

RE: P250392-01  
Roof - BY Lot 1320

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

**Site Information:**

Customer: Clayton Properties Project Name: P250392-01  
Lot/Block: 1320 Model: Sienna - Farmhouse  
Address: 1312 SE Windbreak Dr. Subdivision: Bailey Farms  
City: Lee's Summit State: MO

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

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

This package includes 37 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I66862696	B5	7/16/2024	21	I66862716	D3	7/16/2024
2	I66862697	B4	7/16/2024	22	I66862717	D1	7/16/2024
3	I66862698	B3	7/16/2024	23	I66862718	V2	7/16/2024
4	I66862699	B2	7/16/2024	24	I66862719	J3	7/16/2024
5	I66862700	B1	7/16/2024	25	I66862720	LAY1	7/16/2024
6	I66862701	E1	7/16/2024	26	I66862721	V5	7/16/2024
7	I66862702	E2	7/16/2024	27	I66862722	C2	7/16/2024
8	I66862703	E3	7/16/2024	28	I66862723	C1	7/16/2024
9	I66862704	E4	7/16/2024	29	I66862724	J6	7/16/2024
10	I66862705	E5	7/16/2024	30	I66862725	J5	7/16/2024
11	I66862706	E6	7/16/2024	31	I66862726	J1	7/16/2024
12	I66862707	LAY2	7/16/2024	32	I66862727	D2	7/16/2024
13	I66862708	A3	7/16/2024	33	I66862728	V3	7/16/2024
14	I66862709	A2	7/16/2024	34	I66862729	J2	7/16/2024
15	I66862710	A1	7/16/2024	35	I66862730	J4	7/16/2024
16	I66862711	A4	7/16/2024	36	I66862731	V1	7/16/2024
17	I66862712	G2	7/16/2024	37	I66862732	V6	7/16/2024
18	I66862713	G1	7/16/2024				
19	I66862714	G3	7/16/2024				
20	I66862715	V4	7/16/2024				

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: Nathan Fox

My license renewal date for the state of Missouri is December 31, 2026.

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.



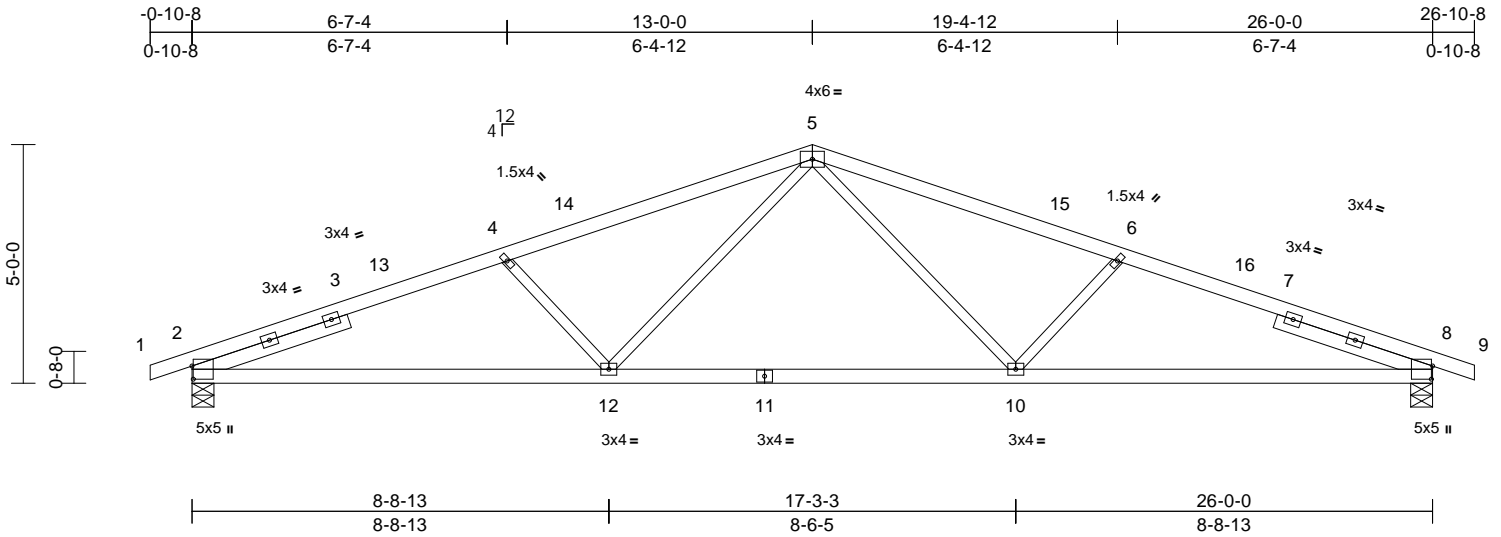
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	B5	Common	9	1	Job Reference (optional)	166862696

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. Mon Jul 15 11:15:44

Page: 1

ID: LICGysw5OsBB2j9caufNtZxFdZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:48.3

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

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	0.99	Vert(LL)	-0.16	10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.34	2-12	>909	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 108 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x3 SPF No.2  
 SLIDER Left 2x4 SP No.2 -- 3-5-5, Right 2x4 SP No.2 -- 3-5-5

#### BRACING

TOP CHORD Structural wood sheathing directly applied.  
 BOT CHORD Rigid ceiling directly applied or 8-0-6 oc bracing.

**REACTIONS** (size) 2=0-5-8, 8=0-5-8  
 Max Horiz 2=-87 (LC 17)  
 Max Uplift 2=-245 (LC 8), 8=-245 (LC 9)  
 Max Grav 2=1231 (LC 1), 8=1231 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=-5/0, 2-4=-2512/627, 4-5=-2224/562, 5-6=-2224/562, 6-8=-2511/627, 8-9=-5/0  
 BOT CHORD 2-12=-514/2285, 10-12=-297/1634, 8-10=-518/2285  
 WEBS 5-10=-108/654, 6-10=-410/251, 5-12=-108/654, 4-12=-410/251

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 13-0-0, Exterior(2R) 13-0-0 to 18-0-0, Interior (1) 18-0-0 to 26-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 245 lb uplift at joint 2 and 245 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



July 16, 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  
 06/17/2025 10:43:54

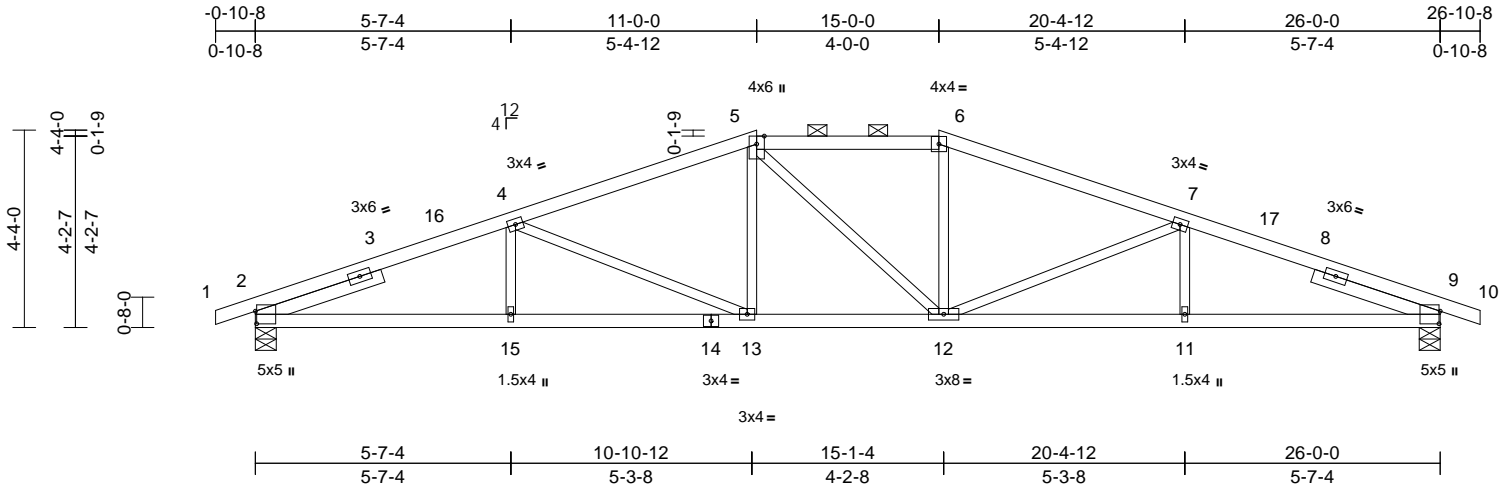
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	166862697
P250392-01	B4	Hip	1	1	Job Reference (optional)	

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. Mon Jul 15 11:15:43

Page: 1

ID:tl3b14IEKQIZx3k9ZfyTGvzxFeN-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:50.6

Plate Offsets (X, Y): [2:0-3-5,0-0-5], [9:0-3-5,0-0-5]

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	0.68	Vert(LL)	-0.14	13-15	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.27	13-15	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.10	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 113 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x3 SPF No.2  
SLIDER Left 2x4 SP No.2 -- 2-11-1, Right 2x4 SP No.2 -- 2-11-1

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 2-9-1 oc purlins, except 2-0-0 oc purlins (4-2-0 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied or 7-6-8 oc bracing.

#### REACTIONS

(size) 2=0-5-8, 9=0-5-8  
Max Horiz 2=-73 (LC 13)  
Max Uplift 2=-260 (LC 8), 9=-260 (LC 9)  
Max Grav 2=1231 (LC 1), 9=1231 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-5/0, 2-4=-2560/692, 4-5=-2054/609, 5-6=-1895/627, 6-7=-2054/623, 7-9=-2560/715, 9-10=-5/0  
BOT CHORD 2-15=-590/2318, 13-15=-590/2318, 12-13=-424/1895, 11-12=-608/2318, 9-11=-608/2318  
WEBS 4-15=0/219, 4-13=-496/188, 5-13=-20/303, 5-12=-182/184, 6-12=-28/303, 7-12=-495/189, 7-11=0/218

#### 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) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 11-0-0, Exterior(2E) 11-0-0 to 15-0-0, Exterior(2R) 15-0-0 to 22-0-14, Interior (1) 22-0-14 to 26-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 260 lb uplift at joint 2 and 260 lb uplift at joint 9.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 16, 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  
06/17/2025 10:43:54

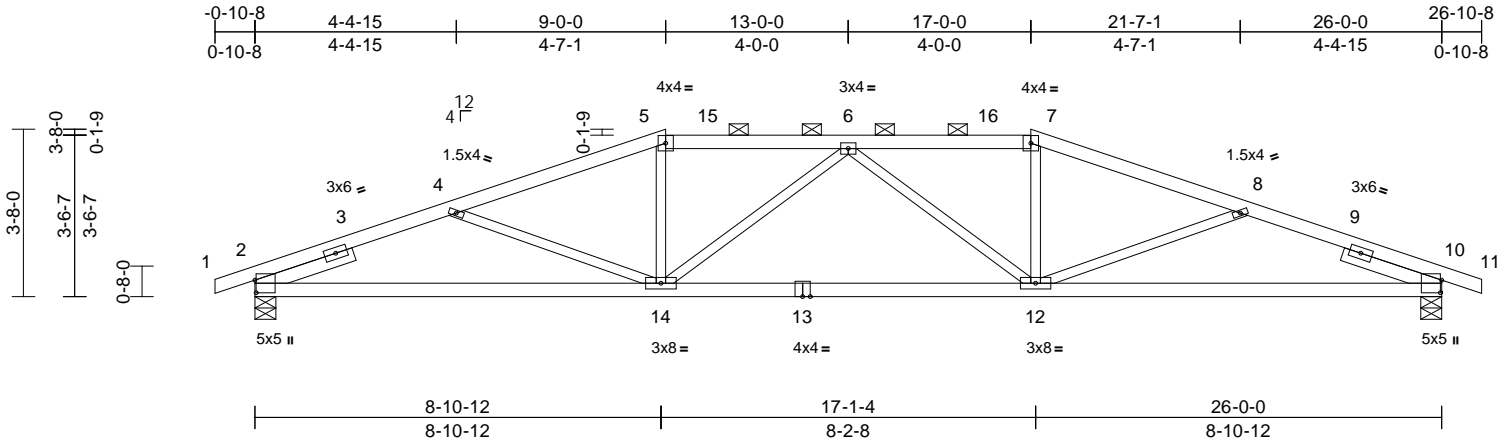
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	B3	Hip	1	1	Job Reference (optional)	I66862698

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. Mon Jul 15 11:15:43

Page: 1

ID:agcX?t?A\_2Hz3NvY9dWrlrzxFel-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:50.5

Plate Offsets (X, Y): [2:0-3-5,0-0-5], [10:0-3-5,0-0-5]

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	0.73	Vert(LL)	-0.17	2-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.38	2-14	>825	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 109 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 -- 2-3-2, Right 2x4 SP No.2 -- 2-3-2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 2-5-8 oc purlins, except 2-0-0 oc purlins (3-10-8 max.): 5-7.  
BOT CHORD Rigid ceiling directly applied or 7-0-4 oc bracing.

#### REACTIONS

(size) 2=0-5-8, 10=0-5-8  
Max Horiz 2=-61 (LC 17)  
Max Uplift 2=-272 (LC 8), 10=-272 (LC 9)  
Max Grav 2=1231 (LC 1), 10=1231 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-5/0, 2-4=-2503/781, 4-5=-2281/651, 5-6=-2129/650, 6-7=-2129/650, 7-8=-2281/651, 8-10=-2503/781, 10-11=-5/0  
BOT CHORD 2-14=-674/2257, 12-14=-598/2342, 10-12=-671/2257  
WEBS 5-14=-51/390, 7-12=-51/390, 4-14=-162/212, 8-12=-162/212, 6-14=-407/162, 6-12=-407/162

#### 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) -0-10-8 to 4-2-7, Interior (1) 4-2-7 to 9-0-0, Exterior(2R) 9-0-0 to 16-0-14, Interior (1) 16-0-14 to 17-0-0, Exterior(2R) 17-0-0 to 24-0-14, Interior (1) 24-0-14 to 26-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 272 lb uplift at joint 2 and 272 lb uplift at joint 10.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 16, 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  
06/17/2025 10:43:54

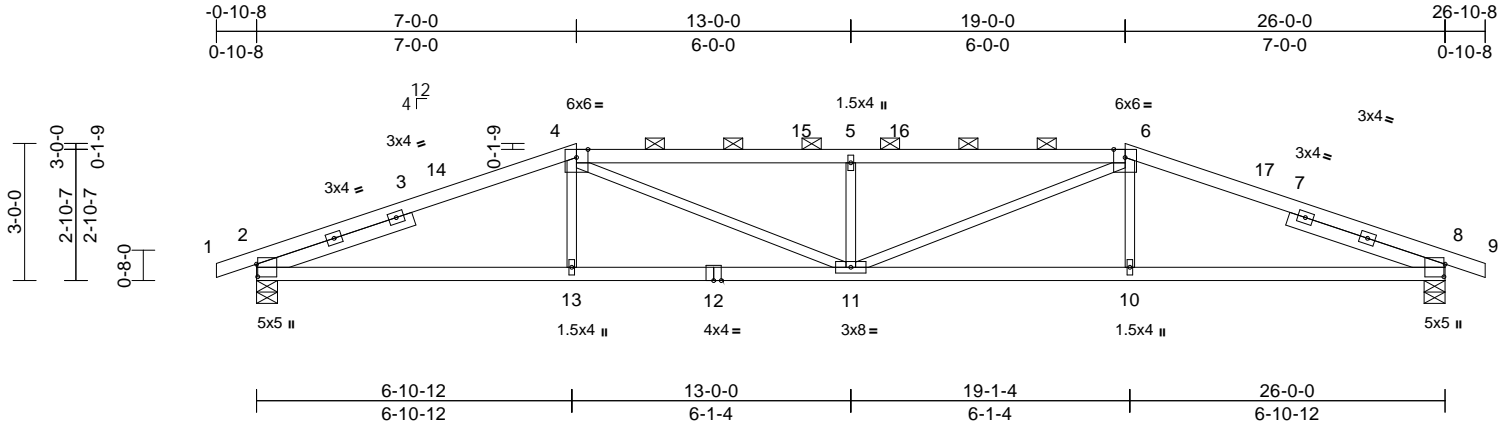
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	166862699
P250392-01	B2	Hip	1	1	Job Reference (optional)	

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. Mon Jul 15 11:15:43

Page: 1

ID:SvoBiceM2qVDTmcnPK\_o4WzxFD-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC7f



Scale = 1:50.4

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

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	0.96	Vert(LL)	-0.20	11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.38	10-11	>831	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.10	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 108 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP 1650F 1.5E \*Except\* 4-6:2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x3 SPF No.2  
SLIDER Left 2x4 SP No.2 -- 3-7-3, Right 2x4 SP No.2 -- 3-7-3

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-5-2 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied or 7-11-7 oc bracing.

#### REACTIONS

(size) 2=0-5-8, 8=0-5-8  
Max Horiz 2=48 (LC 16)  
Max Uplift 2=-281 (LC 8), 8=-281 (LC 9)  
Max Grav 2=1231 (LC 1), 8=1231 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=-5/0, 2-4=-2537/674, 4-5=-3050/872, 5-6=-3050/872, 6-8=-2537/674, 8-9=-5/0  
BOT CHORD 2-13=-538/2307, 11-13=-541/2302, 10-11=-548/2302, 8-10=-545/2307  
WEBS 4-13=0/273, 4-11=-231/962, 5-11=-556/253, 6-11=-231/962, 6-10=0/273

#### 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) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 7-0-0, Exterior(2R) 7-0-0 to 14-0-14, Interior (1) 14-0-14 to 19-0-0, Exterior(2R) 19-0-0 to 26-0-0, Interior (1) 26-0-0 to 26-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 281 lb uplift at joint 2 and 281 lb uplift at joint 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 16, 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  
06/17/2025 10:43:55



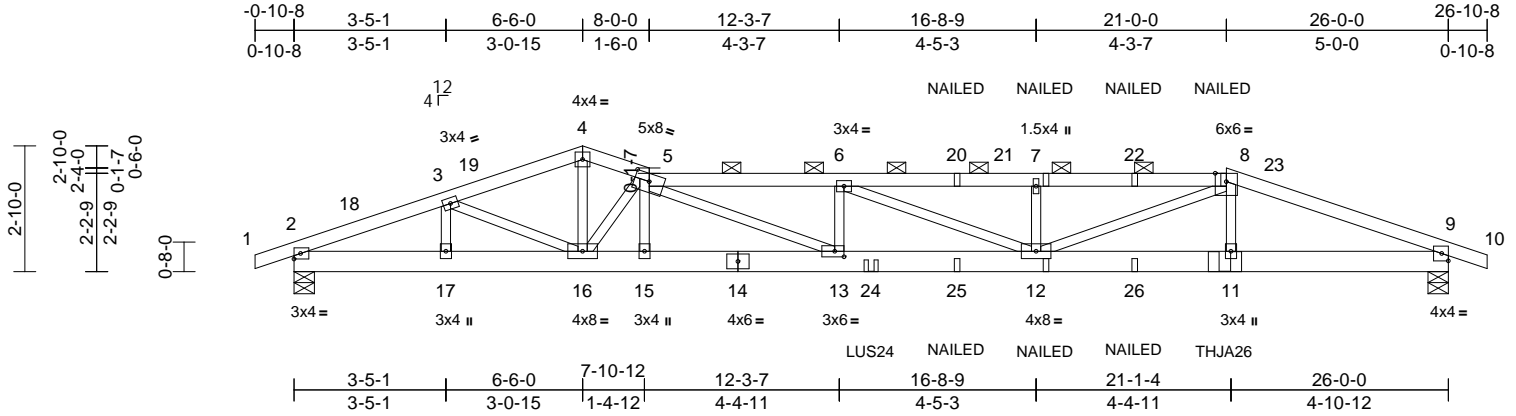
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	I66862700
P250392-01	B1	Roof Special Girder	1	2	Job Reference (optional)	

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. Mon Jul 15 11:15:43

Page: 1

ID: dCN3Jx9GTYSucyY53wGQS4zxFr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCD0i7J4zJC?f



Scale = 1:51.9

Plate Offsets (X, Y): [5:0-4-0,0-2-2], [13:0-2-8,0-1-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.26	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.47	12-13	>656	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 224 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SPF No.2  
WEBS 2x3 SPF No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-4-6 oc purlins, except 2-0-0 oc purlins (4-2-11 max.): 5-8.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-5-8, 9=0-5-8  
Max Horiz 2=46 (LC 13)  
Max Uplift 2=345 (LC 8), 9=572 (LC 9)  
Max Grav 2=1748 (LC 1), 9=2115 (LC 1)

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

TOP CHORD 1-2=0/1, 2-3=-3605/932, 3-4=-3784/999, 4-5=-3816/1021, 5-6=-7376/1935, 6-7=-6874/1879, 7-8=-6878/1881, 8-9=-4988/1375, 9-10=0/1  
BOT CHORD 2-17=-810/3245, 16-17=-810/3245, 15-16=-1300/5346, 13-15=-1303/5348, 12-13=-1836/7373, 11-12=-1211/4552, 9-11=-1212/4576  
WEBS 5-15=-42/60, 8-11=-33/434, 3-17=-80/81, 3-16=-126/485, 4-16=-580/2313, 5-16=-2864/732, 5-13=-620/2291, 8-12=-624/2539, 6-13=-272/175, 6-12=-540/175, 7-12=-612/315

#### 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: 2x6 - 2 rows staggered at 0-9-0 oc.  
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.

- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 6-6-0, Exterior(2E) 6-6-0 to 8-0-0, Interior (1) 8-0-0 to 21-0-0, Exterior(2R) 21-0-0 to 25-9-4, Interior (1) 25-9-4 to 26-10-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 345 lb uplift at joint 2 and 572 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent at 13-0-0 from the left end to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 20-11-10 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

14) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-4=-70, 4-5=-70, 5-8=-70, 8-10=-70, 2-9=-20  
Concentrated Loads (lb)  
Vert: 8=-97 (B), 11=-301 (B), 12=-29 (B), 7=-97 (B), 20=-97 (B), 22=-97 (B), 24=-630 (B), 25=-29 (B), 26=-29 (B)



July 16, 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  
06/17/2025 10:43:55

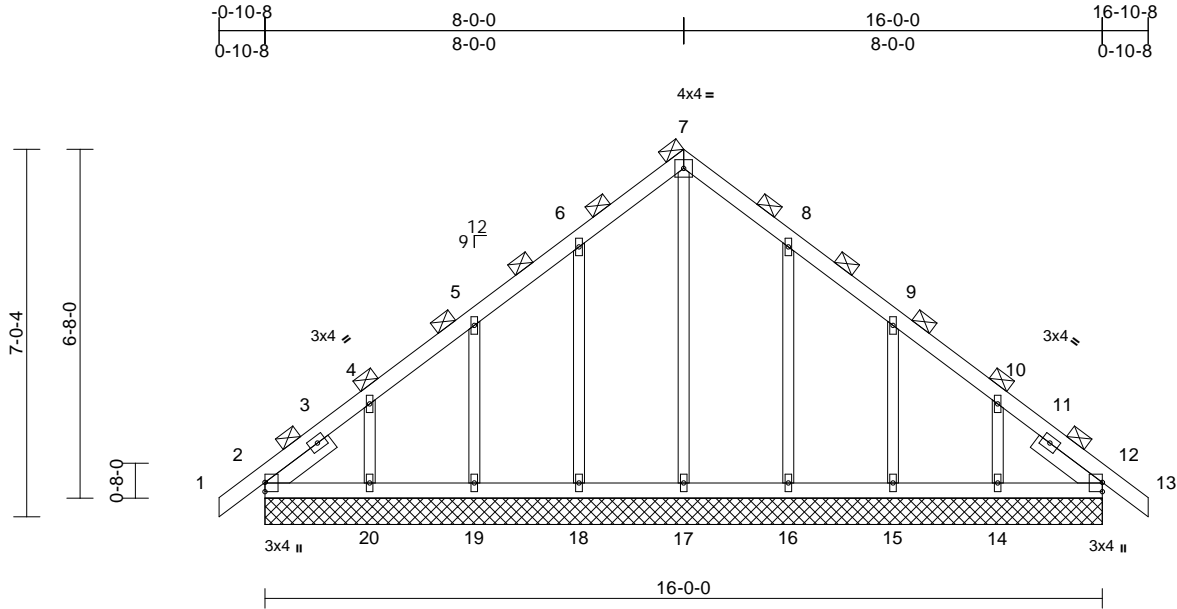
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	166862701
P250392-01	E1	Common Supported Gable	1	1	Job Reference (optional)	

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. Mon Jul 15 11:15:44

Page: 1

ID:zTnbfY4ATh0DjBuqAsmEzxFsq-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCDoi7J4zJC?i



Scale = 1:44

Loading	(psf)	Spacing	4-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.31	Horz(CT)	0.01	12	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 82 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 -- 1-6-2, Right 2x4 SP No.2 -- 1-6-2

#### BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.) (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	2=16-0-0, 12=16-0-0, 14=16-0-0, 15=16-0-0, 16=16-0-0, 17=16-0-0, 18=16-0-0, 19=16-0-0, 20=16-0-0
Max Horiz		2=372 (LC 11)
Max Uplift		2=-96 (LC 8), 12=-15 (LC 9), 14=-235 (LC 13), 15=-174 (LC 13), 16=-176 (LC 13), 18=-181 (LC 12), 19=-170 (LC 12), 20=-249 (LC 12)
Max Grav		2=387 (LC 20), 12=355 (LC 1), 14=403 (LC 20), 15=380 (LC 20), 16=399 (LC 20), 17=334 (LC 22), 18=404 (LC 19), 19=376 (LC 19), 20=418 (LC 19)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/42, 2-4=-357/272, 4-5=-265/186, 5-6=-235/229, 6-7=-236/415, 7-8=-236/415, 8-9=-157/231, 9-10=-183/78, 10-12=-291/152, 12-13=0/42
BOT CHORD	2-20=-131/364, 19-20=-131/364, 18-19=-131/364, 17-18=-131/364, 16-17=-131/364, 15-16=-131/364, 14-15=-131/364, 12-14=-131/364
WEBS	7-17=-319/80, 6-18=-323/262, 5-19=-299/303, 4-20=-326/380, 8-16=-318/264, 9-15=-303/304, 10-14=-312/376

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-0-0, Exterior(2N) 4-0-0 to 8-0-0, Corner(3R) 8-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 16-10-8 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 96 lb uplift at joint 2, 15 lb uplift at joint 12, 181 lb uplift at joint 18, 170 lb uplift at joint 19, 249 lb uplift at joint 20, 176 lb uplift at joint 16, 174 lb uplift at joint 15 and 235 lb uplift at joint 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 16, 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  
06/17/2025 10:43:55

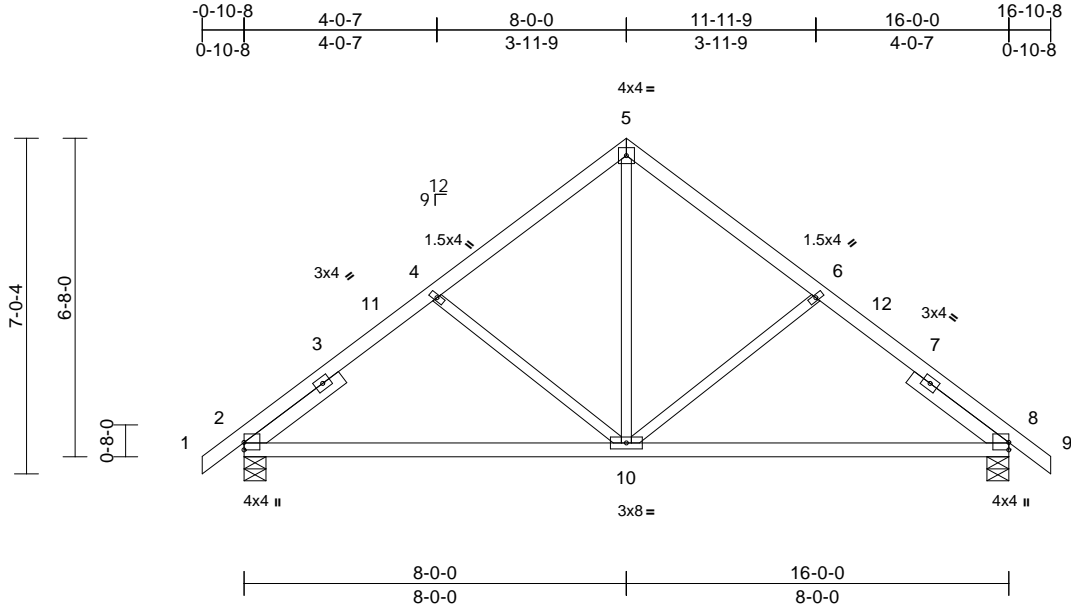
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	166862702
P250392-01	E2	Common	1	1	Job Reference (optional)	

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. Mon Jul 15 11:15:44

Page: 1

ID:?MLvUUN2?fhrrHbsLNBubGzxFAZ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?i



Scale = 1:48.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.08	2-10	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.17	2-10	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.02	8	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 78 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-5-11, Right 2x4 SP No.2 -- 2-5-11

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 2 and 118 lb uplift at joint 8.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

#### BRACING

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

REACTIONS	(size) 2=0-5-8, 8=0-5-8
Max Horiz	2=-186 (LC 10)
Max Uplift	2=-118 (LC 12), 8=-118 (LC 13)
Max Grav	2=781 (LC 1), 8=781 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/21, 2-4=-896/197, 4-5=-688/190, 5-6=-688/190, 6-8=-895/197, 8-9=0/21
BOT CHORD	2-10=-145/681, 8-10=-69/643
WEBS	5-10=-98/441, 4-10=-245/201, 6-10=-246/201

#### 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) -0-10-8 to 3-11-0, Interior (1) 3-11-0 to 8-0-0, Exterior(2R) 8-0-0 to 13-0-0, Interior (1) 13-0-0 to 16-10-8 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.



July 16, 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  
06/17/2025 10:43:55



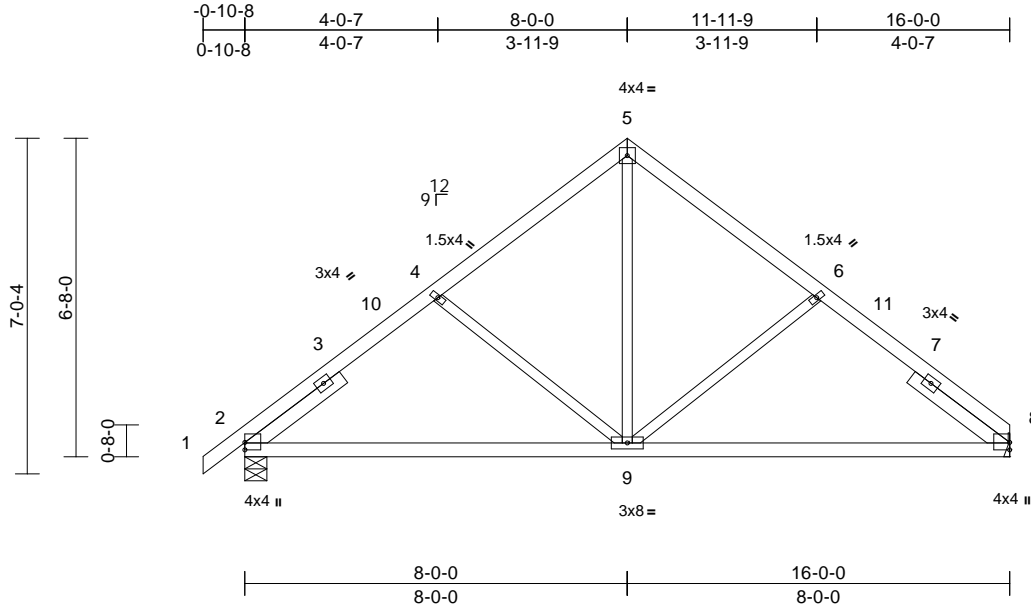
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	E3	Common	2	1	Job Reference (optional)	I66862703

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. Mon Jul 15 11:15:44

Page: 1

ID:HY28PNq7N0R8tSE4HnNes3zxFCa-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:48.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.08	8-9	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.17	8-9	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.02	8	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 76 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-5-11, Right 2x4 SP No.2 -- 2-5-11

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 8 and 119 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

#### BRACING

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

REACTIONS	(size) 2=0-5-8, 8= Mechanical
	Max Horiz 2=183 (LC 9)
	Max Uplift 2=-119 (LC 12), 8=-96 (LC 13)
	Max Grav 2=783 (LC 1), 8=718 (LC 1)

FORCES	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/21, 2-4=-899/198, 4-5=-691/191, 5-6=-691/192, 6-8=-900/201
BOT CHORD	2-9=-151/678, 8-9=-83/650
WEBS	5-9=-101/446, 4-9=-245/201, 6-9=-251/205

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-11-0, Interior (1) 3-11-0 to 8-0-0, Exterior(2R) 8-0-0 to 13-0-0, Interior (1) 13-0-0 to 16-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.



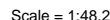
July 16, 2024

**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  
06/17/2025 10:43:55

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. Mon Jul 15 11:15:44 Page: 1  
ID:wlbY 10 qexrEDTRTKrEALzFXQ-RfC?PsB70Ha3NSaPanL8w3uITXbGKWRCDoi7J4zJC?f



**LUMBER**

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-5-11, Right 2x4 SP No 2 -- 2-6-15

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 8 and 119 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

## LOAD CASE(S) Standard

<b>BRACING</b>	
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.
<b>REACTIONS</b>	(size) 2=0-5-8, 8=0-5-8
	Max Horiz 2=183 (LC 9)
	Max Uplift 2=-119 (LC 12), 8=-96 (LC 13)
	Max Grav 2=783 (LC 1), 8=718 (LC 1)
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/21, 2-4=-899/198, 4-5=-691/191, 5-6=-691/193, 6-8=-899/201
BOT CHORD	2-9=-151/678, 8-9=-83/650
WEBS	5-9=-101/446, 4-9=-245/201, 6-9=-251/204

## 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) 0-10-8 to 3-11-0, Interior (1) 3-11-0 to 8-0-0, Exterior(2R) 8-0-0 to 13-0-0, Interior (1) 13-0-0 to 16-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



 **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))

**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVILBLENK SERVICES  
16023 Swingle Ridge Rd  
Chesapeake, MD 20830  
814-454-1200 / MiTekUS.com  
LEE'S SUMMIT, MISSOURI

06/17/2025 10:43:55

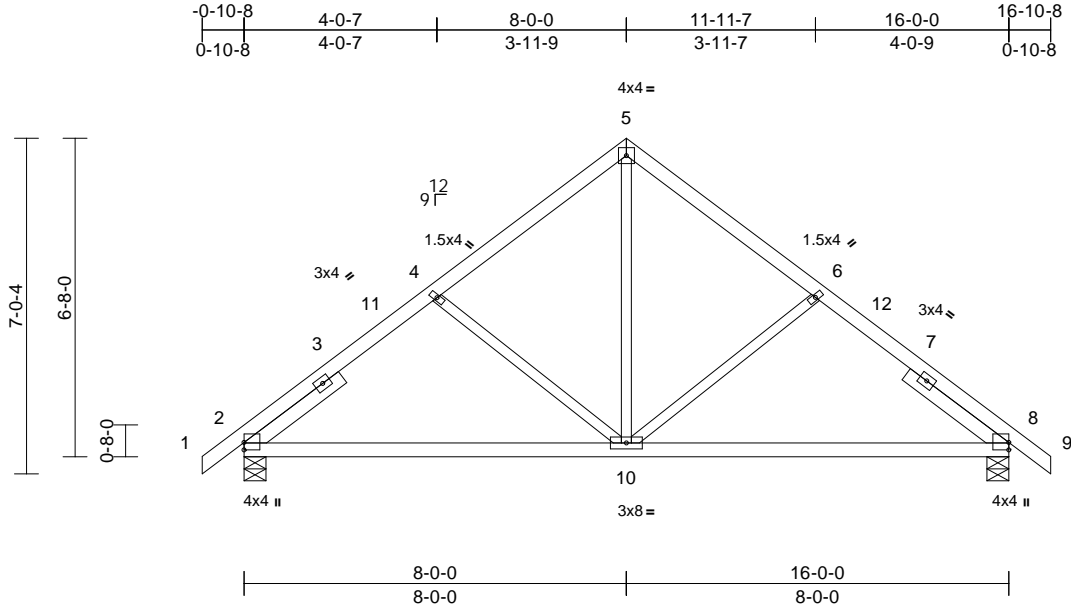
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	I66862705
P250392-01	E5	Common	5	1	Job Reference (optional)	

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. Mon Jul 15 11:15:45

Page: 1

ID: \_YuWsvNk9MFNN4wGt6OpXZzxFRM-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



Scale = 1:48.2

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.08	8-10	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.17	8-10	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.02	8	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							
										Weight: 78 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-5-11, Right 2x4 SP No.2 -- 2-6-15

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 2 and 118 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

#### BRACING

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

#### REACTIONS

(size)	2=0-5-8, 8=0-5-8
Max Horiz	2=186 (LC 11)
Max Uplift	2=-118 (LC 12), 8=-118 (LC 13)
Max Grav	2=781 (LC 1), 8=781 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=0/21, 2-4=-896/197, 4-5=-688/190, 5-6=-688/190, 6-8=-895/197, 8-9=0/21
BOT CHORD	2-10=-145/681, 8-10=-68/643
WEBS	5-10=-98/442, 4-10=-245/201, 6-10=-245/201

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 3-11-0, Interior (1) 3-11-0 to 8-0-0, Exterior(2R) 8-0-0 to 13-0-0, Interior (1) 13-0-0 to 16-10-8 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.



July 16, 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  
06/17/2025 10:43:55

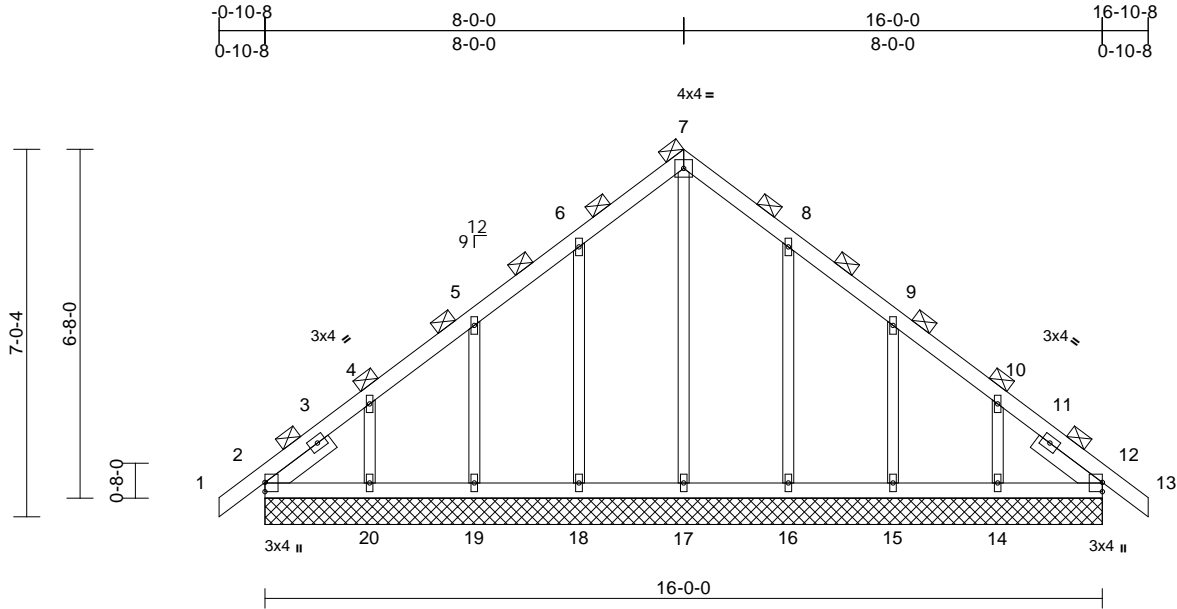
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	166862706
P250392-01	E6	Common Supported Gable	1	1	Job Reference (optional)	

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. Mon Jul 15 11:15:45

Page: 1

ID:zTnbfY4ATh0DjBuqAsmEzxFSQ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKwRCDoi7J4zJC?i



Scale = 1:44

Loading	(psf)	Spacing	4-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.31	Horz(CT)	0.01	12	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 82 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 -- 1-6-2, Right 2x4 SP No.2 -- 1-6-2

#### BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.) (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	2=16-0-0, 12=16-0-0, 14=16-0-0, 15=16-0-0, 16=16-0-0, 17=16-0-0, 18=16-0-0, 19=16-0-0, 20=16-0-0
Max Horiz		2=372 (LC 11)
Max Uplift		2=-96 (LC 8), 12=-15 (LC 9), 14=-235 (LC 13), 15=-174 (LC 13), 16=-176 (LC 13), 18=-181 (LC 12), 19=-170 (LC 12), 20=-249 (LC 12)
Max Grav		2=387 (LC 20), 12=355 (LC 1), 14=403 (LC 20), 15=380 (LC 20), 16=399 (LC 20), 17=334 (LC 22), 18=404 (LC 19), 19=376 (LC 19), 20=418 (LC 19)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=0/42, 2-4=-357/272, 4-5=-265/186, 5-6=-235/229, 6-7=-236/415, 7-8=-236/415, 8-9=-157/231, 9-10=-183/78, 10-12=-291/152, 12-13=0/42
BOT CHORD	2-20=-131/364, 19-20=-131/364, 18-19=-131/364, 17-18=-131/364, 16-17=-131/364, 15-16=-131/364, 14-15=-131/364, 12-14=-131/364
WEBS	7-17=-319/80, 6-18=-323/262, 5-19=-299/303, 4-20=-326/380, 8-16=-318/264, 9-15=-303/304, 10-14=-312/376

#### NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-0-0, Exterior(2N) 4-0-0 to 8-0-0, Corner(3R) 8-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 16-10-8 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 96 lb uplift at joint 2, 15 lb uplift at joint 12, 181 lb uplift at joint 18, 170 lb uplift at joint 19, 249 lb uplift at joint 20, 176 lb uplift at joint 16, 174 lb uplift at joint 15 and 235 lb uplift at joint 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



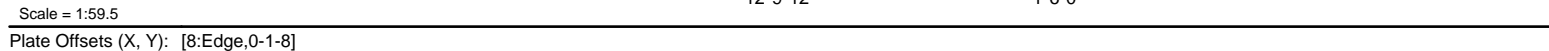
July 16, 2024

**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  
06/17/2025 10:43:55

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. Mon Jul 15 11:15:46 Page: 1  
ID:hqFJqU70xwCBQJPjyVEyNfzxFft-RfC?PsB70Hg3NSgPqnL8w3ulTXbGKWCRDci7J4zJC?f



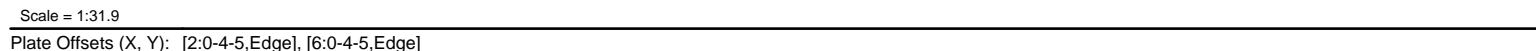
<b>LUMBER</b>		2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-4-1 to 5-4-1, Interior (1) 5-4-1 to 7-11-0, Exterior(2R) 7-11-0 to 12-11-0, Interior (1) 12-11-0 to 14-1-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
TOP CHORD	2x4 SP No.2	
BOT CHORD	2x4 SP No.2	
OTHERS	2x3 SPF No.2	
<b>BRACING</b>		
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.	
<b>REACTIONS</b>		3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
(size)	1=14-3-12, 8=14-3-12, 9=14-3-12, 10=14-3-12, 11=14-3-12, 12=14-3-12, 13=14-3-12, 14=14-3-12, 15=14-3-12	4) All plates are 1.5x4 MT20 unless otherwise indicated.
Max Horiz	1=221 (LC 9)	5) Gable requires continuous bottom chord bearing.
Max Uplift	1=-86 (LC 10), 8=-115 (LC 11), 9=-186 (LC 13), 10=-165 (LC 13), 11=-130 (LC 13), 13=-134 (LC 12), 14=-139 (LC 12), 15=-137 (LC 12)	6) Gable studs spaced at 0-0-0 oc.
Max Grav	1=216 (LC 12), 8=302 (LC 13), 9=116 (LC 11), 10=219 (LC 20), 11=211 (LC 20), 12=153 (LC 22), 13=212 (LC 19), 14=206 (LC 19), 15=209 (LC 19)	7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
<b>FORCES</b>		8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
(lb) - Maximum Compression/Maximum Tension		9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 1, 115 lb uplift at joint 8, 186 lb uplift at joint 9, 137 lb uplift at joint 15, 139 lb uplift at joint 14, 134 lb uplift at joint 13, 130 lb uplift at joint 11 and 165 lb uplift at joint 10.
TOP CHORD	1-2=-316/207, 2-3=-190/132, 3-4=-137/87, 4-5=-149/138, 5-6=-147/133, 6-7=-114/54, 7-8=-187/119	10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.
BOT CHORD	1-15=-106/168, 14-15=-107/168, 13-14=-107/168, 12-13=-107/168, 11-12=-107/168, 10-11=-107/168, 9-10=-107/168, 8-9=-178/264	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.
WEBS	2-15=-187/154, 3-14=-198/165, 4-13=-186/157, 5-12=-126/84, 6-11=-184/154, 7-10=-223/186	
<b>LOAD CASE(S)</b>		Standard

STATE OF MISSOURI  
NATHANIEL  
FOX  
NUMBER  
PE-2022042259  
PROFESSIONAL ENGINEER

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>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 <b>ANSI/TPH Quality Criteria</b>, and <b>DSB-22</b> available from Truss Plate Institute (<a href="http://www.tpinst.org">www.tpinst.org</a>) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (<a href="http://www.sbcsccomponents.com">www.sbcsccomponents.com</a>)</p>	 <p><b>RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPED BY SERVICES LEE'S SUMMIT, MISSOURI</b></p> <p>6023 Sylvania Ridge Rd Crested Hill, MO 63001 Phone: 636.339.1100 Fax: 636.339.1101</p> <p><b>06/17/2025 10:43:55</b></p>
---	---



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. Mon Jul 15 11:15:43 Page: 1



<b>LUMBER</b>		5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 2 and 143 lb uplift at joint 6.
TOP CHORD	2x4 SP No.2	6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
BOT CHORD	2x4 SP No.2	
WEBS	2x3 SPF No.2	
SLIDER	Left 2x4 SP No.2 -- 3-4-11, Right 2x4 SP No.2 -- 3-4-11	
<b>BRACING</b>		<b>LOAD CASE(S)</b> Standard

<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 5-2-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
<b>REACTIONS</b>	(size) 2=0-5-8, 6=0-5-8
	Max Horiz 2=46 (LC 16)
	Max Uplift 2=-143 (LC 8), 6=-143 (LC 9)
	Max Grav 2=646 (LC 1), 6=646 (LC 1)
<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-5/0, 2-4=-955/439, 4-6=-955/439, 6-7=-5/0
BOT CHORD	2-8=-305/825, 6-8=-305/825
WEBS	4-8=0/295

## 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) 0-10-8 to 4-1-8,  
 Interior (1) 4-1-8 to 6-6-0, Exterior(2R) 6-6-0 to 11-6-0,  
 Interior (1) 11-6-0 to 13-10-8 zone; cantilever left and  
 right exposed ; end vertical left and right exposed; C-C  
 for members and forces & MWFRS for reactions shown;  
 Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom  
 chord live load nonconcurrent with any other live loads.
- 4) All bearings are assumed to be SP No.2 crushing  
 capacity of 565 psi.



July 16, 2024

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

**WARNING – verify design parameters and 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))

**Mitek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
16023 Swingle Ridge Rd  
Chesterfield, MO 63005  
DEVELOPER/MSD SERVICES  
914-494-1200 / MitekUS.com  
LEE'S SUMMIT, MISSOURI

06/17/2025 10:43:55

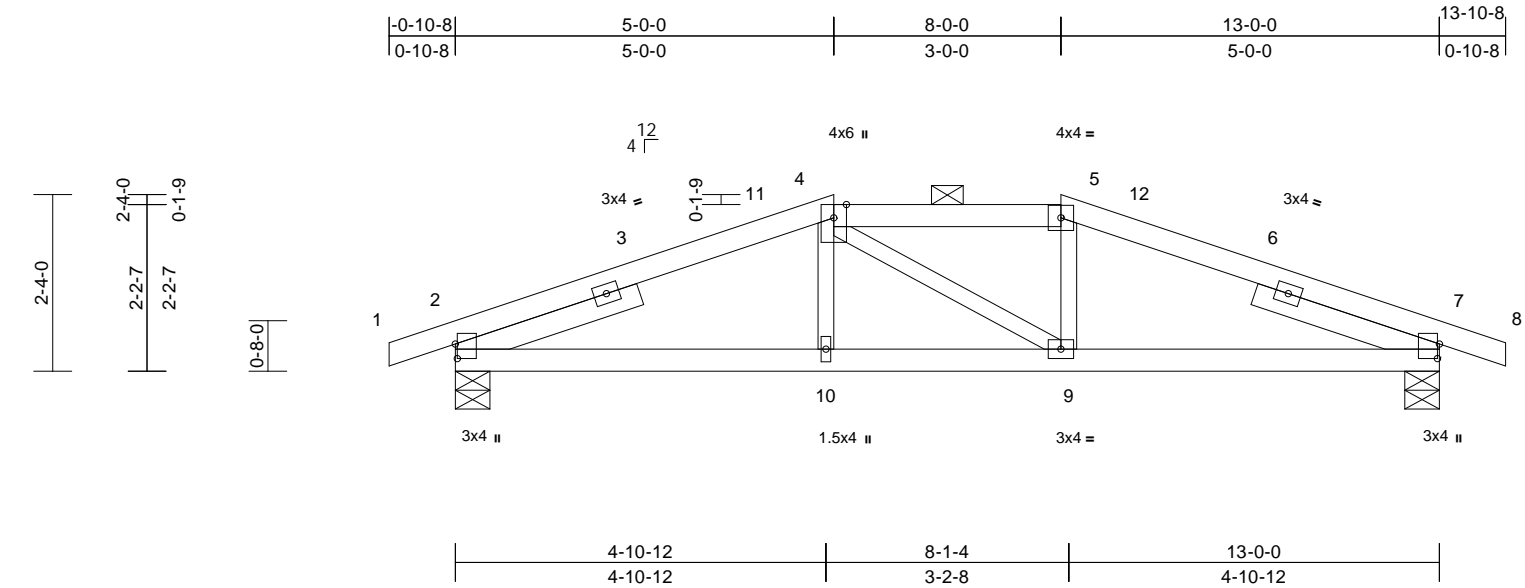
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	166862709
P250392-01	A2	Hip	1	1	Job Reference (optional)	

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. Mon Jul 15 11:15:42

Page: 1

ID:BTUW8PT4CqydUFQNGEGqJmzxFi0-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:30.4

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

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	0.24	Vert(LL)	-0.02	2-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.05	2-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 56 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 2-6-9, Right 2x4 SP No.2 -- 2-6-9

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-9-11 oc purlins, except 2-0-0 oc purlins (5-11-7 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 9-2-5 oc bracing.

#### REACTIONS

(size)	2=0-5-8, 7=0-5-8
Max Horiz	2=36 (LC 12)
Max Uplift	2=-154 (LC 8), 7=-154 (LC 9)
Max Grav	2=646 (LC 1), 7=646 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-2=-5/0, 2-4=-1053/527, 4-5=-923/551, 5-7=-1053/535, 7-8=-5/0
BOT CHORD	2-10=-396/927, 9-10=-398/922, 7-9=-410/927
WEBS	4-10=0/161, 4-9=-119/120, 5-9=0/161

#### 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) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-0-0, Exterior(2E) 5-0-0 to 13-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 154 lb uplift at joint 2 and 154 lb uplift at joint 7.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 16, 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  
06/17/2025 10:43:55

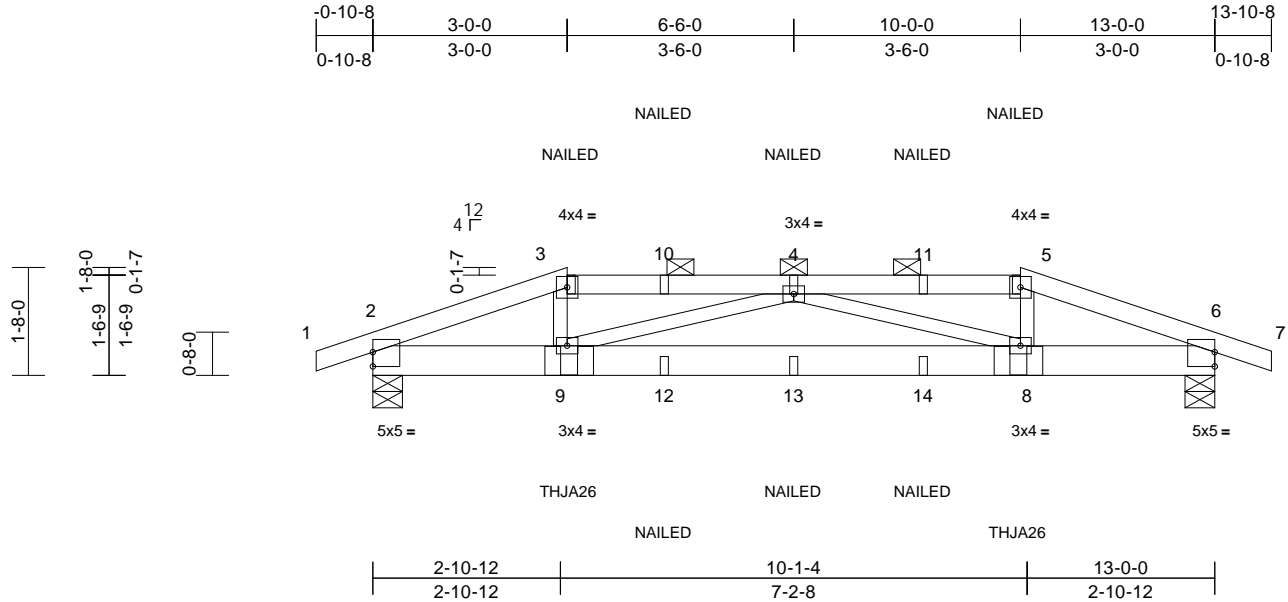
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	166862710
P250392-01	A1	Hip Girder	1	1	Job Reference (optional)	

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. Mon Jul 15 11:15:41

Page: 1

ID:BCy5ZbGPCcp1yed6w9Tr7BzxFiH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:35.6									
Plate Offsets (X, Y): [2:Edge,0-2-10], [6:Edge,0-2-10]									
<b>Loading</b>	(psf)	<b>Spacing</b>	2-0-0	<b>CSI</b>		<b>DEFL</b>	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.06 8-9	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.12 8-9	>999	180
BCLL	0.0	Rep Stress Incr	NO	WB	0.24	Horz(CT)	0.02 6	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
					<b>PLATES</b>		<b>GRIP</b>		
					MT20		197/144		
					Weight: 53 lb		FT = 20%		

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SPF No.2  
WEBS 2x3 SPF No.2

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 4-6-4 oc purlins, except 2-0-0 oc purlins (4-7-5 max.): 3-5.  
BOT CHORD Rigid ceiling directly applied or 7-9-11 oc bracing.

**REACTIONS** (size) 2=0-5-8, 6=0-5-8  
Max Horiz 2=-23 (LC 34)  
Max Uplift 2=-281 (LC 8), 6=-281 (LC 9)  
Max Grav 2=863 (LC 1), 6=863 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-2=0/1, 2-3=-1658/619, 3-4=-1444/594, 4-5=-1444/603, 5-6=-1658/628, 6-7=0/1  
BOT CHORD 2-9=-512/1478, 8-9=-892/1990, 6-8=-521/1478  
WEBS 3-9=-79/447, 5-8=-81/447, 4-8=-605/397, 4-9=-605/407

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 281 lb uplift at joint 2 and 281 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 1 ply, Right Hand Hip) or equivalent at 3-0-6 from the left end to connect truss(es) to back face of bottom chord.
- Use Simpson Strong-Tie THJA26 (THJA26 on 1 ply, Left Hand Hip) or equivalent at 9-11-10 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
- 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20  
Concentrated Loads (lb)  
Vert: 3=-24 (B), 5=-24 (B), 9=-148 (B), 8=-148 (B), 4=-24 (B), 10=-24 (B), 11=-24 (B), 12=-9 (B), 13=-9 (B), 14=-9 (B)

- 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
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.



July 16, 2024

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

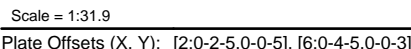
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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

06/17/2025 10:43:56

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. Mon Jul 15 11:15:43 Page: 1



<b>LUMBER</b>		6)	Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 6 and 143 lb uplift at joint 2.
TOP CHORD	2x4 SP No.2	7)	This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
BOT CHORD	2x4 SP No.2		
WEBS	2x3 SPF No.2		
SLIDER	Left 2x4 SP No.2 -- 3-4-11, Right 2x4 SP No.2 -- 3-4-6		

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

**REACTIONS** (size) 2=0-5-8, 6= Mechanical  
 Max Horiz 2=49 (LC 17)  
 Max Uplift 2=143 (LC 8), 6=101 (LC 9)  
 Max Grav 2=646 (LC 1), 6=580 (LC 1)

TOP CHORD 1-2=-5/0, 2-4=-953/454, 4-6=-952/464  
BOT CHORD 2-7=-319/823, 6-7=-319/823  
WEBS 4-7=0/295

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCFL=6.0psf; BCFL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8,  
Interior (1) 4-1-8 to 6-6-0, Exterior(2R) 6-6-0 to 11-6-0,  
Interior (1) 11-6-0 to 12-11-4 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 gir 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) Bearings are assumed to be: Joint 2 SP No.2 crushing  
capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.



**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))

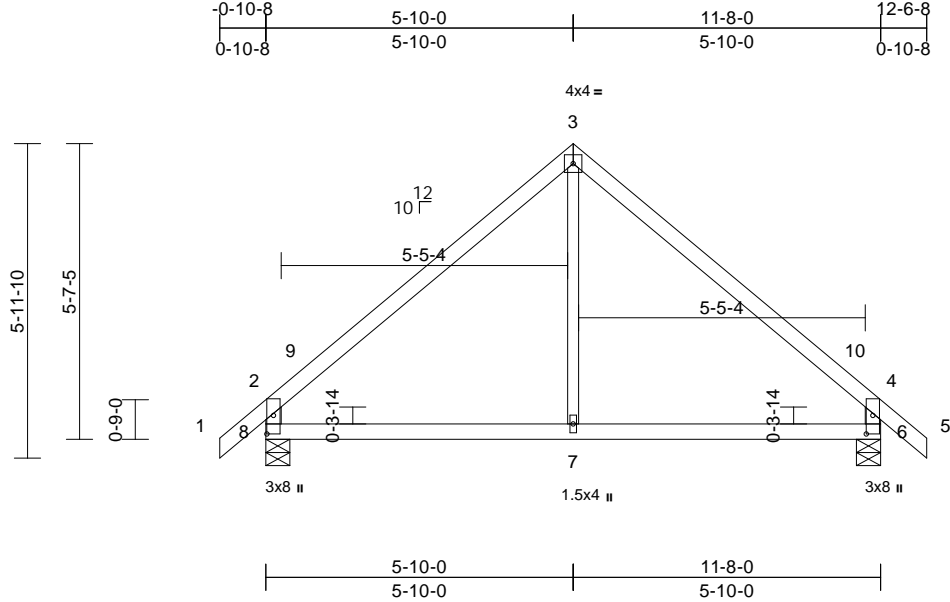
06/17/2025 10:43:56

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	G2	Common	2	1	Job Reference (optional)	I66862712

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. Mon Jul 15 11:15:45  
ID:KybgmexPJUHvfiEQCBTNemzxF7G-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:43.7

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	0.03	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.05	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 49 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.2 \*Except\* 7-3:2x3 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) 6=0-5-8, 8=0-5-8  
Max Horiz 8=178 (LC 11)  
Max Uplift 6=89 (LC 13), 8=89 (LC 12)  
Max Grav 6=583 (LC 1), 8=583 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/46, 2-3=-531/180, 3-4=-531/179,  
4-5=0/46, 2-8=-537/252, 4-6=-537/252  
BOT CHORD 7-8=0/331, 6-7=0/331  
WEBS 3-7=0/253

#### 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) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 5-10-0, Exterior(2R) 5-10-0 to 10-10-0, Interior (1) 10-10-0 to 12-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 8 and 89 lb uplift at joint 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 16, 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  
06/17/2025 10:43:56



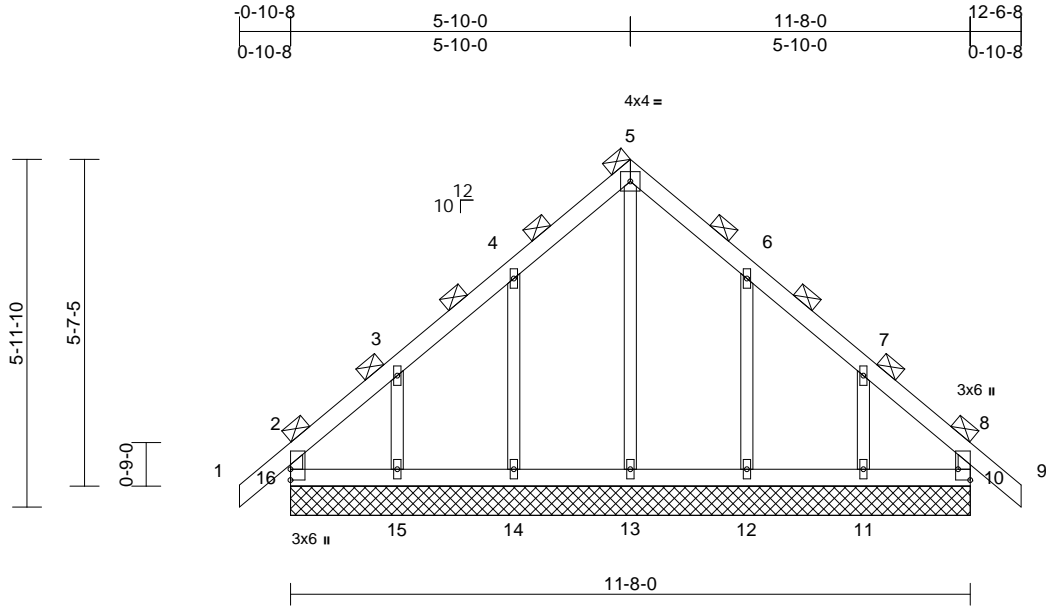
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	G1	Common Supported Gable	1	1	Job Reference (optional)	I66862713

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. Mon Jul 15 11:15:45

Page: 1

ID:RNmtDqGvFaLiZFXu8\_Uw9zxF87-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:39.5

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

Loading	(psf)	Spacing	4-0-0	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	-	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.31	Horz(CT)	0.00	10	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 57 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	2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size)	10=11-8-0, 11=11-8-0, 12=11-8-0, 13=11-8-0, 14=11-8-0, 15=11-8-0, 16=11-8-0
Max Horiz	16=353 (LC 11)
Max Uplift	10=75 (LC 9), 11=253 (LC 13), 12=191 (LC 13), 14=190 (LC 12), 15=260 (LC 12), 16=115 (LC 8)
Max Grav	10=319 (LC 1), 11=387 (LC 20), 12=410 (LC 20), 13=378 (LC 22), 14=409 (LC 19), 15=398 (LC 19), 16=349 (LC 20)

#### FORCES

	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	2-16=-294/206, 1-2=0/88, 2-3=-229/202, 3-4=-176/274, 4-5=-262/522, 5-6=-261/525, 6-7=-139/267, 7-8=-189/149, 8-9=0/88, 8-10=-286/212
BOT CHORD	15-16=-155/260, 14-15=-155/260, 13-14=-155/260, 12-13=-155/260, 11-12=-155/260, 10-11=-155/260
WEBS	5-13=-467/114, 4-14=-334/381, 3-15=-298/414, 6-12=-334/381, 7-11=-298/413

#### NOTES

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 3-10-0, Exterior(2N) 3-10-0 to 5-10-0, Corner(3R) 5-10-0 to 10-10-0, Exterior(2N) 10-10-0 to 12-6-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) The Fabrication Tolerance at joint 2 = 8%, joint 8 = 8%
- 6) Gable requires continuous bottom chord bearing.
- 7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 16, 75 lb uplift at joint 10, 190 lb uplift at joint 14, 260 lb uplift at joint 15, 191 lb uplift at joint 12 and 253 lb uplift at joint 11.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



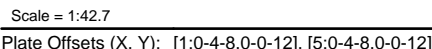
July 16, 2024

**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  
06/17/2025 10:43:56

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. Mon Jul 15 11:15:45 Page: 1



**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x6 SPF No.2  
 WEBS 2x3 SPF No.2  
 SLIDER Left 2x4 SP No.2 -- 3-7-15, Right 2x4 SP No.2 -- 3-7-15

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.

Max Horiz 1=-145 (LC 31)  
Max Uplift 1=-336 (LC 12), 5=-323 (LC 13)  
Max Grav 1=2292 (LC 1), 5=2209 (LC 1)

TOP CHORD	1-3=-2237/451, 3-5=-2237/451
BOT CHORD	1-6=-202/1566, 5-6=-202/1566
WEBS	3-6=-347/2410

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Web connected as follows: 2x3 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.

- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Exterior(2E) 0-2-12 to 5-2-12,  
Interior (1) 5-2-12 to 5-10-0, Exterior(2R) 5-10-0 to  
10-10-0, Interior (1) 10-10-0 to 11-5-4 zone; cantilever  
left and right exposed ; end vertical left and right  
exposed; C-C for members and forces & MWFRS for  
reactions shown; Lumber DOL=1.60 plate grip  
DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom  
chord live load nonconcurrent with any other live loads.
- 6) All bearings are assumed to be SPF No.2 crushing  
capacity of 425 psi.
- 7) Provide mechanical connection (by others) of truss to  
bearing plate capable of withstanding 336 lb uplift at  
joint 1 and 323 lb uplift at joint 5.
- 8) This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d  
Truss, Single Ply Girder) or equivalent spaced at 2-0-0  
oc max. starting at 1-8-0 from the left end to 9-8-0 to  
connect truss(es) to back face of bottom chord.
- 10) Fill all nail holes where hanger is in contact with lumber.

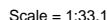
## LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15,  
Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-3=-70, 3-5=-70, 1-5=-20  
Concentrated Loads (lb)  
Vert: 6=-698 (B), 9=-698 (B), 10=-698 (B), 11=-698  
(B), 12=-698 (B)



**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))

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. Mon Jul 15 11:15:46 Page: 1  
ID:dGP0ZTpd5VN4LEpd6Yq6o1zxF?h-RfC?PsB70Hg3NSqPanL8w3uITXbGKWcRDoi7J4zJC?f



**LUMBER**

<b>BRACING</b>	
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.

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

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

- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1, 56 lb uplift at joint 3 and 16 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



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

**WARNING – verify design parameters and 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  
16023 Swingle Ridge Rd  
Chesterfield, MO 63005  
DEVELOPER/MSD SERVICES  
914-404-1200 / MitekUS.com  
LEE'S SUMMIT, MISSOURI

06/17/2025 10:43:56

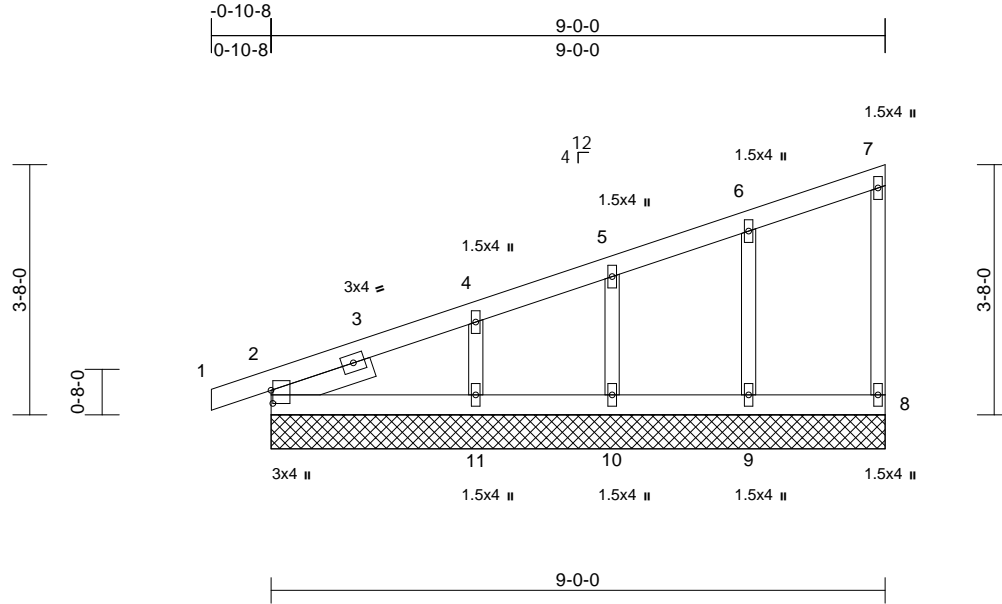
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	D3	Monopitch Supported Gable	1	1	Job Reference (optional)	I66862716

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. Mon Jul 15 11:15:44

Page: 1

ID:R6HKgN9OyKXimYirSO47xGzxFSx-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:33.8

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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%

#### LUMBER

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2
SLIDER	Left 2x4 SP No.2 -- 1-6-9

#### BRACING

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

REACTIONS	(size)	2=9'-0-0, 8=9'-0-0, 9=9'-0-0, 10=9'-0-0, 11=9'-0-0
	Max Horiz	2=143 (LC 12)
	Max Uplift	2=-16 (LC 8), 8=-18 (LC 8), 9=-55 (LC 12), 10=-38 (LC 8), 11=-92 (LC 12)
	Max Grav	2=185 (LC 1), 8=66 (LC 1), 9=201 (LC 1), 10=153 (LC 1), 11=256 (LC 1)

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

TOP CHORD	1-2=-5/0, 2-4=-260/81, 4-5=-149/45, 5-6=-98/33, 6-7=-28/12, 7-8=-52/65
BOT CHORD	2-11=0/0, 10-11=0/0, 9-10=0/0, 8-9=0/0
WEBS	6-9=-155/198, 5-10=-122/138, 4-11=-194/299

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 8-10-12 zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 1.5x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 2'-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) 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 18 lb uplift at joint 8, 16 lb uplift at joint 2, 55 lb uplift at joint 9, 38 lb uplift at joint 10 and 92 lb uplift at joint 11.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



July 16, 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  
06/17/2025 10:43:56

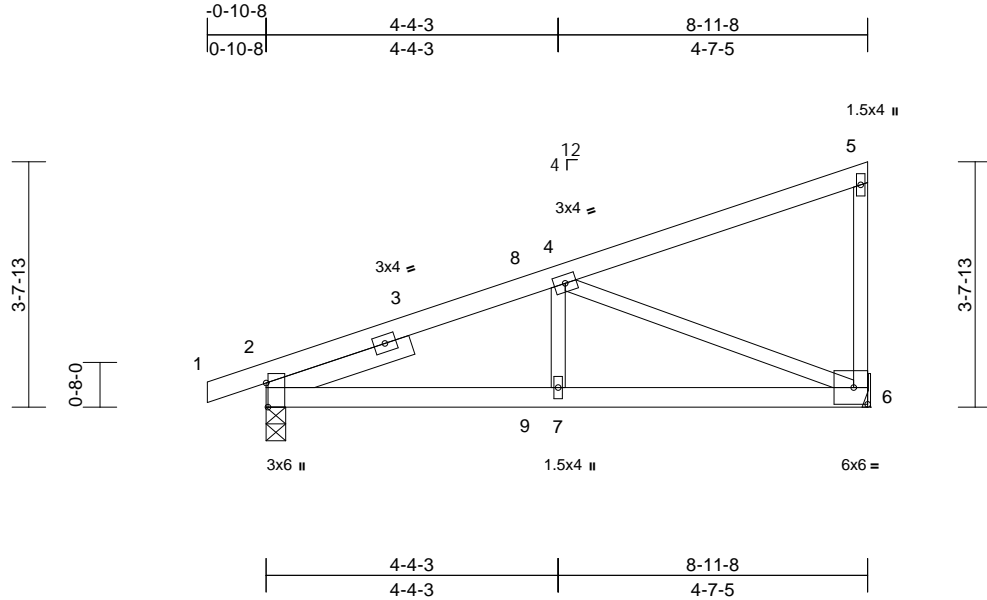
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	D1	Monopitch	5	1	Job Reference (optional)	I66862717

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. Mon Jul 15 11:15:44

Page: 1

ID: \_sXE6HoZjjAnaEafModLMzxFYZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWwCDoi7J4zJC?f



Scale = 1:34.3

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	0.07	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	0.05	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	-0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 40 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 -- 2-3-2

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

LOAD CASE(S) Standard

#### BRACING

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

REACTIONS (size) 2=0-3-8, 6= Mechanical  
Max Horiz 2=142 (LC 12)  
Max Uplift 2=-194 (LC 8), 6=-204 (LC 8)  
Max Grav 2=463 (LC 1), 6=395 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-662/886, 4-5=-68/32, 5-6=-133/160

BOT CHORD 2-7=-995/557, 6-7=-995/557

WEBS 4-6=-600/1073, 4-7=-432/216

#### 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 4-4-3,  
Interior (1) 4-4-3 to 8-10-4 zone; cantilever left and right  
exposed; end vertical left exposed; porch left  
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 204 lb uplift at  
joint 6 and 194 lb uplift at joint 2.



July 16, 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  
06/17/2025 10:43:56



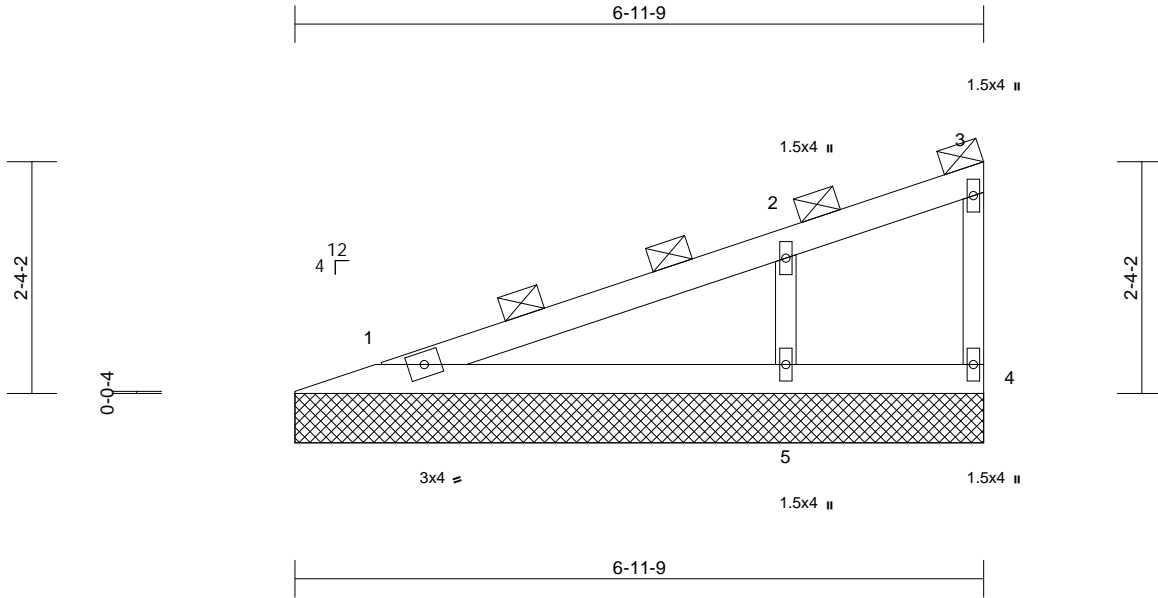
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	166862718
P250392-01	V2	Valley	1	1	Job Reference (optional)	

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. Mon Jul 15 11:15:46

Page: 1

ID:vXDyld3MSmhkXsev2E4pqAzzF0e-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC7f



Scale = 1:23.3

Loading	(psf)	Spacing	3-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.15	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD	2-0-0 oc purlins (6-0-0 max.), except end verticals (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(size)	1=6-11-9, 4=6-11-9, 5=6-11-9
	Max Horiz	1=143 (LC 9)
	Max Uplift	1=-29 (LC 8), 4=-11 (LC 11), 5=-154 (LC 12)
	Max Grav	1=224 (LC 1), 4=18 (LC 1), 5=565 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-270/151, 2-3=-85/81, 3-4=-31/33
BOT CHORD	1-5=-62/83, 4-5=-62/83
WEBS	2-5=-439/589

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Corner(3E) 0-11-5 to 5-11-5,  
Exterior(2N) 5-11-5 to 6-11-1 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 29 lb uplift at joint  
1, 11 lb uplift at joint 4 and 154 lb uplift at joint 5.
- 8) This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size  
or the orientation of the purlin along the top and/or  
bottom chord.

LOAD CASE(S) Standard



July 16, 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))

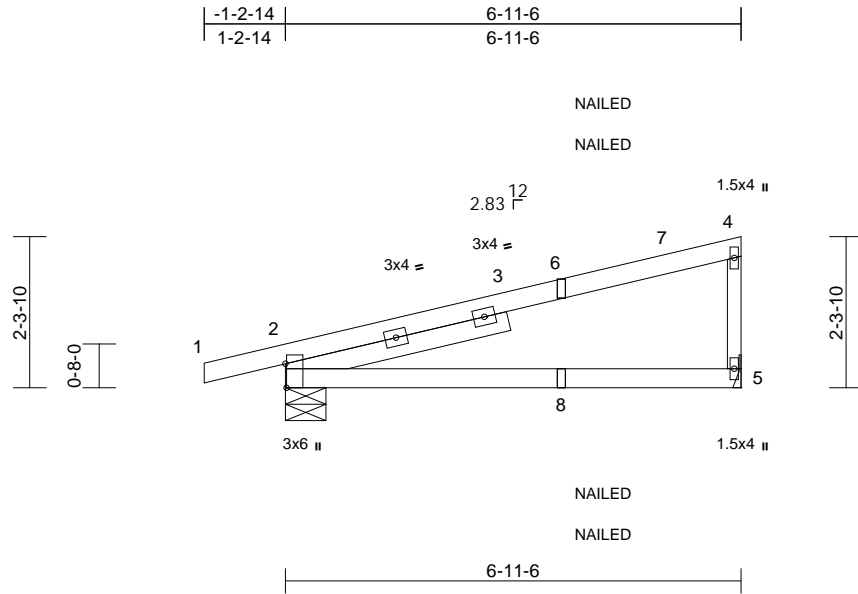
**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
06/17/2025 10:43:56

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	J3	Jack-Closed Girder	1	1	Job Reference (optional)	I66862719

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. Mon Jul 15 11:15:45  
ID:90ph5b8eiEK22SzvVDIBvtzxFfs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?fi

Page: 1



Scale = 1:35.1

Plate Offsets (X, Y): [2:0-4-6,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	0.81	Vert(LL)	-0.13	2-5	>622	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.26	2-5	>311	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP 1650F 1.5E  
BOT CHORD 2x4 SP No.2  
WEBS 2x3 SPF No.2  
SLIDER Left 2x4 SP No.2 -- 3-5-12

#### BRACING

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

#### REACTIONS

(size) 2=0-7-6, 5= Mechanical  
Max Horiz 2=89 (LC 9)  
Max Uplift 2=-130 (LC 8), 5=-81 (LC 12)  
Max Grav 2=402 (LC 1), 5=300 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-6/0, 2-4=-116/67, 4-5=-232/274  
BOT CHORD 2-5=-41/44

#### NOTES

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust)  
Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft;  
Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope)  
exterior zone and C-C Corner (3) -1-2-14 to 5-10-0,  
Exterior(2R) 5-10-0 to 6-10-2 zone; cantilever left and  
right exposed; end vertical left and right exposed; C-C  
for members and forces & MWFRS for reactions shown;  
Lumber DOL=1.60 plate grip DOL=1.60
- 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  
5 and 130 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.

- 7) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails  
per NDS guidelines.
- 8) 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: 8=0 (F=0, B=0)



July 16, 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  
06/17/2025 10:43:56

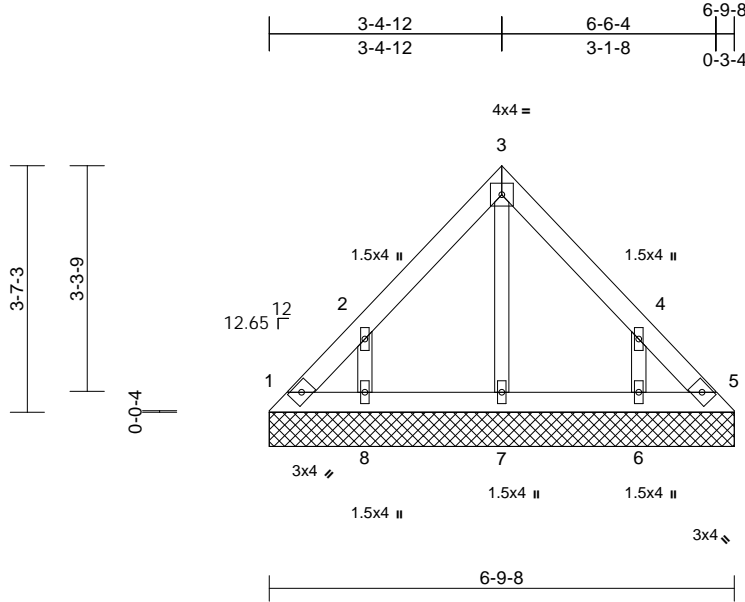
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	LAY1	Lay-In Gable	1	1	Job Reference (optional)	I66862720

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. Mon Jul 15 11:15:46

Page: 1

ID:j?OjMFFnRlhAKU2wMSyCbzzxFil-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



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	0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	5	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=6-9-8, 5=6-9-8, 6=6-9-8, 7=6-9-8, 8=6-9-8  
Max Horiz 1=-92 (LC 8)  
Max Uplift 1=-33 (LC 10), 5=-20 (LC 11), 6=-142 (LC 13), 8=-142 (LC 12)  
Max Grav 1=79 (LC 21), 5=72 (LC 22), 6=204 (LC 20), 7=108 (LC 22), 8=205 (LC 19)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-111/77, 2-3=-101/66, 3-4=-95/62, 4-5=-99/69  
BOT CHORD 1-8=-48/78, 7-8=-49/78, 6-7=-49/78, 5-6=-48/78  
WEBS 2-8=-213/162, 3-7=-66/0, 4-6=-213/162

#### 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 0-0-0 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 33 lb uplift at joint 1, 20 lb uplift at joint 5, 142 lb uplift at joint 8 and 142 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 16, 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  
06/17/2025 10:43:56



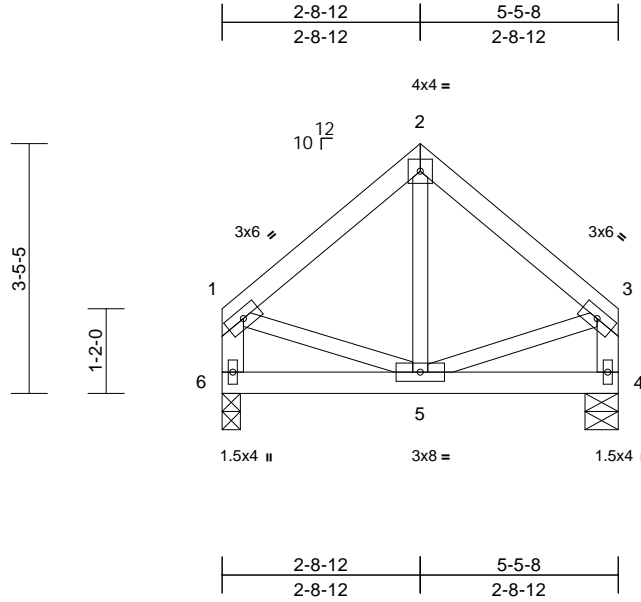
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	I66862722
P250392-01	C2	Common	4	1	Job Reference (optional)	

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. Mon Jul 15 11:15:44

Page: 1

ID:uXQjrqmBI5?cQPKNWVclXwzxFbB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRcDoi7J4zJC?f



Scale = 1:31.8

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	0.20	Vert(LL)	0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.00	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 28 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

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

LOAD CASE(S) Standard

#### BRACING

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

REACTIONS (size) 4=0-5-8, 6=0-3-0  
Max Horiz 6=99 (LC 11)  
Max Uplift 4=-29 (LC 9), 6=-29 (LC 8)  
Max Grav 4=233 (LC 1), 6=233 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-178/256, 2-3=-178/264, 1-6=-212/273, 3-4=-212/287

BOT CHORD 5-6=-94/91, 4-5=-20/21

WEBS 2-5=-171/72, 3-5=-147/108, 1-5=-134/108

#### 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) zone; cantilever left and right exposed; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 6 and 29 lb uplift at joint 4.



July 16, 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  
06/17/2025 10:43:57



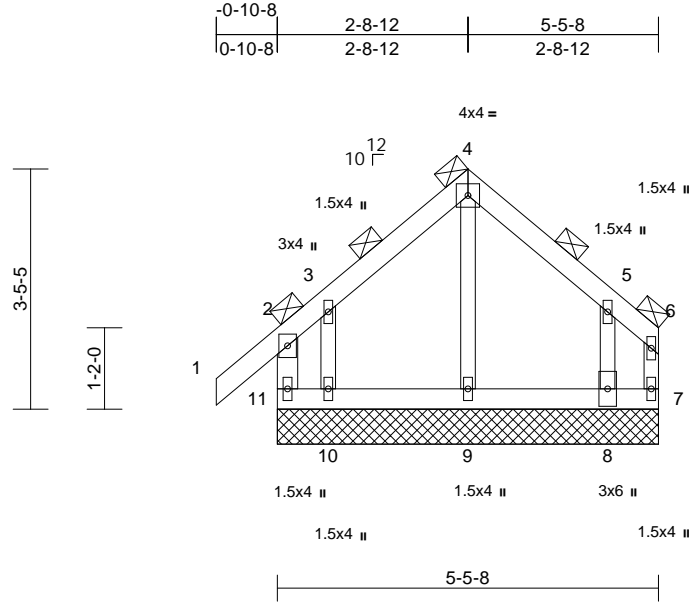
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	166862723
P250392-01	C1	Common Supported Gable	1	1	Job Reference (optional)	

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. Mon Jul 15 11:15:44

Page: 1

ID:qNSd8uN6qGz9aVuDen1oEAzxFbh-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWwCdoi7J4zJC?f



Scale = 1:33

Loading	(psf)	Spacing	4-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.29	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.00	7	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 27 lb	FT = 20%

#### LUMBER

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

#### BRACING

TOP CHORD	2-0-0 oc purlins, except end verticals (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS

(size)	7=5-5-8, 8=5-5-8, 9=5-5-8, 10=5-5-8, 11=5-5-8
Max Horiz	11=229 (LC 9)
Max Uplift	7=145 (LC 11), 8=210 (LC 13), 10=276 (LC 9), 11=250 (LC 8)
Max Grav	7=130 (LC 10), 8=426 (LC 20), 9=349 (LC 1), 10=392 (LC 10), 11=360 (LC 20)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	2-11=-265/345, 1-2=0/91, 2-3=-174/181, 3-4=-160/346, 4-5=-160/346, 5-6=-90/111, 6-7=-83/85
BOT CHORD	10-11=-90/77, 9-10=-90/77, 8-9=-90/77, 7-8=-90/77
WEBS	4-9=-263/0, 3-10=-310/284, 5-8=-317/435

#### 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) 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.
- 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 250 lb uplift at joint 11, 145 lb uplift at joint 7, 276 lb uplift at joint 10 and 210 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



July 16, 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)

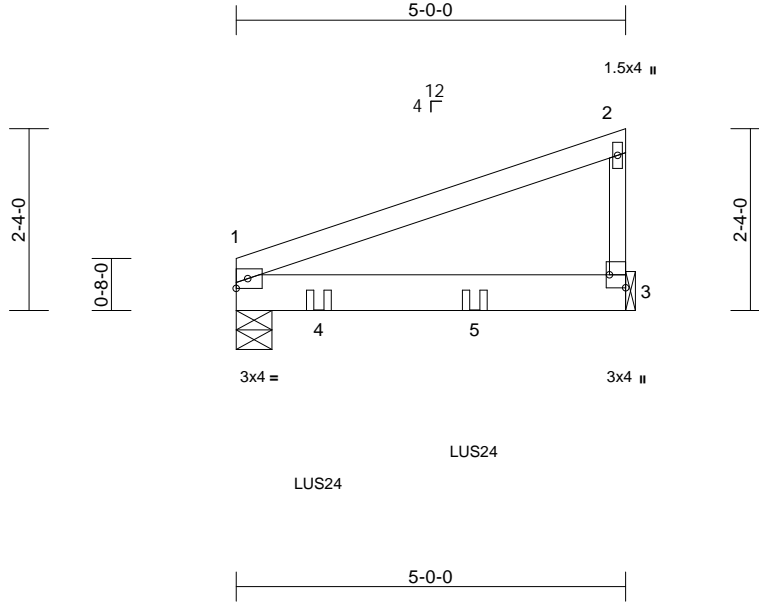
**MiTek®**  
RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
06/17/2025 10:43:57

Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	J6	Jack-Closed Girder	1	1	Job Reference (optional)	I66862724

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. Mon Jul 15 11:15:46  
ID:90ph5b8eiEK22SzvDIBvtzxFfs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?fi

Page: 1



Scale = 1:29.6

Plate Offsets (X, Y): [3:Edge,0-2-8]															
Loading		(psf)	Spacing		2-0-0	CSI		DEFL		in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		25.0	Plate Grip DOL		1.15	TC		0.65	Vert(LL)	-0.06	1-3	>955	240	MT20	197/144
TCDL		10.0	Lumber DOL		1.15	BC		0.92	Vert(CT)	-0.11	1-3	>512	180		
BCLL		0.0	Rep Stress Incr		NO	WB		0.00	Horz(CT)	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 2x6 SPF No.2  
WEBS 2x3 SPF No.2

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5'-0" oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6'-1" oc bracing.

**REACTIONS** (size) 1=0-5-8, 3= Mechanical  
Max Horiz 1=91 (LC 9)  
Max Uplift 1=174 (LC 8), 3=143 (LC 12)  
Max Grav 1=892 (LC 1), 3=650 (LC 1)

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

TOP CHORD 1-2=-131/79, 2-3=-163/229  
BOT CHORD 1-3=-39/43

#### 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 1 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 174 lb uplift at  
joint 1 and 143 lb uplift at joint 3.
- 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.

- 7) Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2'-0" oc max. starting at 1'-0" from the left end to 3'-0" to connect truss(es) to front face of bottom chord.
  - 8) Fill all nail holes where hanger is in contact with lumber.
  - 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: 1-2=-70, 1-3=-20  
Concentrated Loads (lb)  
Vert: 4=-562 (F), 5=-560 (F)



July 16, 2024

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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  
06/17/2025 10:43:57

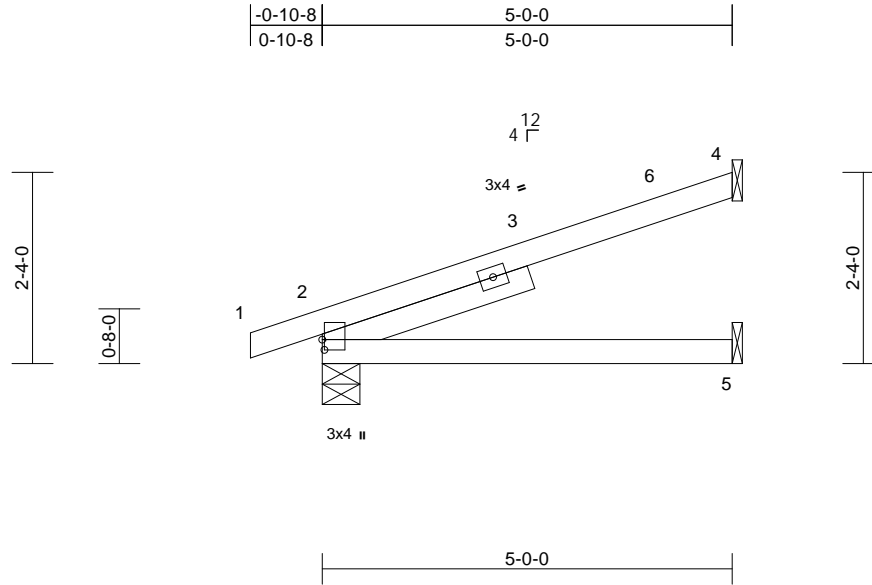
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	J5	Jack-Open	4	1	Job Reference (optional)	I66862725

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. Mon Jul 15 11:15:46

Page: 1

ID:hqFJuF70xwCBQJPjyVEyNfzxFft-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:28.1

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

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	0.57	Vert(LL)	-0.04	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07	2-5	>831	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: 21 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -- 2-7-14

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

LOAD CASE(S) Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 5-0-0 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=-75 (LC 8), 4=-94 (LC 12)  
Max Grav 2=289 (LC 1), 4=167 (LC 1), 5=99 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-91/42  
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 4-11-4 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 94 lb uplift at joint 4 and 75 lb uplift at joint 2.



July 16, 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  
06/17/2025 10:43:57

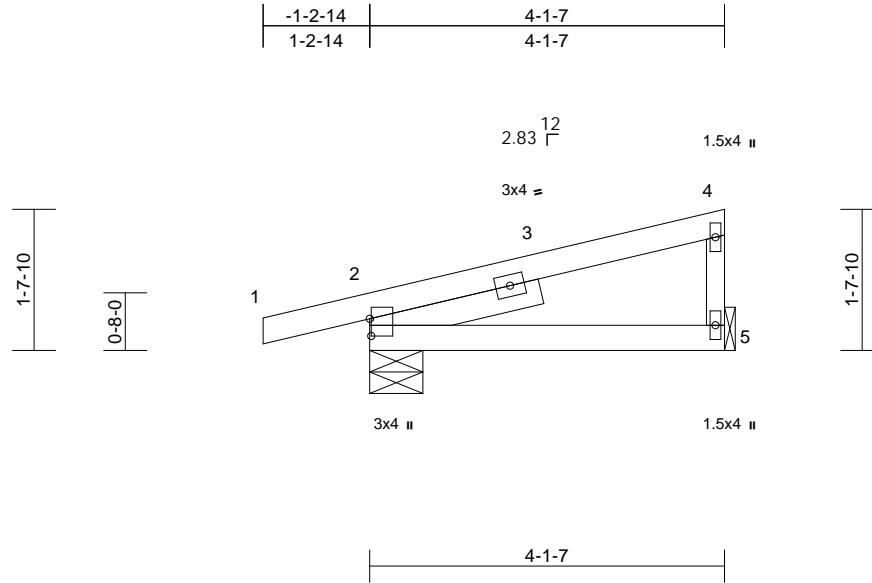
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	J1	Jack-Closed	2	1	Job Reference (optional)	I66862726

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. Mon Jul 15 11:15:45

Page: 1

ID:j?OjMFFnRIhAKU2wMSycbzzxFil-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



Scale = 1:26.7

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

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	0.29	Vert(LL)	-0.02	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.03	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 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 -- 2-0-5

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 2=0-7-6, 5= Mechanical  
Max Horiz 2=55 (LC 12)  
Max Uplift 2=-96 (LC 8), 5=-44 (LC 12)  
Max Grav 2=281 (LC 1), 5=167 (LC 1)

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

TOP CHORD 1-2=-6/0, 2-4=-61/23, 4-5=-127/169  
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 Corner (3) zone; cantilever left  
and right exposed; end vertical left 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 44 lb uplift at joint  
5 and 96 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard



July 16, 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  
06/17/2025 10:43:57

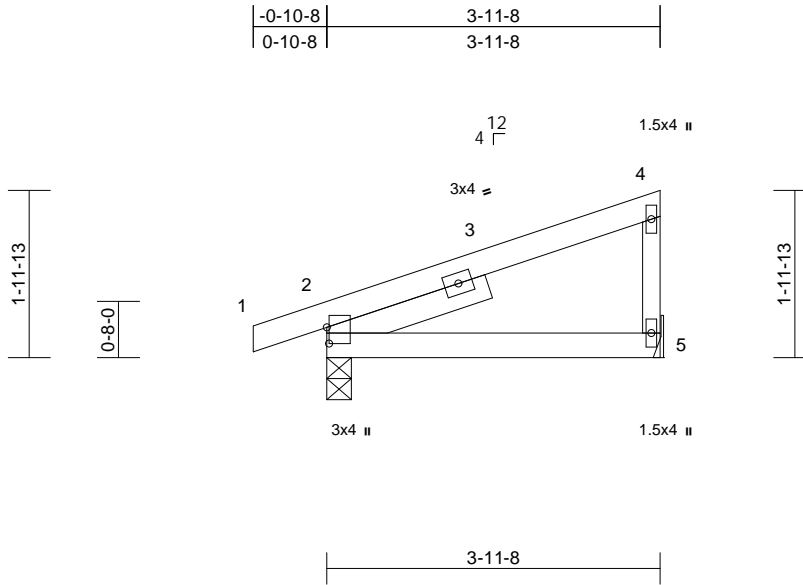
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	D2	Monopitch	5	1	Job Reference (optional)	I66862727

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. Mon Jul 15 11:15:44

Page: 1

ID:78C7o6q0croABosuZ?dZ0HzxFUe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.4

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.01	2-5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	2-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 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 -- 2-0-0

#### BRACING

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

REACTIONS (size) 2=0-3-8, 5= Mechanical  
Max Horiz 2=69 (LC 12)  
Max Uplift 2=-67 (LC 8), 5=-51 (LC 12)  
Max Grav 2=242 (LC 1), 5=166 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-75/32, 4-5=-128/190  
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 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 51 lb uplift at joint 5 and 67 lb uplift at joint 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 16, 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  
06/17/2025 10:43:57

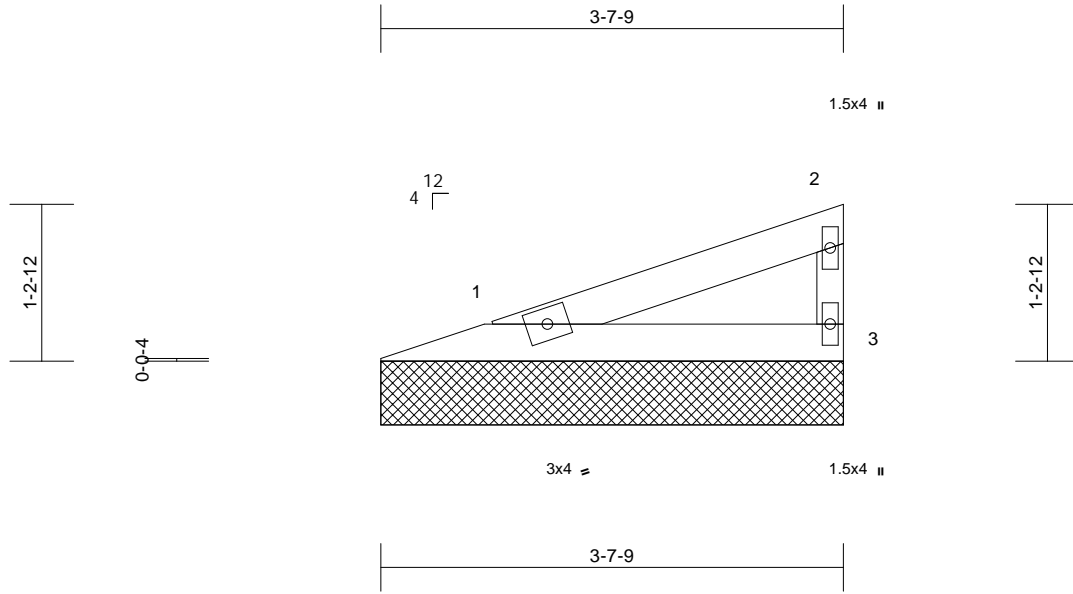


Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	I66862728
P250392-01	V3	Valley	1	1	Job Reference (optional)	

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. Mon Jul 15 11:15:46  
ID:ZN?LPLdDduUD2x9lkvvbhtzxF?w-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWwCDoi7J4zJC?f

Page: 1



Scale = 1:18.1

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
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 3-8-5 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-7-9, 3=3-7-9

Max Horiz 1=43 (LC 9)  
Max Uplift 1=-23 (LC 8), 3=-29 (LC 12)  
Max Grav 1=119 (LC 1), 3=119 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-60/37, 2-3=-93/121  
BOT CHORD 1-3=-18/20

#### 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 29 lb uplift at joint 3.



July 16, 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  
06/17/2025 10:43:57

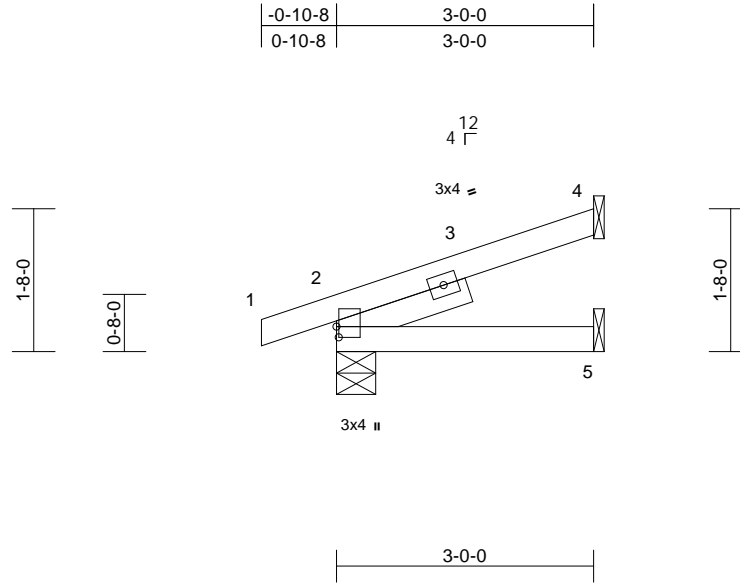
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	J2	Jack-Open	5	1	Job Reference (optional)	I66862729

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. Mon Jul 15 11:15:45

Page: 1

ID:j?OjMFFnRlhAKU2wMSyCbzzxFil-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWwRCDoi7J4zJC?f



Scale = 1:26.9

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

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	0.18	Vert(LL)	0.00	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01	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: 13 lb	FT = 20%

#### LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -- 1-7-4

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

LOAD CASE(S) Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-0-0 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=56 (LC 12)  
Max Uplift 2=-62 (LC 8), 4=-57 (LC 12)  
Max Grav 2=203 (LC 1), 4=94 (LC 1), 5=59 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-5/0, 2-4=-58/25  
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 57 lb uplift at joint  
4 and 62 lb uplift at joint 2.



July 16, 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  
06/17/2025 10:43:57

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. Mon Jul 15 11:15:45 Page: 1  
ID:hgFJuF70xwCBQJPjvVEyNfzxFft-RfC?PsB70Ha3NSaPanL8w3ulTXbGKWCrCDoi7J4Cz?i

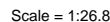


Plate Offsets (X, Y): [2:0-1-8.0-5-5]

LUMBER

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 -- 1-6-11

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

LOAD CASE(S) Standard

## BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-10-15 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=55 (LC 12)  
 Max Uplift 2=61 (LC 8), 4=55 (LC 12)  
 Max Grav 2=199 (LC 1), 4=90 (LC 1), 5=57 (LC 3)

## FORCES

<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-2=-5/0, 2-4=-57/24
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 55 lb uplift at joint  
4 and 61 lb uplift at joint 2.



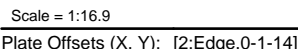
 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

**WARNING – verify design parameters and noted notes on this and included MiTek Reference Tag M7473 Rev. 1/2/2023 before use.** Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, and DSB-22** available from Truss Plate Institute ([www.tpinst.org](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  
DEVELOPER/MSD SERVICES  
914-494-1200 / MitekUS.com  
LEE'S SUMMIT, MISSOURI

06/17/2025 10:43:57

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. Mon Jul 15 11:15:46 Page: 1  
ID:90ph5b8eiEK22SvzVDBvtzxFs-RfC?PsB70Hg3NSaPqnL8w3uITXBGKWrcDoi7J4zJC?f



## 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.



**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  
DEVELOPER SERVICES  
16023 Swingley Ridge Rd  
Chesham, MO 64010  
#341 4200 MiTekUS.com  
LEE'S SUMMIT, MISSOURI  
06/17/2025 10:43:57

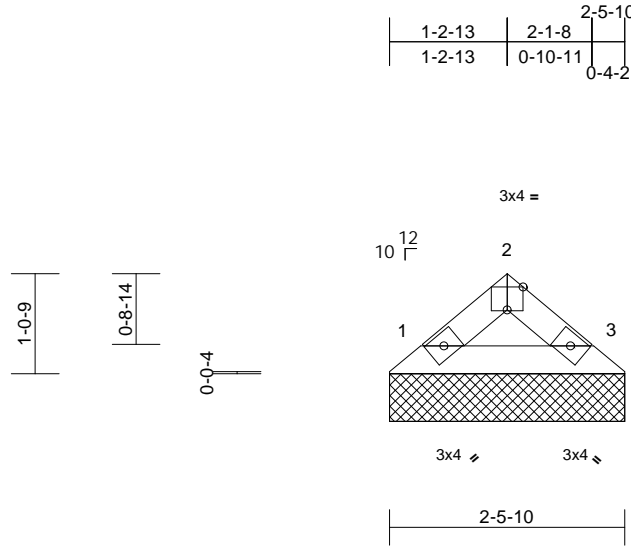
Job	Truss	Truss Type	Qty	Ply	Roof - BY Lot 1320	
P250392-01	V6	Valley	1	1	Job Reference (optional)	I66862732

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. Mon Jul 15 11:15:47

Page: 1

ID:TmPQfbvifSrAmDG7y9oS\_DzxF\_G-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?i



Scale = 1:24.2

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 7 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 2-6-3 oc purlins.

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

REACTIONS (size) 1=2-5-10, 3=2-5-10

Max Horiz 1=-20 (LC 8)

Max Uplift 1=-10 (LC 12), 3=-10 (LC 13)

Max Grav 1=77 (LC 1), 3=77 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-62/48, 2-3=-62/51

BOT CHORD 1-3=-9/37

#### 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) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 4-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1 and 10 lb uplift at joint 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 16, 2024

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

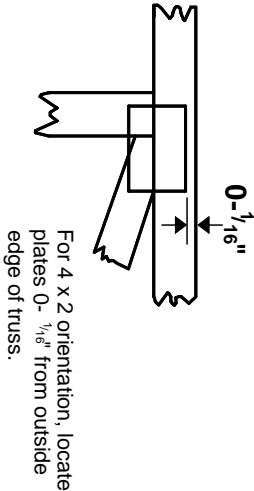
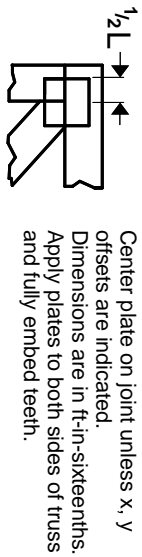
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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  
06/17/2025 10:43:57



# 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.

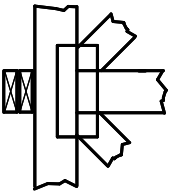
4 X 4

## 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.

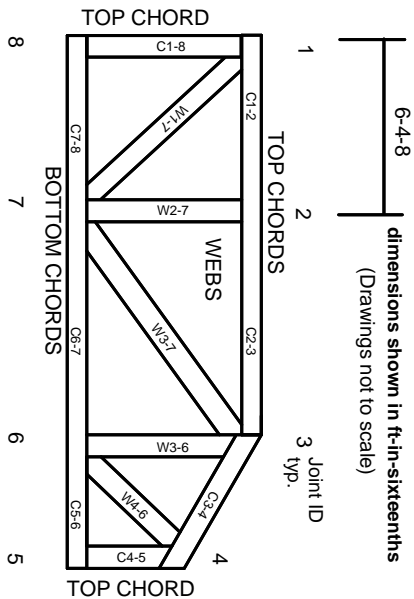
## BEARING



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.

RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
06/17/2025 10:43:58