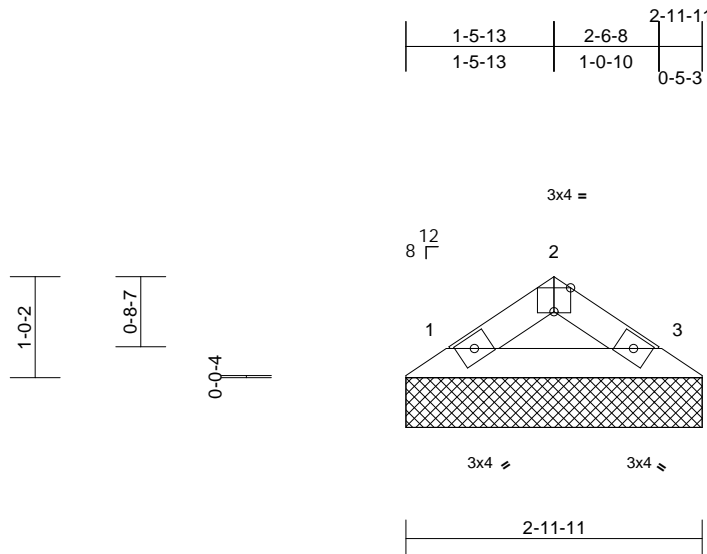
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	V9	Valley	1	1	Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:07 Page: 1

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07/07/2025



Scale = 1:23.1

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	0.05	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 3-0-7 oc purlins.

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

REACTIONS (size) 1=2-11-11, 3=2-11-11

Max Horiz 1=-19 (LC 8)

Max Uplift 1=-13 (LC 12), 3=-13 (LC 13)

Max Grav 1=93 (LC 1), 3=93 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

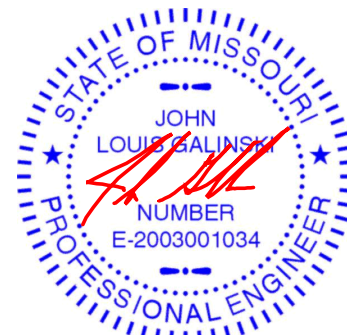
TOP CHORD 1-2=-81/56, 2-3=-81/56

BOT CHORD 1-3=-21/54

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 13 lb uplift at joint 1 and 13 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

June 27, 2025

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

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

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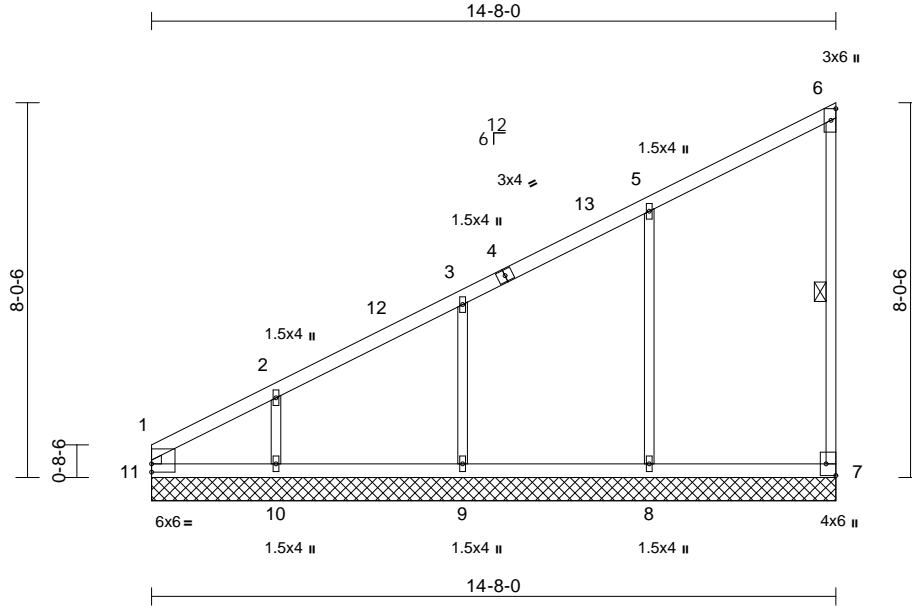
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION
P250398-01	V10	Valley	2	1	Job Reference (optional)	AS NOTED FOR PLAN REVIEW
						DEVELOPMENT SERVICES
						174494440
						LEE'S SUMMIT, MISSOURI

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1

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07/07/2025



Scale = 1:49.4									
Plate Offsets (X, Y): [7:Edge,0-2-8], [11:Edge,0-2-2]									
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(TL)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horiz(TL)	0.00	7	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R					
						PLATES		GRIP	
						MT20		244/190	
						Weight: 61 lb		FT = 20%	

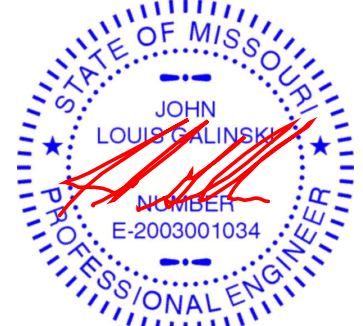
LUMBER	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2
BRACING	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-7
REACTIONS	
(size)	7=14-8-0, 8=14-8-0, 9=14-8-0, 10=14-8-0, 11=14-8-0
Max Horiz	11=340 (LC 9)
Max Uplift	7=-49 (LC 9), 8=-135 (LC 12), 9=-113 (LC 12), 10=-167 (LC 12)
Max Grav	7=142 (LC 1), 8=393 (LC 1), 9=359 (LC 1), 10=330 (LC 1), 11=178 (LC 9)
FORCES	
(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-11=-235/115, 1-2=-514/298, 2-3=-399/248, 3-5=-301/213, 5-6=-162/143, 6-7=-110/113
BOT CHORD	10-11=-150/164, 9-10=-150/164, 8-9=-150/164, 7-8=-150/164
WEBS	5-8=-306/264, 3-9=-280/202, 2-10=-255/227

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) 0-1-4 to 5-1-4, Interior (1) 5-1-4 to 14-6-12 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

- 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.
- The Fabrication Tolerance at joint 11 = 12%, joint 1 = 16%, joint 11 = 12%
- 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 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 49 lb uplift at joint 7, 135 lb uplift at joint 8, 113 lb uplift at joint 9 and 167 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



June 27, 2025

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

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

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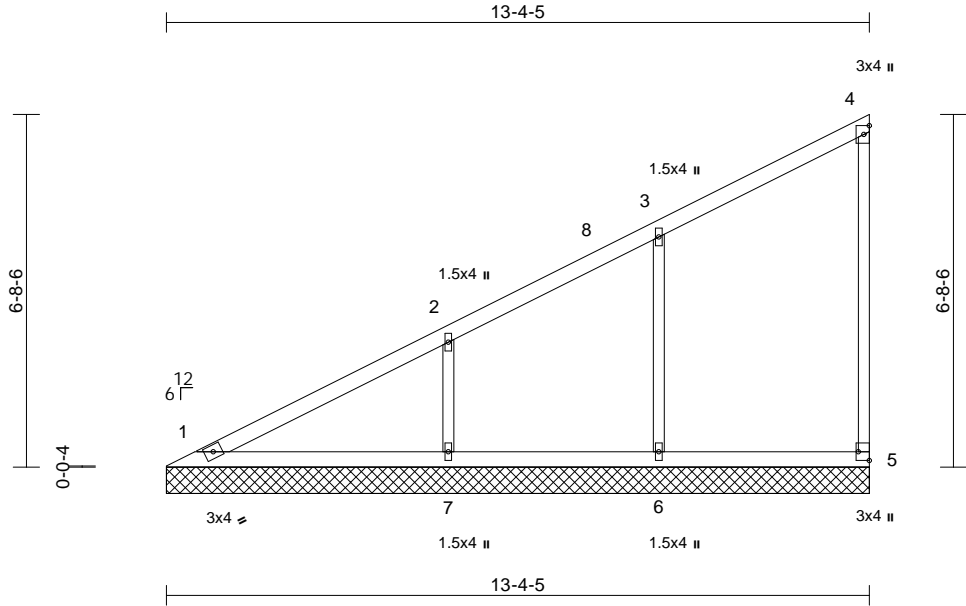
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 174494441 LEE'S SUMMIT, MISSOURI
P250398-01	V11	Valley	2	1	Job Reference (optional)	

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

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07/07/2025



Scale = 1:43.8

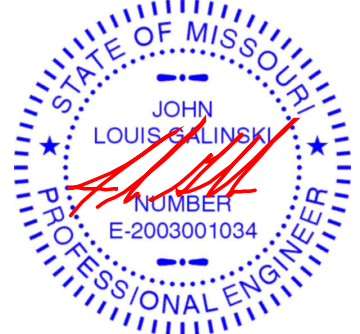
Plate Offsets (X, Y): [5:Edge,0-2-8]												
Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horiz(TL)	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	
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=13-4-5, 5=13-4-5, 6=13-4-5, 7=13-4-5
		Max Horiz 1=282 (LC 9)
		Max Uplift 5=-44 (LC 9), 6=-124 (LC 12), 7=-154 (LC 12)
		Max Grav 1=195 (LC 20), 5=147 (LC 1), 6=364 (LC 1), 7=453 (LC 1)
FORCES		(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-414/251, 2-3=-286/191, 3-4=-152/129, 4-5=-113/120	
BOT CHORD	1-7=-126/138, 6-7=-126/138, 5-6=-126/138	
WEBS	3-6=-287/252, 2-7=-341/267	

- NOTES**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-9 to 5-4-13, Interior (1) 5-4-13 to 13-3-9 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) 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 44 lb uplift at joint 5, 124 lb uplift at joint 6 and 154 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



June 27, 2025

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

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

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Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	V12	Valley	2	1	Job Reference (optional)

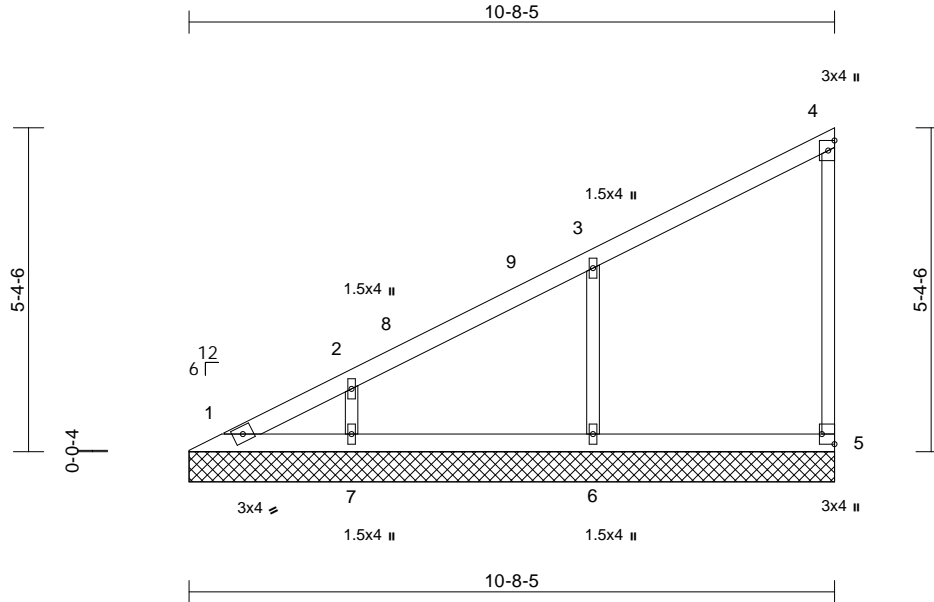
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:00 Page: 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494442
LEE'S SUMMIT, MISSOURI

07/07/2025



Scale = 1:38.2

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 40 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=10-8-5, 5=10-8-5, 6=10-8-5, 7=10-8-5
	Max Horiz	1=223 (LC 9)
	Max Uplift	5=-37 (LC 9), 6=-137 (LC 12), 7=-103 (LC 12)
	Max Grav	1=95 (LC 20), 5=140 (LC 1), 6=404 (LC 1), 7=301 (LC 1)

FORCES

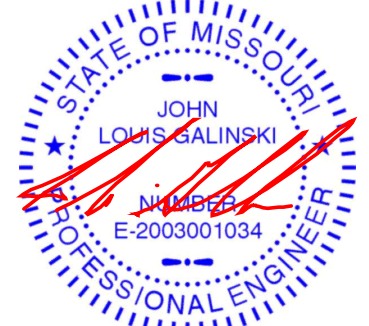
	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-377/218, 2-3=-294/184, 3-4=-138/112, 4-5=-108/124
BOT CHORD	1-7=-101/111, 6-7=-101/111, 5-6=-101/111
WEBS	3-6=-315/300, 2-7=-233/225

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-7-9 to 5-7-9, Interior (1) 5-7-9 to 10-7-9 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) 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 37 lb uplift at joint 5, 137 lb uplift at joint 6 and 103 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



June 27, 2025

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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	Roof - BY Lot 2290
P250398-01	V13	Valley	1	1	Job Reference (optional)

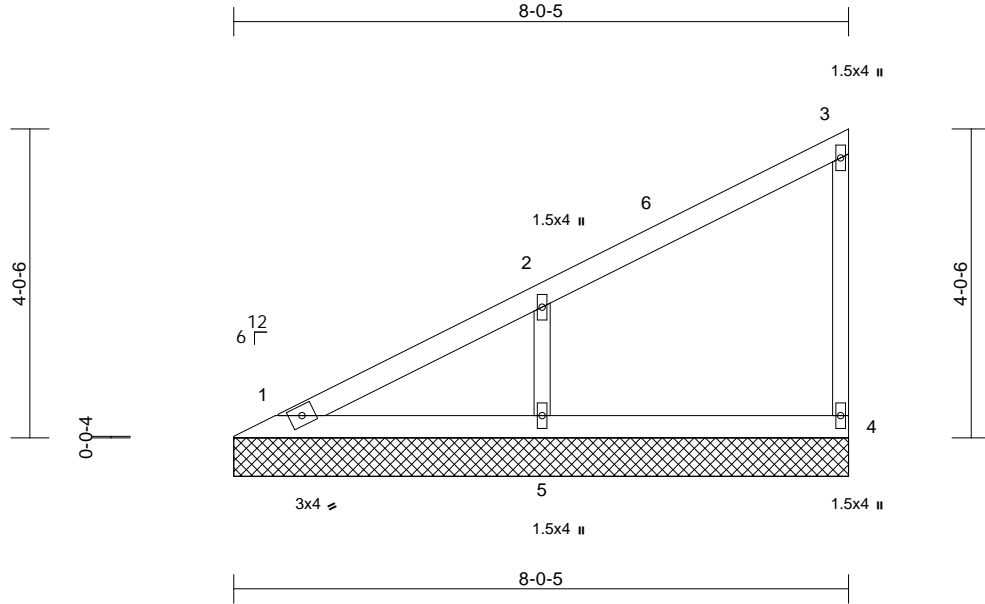
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:02 Page: 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
174494443
LEE'S SUMMIT, MISSOURI

07/07/2025



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	0.27	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	0.08	Horiz(TL)	0.00	4	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
OTHERS 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) 1=8-0-5, 4=8-0-5, 5=8-0-5
Max Horiz 1=163 (LC 9)
Max Uplift 4=31 (LC 9), 5=140 (LC 12)
Max Grav 1=119 (LC 20), 4=136 (LC 1), 5=413 (LC 1)

FORCES

(lb) - Maximum Compression/Maximum Tension

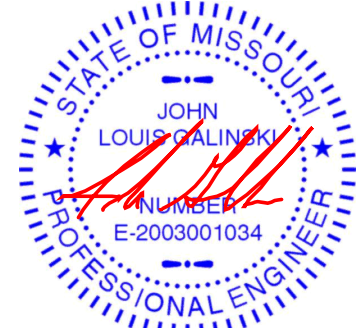
TOP CHORD 1-2=-293/175, 2-3=-128/98, 3-4=-109/135
BOT CHORD 1-5=-76/82, 4-5=-76/82
WEBS 2-5=-321/331

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) 0-7-9 to 5-7-9,
Interior (1) 5-7-9 to 7-11-9 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" 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 31 lb uplift at joint
4 and 140 lb uplift at joint 5.
- 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



June 27, 2025

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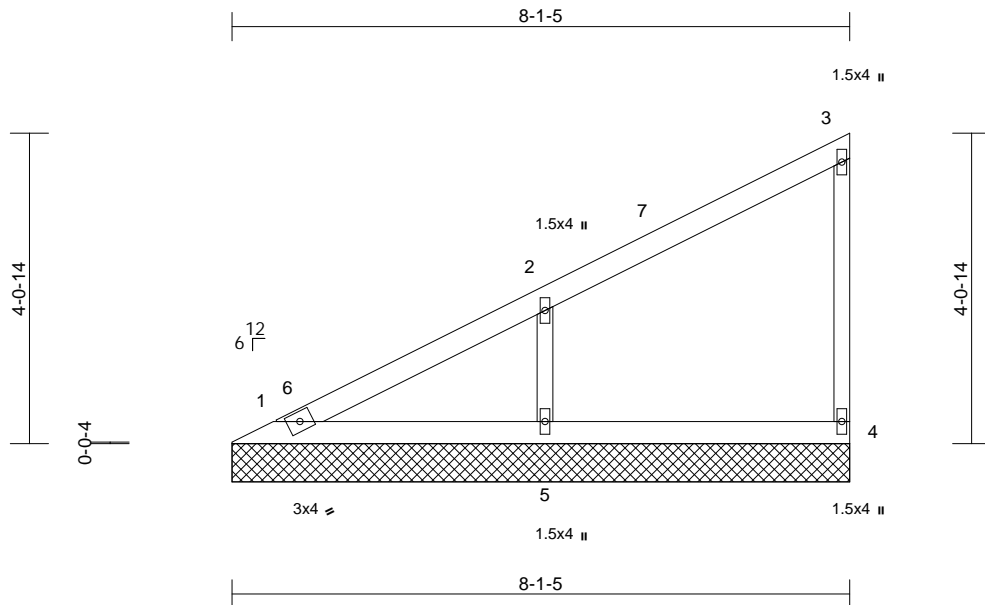
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 2290
P250398-01	V14	Valley	1	1	Job Reference (optional)

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

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Thu Jun 26 18:59:02 Page: 1

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07/07/2025



Scale = 1:30.2

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	0.28	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	0.08	Horiz(TL)	0.00	4	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
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=8-1-5, 4=8-1-5, 5=8-1-5
Max Horiz	1=165 (LC 9)
Max Uplift	4=-31 (LC 9), 5=-142 (LC 12)
Max Grav	1=123 (LC 20), 4=136 (LC 1), 5=418 (LC 1)

FORCES

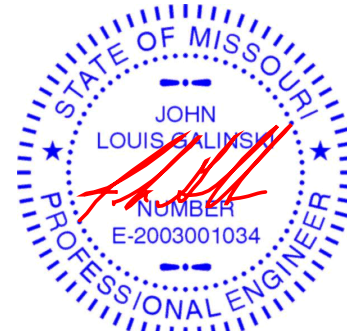
(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-295/176, 2-3=-129/99, 3-4=-109/135
BOT CHORD	1-5=-77/83, 4-5=-77/83
WEBS	2-5=-325/333

NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)
exterior zone and C-C Exterior(2E) 0-7-9 to 5-7-9,
Interior (1) 5-7-9 to 8-0-9 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) 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 31 lb uplift at joint
4 and 142 lb uplift at joint 5.
- 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

June 27, 2025

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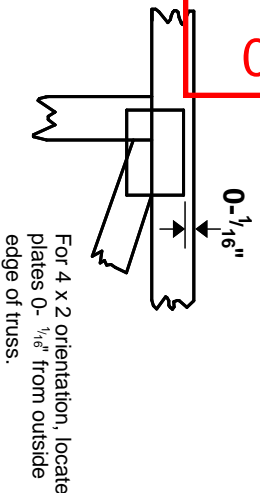
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Symbols

PLATE LOCATION AND ORIENTATION

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



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

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

PLATE SIZE

4 X 4

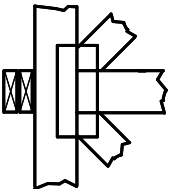
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

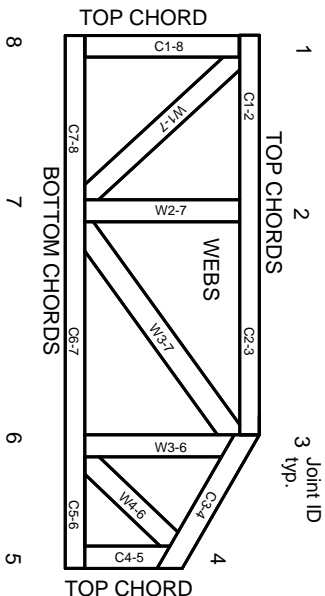


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:
ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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.