



RE: P250543-01  
Roof - BY Lot 360

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

**Site Information:**

Customer: Clayton Properties Project Name: P250543-01  
Lot/Block: 360 Model: Carolina - Modern Farmhouse  
Address: 1130 SE Ranchland St. Subdivision: Bailey Farms  
City: Lee's Summit State: MO

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

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

This package includes 38 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I68187632	A1	9/13/2024	21	I68187652	G2	9/13/2024
2	I68187633	A2	9/13/2024	22	I68187653	G3	9/13/2024
3	I68187634	A3	9/13/2024	23	I68187654	J1	9/13/2024
4	I68187635	A4	9/13/2024	24	I68187655	J2	9/13/2024
5	I68187636	A5	9/13/2024	25	I68187656	J3	9/13/2024
6	I68187637	A6	9/13/2024	26	I68187657	J4	9/13/2024
7	I68187638	A7	9/13/2024	27	I68187658	J5	9/13/2024
8	I68187639	B1	9/13/2024	28	I68187659	V1	9/13/2024
9	I68187640	B2	9/13/2024	29	I68187660	V2	9/13/2024
10	I68187641	B3	9/13/2024	30	I68187661	V3	9/13/2024
11	I68187642	C1	9/13/2024	31	I68187662	V4	9/13/2024
12	I68187643	C2	9/13/2024	32	I68187663	V5	9/13/2024
13	I68187644	CG1	9/13/2024	33	I68187664	V6	9/13/2024
14	I68187645	D1	9/13/2024	34	I68187665	V7	9/13/2024
15	I68187646	D2	9/13/2024	35	I68187666	V8	9/13/2024
16	I68187647	D5	9/13/2024	36	I68187667	V9	9/13/2024
17	I68187648	E1	9/13/2024	37	I68187668	V10	9/13/2024
18	I68187649	E2	9/13/2024	38	I68187669	V11	9/13/2024
19	I68187650	F1	9/13/2024				
20	I68187651	G1	9/13/2024				

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

Truss Design Engineer's Name: Sevier, Scott

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

Missouri COA: 001193

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



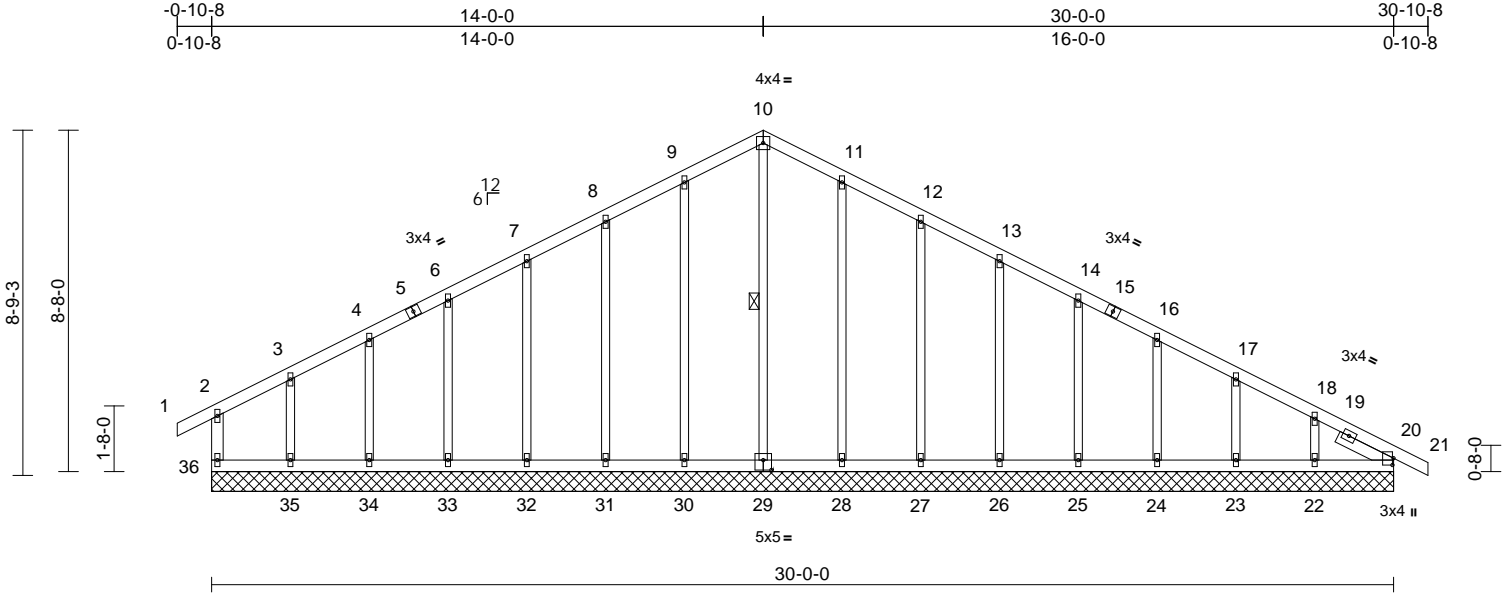
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	168187632
P250543-01	A1	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:45

Page: 1

ID:a28z?L6gE29gV2LEVbGk?yzbjFxC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC7f



Scale = 1:58.5												
Plate Offsets (X, Y): [20:0-2-1,0-0-5], [29:0-2-8,0-3-0]												
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 154 lb	FT = 20%

<b>LUMBER</b>		<b>TOP CHORD</b>		2-36=147/112, 1-2=0/32, 2-3=58/51, 3-4=52/110, 4-6=70/162, 6-7=89/216, 7-8=108/270, 8-9=127/327, 9-10=145/374, 10-11=145/374, 11-12=127/327, 12-13=108/270, 13-14=89/217, 14-16=77/172, 16-17=91/145, 17-18=110/116, 18-20=168/107, 20-21=0/6		5) Gable requires continuous bottom chord bearing.	
TOP CHORD		2x4 SP No.2		35-36=80/168, 34-35=80/168, 33-34=80/168, 32-33=80/168, 31-32=80/168, 30-31=80/168, 28-30=80/168, 27-28=80/168, 26-27=80/168, 25-26=80/168, 24-25=80/168, 23-24=80/168, 22-23=80/168, 20-22=80/168		6) Gable studs spaced at 2-0-0 oc.	
BOT CHORD		2x4 SP No.2		10-29=243/46, 9-30=149/82, 8-31=139/104, 7-32=140/96, 6-33=139/97, 4-34=144/121, 3-35=124/161, 11-28=149/82, 12-27=139/104, 13-26=140/95, 14-25=140/97, 16-24=140/96, 17-23=142/122, 18-22=136/163		7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.	
WEBS		2x4 SP No.2				8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.	
OTHERS		2x3 SPF No.2				9) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 36, 20, 30, 31, 32, 33, 34, 35, 28, 27, 26, 25, 24, 23, and 22. This connection is for uplift only and does not consider lateral forces.	
SLIDER		Right 2x4 SP No.2 -- 1-6-7				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.	
<b>BRACING</b>		<b>TOP CHORD</b>		<b>WEBS</b>		<b>LOAD CASE(S)</b>	
TOP CHORD		Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.		10-29		Standard	
BOT CHORD		Rigid ceiling directly applied or 10-0-0 oc bracing.					
WEBS		1 Row at midpt					
<b>REACTIONS</b>		(size)					
		20=30-0-0, 22=30-0-0, 23=30-0-0, 24=30-0-0, 25=30-0-0, 26=30-0-0, 27=30-0-0, 28=30-0-0, 29=30-0-0, 30=30-0-0, 31=30-0-0, 32=30-0-0, 33=30-0-0, 34=30-0-0, 35=30-0-0, 36=30-0-0					
Max Horiz		36=157 (LC 10)					
Max Uplift		20=59 (LC 9), 22=95 (LC 13), 23=58 (LC 13), 24=62 (LC 13), 25=61 (LC 13), 26=60 (LC 13), 27=65 (LC 13), 28=55 (LC 13), 30=51 (LC 12), 31=67 (LC 12), 32=59 (LC 12), 33=64 (LC 12), 34=50 (LC 12), 35=109 (LC 12), 36=33 (LC 13)					
Max Grav		20=157 (LC 19), 22=180 (LC 1), 23=181 (LC 26), 24=180 (LC 1), 25=180 (LC 26), 26=180 (LC 1), 27=179 (LC 26), 28=189 (LC 26), 29=226 (LC 21), 30=189 (LC 25), 31=179 (LC 25), 32=180 (LC 1), 33=179 (LC 25), 34=184 (LC 1), 35=164 (LC 25), 36=164 (LC 1)					
<b>FORCES</b>		(lb) - Maximum Compression/Maximum Tension					



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:39

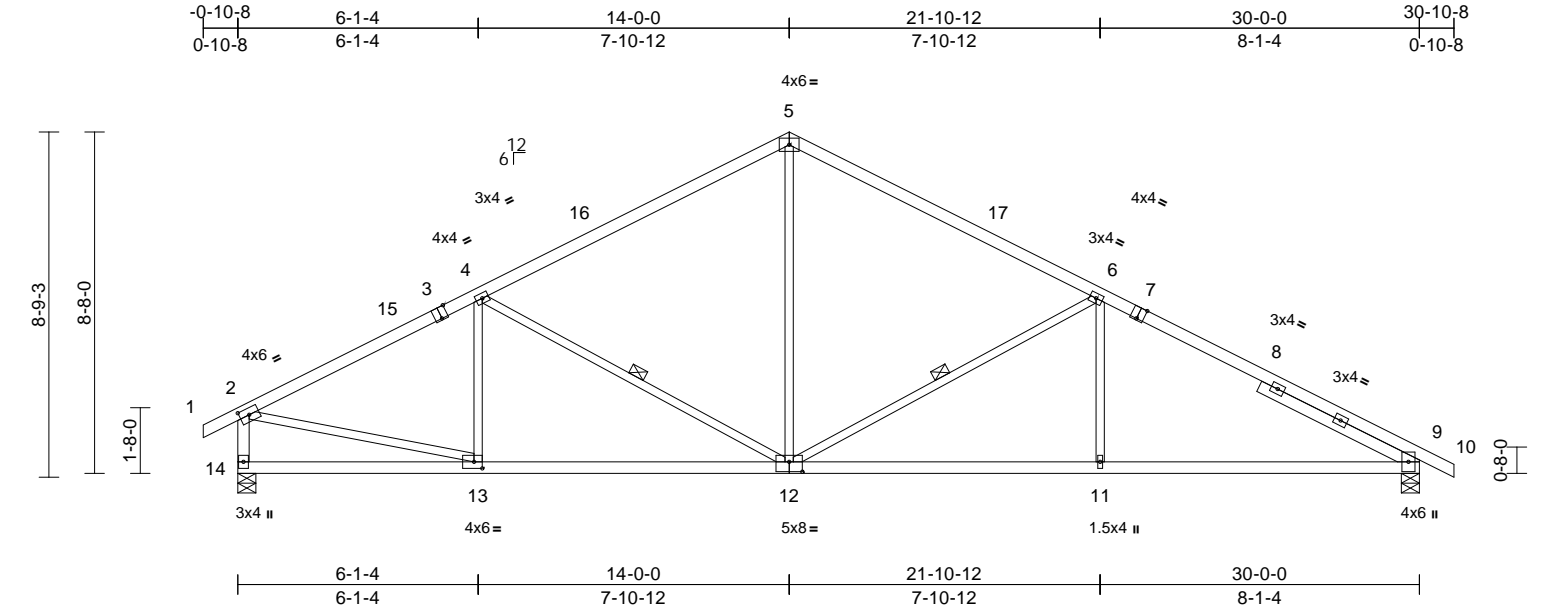
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	A2	Common	6	1	Job Reference (optional)	168187633

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:46

Page: 1

ID:EMtWWRGCPkgzxuGYC7UYUuzbjFI-RFC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:58.5

Plate Offsets (X, Y): [2:0-2-15,0-2-0], [3:0-2-0,Edge], [7:0-2-0,Edge], [9:0-3-9,0-1-5], [12:0-4-0,0-3-0], [13:0-2-8,0-2-0]

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	0.61	Vert(LL)	-0.11	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.25	9-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 139 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP 1650F 1.5E \*Except\* 1-3,7-10:2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x3 SPF No.2 \*Except\* 14-2:2x4 SP No.2  
SLIDER Right 2x4 SP No.2 -- 4-5-15

#### BRACING

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

WEBS 1 Row at midpt 6-12, 4-12

**REACTIONS** (size) 9=0-5-8, 14=0-5-8  
Max Horiz 14=157 (LC 10)  
Max Uplift 9=233 (LC 13), 14=218 (LC 12)  
Max Grav 9=1404 (LC 1), 14=1415 (LC 1)

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

TOP CHORD 1-2=0/32, 2-4=-1798/311, 4-5=-1504/342, 5-6=-1504/347, 6-9=-2249/364, 9-10=0/6, 2-14=-1360/304

BOT CHORD 13-14=-125/193, 11-13=-267/1894, 9-11=-217/1894

WEBS 5-12=-73/708, 6-12=-798/306, 6-11=0/335, 4-12=-447/233, 4-13=-207/133, 2-13=-175/1479

#### 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) 1-1-8 to 6-1-8, Interior (1) 6-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 21-0-0, Interior (1) 21-0-0 to 32-10-8 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 9. This connection is for uplift only and does not consider lateral forces.
- 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



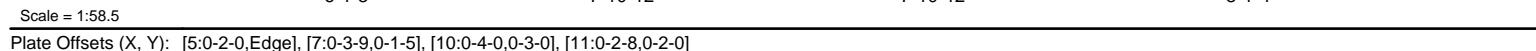
September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:39

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:46 Page: 1  
ID:EMtWWRGCPkqzuxGYC7UYUuzbFiRfC?PsB70Ha3NSaPanL8w3ulTXbGKWCrDdoi7J4zJC?f



<b>LUMBER</b>		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)
TOP CHORD	2x4 SP 1650F 1.5E *Except* 5-8:2x4 SP No.2	exterior zone and C-C Exterior(2E) 2-1-13 to 7-1-13, Interior (1) 7-1-13 to 16-0-0, Exterior(2R) 16-0-0 to 21-0-0, Interior (1) 21-0-0 to 32-10-8 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
BOT CHORD	2x4 SP No.2	
WEBS	2x3 SPF No.2 *Except* 12-1:2x4 SP No.2	
SLIDER	Right 2x4 SP No.2 -- 4-5-15	
<b>BRACING</b>		
TOP CHORD	Structural wood sheathing directly applied or 3-3-3 oc purlins, except end verticals.	
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.	
WEBS	1 Row at midpt 4-10, 2-10	
<b>REACTIONS</b>	(size) 7=0-5-8, 12= Mechanical	3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
	Max Horiz 12=-166 (LC 17)	4) Bearings are assumed to be: , Joint 7 SP No.2 crushing capacity of 565 psi.
	Max Uplift 7=-233 (LC 13), 12=-192 (LC 12)	5) Refer to girder(s) for truss to truss connections.
	Max Grav 7=1405 (LC 1), 12=1342 (LC 1)	6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 12.
<b>FORCES</b>		7) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7. This connection is for uplift only and does not consider lateral forces.
TOP CHORD	(lb) - Maximum Compression/Maximum Tension	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.
	1-2=-1802/311, 2-3=-1507/345,	
	3-4=-1506/346, 4-7=-2251/364, 7-8=0/6, 1-12=-1288/251	
BOT CHORD	11-12=-101/192, 9-11=-266/1896,	
	7-9=-219/1896	
WEBS	3-10=-73/711, 4-10=-799/306, 4-9=0/335,	
	2-10=-455/233, 2-11=-213/142,	
	1-11=-211/1503	
<b>LOAD CASE(S)</b> Standard		

September 13, 2024

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

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

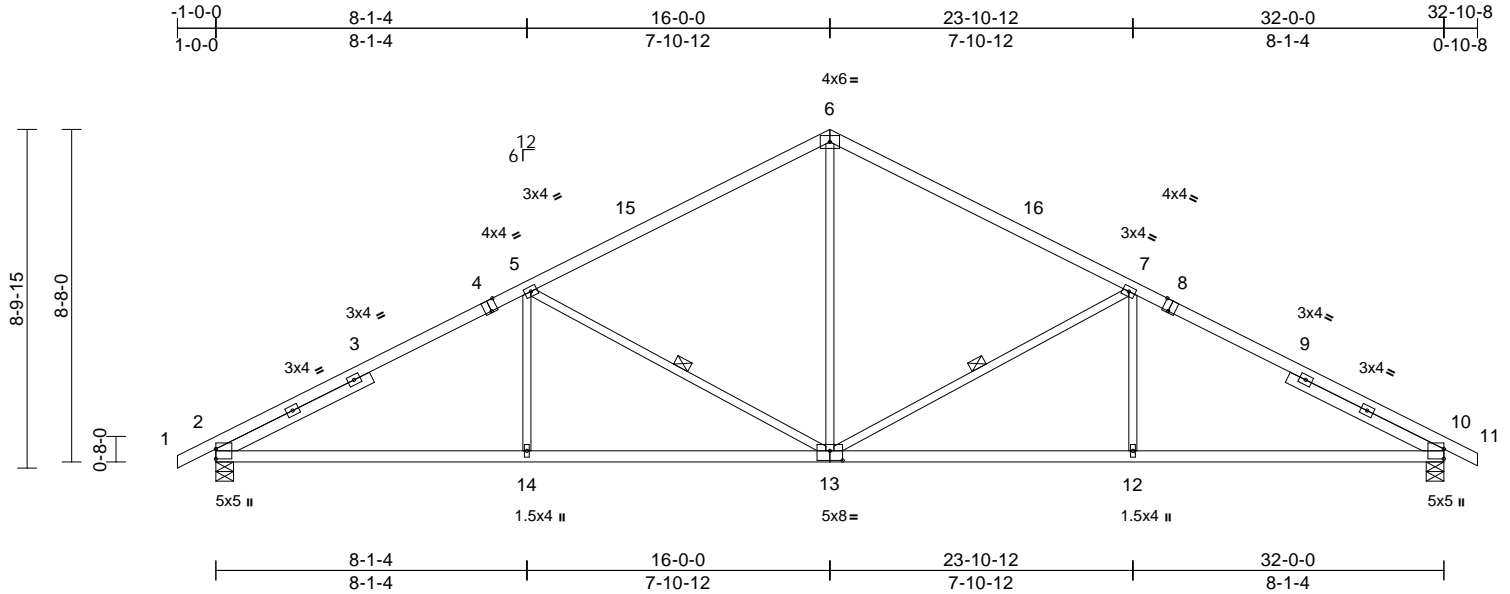
**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
16023 Swingle Ridge Rd.  
Chesterfield, MO 63005  
DEVILBOLT SERVICES  
©2009 MiTek US, Inc.  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:39

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	A4	Common	1	1	Job Reference (optional)	168187635

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:47  
ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:60  
Plate Offsets (X, Y): [4:0-2-0,Edge], [8:0-2-0,Edge], [13:0-4-0,0-3-0]

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	0.68	Vert(LL)	-0.12	2-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.26	10-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.11	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 145 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP 1650F 1.5E \*Except\* 1-4,8-11:2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x3 SPF No.2  
SLIDER Left 2x4 SP No.2 -- 4-5-15, Right 2x4 SP No.2 -- 4-5-15

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 3-0-9 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 9-9-4 oc bracing.  
WEBS 1 Row at midpt 7-13, 5-13

**REACTIONS** (size) 2=0-5-8, 10=0-5-8  
Max Horiz 2=161 (LC 16)  
Max Uplift 2=-244 (LC 12), 10=-241 (LC 13)  
Max Grav 2=1510 (LC 1), 10=1501 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/10, 2-5=-2447/389, 5-6=-1710/373, 6-7=-1710/374, 7-10=-2448/390, 10-11=0/6  
BOT CHORD 2-14=-358/2068, 12-14=-358/2069, 10-12=-242/2069  
WEBS 6-13=-100/889, 7-13=-792/305, 7-12=0/337, 5-13=-790/304, 5-14=0/337

**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) -1-0-0 to 4-0-0, Interior (1) 4-0-0 to 16-0-0, Exterior(2R) 16-0-0 to 21-0-0, Interior (1) 21-0-0 to 32-10-8 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.
- One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
- 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



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:40



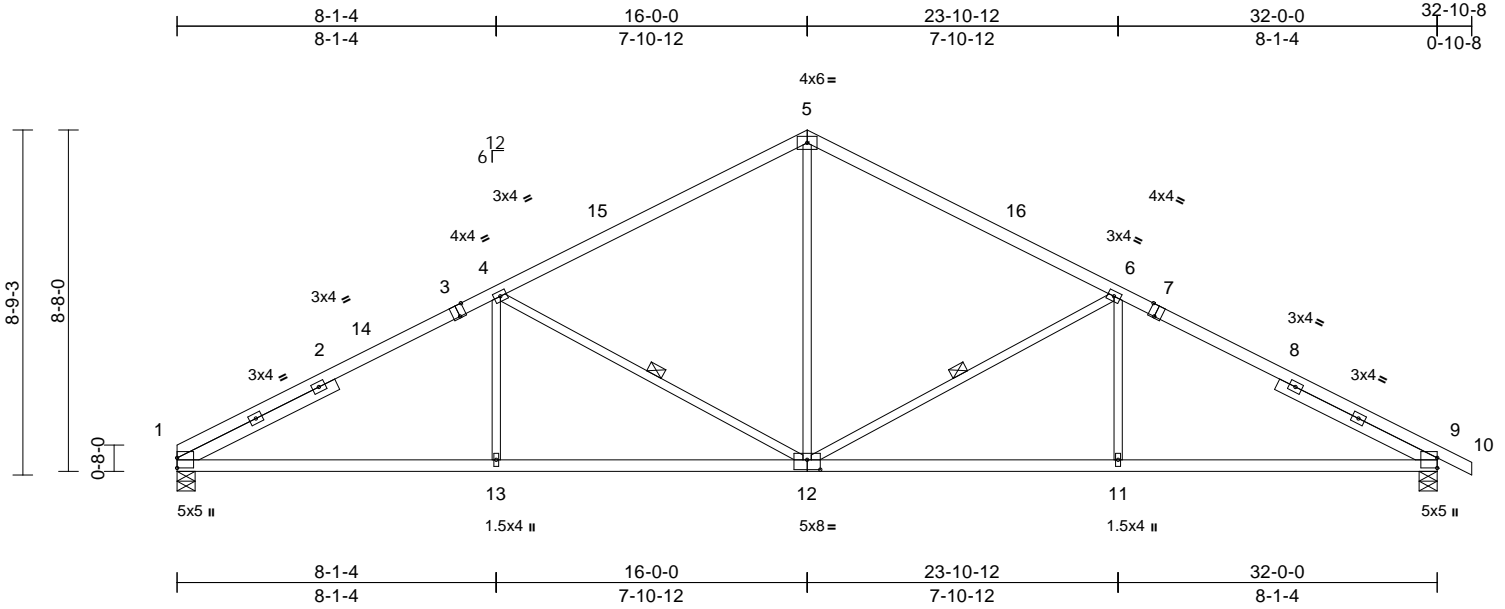
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	168187636
P250543-01	A5	Common	8	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:47

Page: 1

ID:pnBNuPDK6pIO4QXzX\_wrtszbjFo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:58.5

Plate Offsets (X, Y): [3:0-2-0,Edge], [7:0-2-0,Edge], [12:0-4-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.12	1-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.27	1-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 144 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP 1650F 1.5E \*Except\* 1-3,7-10:2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x3 SPF No.2  
SLIDER Left 2x4 SP No.2 -- 4-5-15, Right 2x4 SP No.2 -- 4-5-15

#### BRACING

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied or 9-8-11 oc bracing.

WEBS 1 Row at midpt 6-12, 4-12

**REACTIONS** (size) 1=0-5-8, 9=0-5-8  
Max Horiz 1=-161 (LC 13)  
Max Uplift 1=-218 (LC 12), 9=-241 (LC 13)  
Max Grav 1=1439 (LC 1), 9=1502 (LC 1)

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

TOP CHORD 1-4=-2454/401, 4-5=-1712/379,  
5-6=-1712/374, 6-9=-2450/390, 9-10=0/6

BOT CHORD 1-13=-361/2075, 11-13=-361/2075,  
9-11=-246/2071

WEBS 5-12=-105/891, 6-12=-792/305, 6-11=0/337,  
4-12=-796/306, 4-13=0/339

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 16-0-0, Exterior(2R) 16-0-0 to 21-0-0, Interior (1) 21-0-0 to 32-10-8 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.
- One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 9. This connection is for uplift only and does not consider lateral forces.
- 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



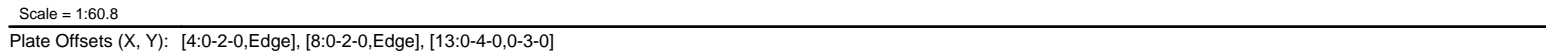
September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:40

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:47 Page: 1  
ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



**LUMBER**

TOP CHORD	2x4 SP 1650F 1.5E *Except* 1-4,8-11:2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 4-5-15, Right 2x4 SP No.2 -- 4-5-15

TOP CHORD	Structural wood sheathing directly applied or 3-0-9 oc purlins.	
BOT CHORD	Rigid ceiling directly applied or 9-9-11 oc bracing.	
WEBS	1 Row at midpt	7-13, 5-13

**REACTIONS** (size) 2=0-5-8, 10=0-5-8  
 Max Horiz 2=171 (LC 12)  
 Max Uplift 2=-257 (LC 12), 10=-240 (LC 13)  
 Max Grav 2=1547 (LC 1), 10=1500 (LC 1)

<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
<b>TOP CHORD</b>	1-2=0/27, 2-5=-2439/379, 5-6=-1706/369, 6-7=-1707/373, 7-10=-2445/389, 10-11=0/6
<b>BOT CHORD</b>	2-14=-354/2058, 12-14=-354/2066, 10-12=-238/2066
<b>WEBS</b>	6-13=-99/885, 7-13=-792/305, 7-12=0/337, 5-13=-782/300, 5-14=0/336

- 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) -1-6-0 to 3-6-0,  
Interior (1) 3-6-0 to 16-0-0, Exterior(2R) 16-0-0 to  
21-0-0, Interior (1) 21-0-0 to 32-10-8 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) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at j(s) 10 and 2. This connection is for uplift only and does not consider lateral forces.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



**WARNING – Verify design parameters and READ NOTES on this and INCLUDED MITER KEEF ELEMENTS (see MIT-1473 Rev. 1/2/2023) BEFORE USE.** Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcsccomponents.com](http://www.sbcsccomponents.com))

**RELEASE FOR CONSTRUCTION**  
**AS NOTED ON PLANS REVIEW**  
**DEVELOPMENT SERVICES**  
**LEE'S SUMMIT, MISSOURI**  
**08/13/2025 5:04:40**

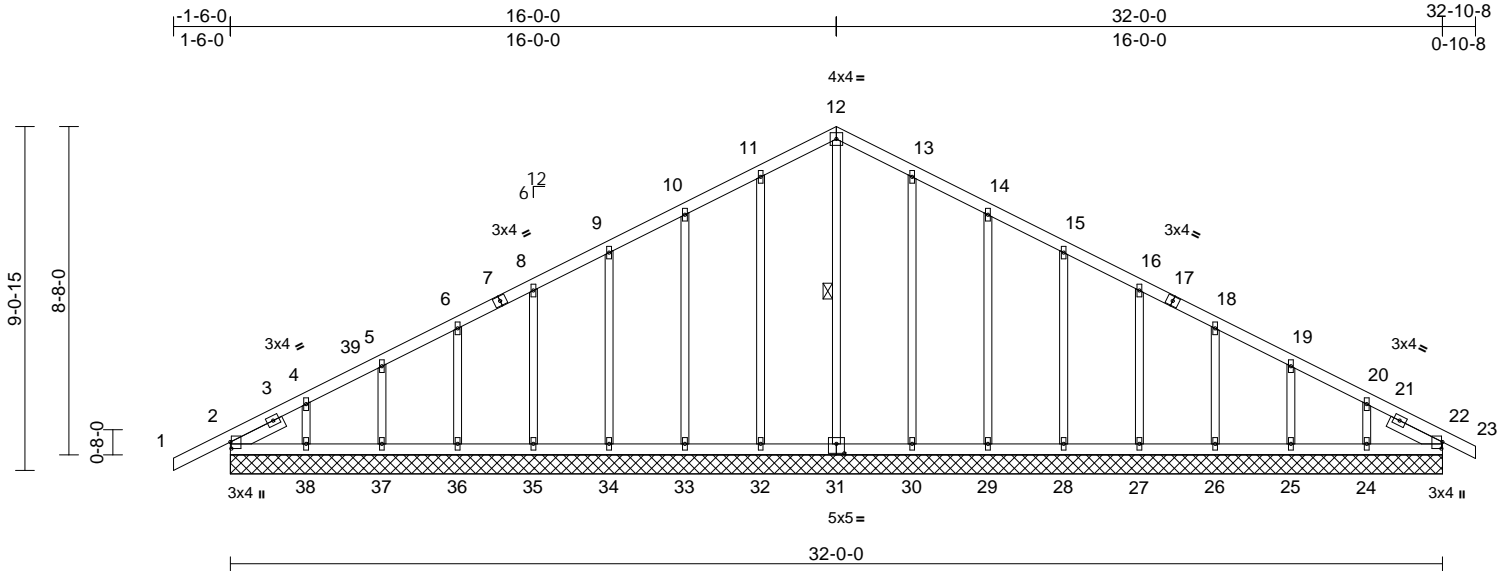
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	168187638
P250543-01	A7	Common Supported Gable	1	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:47

Page: 1

ID:2EiMDg7J?MHX6CwQ3JnzYAzbjFw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?r



Scale = 1:60.8

Plate Offsets (X, Y): [2:0-2-1,0-0-5], [22:0-2-1,0-0-5], [31:0-2-8,0-3-0]

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	0.17	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	22	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 163 lb FT = 20%											

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x3 SPF No.2  
SLIDER Left 2x4 SP No.2 -- 1-6-7, Right 2x4 SP No.2 -- 1-6-7

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 12-31

**REACTIONS** (size)  
2=32-0-0, 22=32-0-0, 24=32-0-0, 25=32-0-0, 26=32-0-0, 27=32-0-0, 28=32-0-0, 29=32-0-0, 30=32-0-0, 31=32-0-0, 32=32-0-0, 33=32-0-0, 34=32-0-0, 35=32-0-0, 36=32-0-0, 37=32-0-0, 38=32-0-0  
Max Horiz 2=171 (LC 12)  
Max Uplift 2=43 (LC 8), 24=92 (LC 13), 25=58 (LC 13), 26=62 (LC 13), 27=61 (LC 13), 28=60 (LC 13), 29=66 (LC 13), 30=54 (LC 13), 32=58 (LC 12), 33=64 (LC 12), 34=61 (LC 12), 35=61 (LC 12), 36=62 (LC 12), 37=59 (LC 12), 38=90 (LC 12)  
Max Grav 2=236 (LC 1), 22=162 (LC 1), 24=178 (LC 26), 25=181 (LC 1), 26=180 (LC 26), 27=180 (LC 26), 28=180 (LC 1), 29=179 (LC 26), 30=189 (LC 26), 31=197 (LC 22), 32=189 (LC 25), 33=179 (LC 25), 34=180 (LC 1), 35=180 (LC 1), 36=178 (LC 25), 37=187 (LC 1), 38=143 (LC 25)

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

**TOP CHORD** 1-2=0/27, 2-4=-216/71, 4-5=-148/79, 5-6=-111/93, 6-8=-84/119, 8-9=-68/147, 9-10=-71/185, 10-11=-91/241, 11-12=-109/290, 12-13=-109/290, 13-14=-91/241, 14-15=-71/185, 15-16=-53/131, 16-18=-51/77, 18-19=-62/28, 19-20=-86/23, 20-22=-151/47, 22-23=0/6  
**BOT CHORD** 2-38=-44/177, 37-38=-44/177, 36-37=-44/177, 35-36=-44/177, 34-35=-44/177, 33-34=-44/177, 32-33=-44/177, 30-32=-44/177, 29-30=-44/177, 28-29=-44/177, 27-28=-44/177, 26-27=-44/177, 25-26=-44/177, 24-25=-44/177, 22-24=-44/177  
**WEBS** 12-31=-172/28, 11-32=-149/86, 10-33=-139/102, 9-34=-140/95, 8-35=-140/97, 6-36=-139/96, 5-37=-147/113, 4-38=-106/149, 13-30=-149/86, 14-29=-139/102, 15-28=-140/96, 16-27=-140/97, 18-26=-139/97, 19-25=-142/121, 20-24=-134/179

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -1-6-0 to 3-6-0, Exterior(2N) 3-6-0 to 16-0-0, Corner(3R) 16-0-0 to 21-0-0, Exterior(2N) 21-0-0 to 32-10-8 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.
- 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 43 lb uplift at joint 2, 58 lb uplift at joint 32, 64 lb uplift at joint 33, 61 lb uplift at joint 34, 61 lb uplift at joint 35, 62 lb uplift at joint 36, 59 lb uplift at joint 37, 90 lb uplift at joint 38, 54 lb uplift at joint 30, 66 lb uplift at joint 29, 60 lb uplift at joint 28, 61 lb uplift at joint 27, 62 lb uplift at joint 26, 58 lb uplift at joint 25 and 92 lb uplift at joint 24.
- 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



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:40



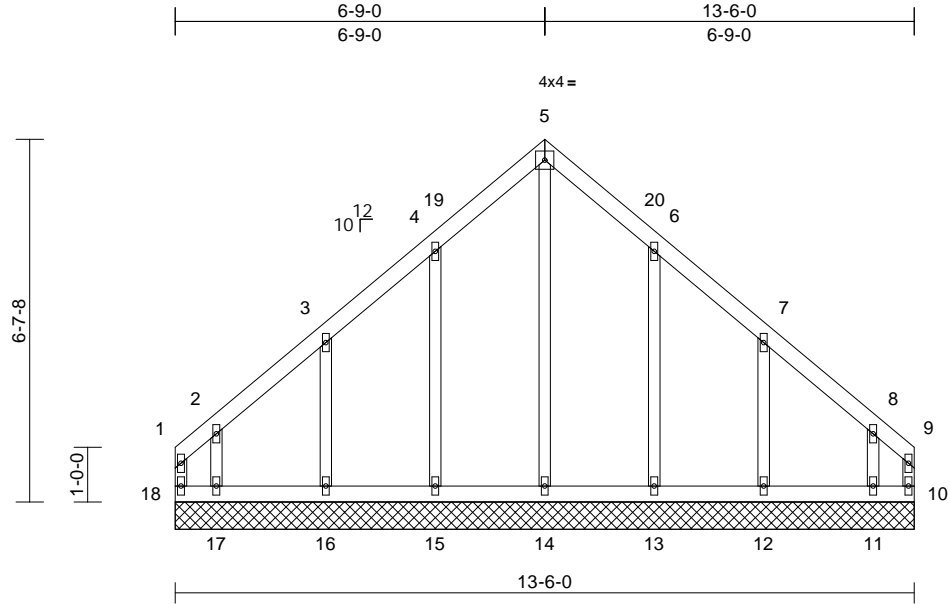
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	B1	Common Supported Gable	1	1	Job Reference (optional)	168187639

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:47

Page: 1

ID:D4L4yd3YPWXNOHSHi2gZlvzbjG0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
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	0.27	Horiz(TL)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 66 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)	10=13-6-0, 11=13-6-0, 12=13-6-0, 13=13-6-0, 14=13-6-0, 15=13-6-0, 16=13-6-0, 17=13-6-0, 18=13-6-0
Max Horiz	18=185 (LC 9)
Max Uplift	10=-157 (LC 11), 11=-180 (LC 13), 12=-103 (LC 13), 13=-98 (LC 13), 15=-98 (LC 12), 16=-102 (LC 12), 17=-188 (LC 12), 18=-187 (LC 10)
Max Grav	10=183 (LC 8), 11=229 (LC 20), 12=197 (LC 20), 13=203 (LC 20), 14=199 (LC 22), 15=204 (LC 19), 16=196 (LC 19), 17=243 (LC 19), 18=212 (LC 9)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-18=-140/120, 1-2=-163/147, 2-3=-114/97, 3-4=-96/187, 4-5=-152/302, 5-6=-152/302, 6-7=-95/189, 7-8=-100/79, 8-9=-139/123, 9-10=-120/100
BOT CHORD	17-18=-89/99, 16-17=-89/99, 15-16=-89/99, 14-15=-89/99, 13-14=-89/99, 12-13=-89/99, 11-12=-89/99, 10-11=-89/99
WEBS	5-14=-286/85, 4-15=-164/175, 3-16=-158/213, 2-17=-162/198, 6-13=-163/175, 7-12=-158/213, 8-11=-156/199

#### 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; BC DL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-1-4 to 5-1-4, Exterior(2N) 5-1-4 to 6-9-0, Corner(3R) 6-9-0 to 11-9-0, Exterior(2N) 11-9-0 to 13-4-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 187 lb uplift at joint 18, 157 lb uplift at joint 10, 98 lb uplift at joint 15, 102 lb uplift at joint 16, 188 lb uplift at joint 17, 98 lb uplift at joint 13, 103 lb uplift at joint 12 and 180 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



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:40

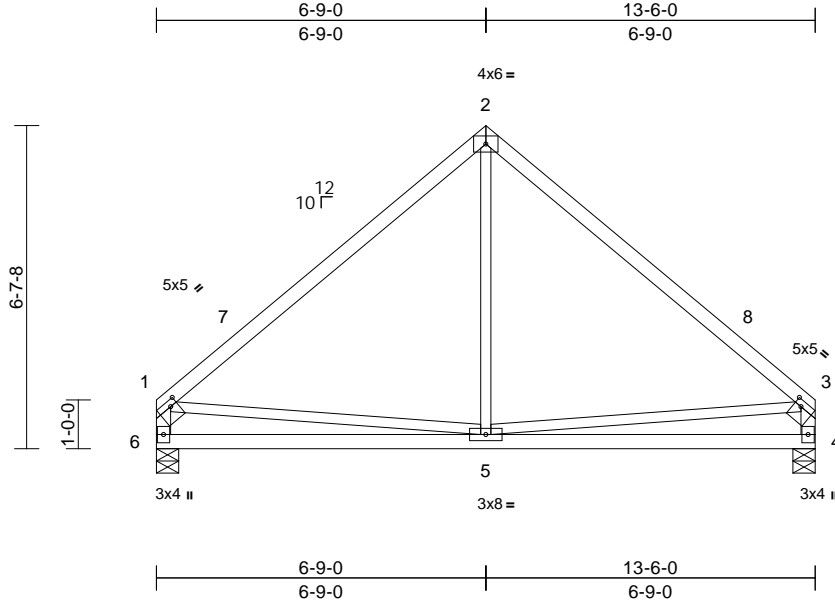
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	B2	Common	4	1	Job Reference (optional)	I68187640

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:47

Page: 1

ID:9J7J5FaeRY6JkhLePyJyHzbjFm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:47.2

Plate Offsets (X, Y): [1:0-1-12,0-1-8], [3:0-1-12,0-1-8]												
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.04	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.08	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 64 lb	FT = 20%

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

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 4=0-5-8, 6=0-5-8  
Max Horiz 6=186 (LC 9)  
Max Uplift 4=72 (LC 13), 6=72 (LC 12)  
Max Grav 4=594 (LC 1), 6=594 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-606/170, 2-3=-606/170, 1-6=-536/173, 3-4=-536/173  
BOT CHORD 5-6=-240/398, 4-5=-157/263  
WEBS 2-5=0/275, 1-5=-106/234, 3-5=-112/236

- 5) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6 and 4. This connection is for uplift only and does not consider lateral forces.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard

- NOTES**
- 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) 0-1-12 to 5-1-12, Interior (1) 5-1-12 to 6-9-0, Exterior(2R) 6-9-0 to 11-9-0, Interior (1) 11-9-0 to 13-4-4 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
  - 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.



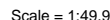
September 13,2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:40

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:47 Page: 1  
ID:2VEnnUKz aQ7fpjZNaykizbfFi-RfC?PsB70Hg3NSqPanL8w3uITXbGKWRCdoi7J4zJC?f

[illegible]

September 13, 2024

**WARNING – verify design parameters and noted notes on this and included MiTek Reference Tag M7473 Rev. 1/2/2023 before use.** Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcscomponents.com](http://www.sbcscomponents.com))

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
16023 Swingley Ridge Rd  
Crestedmont, MD 21030  
410.420.1100  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:40

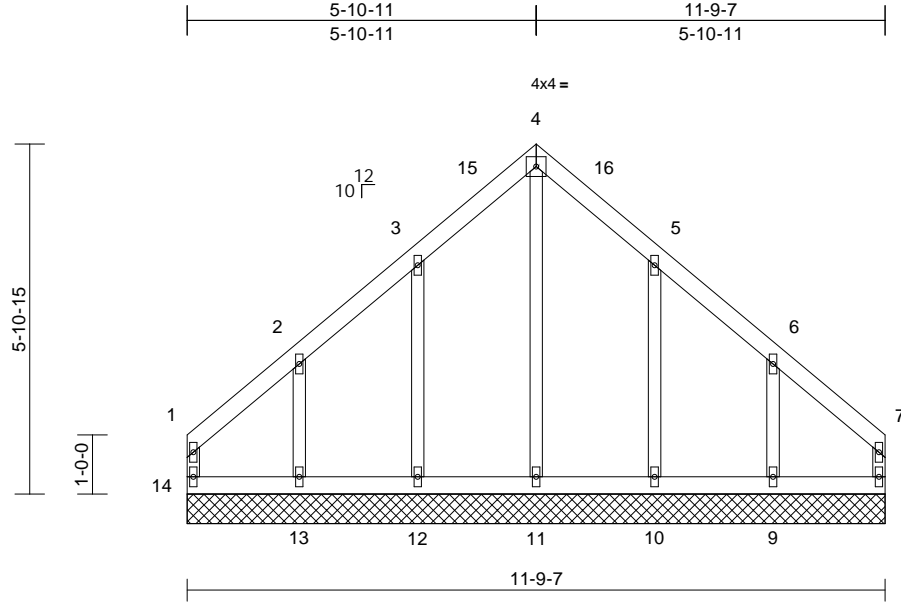
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	C1	Common Supported Gable	1	1	Job Reference (optional)	168187642

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:48

Page: 1

ID:lunilH2weCPWn7u49L9KmhzbjG1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
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	0.21	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 55 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.

<b>REACTIONS</b>	(size)	8=11-9-7, 9=11-9-7, 10=11-9-7, 11=11-9-7, 12=11-9-7, 13=11-9-7, 14=11-9-7
	Max Horiz	14=165 (LC 11)
	Max Uplift	8=-59 (LC 9), 9=-142 (LC 13), 10=-91 (LC 13), 12=-91 (LC 12), 13=-144 (LC 12), 14=-71 (LC 8)
	Max Grav	8=128 (LC 19), 9=231 (LC 20), 10=197 (LC 20), 11=186 (LC 22), 12=196 (LC 19), 13=235 (LC 19), 14=136 (LC 20)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-14=-103/59, 1-2=-118/101, 2-3=-96/185, 3-4=-154/305, 4-5=-154/306, 5-6=-94/186, 6-7=-109/88, 7-8=-96/56
BOT CHORD	13-14=-78/87, 12-13=-78/87, 11-12=-78/87, 10-11=-78/87, 9-10=-78/87, 8-9=-78/87
WEBS	4-11=-280/86, 3-12=-161/201, 2-13=-174/238, 5-10=-161/201, 6-9=-172/239

#### NOTES

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

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-1-4 to 5-1-4, Exterior(2N) 5-1-4 to 5-10-11, Corner(3R) 5-10-11 to 10-10-11, Exterior(2N) 10-10-11 to 11-8-3 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
- 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 71 lb uplift at joint 14, 59 lb uplift at joint 8, 91 lb uplift at joint 12, 144 lb uplift at joint 13, 91 lb uplift at joint 10 and 142 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:40

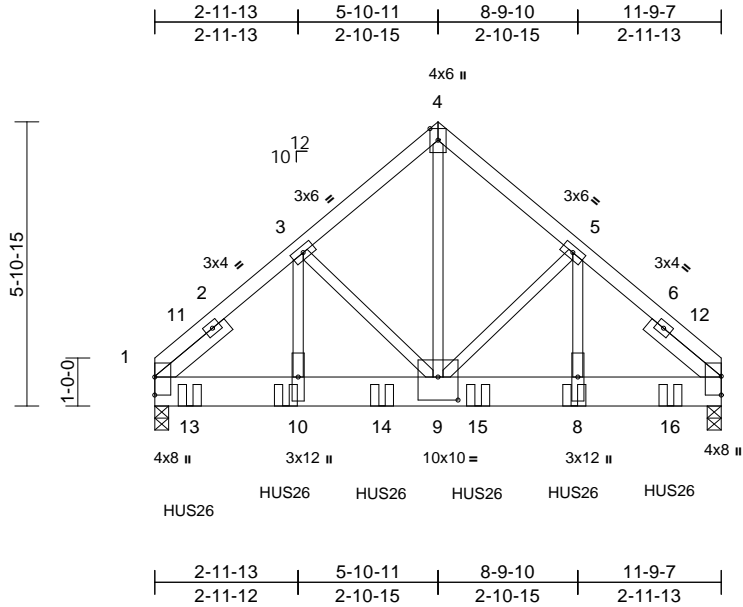


Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	168187643
P250543-01	C2	Common Girder	1	2	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:48  
ID:6760MpJtZAPQVZJRyYUfKbjFh-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC7f

Page: 1



Scale = 1:47.9

Plate Offsets (X, Y): [9:0-5-0,0-5-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.04	9-10	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.07	9-10	>999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.02	7	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
Weight: 143 lb FT = 20%											

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x8 SPF No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 1-10-10, Right 2x4 SP No.2 -- 1-10-10

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-8-2 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 1=0-3-7, (req. 0-3-9), 7=0-3-8
Max Horiz	1=-151 (LC 31)
Max Uplift	1=-687 (LC 12), 7=-666 (LC 13)
Max Grav	1=4573 (LC 1), 7=4424 (LC 1)

#### FORCES

TOP CHORD	1-3=-4555/802, 3-4=-3343/670, 4-5=-3344/670, 5-7=-4554/801
BOT CHORD	1-10=-525/3231, 9-10=-525/3231, 8-9=-495/3233, 7-8=-495/3233
WEBS	3-10=-219/1587, 3-9=-962/283, 4-9=-719/3859, 5-9=-965/285, 5-8=-223/1585

#### 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.  
Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-8-0 oc.  
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-0 to 5-0-0, Interior (1) 5-0-0 to 5-10-11, Exterior(2R) 5-10-11 to 10-10-11, Interior (1) 10-10-11 to 11-9-7 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.
- WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Two H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1 and 7. This connection is for uplift only and does not consider lateral forces.
- 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 0-8-12 from the left end to 10-8-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-4=-70, 4-7=-70, 1-7=-20  
Concentrated Loads (lb)  
Vert: 10=-1322 (B), 8=-1322 (B), 13=-1325 (B), 14=-1322 (B), 15=-1322 (B), 16=-1322 (B)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:40



Page: 1

ID:ewYe9TI5if2YoL\_7tF1F67zbiFi-RfC?PsB70Hg3NSaPanL8w3uITXbGKWrcDpi7J4zJC?f

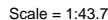


Plate Offsets (X, Y): [2:Edge.0-3-11] [2:0-3-6.0-6-15]

## LUMBER

## BRACING

## REACTIONS

## FORCES

TOP CHORD

BOT CHORD

## 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) -1-2-14 to 5-10-0,  
Exterior(2R) 5-10-0 to 10-11-15 zone; cantilever left and  
right exposed ; end vertical left and right exposed; C-C  
for members and forces & MWFRS for reactions shown;  
Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SPF No.2 crushing  
capacity of 425 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 233 lb uplift at  
joint 5.

- 6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s). This connection is for uplift only and does not consider lateral forces.
- 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.
- 8) "NAILED" indicates 3-10d (.148"x3") or 2-12d (.148"x3.25") toe-nails per NDS guidelines.
- 9) 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: 1-4=-70, 2-5=-20  
Concentrated Loads (lb)  
Vert: 3=-53 (F=-26, B=-26), 6=-19 (F=-10, B=-10),  
9=-198 (F=-99, B=-99), 11=-59 (F=-30, B=-30)



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

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

**RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI**

08/13/2025 5:04:40

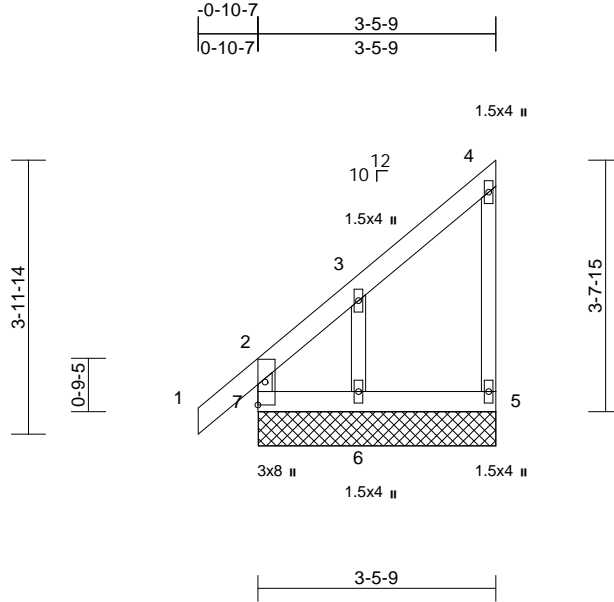
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	D1	Monopitch Supported Gable	1	1	Job Reference (optional)	168187645

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:48

Page: 1

ID:ATTRNJ4ox7n5eacfqTt1NKzbjG\_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:33.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 18 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 3-5-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	5=3-5-8, 6=3-5-8, 7=3-5-8
	Max Horiz	7=152 (LC 9)
	Max Uplift	5=-34 (LC 9), 6=-131 (LC 12), 7=-46 (LC 8)
	Max Grav	5=88 (LC 19), 6=192 (LC 19), 7=170 (LC 20)

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

TOP CHORD	2-7=-156/166, 1-2=0/44, 2-3=-388/246, 3-4=-141/115, 4-5=-104/147
BOT CHORD	6-7=-65/86, 5-6=-65/86
WEBS	3-6=-239/371

#### 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) 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 2-0-0 oc.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 7, 34 lb uplift at joint 5 and 131 lb uplift at joint 6.
- 8) Non Standard bearing condition. Review required.
- 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



September 13, 2024

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

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

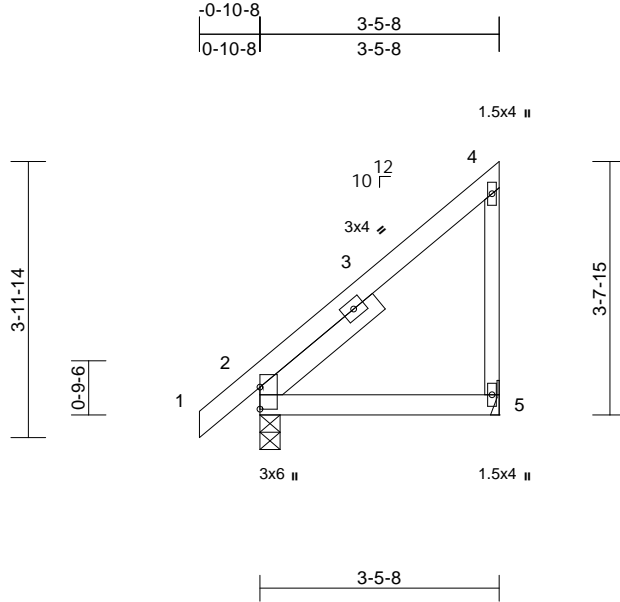
**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:40

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	D2	Monopitch	10	1	Job Reference (optional)	I68187646

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:48  
ID:I9J7J5FaeRY6JkhLePyJyHzbjFm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:33.3

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	0.39	Vert(LL)	-0.01	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 20 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x3 SPF No.2  
SLIDER Left 2x4 SP No.2 -- 2-2-4

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

LOAD CASE(S) Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-5-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 5= Mechanical  
Max Horiz 2=143 (LC 9)  
Max Uplift 2=-23 (LC 12), 5=-67 (LC 9)  
Max Grav 2=220 (LC 1), 5=173 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/19, 2-4=-222/168, 4-5=-208/254  
BOT CHORD 2-5=-67/72

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E) zone; cantilever left  
and right exposed; end vertical left and right  
exposed; C-C for members and forces & MWFRS for  
reactions shown; Lumber DOL=1.60 plate grip  
DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SP No.2 crushing  
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 67 lb uplift at joint  
5.
- 6) One H2.5T Simpson Strong-Tie connectors  
recommended to connect truss to bearing walls due to  
UPLIFT at jt(s) 2. This connection is for uplift only and  
does not consider lateral forces.



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:41

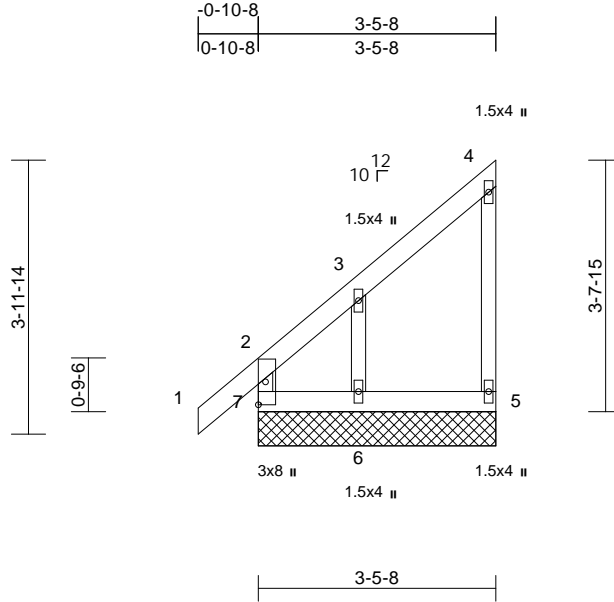
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	D5	Monopitch Supported Gable	1	1	Job Reference (optional)	168187647

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:48

Page: 1

ID:ATTRNJ4ox7n5eacfqTt1NKzbjG\_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:33.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 18 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 3-5-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size)	5=3-5-8, 6=3-5-8, 7=3-5-8
Max Horiz	7=152 (LC 9)
Max Uplift	5=-34 (LC 9), 6=-131 (LC 12), 7=-46 (LC 8)
Max Grav	5=88 (LC 19), 6=192 (LC 19), 7=170 (LC 20)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	2-7=-157/167, 1-2=0/44, 2-3=-388/246, 3-4=-141/115, 4-5=-104/147
BOT CHORD	6-7=-65/86, 5-6=-65/86
WEBS	3-6=-239/371

#### 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) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 2-0-0 oc.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 7, 34 lb uplift at joint 5 and 131 lb uplift at joint 6.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

#### LOAD CASE(S)

Standard



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:41

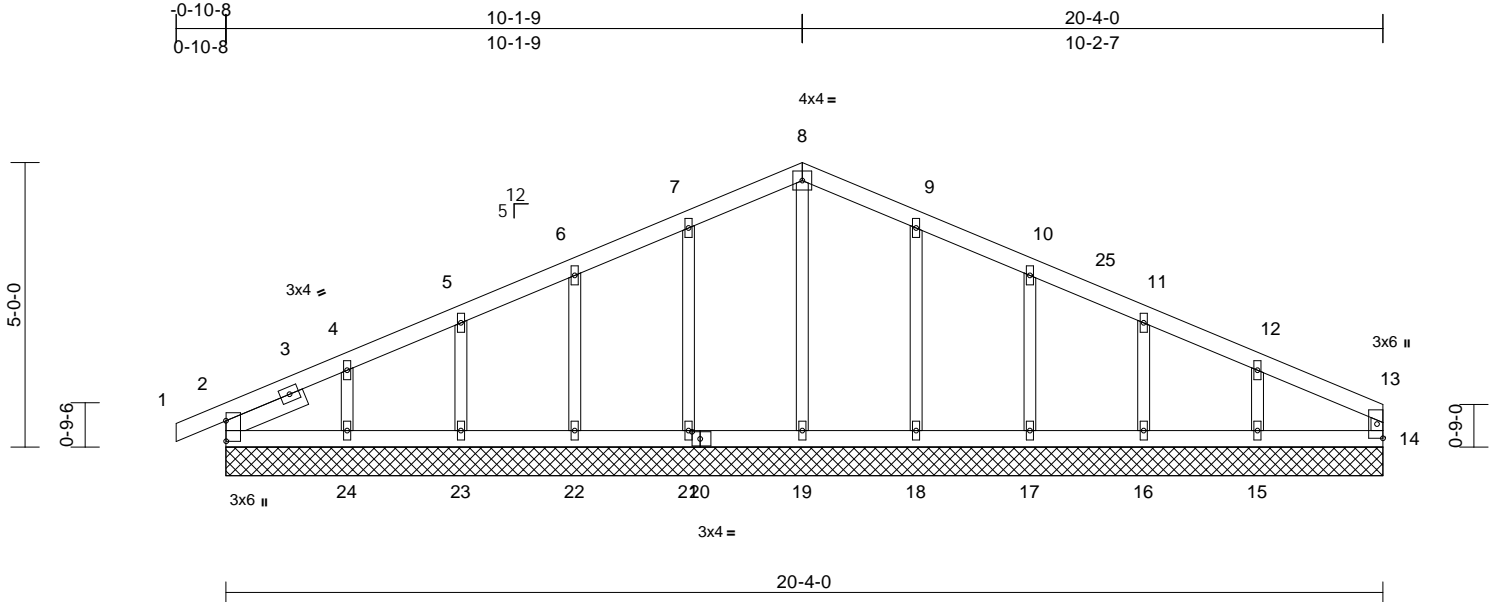
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	E1	Common Supported Gable	1	1	Job Reference (optional)	168187648

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:48

Page: 1

ID:lunilH2weCPWn7u49L9KmhzbjG1-RfC?PsB70Hq3NSgPqnL8w3uITxBGKWrCDoi7J4zJC?f



Scale = 1:40.5

Plate Offsets (X, Y): [2:0-4-5,0-0-1], [20:0-1-12,0-1-8]

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	0.06	Vert(LL)	n/a	-	n/a	999	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	14	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 86 lb	FT = 20%

<b>LUMBER</b>	
TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 1-6-4

<b>BRACING</b>	
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.

<b>REACTIONS</b> (size)	
Max Horiz	2=20-4-0, 14=20-4-0, 15=20-4-0, 16=20-4-0, 17=20-4-0, 18=20-4-0, 19=20-4-0, 21=20-4-0, 22=20-4-0, 23=20-4-0, 24=20-4-0
Max Uplift	2=86 (LC 12), 15=78 (LC 13), 16=48 (LC 13), 17=57 (LC 13), 18=55 (LC 13), 21=57 (LC 12), 22=56 (LC 12), 23=51 (LC 12), 24=82 (LC 12)
Max Grav	2=168 (LC 1), 14=90 (LC 1), 15=204 (LC 26), 16=174 (LC 1), 17=180 (LC 1), 18=190 (LC 26), 19=154 (LC 22), 21=190 (LC 25), 22=179 (LC 1), 23=180 (LC 1), 24=185 (LC 25)

<b>FORCES</b> (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-8/0, 2-4=-116/60, 4-5=-68/79, 5-6=-53/108, 6-7=-69/154, 7-8=-84/198, 8-9=-84/198, 9-10=-69/154, 10-11=-53/107, 11-12=-50/55, 12-13=-58/15, 13-14=-72/33, 2-24=-14/46, 23-24=-14/46, 22-23=-14/46, 21-22=-14/46, 19-21=-14/46, 18-19=-14/46, 17-18=-14/46, 16-17=-14/46, 15-16=-14/46, 14-15=-14/46
BOT CHORD	

<b>WEBS</b>	
8-19=-114/0, 7-21=-150/92, 6-22=-138/94, 5-23=-142/113, 4-24=-140/159, 9-18=-150/92, 10-17=-140/98, 11-16=-136/125, 12-15=-158/167	

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) 0-9-10 to 4-2-7, Exterior(2N) 4-2-7 to 10-2-7, Corner(3R) 10-2-7 to 15-2-7, Exterior(2N) 15-2-7 to 20-3-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 1.5x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 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 35 lb uplift at joint 2, 57 lb uplift at joint 21, 56 lb uplift at joint 22, 51 lb uplift at joint 23, 82 lb uplift at joint 24, 55 lb uplift at joint 18, 57 lb uplift at joint 17, 48 lb uplift at joint 16 and 78 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.

**LOAD CASE(S)** Standard



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:41

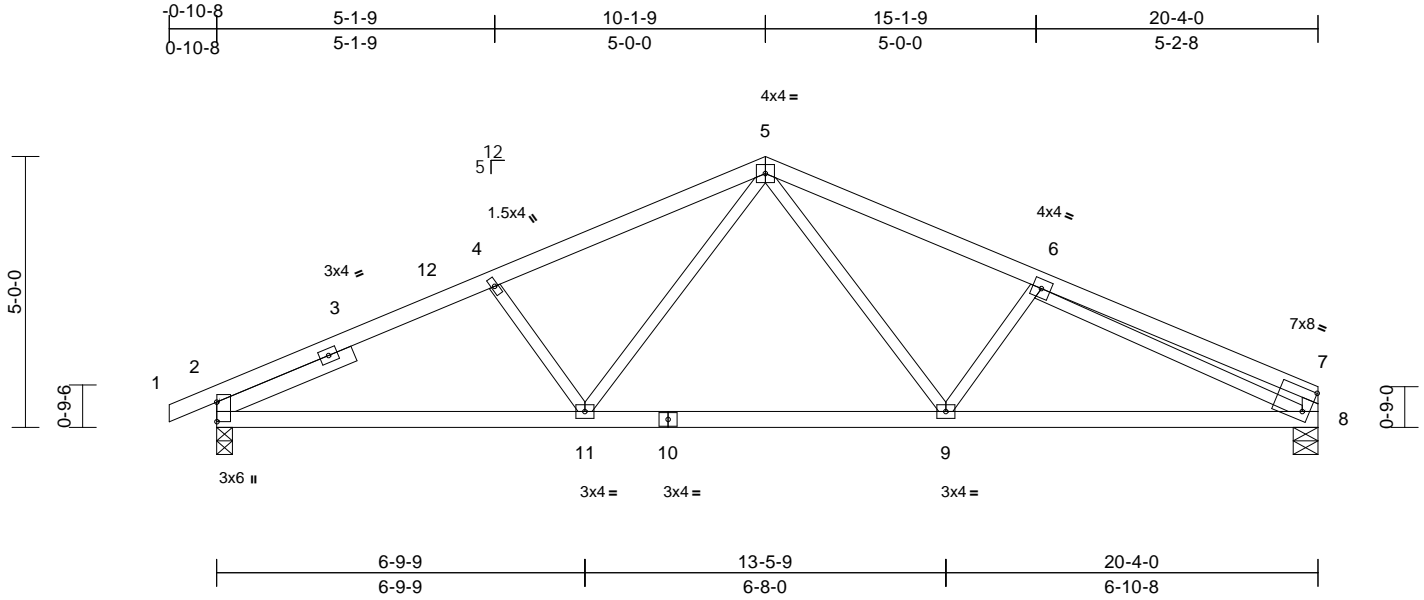


Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	168187649
P250543-01	E2	Common	3	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:48  
ID:H2l5lEyt7QFia695iR4P3zbjFn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:42.5

Plate Offsets (X, Y): [2'-0"-4'-5'-0"-0'-1"], [7'-0"-1'-8'-0'-5"-0"]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.07	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.14	9-11	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 87 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x3 SPF No.2 \*Except\* 8-7:2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -- 2-9-0

#### BRACING

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

#### REACTIONS

(size) 2=0-3-8, 8=0-5-8  
Max Horiz 2=86 (LC 12)  
Max Uplift 2=-163 (LC 12), 8=-140 (LC 13)  
Max Grav 2=971 (LC 1), 8=907 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-8/0, 2-4=-1576/396, 4-5=-1383/382, 5-6=-1400/386, 6-7=-439/123, 7-8=-310/119  
BOT CHORD 2-11=-329/1343, 9-11=-177/984, 8-9=-318/1367  
WEBS 5-9=-94/452, 6-9=-285/196, 5-11=-91/435, 4-11=-264/191, 6-8=-1149/286

#### 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) -0-9-10 to 4-2-6, Interior (1) 4-2-6 to 10-2-7, Exterior(2R) 10-2-7 to 15-3-8, Interior (1) 15-3-8 to 20-3-3 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
- 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.
- One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
- 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



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:41

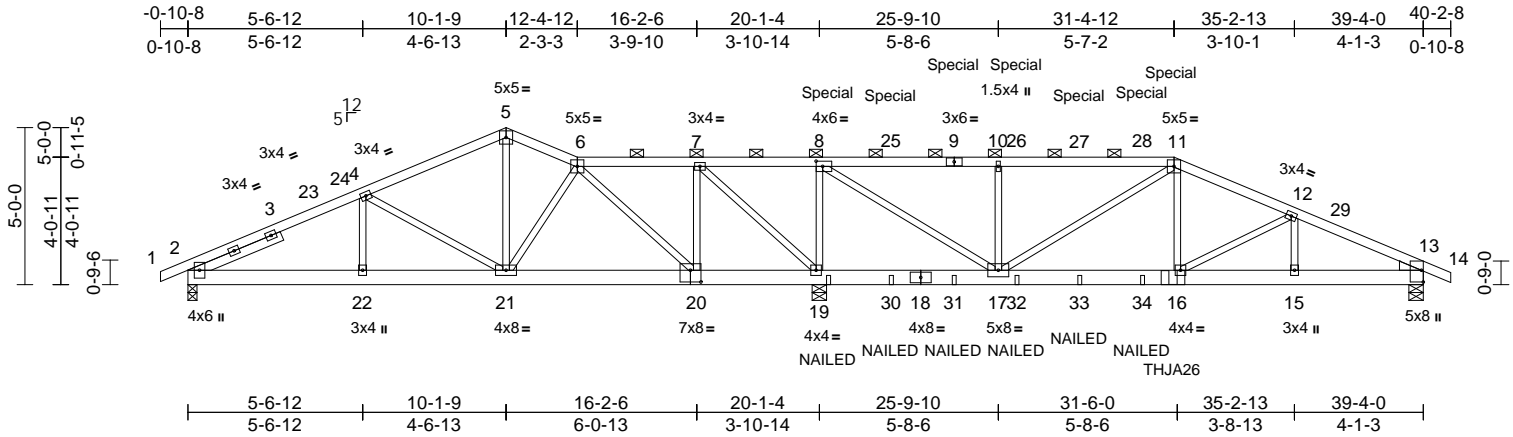
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	F1	Roof Special Girder	1	2	Job Reference (optional)	I68187650

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:49

Page: 1

ID:PT1gqCO6p63PlabfLxA7RpbjFa-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	I68187650
P250543-01	F1	Roof Special Girder	1	2	Job Reference (optional)	

16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 256 lb down and 161 lb up at 20-5-11, 252 lb down and 160 lb up at 22-5-11, 252 lb down and 160 lb up at 24-5-11, 252 lb down and 160 lb up at 26-5-11, 252 lb down and 160 lb up at 28-5-11, and 252 lb down and 160 lb up at 30-5-11, and 252 lb down and 160 lb up at 31-5-10 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15,  
Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-5=-70, 5-6=-70, 6-11=-70, 11-14=-70,  
2-13=-20  
Concentrated Loads (lb)  
Vert: 9=-202 (F), 16=-732 (F), 8=-206 (F), 19=-59 (F), 11=-202 (F), 25=-202 (F), 26=-202 (F), 27=-202 (F), 28=-202 (F), 30=-59 (F), 31=-59 (F), 32=-59 (F), 33=-59 (F), 34=-59 (F)

 **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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcsccomponents.com](http://www.sbcsccomponents.com))



**RELEASE FOR CONSTRUCTION**  
**AS NOTED ON PLANS REVIEW**  
**DEVELOPMENT SERVICES**  
**LEE'S SUMMIT, MISSOURI**  
**08/13/2025 5:04:41**

16023 Swingley Ridge Rd  
Houston, TX 77060-5303  
817-424-0200 / MiTek-USA.com

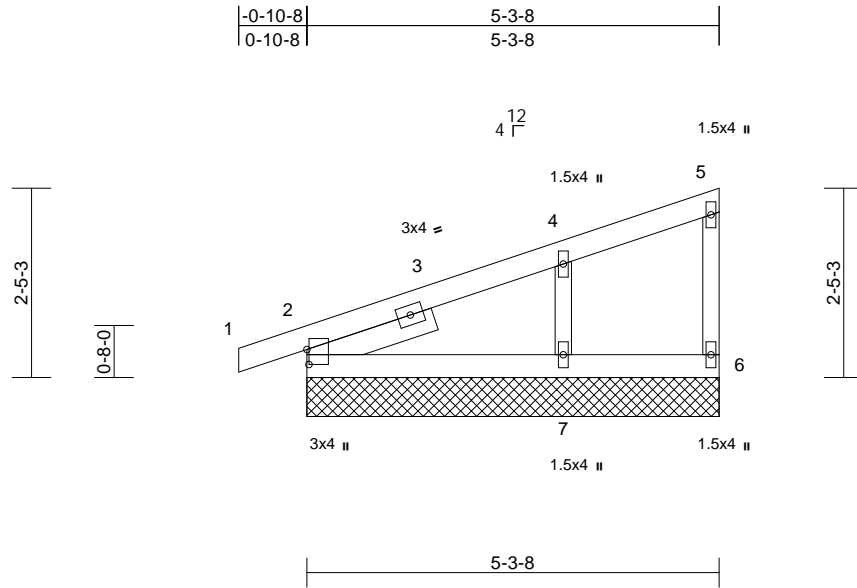
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	G1	Monopitch Supported Gable	1	1	Job Reference (optional)	I68187651

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:49

Page: 1

ID:lunilH2weCPWn7u49L9KmhzbjG1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:29.6

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	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	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 1-8-7

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size) 2=5-3-8, 6=5-3-8, 7=5-3-8
Max Horiz	2=98 (LC 11)
Max Uplift	2=-56 (LC 8), 6=-9 (LC 9), 7=-85 (LC 12)
Max Grav	2=194 (LC 1), 6=45 (LC 1), 7=288 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-5/0, 2-4=-196/104, 4-5=-54/53, 5-6=-37/59
BOT CHORD	2-7=-43/58, 6-7=-43/58
WEBS	4-7=-219/389

#### NOTES

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

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 6, 56 lb uplift at joint 2 and 85 lb uplift at joint 7.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- 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



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:41

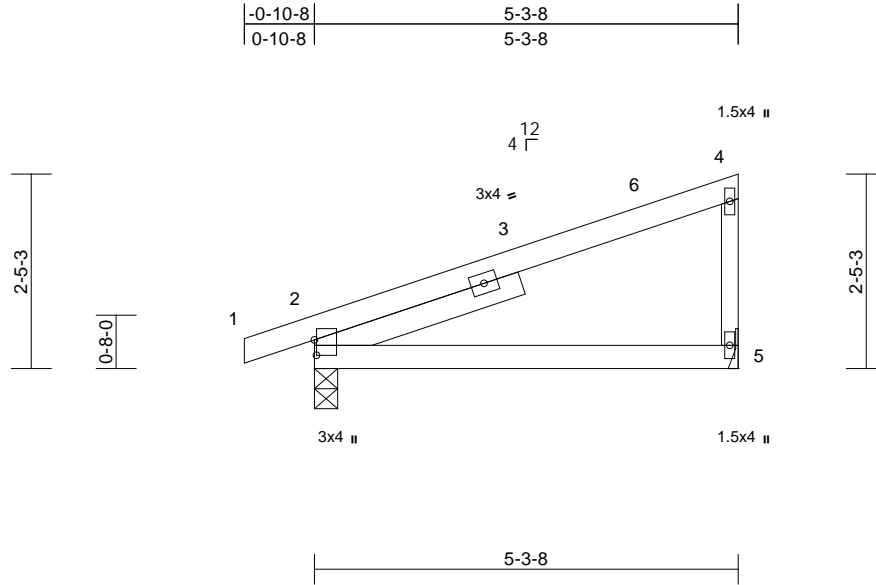
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	G2	Monopitch	6	1	Job Reference (optional)	I68187652

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:49

Page: 1

ID:Lad?h4DiLWAXSGynzHPcKzbfJp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?i



Scale = 1:28.8

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.04	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.09	2-5	>717	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x3 SPF No.2  
SLIDER Left 2x4 SP No.2 -- 2-8-6

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size) 2=0-3-8, 5= Mechanical  
Max Horiz 2=98 (LC 9)  
Max Uplift 2=-86 (LC 8), 5=-59 (LC 12)  
Max Grav 2=300 (LC 1), 5=228 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-133/78, 4-5=-176/267  
BOT CHORD 2-5=-43/47

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8,  
Interior (1) 4-1-8 to 5-2-4 zone; cantilever left and right  
exposed; end vertical left and right exposed; C-C for  
members and forces & MWFRS for reactions shown;  
Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: Joint 2 SP No.2 crushing  
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 59 lb uplift at joint  
5.

- 6) One H2.5T Simpson Strong-Tie connectors  
recommended to connect truss to bearing walls due to  
UPLIFT at jt(s) 2. This connection is for uplift only and  
does not consider lateral forces.
- 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



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:41



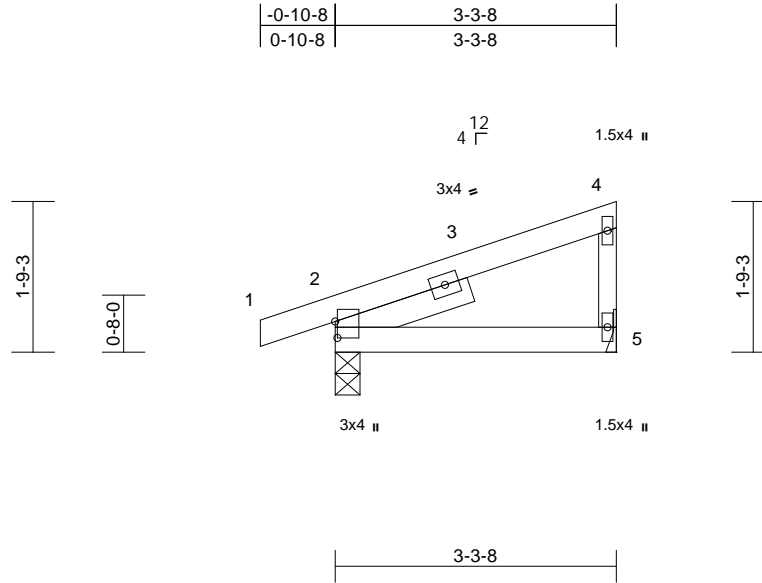
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	G3	Monopitch	6	1	Job Reference (optional)	I68187653

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:49

Page: 1

ID:HzlI5lEyt7QFia695iR4P3zbjFn-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:27

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.01	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x3 SPF No.2  
SLIDER Left 2x4 SP No.2 -- 1-7-12

#### BRACING

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

**REACTIONS** (size) 2=0-3-8, 5= Mechanical  
Max Horiz 2=66 (LC 9)  
Max Uplift 2=-71 (LC 8), 5=-35 (LC 12)  
Max Grav 2=213 (LC 1), 5=135 (LC 1)

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

TOP CHORD 1-2=-5/0, 2-4=-85/52, 4-5=-103/166  
BOT CHORD 2-5=-29/32

#### NOTES

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

- 6) One H2.5T Simpson Strong-Tie connectors  
recommended to connect truss to bearing walls due to  
UPLIFT at jt(s) 2. This connection is for uplift only and  
does not consider lateral forces.
- 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

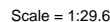


September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:41

Page: 1

**Mitek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
16023 Swingley Ridge Rd  
Crestedmont, MD 21031  
DEVELOPMENT SERVICES  
P.O. Box 12000, Natick, MA 01905  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:41

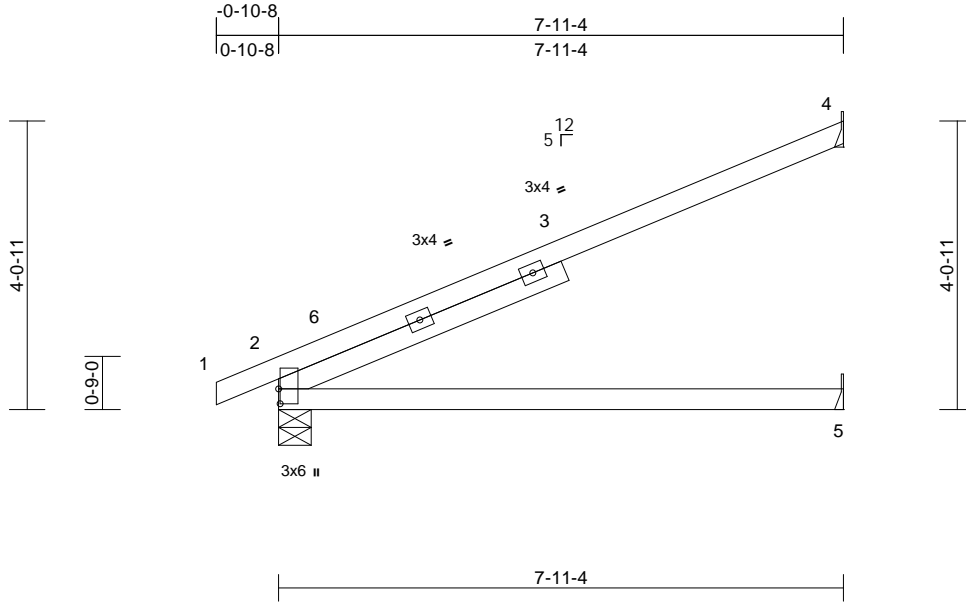
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	J2	Jack-Open	6	1	Job Reference (optional)	I68187655

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:49

Page: 1

ID:tO3dTkC3aC2gr7NaPZuNnRzbjFq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:32.4

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

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	1.00	Vert(LL)	-0.23	2-5	>410	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.46	2-5	>205	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 33 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP 1650F 1.5E  
BOT CHORD 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -- 4-4-4

#### BRACING

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied or 9-2-10 oc bracing.

**REACTIONS** (size) 2=0-5-8, 4= Mechanical, 5= Mechanical  
Max Horiz 2=160 (LC 12)  
Max Uplift 2=-62 (LC 12), 4=-162 (LC 12)  
Max Grav 2=419 (LC 1), 4=272 (LC 1), 5=158 (LC 3)

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

TOP CHORD 1-2=-6/0, 2-4=-142/83  
BOT CHORD 2-5=0/0

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8,  
Interior (1) 4-1-8 to 7-10-8 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
- 2) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: , Joint 2 SP No.2 crushing  
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 162 lb uplift at  
joint 4.

- 6) One H2.5T Simpson Strong-Tie connectors  
recommended to connect truss to bearing walls due to  
UPLIFT at jt(s) 2. This connection is for uplift only and  
does not consider lateral forces.
- 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



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:41

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:49 Page: 1  
ID:tO3dTkC3aC2qr7NaPZuNnRzbiFq-RfC?PsB70Hg3NSaPanL8w3ulTXbGKWrcDoi7J4zJC?f

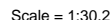


Plate Offsets (X, Y): [2:0-2-8.0-0-4]

## LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -- 3-2-11

## BRACING

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

## REACTIONS

(size) 2=0-5-8, 4= Mechanical, 5= Mechanical

Max Horiz 2=122 (LC 12)

Max Uplift 2=-50 (LC 12), 4=-121 (LC 12)

Max Grav 2=326 (LC 1), 4=198 (LC 1), 5=116 (LC 3)

## FORCES

(Ib) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-6/0, 2-4=-116/60  
BOT CHORD 2-5=0/0

## NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E)-0-10-8 to 4-1-8,  
Interior (1) 4-1-8 to 5-9-7 zone; cantilever left and right  
exposed ; end vertical left and right exposed; C-C for  
members and forces & MWFRS for reactions shown;  
Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be : Joint 2 SP No.02 crushing  
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 121 lb uplift at  
joint 4.

- 6) One H2.5T Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 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/TP1.1

## LOAD CASE(S) Standard



**WARNING – verify design parameters and noted notes on this and included MiTek Reference Tag M7473 Rev. 1/2/2023 before use.** Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcscomponents.com](http://www.sbcscomponents.com))

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
16023 Swinley Ridge Rd.  
Crescentfield, MO 65007  
ph: 816.620.1100 www.usmi.com  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:41

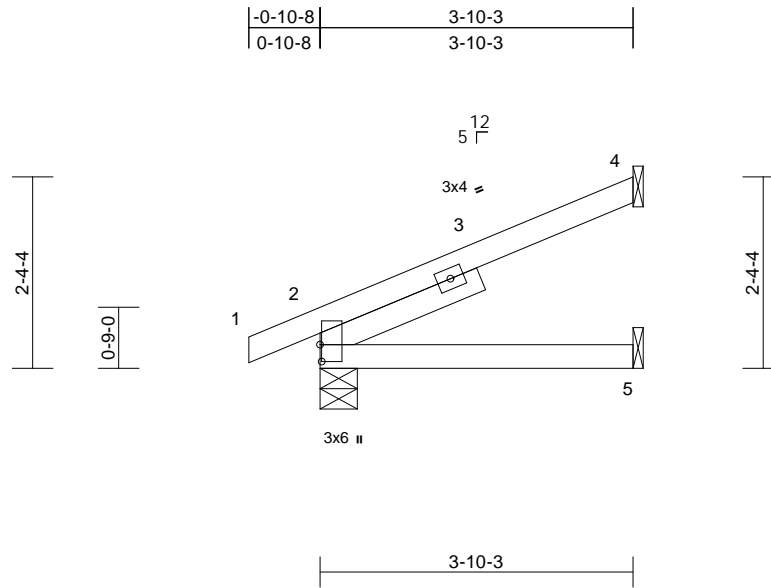
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	J4	Jack-Open	2	1	Job Reference (optional)	I68187657

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:49

Page: 1

ID:Lad?h4DiLWAXSGynzHPcKzbfJp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:28.3

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

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	0.29	Vert(LL)	-0.01	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	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  
SLIDER Left 2x4 SP No.2 -- 2-1-11

#### BRACING

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

#### REACTIONS

(size) 2=0-5-8, 4= Mechanical, 5= Mechanical  
Max Horiz 2=85 (LC 12)  
Max Uplift 2=-38 (LC 12), 4=-81 (LC 12)  
Max Grav 2=239 (LC 1), 4=125 (LC 1), 5=76 (LC 3)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-6/0, 2-4=-83/40  
BOT CHORD 2-5=0/0

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E) zone; cantilever left  
and right exposed ; end vertical left and right  
exposed;C-C for members and forces & MWFRS for  
reactions shown; Lumber DOL=1.60 plate grip  
DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: , Joint 2 SP No.2 crushing  
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 81 lb uplift at joint  
4.

- 6) One H2.5T Simpson Strong-Tie connectors  
recommended to connect truss to bearing walls due to  
UPLIFT at jt(s) 2. This connection is for uplift only and  
does not consider lateral forces.
- 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



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:42



Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360
P250543-01	J5	Jack-Open	2	1	Job Reference (optional)

I68187658

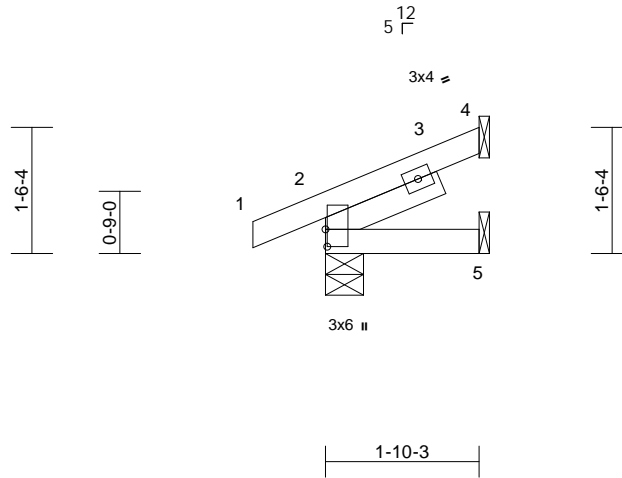
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:50

Page: 1

ID:Lad?h4DiLWAXSGynzHPcKzbfJp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?i

-0-10-8	1-10-3
0-10-8	1-10-3



Scale = 1:27.7

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

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	0.06	Vert(LL)	0.00	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	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  
SLIDER Left 2x4 SP No.2 -- 1-6-0

**BRACING**

TOP CHORD Structural wood sheathing directly applied or  
1-10-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

**REACTIONS** (size) 2=0-5-8, 4= Mechanical, 5=  
Mechanical  
Max Horiz 2=50 (LC 12)  
Max Uplift 2=-31 (LC 8), 4=-41 (LC 12)  
Max Grav 2=158 (LC 1), 4=50 (LC 1), 5=37  
(LC 3)

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

TOP CHORD 1-2=-6/0, 2-4=-51/21  
BOT CHORD 2-5=0/0

**NOTES**

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E) zone; cantilever left  
and right exposed; end vertical left and right  
exposed; C-C for members and forces & MWFRS for  
reactions shown; Lumber DOL=1.60 plate grip  
DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
- 3) Bearings are assumed to be: , Joint 2 SP No.2 crushing  
capacity of 565 psi.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 41 lb uplift at joint  
4.

- 6) One H2.5T Simpson Strong-Tie connectors  
recommended to connect truss to bearing walls due to  
UPLIFT at jt(s) 2. This connection is for uplift only and  
does not consider lateral forces.
  - 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



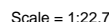
September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:42

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:50 Page: 1  
ID: Ak Gx7HSxMwhABPwKYW0avzbjFi-RfC?PsB70Hg3NSqPqnL8w3ulTXbGKwKCDoi7J4zJC?f

LOAD CASE(S) Standard

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E) zone; cantilever left  
and right exposed ; end vertical left and right  
exposed; C-C for members and forces & MWFRS for  
reactions shown; Lumber DOL=1.60 plate grip  
DOL=1.60
- 2) 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 39 lb uplift at joint  
1 and 59 lb uplift at joint 3.



**WARNING – verify design parameters and noted notes on this and included MiTek Reference Tag M7473 Rev. 1/2/2023 before use.** Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, and DSB-22** available from Truss Plate Institute ([www.tpinst.org](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcsccomponents.com](http://www.sbcsccomponents.com))

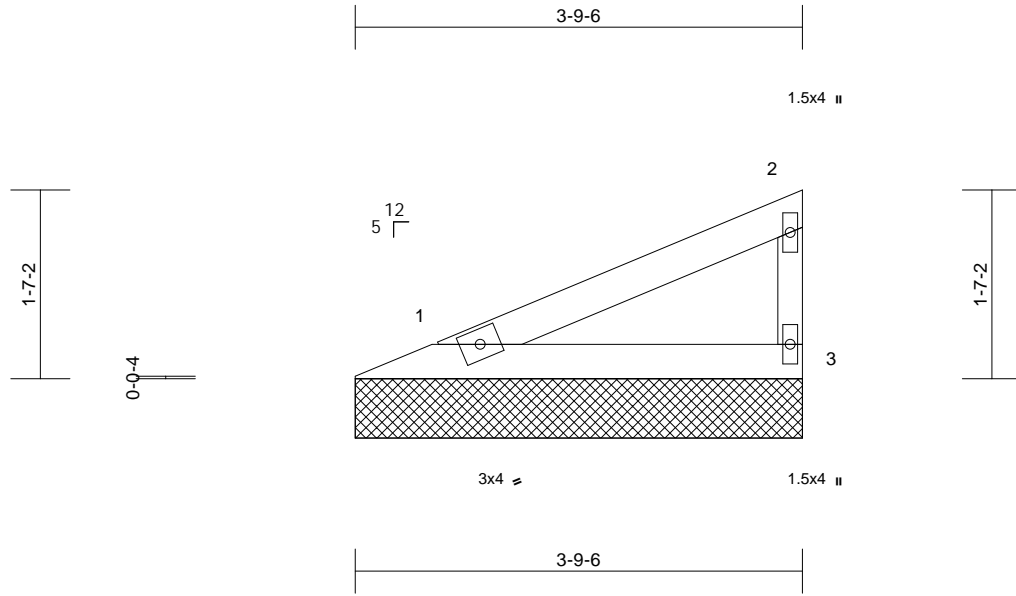
**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
16023 Swingley Ridge Rd  
Crestwood, MO 63070  
866.4.MiTekUS  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:42

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	I68187660
P250543-01	V2	Valley	1	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:50  
ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:19.5

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 20%

#### LUMBER

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

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

LOAD CASE(S) Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size) 1=3-9-6, 3=3-9-6  
Max Horiz 1=58 (LC 9)  
Max Uplift 1=-23 (LC 12), 3=-35 (LC 12)  
Max Grav 1=134 (LC 1), 3=134 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-76/52, 2-3=-104/123  
BOT CHORD 1-3=-26/28

#### NOTES

- Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E) zone; cantilever left  
and right exposed; end vertical left and right  
exposed; C-C for members and forces & MWFRS for  
reactions shown; Lumber DOL=1.60 plate grip  
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 23 lb uplift at joint  
1 and 35 lb uplift at joint 3.



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:42

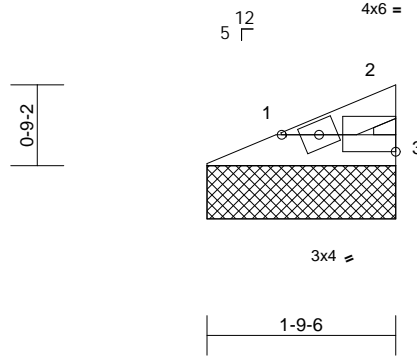
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	I68187661
P250543-01	V3	Valley	1	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:50  
ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1

0-8-6	1-9-6
0-8-6	1-1-0



Scale = 1:21.7

Plate Offsets (X, Y): [2:Edge,0-1-15]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	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: 5 lb	FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 1-9-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=1-9-6, 3=1-9-6  
Max Horiz 1=19 (LC 9)  
Max Uplift 1=8 (LC 12), 3=12 (LC 12)  
Max Grav 1=44 (LC 1), 3=44 (LC 1)

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

TOP CHORD 1-2=-25/17, 2-3=-34/40  
BOT CHORD 1-3=-9/9

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E) zone; cantilever left  
and right exposed; end vertical left and right  
exposed; C-C for members and forces & MWFRS for  
reactions shown; Lumber DOL=1.60 plate grip  
DOL=1.60
- 2) 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 8 lb uplift at joint 1  
and 12 lb uplift at joint 3.
- 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



September 13, 2024

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

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

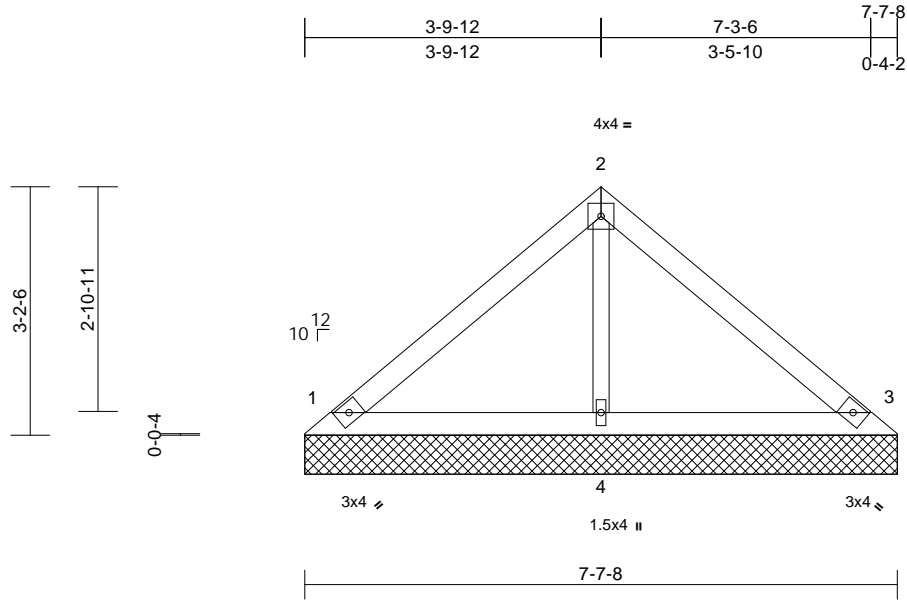
**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:42

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	V4	Valley	1	1	Job Reference (optional)	I68187662

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:50  
ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
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	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

#### LUMBER

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

#### BRACING

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

#### REACTIONS

(size) 1=7-7-8, 3=7-7-8, 4=7-7-8  
Max Horiz 1=-80 (LC 8)  
Max Uplift 1=-44 (LC 12), 3=-54 (LC 13)  
Max Grav 1=186 (LC 1), 3=186 (LC 1), 4=246 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-132/76, 2-3=-125/83  
BOT CHORD 1-4=-19/63, 3-4=-19/63  
WEBS 2-4=-160/87

#### 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 44 lb uplift at joint 1 and 54 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



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:42

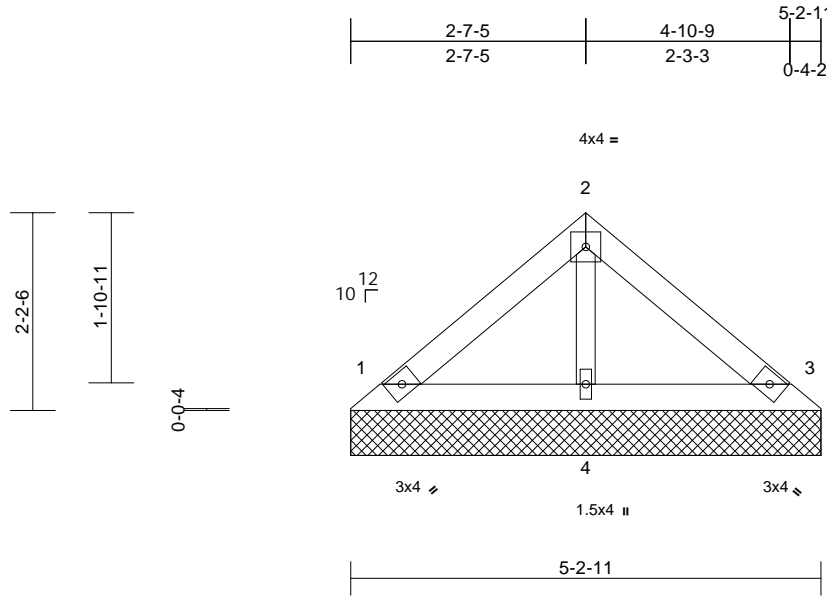


Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	I68187663
P250543-01	V5	Valley	1	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:50  
ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:25.6

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	0.05	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=5-2-11, 3=5-2-11, 4=5-2-11  
Max Horiz 1=-52 (LC 8)  
Max Uplift 1=-29 (LC 12), 3=-35 (LC 13)  
Max Grav 1=121 (LC 1), 3=121 (LC 1), 4=160 (LC 1)

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

TOP CHORD 1-2=-86/57, 2-3=-81/62  
BOT CHORD 1-4=-12/41, 3-4=-12/41  
WEBS 2-4=-104/67

#### 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 29 lb uplift at joint 1 and 35 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



September 13, 2024

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

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

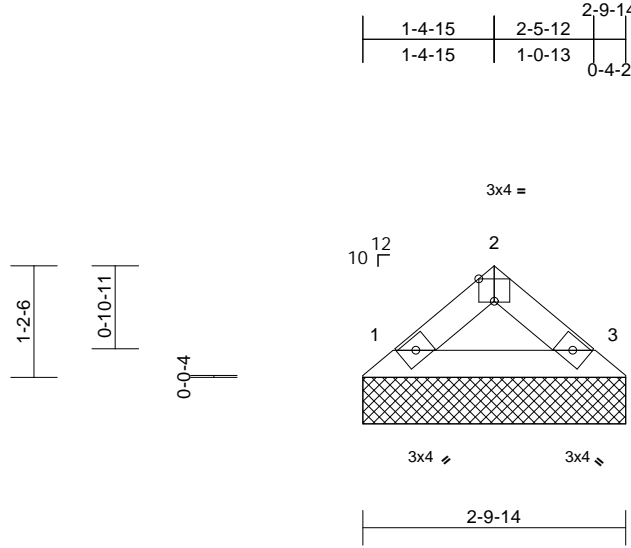
**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:42

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	V6	Valley	1	1	Job Reference (optional)	I68187664

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:50  
ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:24.7

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.03	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	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 2-10-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=2-9-14, 3=2-9-14  
Max Horiz 1=24 (LC 11)  
Max Uplift 1=-12 (LC 12), 3=-12 (LC 13)  
Max Grav 1=93 (LC 1), 3=93 (LC 1)

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

TOP CHORD 1-2=-75/56, 2-3=-75/60  
BOT CHORD 1-3=-11/45

#### 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 12 lb uplift at joint 1 and 12 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



September 13, 2024

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

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

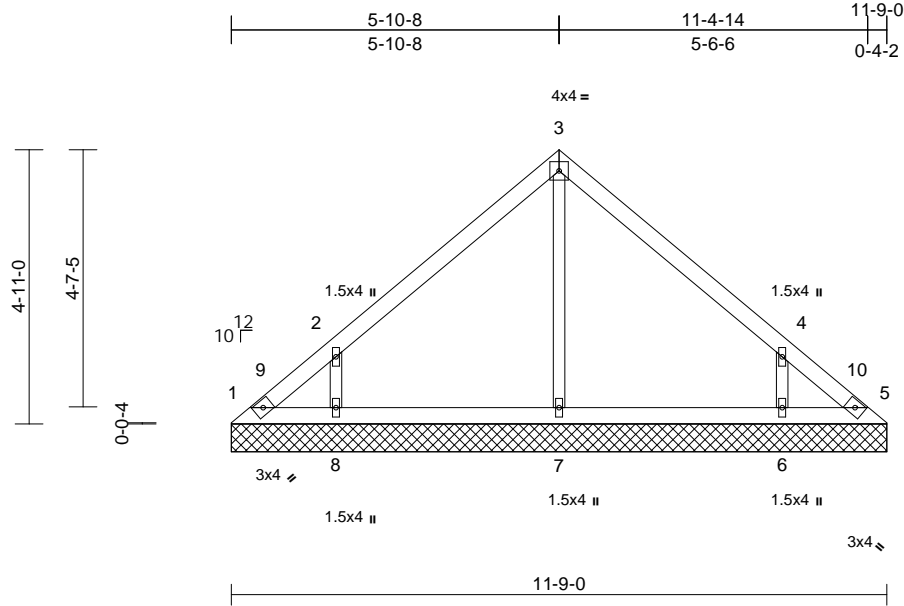
**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:42

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	168187665
P250543-01	V7	Valley	1	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:50  
ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCD0i7J4zJC?f

Page: 1



<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 44 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
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=11-9-0, 5=11-9-0, 6=11-9-0, 7=11-9-0, 8=11-9-0  
Max Horiz 1=128 (LC 9)  
Max Uplift 1=-59 (LC 10), 5=-37 (LC 11), 6=-195 (LC 13), 8=-195 (LC 12)  
Max Grav 1=95 (LC 12), 5=80 (LC 13), 6=359 (LC 20), 7=257 (LC 1), 8=359 (LC 19)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-143/109, 2-3=-172/125, 3-4=-167/118, 4-5=-120/74  
BOT CHORD 1-8=-37/91, 7-8=-37/91, 6-7=-37/91, 5-6=-37/91  
WEBS 3-7=-171/17, 2-8=-299/292, 4-6=-299/292

#### 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) 0-4-13 to 5-4-13, Interior (1) 5-4-13 to 5-10-13, Exterior(2R) 5-10-13 to 10-10-13, Interior (1) 10-10-13 to 11-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 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 59 lb uplift at joint 1, 37 lb uplift at joint 5, 195 lb uplift at joint 8 and 195 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:42

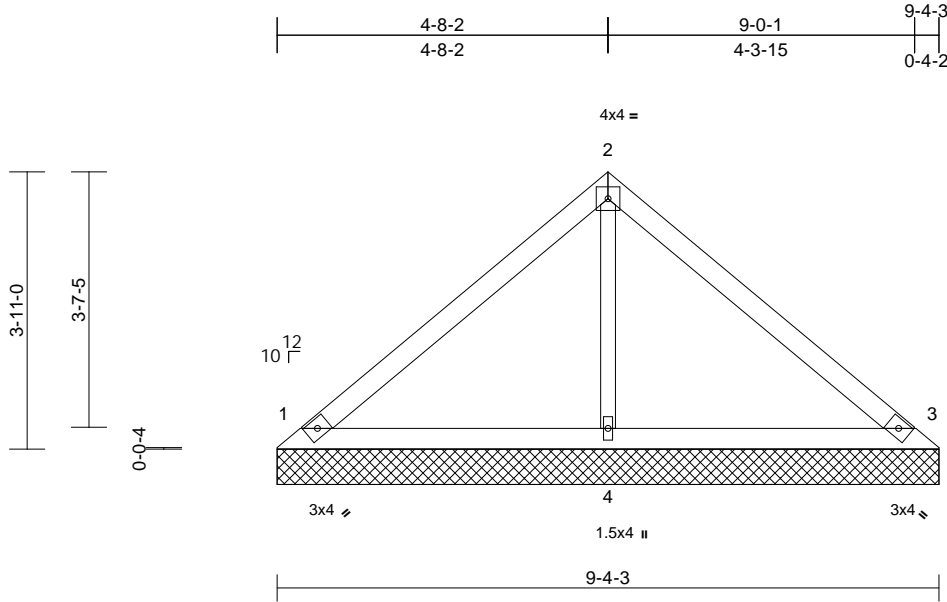
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	V8	Valley	1	1	Job Reference (optional)	I68187666

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:50

Page: 1

ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrcDoi7J4zJC?f



Scale = 1:32.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 33 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
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=9-4-3, 3=9-4-3, 4=9-4-3  
Max Horiz 1=100 (LC 8)  
Max Uplift 1=42 (LC 12), 3=54 (LC 13), 4=16 (LC 12)  
Max Grav 1=216 (LC 1), 3=216 (LC 1), 4=342 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=180/90, 2-3=177/99  
BOT CHORD 1-4=23/85, 3-4=23/85  
WEBS 2-4=210/104

#### 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 42 lb uplift at joint 1, 54 lb uplift at joint 3 and 16 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



September 13, 2024

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

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

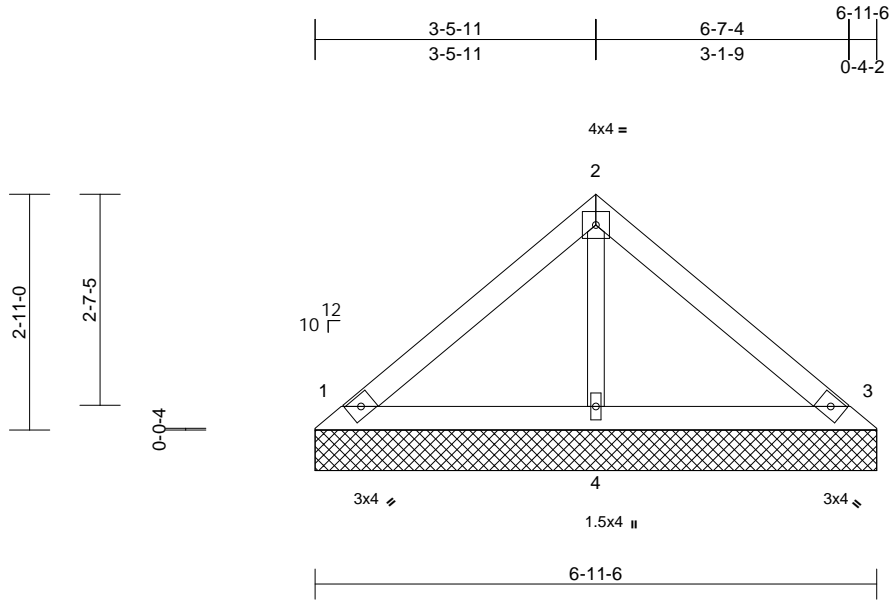
**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:42

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	
P250543-01	V9	Valley	1	1	Job Reference (optional)	I68187667

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:50  
ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:28.5

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999	244/190
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: 24 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=6-11-6, 3=6-11-6, 4=6-11-6  
Max Horiz 1=72 (LC 9)  
Max Uplift 1=40 (LC 12), 3=48 (LC 13)  
Max Grav 1=168 (LC 1), 3=168 (LC 1), 4=221 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-119/72, 2-3=-112/78  
BOT CHORD 1-4=-17/57, 3-4=-17/57  
WEBS 2-4=-144/83

#### 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 40 lb uplift at joint 1 and 48 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



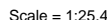
September 13, 2024

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

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:43



Page: 1LOAD CASE(S) Standard

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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcscomponents.com](http://www.sbcscomponents.com))

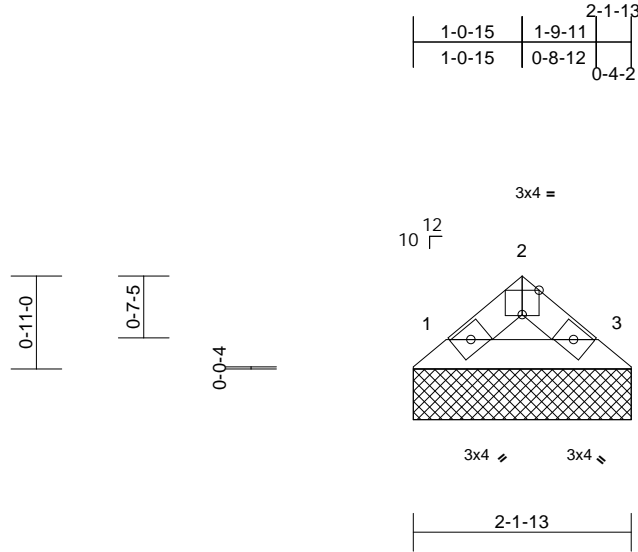
**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
16023 Swingley Ridge Rd  
Crestwood, MO 63070  
844.620.1100  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:43

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 360	I68187669
P250543-01	V11	Valley	1	1	Job Reference (optional)	

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

Run: 8.63 S Jul 12 2024 Print: 8.630 S Jul 12 2024 MiTek Industries, Inc. Thu Sep 12 14:23:51  
ID: Ak\_Gx7HSxMwhABPwKYW0avzbjFj-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:22.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	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: 6 lb	FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=2-1-13, 3=2-1-13  
Max Horiz 1=16 (LC 11)  
Max Uplift 1=-8 (LC 12), 3=-8 (LC 13)  
Max Grav 1=63 (LC 1), 3=63 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-51/40, 2-3=-51/42  
BOT CHORD 1-3=-7/30

#### 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 8 lb uplift at joint 1 and 8 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



September 13, 2024

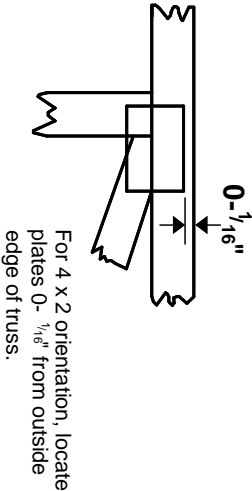
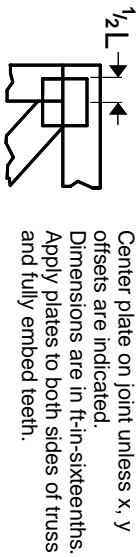
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
08/13/2025 5:04:43

# Symbols

## PLATE LOCATION AND ORIENTATION



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

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

## PLATE SIZE

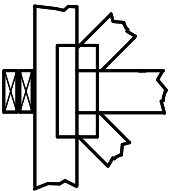
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

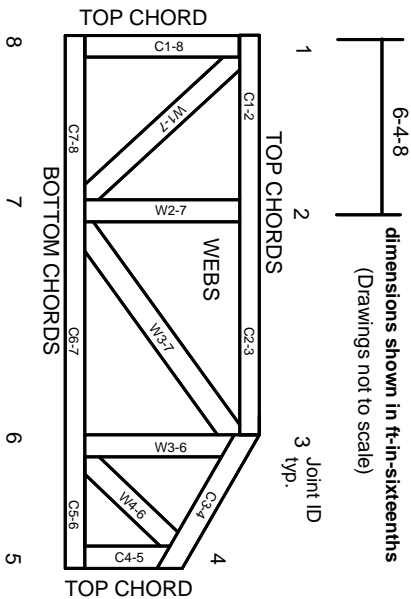
## BEARING



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

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

# Numbering System



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

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

## Product Code Approvals

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

## Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.  
Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

© 2023 MITek® All Rights Reserved

# MITek®

MITek Engineering Reference Sheet: MIL-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.