

09/24/2024



RE: P240906-01

Roof - HR Lot 202

MiTek, Inc.

16023 Swingley Ridge Rd. Chesterfield, MO 63017

314.434.1200

Site Information:

Customer: Clayton Properties Project Name: P240906-01 Lot/Block: 202 Model: Wildflow Model: Wildflower - Farmhouse 3Car

City: Lee's Summit State: MO

Address: 1613 SW Buckthorn Dr-Subdivision: Hawthorne Ridge

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 Floor Load: N/A psf Roof Load: 45.0 psf

This package includes 21 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	166720478	A5	7/8/2024	21	166720498	J2	7/8/2024
2	166720479	A4	7/8/2024				
3	166720480	A3	7/8/2024				
4	166720481	A2	7/8/2024				
5	166720482	A1	7/8/2024				
6	166720483	B1	7/8/2024				
7	166720484	C3	7/8/2024				
8	166720485	C2	7/8/2024				
9	166720486	C1	7/8/2024				
10	166720487	C4	7/8/2024				
11	166720488	V1	7/8/2024				
12	166720489	V2	7/8/2024				
13	166720490	HG1	7/8/2024				
14	166720491	V3	7/8/2024				
15	166720492	PB01	7/8/2024				
16	166720493	V4	7/8/2024				
17	166720494	CG1	7/8/2024				
18	166720495	CG2	7/8/2024				
19	166720496	J1	7/8/2024				
20	166720497	V5	7/8/2024				

The truss drawing(s) referenced above have been prepared by

MiTek USA, Inc under my direct supervision

based on the parameters provided by .

Truss Design Engineer's Name: Sevier, Scott

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

Missouri COA: 001193

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

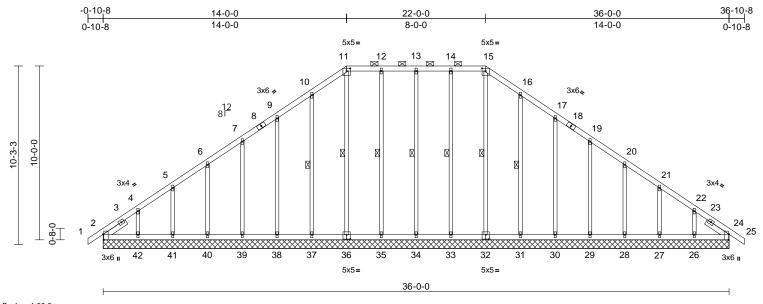


Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 202	
P240906-01	A5	Piggyback Base Supported Gable	1	1	Job Reference (optional)	

LEE'S SUMMIT. MISSOURI Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon 👊 ID:ewrAceOsPybP0GqmZjh3U?zkXV?-RfC?PsB70Hq3NSgPqnL8w3uITXbG

KWrCDoi 7

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720478



Scale = 1:66.3

Plate Offsets (X, Y): [2:0-3-13,Edge], [11:0-2-8,0-1-13], [15:0-2-8,0-1-13], [24:0-3-13,Edge], [32:0-2-8,0-3-0], [36:0-2-8,0-1-13]	3-0]
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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999	1	
BCLL	0.0*	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	24	n/a	n/a	1	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 209 lb	FT = 20%

TOP	CHORD
BOT	CHORD

LUMBER

2x4 SP No.2 OTHERS 2x3 SPF No.2

SLIDER Left 2x4 SP No.2 -- 1-6-4, Right 2x4 SP No.2

-- 1-6-4

2x4 SP No.2

BRACING

WEBS

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 11-15. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

1 Row at midpt

bracing.

15-32, 14-33, 13-34, 12-35, 11-36, 10-37,

16-31

REACTIONS (size)

2=36-0-0, 24=36-0-0, 26=36-0-0, 27=36-0-0, 28=36-0-0, 29=36-0-0, 30=36-0-0, 31=36-0-0, 32=36-0-0, 33=36-0-0, 34=36-0-0, 35=36-0-0, 36=36-0-0, 37=36-0-0, 38=36-0-0,

39=36-0-0, 40=36-0-0, 41=36-0-0, 42=36-0-0

Max Horiz 2=277 (LC 11)

Max Uplift 2=-100 (LC 8), 24=-20 (LC 9), 26=-118 (LC 13), 27=-73 (LC 13), 28=-79 (LC 13), 29=-77 (LC 13),

30=-82 (LC 13), 31=-76 (LC 13), 33=-43 (LC 9), 34=-43 (LC 8), 35=-41 (LC 9), 36=-14 (LC 9), 37=-79 (LC 12), 38=-80 (LC 12),

39=-77 (LC 12), 40=-80 (LC 12), 41=-71 (LC 12), 42=-132 (LC 12) Max Grav 2=225 (LC 20), 24=171 (LC 1), 26=204 (LC 20), 27=187 (LC 20), 28=189 (LC 20), 29=189 (LC 20), 30=189 (LC 20), 31=196 (LC 20),

32=168 (LC 22), 33=188 (LC 25), 34=179 (LC 25), 35=188 (LC 26), 36=187 (LC 22), 37=198 (LC 19), 38=188 (LC 19), 39=189 (LC 19), 40=190 (LC 19), 41=185 (LC 19),

42=220 (LC 19)

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

1-2=0/16, 2-4=-286/237, 4-5=-198/190, 5-6=-172/168, 6-7=-155/162, 7-9=-141/190,

9-10=-138/232, 10-11=-177/273, 11-12=-153/250, 12-13=-153/250, 13-14=-153/250, 14-15=-153/250, 15-16=-177/273, 16-17=-138/209,

17-19=-99/141, 19-20=-69/75, 20-21=-84/54, 21-22=-113/77. 22-24=-202/113. 24-25=0/16

BOT CHORD 2-42=-95/196. 41-42=-95/196.

40-41=-95/196, 39-40=-95/196, 38-39=-95/196, 37-38=-95/196, 35-37=-95/196, 34-35=-95/196, 33-34=-95/196, 31-33=-95/196

30-31=-95/196, 29-30=-95/196, 28-29=-95/196, 27-28=-95/196 26-27=-95/196, 24-26=-95/196

15-32=-128/7, 14-33=-148/67, 13-34=-139/67, 12-35=-148/65 11-36=-147/45, 10-37=-158/103, 9-38=-148/104, 7-39=-149/101,

6-40=-149/103, 5-41=-147/96, 4-42=-173/151, 16-31=-156/100 17-30=-149/106, 19-29=-149/101, 20-28=-149/103, 21-27=-149/98,

22-26=-158/138

Unbalanced roof live loads have been considered for

- 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 14-0-0, Corner(3R) 14-0-0 to 19-0-0, Exterior(2N) 19-0-0 to 22-0-0, Corner(3R) 22-0-0 to 27-0-0, Exterior(2N) 27-0-0 to 36-10-8 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.
- Provide adequate drainage to prevent water ponding. All plates are 1.5x4 MT20 unless otherwise indicated.
- 6) 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.



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Continued on page 2

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

NOTES

WEBS



Ply Qty Roof - HR Lot 202 Job Truss Truss Type P240906-01 Α5 Piggyback Base Supported Gable Job Reference (optional

DEVELOPMENT SERVICES 166720478 LEE'S SUMMIT. MISSOURI Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon 17 2024 MiTek Indu

RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW

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

- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 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 100 lb uplift at joint 2, 43 lb uplift at joint 33, 43 lb uplift at joint 34, 41 lb uplift at joint 35, 14 lb uplift at joint 36, 79 lb uplift at joint 37, 80 lb uplift at joint 38, 77 lb uplift at joint 39, 80 lb uplift at joint 40, 71 lb uplift at joint 41, 132 lb uplift at joint 42, 76 lb uplift at joint 31, 82 lb uplift at joint 30, 77 lb uplift at joint 29, 79 lb uplift at joint 28, 73 lb uplift at joint 27, 118 lb uplift at joint 26 and 20 lb uplift at joint
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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



Truss Type Job Truss Qty Ply Roof - HR Lot 202 P240906-01 **A4** 18 Piggyback Base Job Reference (optiona

DEVELOPMENT SERVICES 166720479 LEE'S SUMMIT. MISSOURI

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

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, I<mark>.</mark> c. Mon 🕡 ID:Do4JrdsVQdc4LgXOR7cmHVzkXB1-RfC?PsB70Hq3NSgPqnL8w3ulTXb(KWrCD

RELEASE FOR CONSTRUCTION

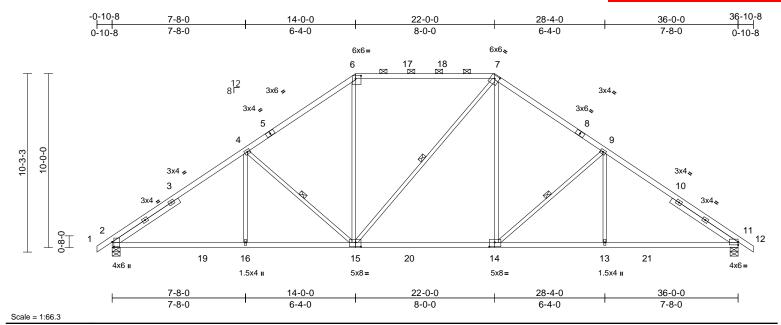


Plate Offsets (X, Y): [2:0-3-5,0-1-3], [6:0-3-12,0-2-0], [7:0-3-0,0-2-3], [11:Edge,0-2-1], [14:0-3-12,0-3-0], [15:0-3-12,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.23	14-15	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.39	14-15	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 179 lb	FT = 20%

LUMBER

2x4 SP No.2 *Except* 6-7:2x4 SP 2400F TOP CHORD

2.0E

BOT CHORD 2x4 SP No.2 2x3 SPF No 2 WFBS

SLIDER Left 2x4 SP No.2 -- 4-6-11, Right 2x4 SP

No.2 -- 4-6-11

BRACING

TOP CHORD Structural wood sheathing directly applied or

3-4-0 oc purlins, except

2-0-0 oc purlins (5-1-3 max.): 6-7 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

WFBS 1 Row at midpt 4-15, 7-15, 9-14

REACTIONS (size) 2=0-5-8, 11=0-5-8

Max Horiz 2=277 (LC 11)

Max Uplift 2=-225 (LC 12), 11=-225 (LC 13)

Max Grav 2=1786 (LC 2), 11=1792 (LC 2)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/16, 2-4=-2527/360, 4-6=-1998/398,

6-7=-1576/390, 7-9=-2010/399,

9-11=-2537/360, 11-12=0/16 **BOT CHORD** 2-16=-275/2101, 13-16=-275/2101,

11-13=-175/1996

WEBS 4-16=0/321, 4-15=-681/283, 6-15=-49/679,

7-15=-182/184, 7-14=-96/751,

9-14=-680/283, 9-13=0/319

NOTES

Unbalanced roof live loads have been considered for

- 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 14-0-0, Exterior(2R) 14-0-0 to 19-0-0, Interior (1) 19-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 27-0-0, Interior (1) 27-0-0 to 36-10-8 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint 2 and 225 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 8,2024



MARNING - 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



Truss Type Job Truss Qty Ply Roof - HR Lot 202 P240906-01 **A3** 8 Piggyback Base

DEVELOPMENT SERVICES 166720480 LEE'S SUMMIT. MISSOURI Job Reference (optional

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

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, I<mark>.</mark> c. Mon 🕡 ID:wv5pEcMn41RuwMuWX0N86szkXBg-RfC?PsB70Hq3NSgPqnL8w3uITXt<mark>G</mark>KWrCDe

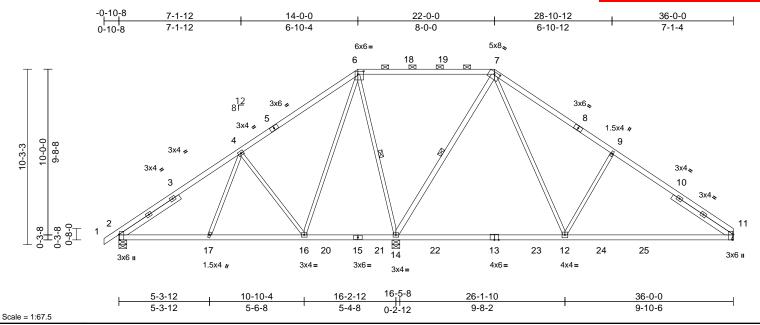


Plate Offsets (X, Y): [2:0-3-13,Edge], [6:0-4-0,0-2-0], [7:0-4-0,0-1-9], [11:0-3-13,Edge]

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	0.76	Vert(LL)	-0.29	12-14	>809	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.43	12-14	>549	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 184 lb	FT = 20%

LUMBER

2x4 SP No.2 *Except* 6-7:2x4 SP 1650F TOP CHORD

1.5E

BOT CHORD 2x4 SP 1650F 1.5E *Except* 15-13:2x4 SP

No.2

WEBS 2x3 SPF No.2 *Except* 14-7:2x4 SP No.2 SLIDER

Left 2x4 SP No.2 -- 4-2-10, Right 2x4 SP

No.2 -- 4-2-12

BRACING

WFBS

TOP CHORD Structural wood sheathing directly applied or

5-0-2 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 6-7.

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

bracing, Except:

6-0-0 oc bracing: 14-16. 1 Row at midpt 7-14, 6-14

REACTIONS 2=0-5-8, 11= Mechanical, 14=0-5-8 (size)

Max Horiz 2=275 (LC 9)

Max Uplift 2=-171 (LC 12), 11=-191 (LC 13),

14=-98 (LC 12) Max Grav

2=730 (LC 25), 11=905 (LC 20), 14=2054 (LC 2)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=0/16, 2-4=-855/190, 4-6=-423/270, TOP CHORD 6-7=-7/324 7-9=-876/363 9-11=-1048/291

BOT CHORD 2-17=-212/698, 16-17=-232/612,

14-16=-204/196, 12-14=-56/290

11-12=-115/773

WFBS 7-14=-960/150, 7-12=-179/965,

9-12=-483/336, 6-14=-938/199,

6-16=-196/687, 4-16=-620/305, 4-17=0/264

NOTES

1) 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 14-0-0, Exterior(2R) 14-0-0 to 19-0-0, Interior (1) 19-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 27-0-0, Interior (1) 27-0-0 to 36-0-0 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
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearings are assumed to be: Joint 2 SP 1650F 1.5E crushing capacity of 565 psi, Joint 14 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 171 lb uplift at joint 2, 98 lb uplift at joint 14 and 191 lb uplift at joint 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) 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 8,2024



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



Job Truss Truss Type Qty Ply Roof - HR Lot 202 P240906-01 A2 2 Piggyback Base Job Reference (optiona RELEASE FOR CONSTRUCTION DEVELOPMENT SERVICES 166720481 LEE'S SUMMIT. MISSOURI

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

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, I<mark>.</mark> c. Mon 🕡

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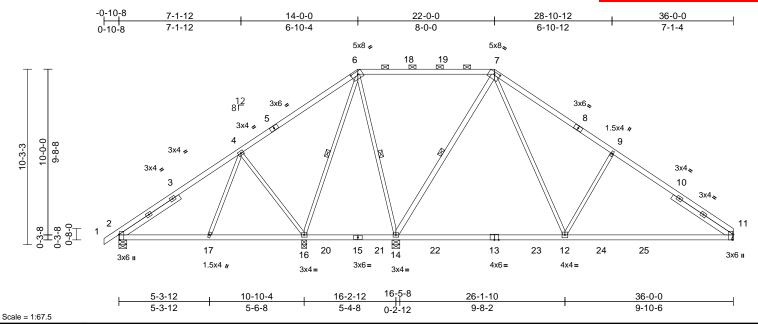


Plate Offsets (X, Y): [2:0-3-13,Edge], [6:0-4-12,0-2-0], [7:0-4-0,0-1-9], [11:0-3-13,Edge]

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	0.76	Vert(LL)	-0.30	12-14	>803	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.44	12-14	>541	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 184 lb	FT = 20%

LUMBER

2x4 SP No.2 *Except* 6-7:2x4 SP 1650F TOP CHORD

1.5E

BOT CHORD 2x4 SP 1650F 1.5F *Except* 15-13:2x4 SP

No.2

WEBS 2x3 SPF No.2 *Except* 14-7:2x4 SP No.2 SLIDER Left 2x4 SP No.2 -- 4-2-10, Right 2x4 SP

No.2 -- 4-2-12

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-11-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 6-7.

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

bracing, Except:

6-0-0 oc bracing: 14-16.

WFBS 1 Row at midpt 7-14, 6-16, 6-14

REACTIONS (size)

2=0-5-8, 11= Mechanical, 14=0-5-8, 16=0-3-8

Max Horiz 2=275 (LC 9)

Max Uplift 2=-127 (LC 12), 11=-192 (LC 13), 14=-20 (LC 13), 16=-173 (LC 12)

Max Grav 2=557 (LC 25), 11=941 (LC 20),

14=1498 (LC 2), 16=765 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/16, 2-4=-562/149, 4-6=-129/328.

6-7=-58/245, 7-9=-938/363, 9-11=-1109/292

BOT CHORD 2-17=-184/430. 16-17=-207/343.

14-16=-211/196, 12-14=-62/346

11-12=-115/823 WEBS

7-14=-919/145, 6-16=-182/37

6-14=-405/105, 4-16=-634/308, 4-17=0/265,

7-12=-179/963, 9-12=-480/336

NOTES

1) 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 14-0-0, Exterior(2R) 14-0-0 to 19-0-0, Interior (1) 19-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 27-0-0, Interior (1) 27-0-0 to 36-0-0 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
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearings are assumed to be: Joint 2 SP 1650F 1.5E crushing capacity of 565 psi, Joint 16 SP 1650F 1.5E crushing capacity of 565 psi, Joint 14 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 127 lb uplift at joint 2, 20 lb uplift at joint 14, 192 lb uplift at joint 11 and 173 lb uplift at joint 16.
- 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.
- 10) 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 8,2024



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



Job Truss Truss Type Qty Ply Roof - HR Lot 202 P240906-01 A1 Piggyback Base Structural Gable Job Reference (optiona

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720482 LEE'S SUMMIT. MISSOURI

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

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, I c. Mon 👊 ID:ZPE42GuJG2XQkNP0lKB?1ezkXCH-RfC?PsB70Hq3NSgPqnL8w3ulTXb

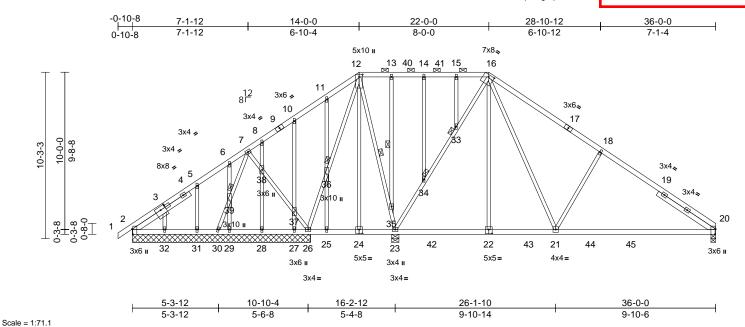


Plate Offsets (X, Y): [2:0-3-13,Edge], [2:2-5-3,0-1-8], [3:0-4-0,0-2-8], [12:0-1-12,0-2-8], [16:0-4-0,0-1-9], [20:0-3-13,Edge], [22:0-2-8,0-3-0], [24:0-2-8,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.33	20-21	>710	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.60	20-21	>397	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.02	20	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 229 lb	FT = 20%

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

LUMBER

SLIDER Left 2x4 SP No.2 -- 4-2-10, Right 2x4 SP

No.2 -- 4-2-12

BRACING TOP CHORD Structural wood sheathing directly applied or

4-10-0 oc purlins, except 2-0-0 oc purlins (10-0-0 max.): 12-16.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc

bracing, Except:

10-0-0 oc bracing: 22-23,21-22 2-2-0 oc bracing: 20-21.

WEBS 1 Row at midpt **JOINTS** 1 Brace at Jt(s): 33,

34, 36, 39

REACTIONS (size) 2=11-0-0, 20=0-3-8, 23=0-5-8, 26=11-0-0, 27=11-0-0, 28=11-0-0,

29=11-0-0, 30=11-0-0, 31=11-0-0, 32=11-0-0

12-23, 13-35

Max Horiz 2=276 (LC 9)

Max Uplift 2=-75 (LC 8), 20=-173 (LC 13), 23=-94 (LC 8), 26=-112 (LC 12),

27=-58 (LC 12), 28=-44 (LC 12), 29=-50 (LC 12), 30=-31 (LC 28), 31=-96 (LC 12), 32=-91 (LC 12)

Max Grav 2=156 (LC 20), 20=956 (LC 20), 23=1493 (LC 2), 26=370 (LC 19),

27=122 (LC 19), 28=177 (LC 19), 29=159 (LC 19), 30=44 (LC 12), 31=228 (LC 19), 32=232 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/16, 2-3=-222/232, 3-5=-158/211, 5-6=-109/182, 6-7=-86/158, 7-8=-77/223,

8-10=-52/241, 10-11=-38/229, 11-12=-56/272, 12-13=-28/243, 13-14=-28/243, 14-15=-28/243,

15-16=-28/243, 16-18=-943/336,

18-20=-1114/264

BOT CHORD 2-32=-145/180, 31-32=-145/183,

30-31=-145/183, 29-30=-157/194, 28-29=-157/194, 27-28=-157/194, 26-27=-157/194, 25-26=-193/237, 23-25=-193/237, 21-23=0/361,

20-21=-92/829

WFBS 23-34=-970/150, 33-34=-928/138,

16-33=-959/148, 26-36=-48/27, 12-36=-45/29, 12-35=-220/26 23-35=-499/182, 16-21=-205/858,

18-21=-488/335, 7-38=-95/75, 37-38=-87/69, 26-37=-95/75, 30-39=-43/55, 7-39=-46/58,

16-22=0/192, 15-33=-12/37, 14-34=-59/20, 13-35=-317/160, 12-24=-20/48, 11-36=-104/90, 25-36=-95/87

10-37=-195/120, 27-37=-186/113, 8-38=-84/59, 28-38=-91/66, 6-39=-112/74, 29-39=-108/70, 5-31=-168/118,

3-32=-155/116

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 4-0-0, Interior (1) 4-0-0 to 14-0-0, Exterior(2R) 14-0-0 to 19-0-0, Interior (1) 19-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 27-0-0, Interior (1) 27-0-0 to 36-0-0 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable 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.



July 8,2024

Continued on page 2

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



Ply Qty Roof - HR Lot 202 Job Truss Truss Type P240906-01 Α1 Piggyback Base Structural Gable Job Reference (optional

DEVELOPMENT SERVICES 166720482 LEE'S SUMMIT, MISSOURI Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon (1) 10 1/32 4/2 9:24 ID:ZPE42GuJG2XQkNP0IKB?1ezkXCH-RfC?PsB70Hq3NSgPqnL8w3ulTXb kWrCDbr/74-0;7

ID:ZPE42GuJG2XQkNP0lKB?1ezkXCH-RfC?PsB70Hq3NSgPqnL8w3ulTXbr

RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW

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

* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 2, 94 lb uplift at joint 23, 173 lb uplift at joint 20, 112 lb uplift at joint 26, 31 lb uplift at joint 30, 58 lb uplift at joint 27, 44 lb uplift at joint 28, 50 lb uplift at joint 29, 96 lb uplift at joint 31 and 91 lb uplift at joint 32.
- 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.
- 12) 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



Job Truss Truss Type Qty Ply Roof - HR Lot 202 P240906-01 В1 Common Supported Gable Job Reference (optional

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

LEE'S SUMMIT. MISSOURI Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon 👊 ID:bzCw6On6o49uPtGdBr3k7RzkXGI-RfC?PsB70Hq3NSgPqnL8w3uITXbGł WrCDoi734z3

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES 166720483

25-8-0 12-10-0 12-10-0 12-10-0 4x4 =10 3x4**⋄** 3x4 4 8 12 12 81 13 6 14 5 15 32 33 3x4 🚜 16 3x4

Scalo - 1:50 2	

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.01	18	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 138 lb	FT = 20%

27 26

3x4=

25

25-8-0

24

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

2x3 SPF No.2 OTHERS SLIDER Left 2x4 SP No.2 -- 1-7-13, Right 2x4 SP

0-8-0

No.2 -- 1-7-13

BRACING TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

WEBS 1 Row at midpt 10-25

REACTIONS (size) 2=25-8-0, 18=25-8-0, 20=25-8-0, 21=25-8-0, 22=25-8-0, 23=25-8-0, 24=25-8-0, 25=25-8-0, 27=25-8-0,

28=25-8-0, 29=25-8-0, 30=25-8-0, 31=25-8-0

Max Horiz 2=255 (LC 11)

Max Uplift 2=-60 (LC 8), 18=-4 (LC 9), 20=-137 (LC 13), 21=-62 (LC 13),

22=-81 (LC 13), 23=-83 (LC 13), 24=-69 (LC 13), 27=-72 (LC 12), 28=-82 (LC 12), 29=-81 (LC 12),

30=-59 (LC 12), 31=-146 (LC 12) Max Grav 2=239 (LC 20), 18=211 (LC 1),

20=264 (LC 20), 21=167 (LC 20), 22=194 (LC 20), 23=189 (LC 20),

24=193 (LC 20), 25=215 (LC 13), 27=197 (LC 19), 28=187 (LC 19), 29=195 (LC 19), 30=164 (LC 19),

31=274 (LC 19)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/16, 2-4=-231/188, 4-5=-178/133,

16-18=-184/99, 18-19=0/16

5-6=-163/131, 6-8=-148/159, 8-9=-134/201, 9-10=-169/250, 10-11=-169/250, 11-12=-134/191, 12-14=-94/121, 14-15=-100/63, 15-16=-117/51,

BOT CHORD

WFBS

29

28

31

3x4 II

2-31=-85/187, 30-31=-85/187, 29-30=-85/187, 28-29=-85/187 27-28=-85/187, 25-27=-85/187 24-25=-85/187, 23-24=-85/187, 22-23=-85/187, 21-22=-85/187 20-21=-85/187, 18-20=-85/187 10-25=-201/84, 9-27=-157/96, 8-28=-148/106, 6-29=-153/105, 5-30=-132/84, 4-31=-210/168, 11-24=-153/93, 12-23=-149/107, 14-22=-152/104, 15-21=-135/87,

16-20=-201/160

NOTES

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

Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 4-1-8, Exterior(2N) 4-1-8 to 12-10-0, Corner(3R) 12-10-0 to 17-10-0, Exterior(2N) 17-10-0 to 26-6-8 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

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.
- 5) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 2, 4 lb uplift at joint 18, 72 lb uplift at joint 27, 82 lb uplift at joint 28, 81 lb uplift at joint 29, 59 lb uplift at joint 30, 146 lb uplift at joint 31, 69 lb uplift at joint 24, 83 lb uplift at joint 23, 81 lb uplift at joint 22, 62 lb uplift at joint 21 and 137 lb uplift at joint 20.

17

18

3x4 II

19

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

LOAD CASE(S) Standard

21

20



July 8,2024





Truss Type Job Truss Qty Ply Roof - HR Lot 202 P240906-01 C3 Hip Job Reference (optional

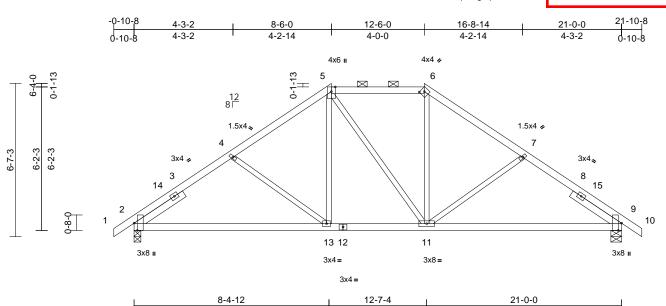
S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720484 LEE'S SUMMIT. MISSOURI

RELEASE FOR CONSTRUCTION

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

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries. I c. Mon 👊 ID:hllXBB7i22CSG8LYn54hh?z0P74-RfC?PsB70Hq3NSgPqnL8w3ulTXbGK VrCDoi734

8-4-12



Scale = 1:49.6

Plate Offsets (X, Y): [2:0-3-13,Edge], [6:0-2-0,0-1-11], [9:0-3-13,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	0.29	Vert(LL)	-0.14	2-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.29	2-13	>875	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 102 lb	FT = 20%

4-2-8

LUMBER

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

SLIDER Left 2x4 SP No.2 -- 2-6-3, Right 2x4 SP No.2

-- 2-6-3

BRACING TOP CHORD

Structural wood sheathing directly applied or

5-2-6 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 5-6. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 2=0-3-8, 9=0-5-8

Max Horiz 2=173 (LC 11)

Max Uplift 2=-143 (LC 12), 9=-143 (LC 13) Max Grav 2=1006 (LC 1), 9=1006 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/16, 2-4=-1300/252, 4-5=-1073/220,

5-6=-824/207, 6-7=-1074/214, 7-9=-1300/229, 9-10=0/16

BOT CHORD 2-13=-188/996, 11-13=-44/824,

9-11=-115/996

WEBS 5-13=-41/289, 5-11=-110/112, 6-11=-24/289,

4-13=-252/200, 7-11=-252/201

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 4-1-9, Interior (1) 4-1-9 to 8-6-0, Exterior(2E) 8-6-0 to 12-6-0, Exterior(2R) 12-6-0 to 19-6-14, Interior (1) 19-6-14 to 21-10-8 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 2 and 143 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.

LOAD CASE(S) Standard

8-4-12



July 8,2024



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



Job Truss Truss Type Qty Ply Roof - HR Lot 202 P240906-01 C2 Hip

Job Reference (optiona

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720485 LEE'S SUMMIT. MISSOURI

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

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon 👊 ID:I5fLCiunWCp9UDOu9bEEP?z0P7N-RfC?PsB70Hq3NSgPqnL8w3uITXbG

KWrCDo

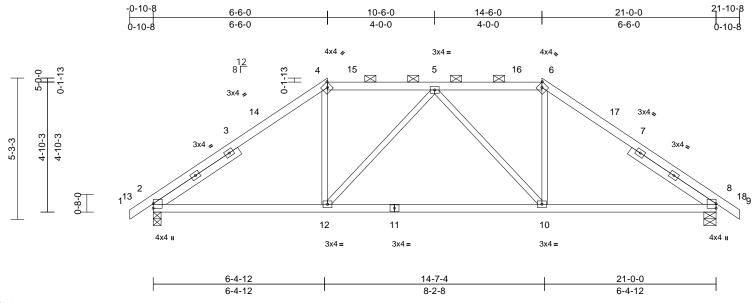


Plate Offsets (X, Y): [4:0-1-11,0-2-0], [6:0-1-11,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.09	10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.19	10-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%

LUMBER

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

SLIDER Left 2x4 SP No.2 -- 3-9-9, Right 2x4 SP No.2

-- 3-9-9

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-5-7 oc purlins, except

2-0-0 oc purlins (5-10-9 max.): 4-6. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 2=0-3-8, 8=0-5-8

Max Horiz 2=136 (LC 11)

Max Uplift 2=-125 (LC 12), 8=-125 (LC 13)

Max Grav 2=1006 (LC 1), 8=1006 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/16, 2-4=-1307/204, 4-5=-950/239,

5-6=-950/239, 6-8=-1307/204, 8-9=0/16 2-12=-119/955, 10-12=-143/1088,

8-10=-48/955

WEBS 4-12=-24/378, 6-10=-24/378, 5-12=-304/171,

5-10=-304/171

NOTES

BOT CHORD

- 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 (2R) 6-6-0 to 13-6-14, Interior (1) 13-6-14 to 14-6-0, Exterior(2R) 14-6-0 to 21-6-14, Interior (1) 21-6-14 to 21-10-8 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.
- All plates are 3x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 2 and 125 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.
- 10) 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 8,2024



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



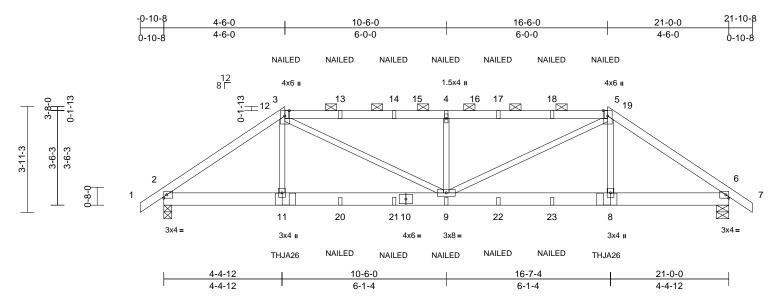
Job Truss Truss Type Qty Ply Roof - HR Lot 202 P240906-01 C1 Hip Girder 2 Job Reference (optional

S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720486 LEE'S SUMMIT. MISSOURI

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

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, I c. Mon 🕼 ID:HdZYRYgUlhYiKS?R6pw0hCz0P7f-RfC?PsB70Hq3NSgPqnL8w3ulTXbG (WrCDoix

RELEASE FOR CONSTRUCTION



Scale = 1:42.8

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	0.49	Vert(LL)	0.06	9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.09	9	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 186 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.

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

bracing

REACTIONS (size) 2=0-3-8, 6=0-5-8

Max Horiz 2=98 (LC 11)

Max Uplift 2=-536 (LC 12), 6=-539 (LC 13)

Max Grav 2=1597 (LC 1), 6=1603 (LC 1) (lb) - Maximum Compression/Maximum

FORCES Tension

TOP CHORD 1-2=0/21, 2-3=-2388/860, 3-4=-2748/1093,

4-5=-2748/1093, 5-6=-2363/859, 6-7=0/22 **BOT CHORD** 2-11=-712/1855, 9-11=-711/1841,

8-9=-633/1810, 6-8=-633/1823

WEBS 3-11=-41/456, 3-9=-478/1072, 4-9=-810/558,

5-9=-488/1104, 5-8=-39/449

NOTES

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 - Top chords connected as follows: 2x4 1 row at 0-9-0
 - 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 4-6-0, Exterior(2R) 4-6-0 to 11-6-14, Interior (1) 11-6-14 to 16-6-0, Exterior(2E) 16-6-0 to 21-10-8 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 536 lb uplift at joint 2 and 539 lb uplift at joint 6.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Left Hand Hip) or equivalent at 4-6-6 from the left end to connect truss(es) to front face of bottom chord.
- 13) Use Simpson Strong-Tie THJA26 (THJA26 on 2 ply, Right Hand Hip) or equivalent at 16-5-10 from the left end to connect truss(es) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) "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: 1-3=-70, 3-5=-70, 5-7=-70, 2-6=-20 Concentrated Loads (lb)

Vert: 3=-79 (F), 5=-79 (F), 11=-263 (F), 9=-24 (F), 4=-79 (F), 8=-254 (F), 13=-79 (F), 14=-79 (F), 17=-79 (F), 18=-79 (F), 20=-24 (F), 21=-24 (F), 22=-24 (F), 23=-24 (F)



July 8,2024



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

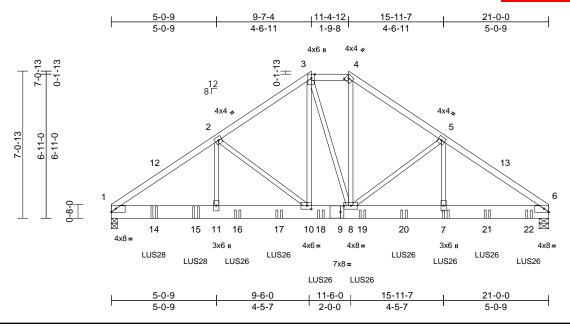


Job Truss Truss Type Qty Ply Roof - HR Lot 202 3 P240906-01 C4 Hip Girder Job Reference (optional

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720487 LEE'S SUMMIT. MISSOURI

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

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon 🕡 ID:zfUKYGM7QBpAliAUDQTSmCz0P9M-RfC?PsB70Hq3NSgPqnL8w3ulTXI GKWrCDef73429C



Scale = 1:55.3

Plate Offsets (X, Y): [4:0-2-0,0-1-11], [9:0-2-0,0-3-8], [10:0-2-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.06	10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.11	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.29	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 348 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x8 SPF No.2 2x3 SPF No.2 WEBS

BRACING

BOT CHORD

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 3-4.

Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 1=0-3-8, 6=0-5-8

Max Horiz 1=182 (LC 11)

Max Uplift 1=-1085 (LC 12), 6=-1199 (LC 13) Max Grav 1=5086 (LC 19), 6=5566 (LC 20)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-7337/1593, 2-3=-5238/1212,

3-4=-4384/1061, 4-5=-5353/1247,

5-6=-7253/1575

BOT CHORD 1-11=-1312/6014, 10-11=-1312/6014,

8-10=-859/4347, 7-8=-1202/5774.

6-7=-1202/5774

WFBS 3-10=-548/2399, 3-8=-154/413,

4-8=-622/2732, 2-10=-2082/568,

5-8=-1822/519, 2-11=-458/2385,

5-7=-427/2172

NOTES

3-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0

Bottom chords connected as follows: 2x8 - 3 rows staggered at 0-6-0 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 3) 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(2F) 0-1-12 to 5-0-9 Interior (1) 5-0-9 to 9-7-4, Exterior(2E) 9-7-4 to 11-4-12, Exterior(2R) 11-4-12 to 18-5-10. Interior (1) 18-5-10 to 20-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown: Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SPF No.2 crushing capacity of 425 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1085 lb uplift at joint 1 and 1199 lb uplift at joint 6.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 4-0-12 to connect truss(es) to back face of bottom chord.

- 13) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 6-0-12 from the left end to 20-0-12 to connect truss(es) to back face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-3=-70, 3-4=-70, 4-6=-70, 1-6=-20

Concentrated Loads (lb)

Vert: 7=-798 (B), 14=-826 (B), 15=-826 (B), 16=-798 (B), 17=-798 (B), 18=-798 (B), 19=-798 (B), 20=-798 (B), 21=-798 (B), 22=-801 (B)



July 8,2024



MARNING - 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



Job Truss Truss Type Qty Ply Roof - HR Lot 202 P240906-01 V1 Valley

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

LEE'S SUMMIT. MISSOURI Job Reference (optional Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon 👊 ID:TMuG8B2N8PngNp89E2SWm1z0P5u-RfC?PsB70Hq3NSgPqnL8w3uITX

I/defI

n/a 999

n/a 999

n/a n/a

(loc)

7

n/a

n/a

0.00

L/d

PLATES

Weight: 74 lb

MT20

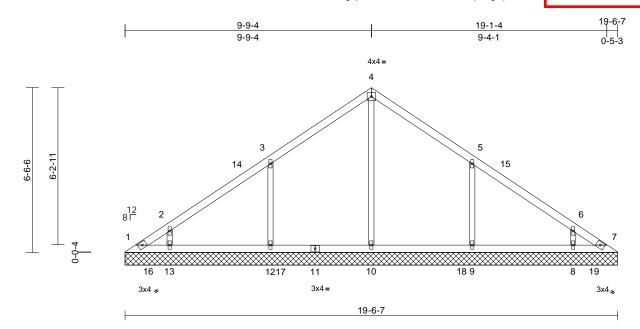
GRIP

244/190

FT = 20%

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES 166720488



BCDL LUMBER

Scale = 1:45.7 Loading

TCLL (roof)

TCDI

BCLL

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

(psf)

25.0

10.0

10.0

0.0*

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=19-6-7, 7=19-6-7, 8=19-6-7, 9=19-6-7, 10=19-6-7, 12=19-6-7,

13=19-6-7

Spacing

Code

Plate Grip DOL

Rep Stress Incr

Lumber DOL

2-0-0

1.15

1 15

YES

IRC2018/TPI2014

Max Horiz 1=-174 (LC 8)

Max Uplift 1=-72 (LC 10), 7=-40 (LC 11) 8=-125 (LC 13), 9=-176 (LC 13),

12=-176 (LC 12), 13=-124 (LC 12)

Max Grav 1=103 (LC 12), 7=81 (LC 13),

8=350 (LC 20), 9=498 (LC 20)

10=384 (LC 19), 12=498 (LC 19),

13=349 (LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-2=-186/139, 2-3=-177/107, 3-4=-155/157, TOP CHORD

4-5=-140/134, 5-6=-133/54, 6-7=-147/80 **BOT CHORD** 1-13=-53/119, 12-13=-53/119, 10-12=-53/119,

9-10=-53/119, 8-9=-53/119, 7-8=-53/119

WEBS 4-10=-190/0, 3-12=-330/226, 2-13=-242/168,

5-9=-330/225, 6-8=-243/169

NOTES

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

Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 9-9-10, Exterior(2R) 9-9-10 to 14-9-10, Interior (1) 14-9-10 to 19-1-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

DEFL

Vert(LL)

Vert(TL)

Horiz(TL)

0.25

0.17

0.18

- 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.

CSI

TC

BC

WB

Matrix-S

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 1, 40 lb uplift at joint 7, 176 lb uplift at joint 12, 124 lb uplift at joint 13, 176 lb uplift at joint 9 and 125 lb uplift at
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 8,2024



MARNING - 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



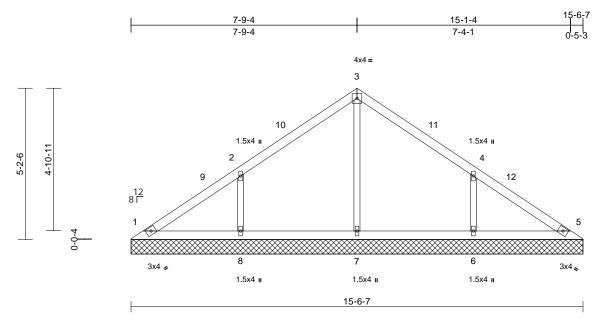
Ply Job Truss Truss Type Qty Roof - HR Lot 202 P240906-01 V2 Valley

S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720489 LEE'S SUMMIT. MISSOURI Job Reference (optional

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

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon 👊 ID:TMuG8B2N8PngNp89E2SWm1z0P5u-RfC?PsB70Hq3NSgPqnL8w3uITX

RELEASE FOR CONSTRUCTION



Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 56 lb	FT = 20%

LUMBER

Scale = 1:39.6

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

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=15-6-7, 5=15-6-7, 6=15-6-7, 7=15-6-7, 8=15-6-7

Max Horiz 1=-136 (LC 8)

Max Uplift 1=-17 (LC 13), 6=-175 (LC 13),

8=-175 (LC 12)

1=146 (LC 20), 5=139 (LC 1), Max Grav 6=408 (LC 20), 7=270 (LC 1),

8=408 (LC 19)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-142/100, 2-3=-149/124, 3-4=-140/112,

4-5=-107/56

BOT CHORD 1-8=-38/88, 7-8=-38/88, 6-7=-38/88,

5-6=-38/88

WEBS 3-7=-193/5, 2-8=-321/218, 4-6=-321/218

NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12, Interior (1) 5-5-12 to 7-9-10, Exterior(2R) 7-9-10 to 12-9-10, Interior (1) 12-9-10 to 15-1-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1, 175 lb uplift at joint 8 and 175 lb uplift at joint 6.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 8,2024





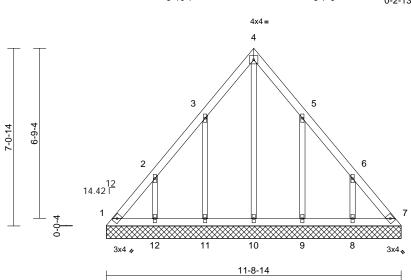
Job Truss Truss Type Qty Ply Roof - HR Lot 202 P240906-01 HG1 Lay-In Gable

DEVELOPMENT SERVICES 166720490 LEE'S SUMMIT. MISSOURI Job Reference (optional Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon 👊

ID:1GMa8bKsuaZSVO066?Q_hoz0P9O-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDsi7J4zJC

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





Scale = 1:45.9

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 58 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=11-8-14, 7=11-8-14, 8=11-8-14,

9=11-8-14, 10=11-8-14, 11=11-8-14, 12=11-8-14

Max Horiz 1=197 (LC 9)

Max Uplift 1=-82 (LC 10), 7=-57 (LC 11)

8=-168 (LC 13), 9=-165 (LC 13), 11=-167 (LC 12), 12=-168 (LC 12)

Max Grav 1=190 (LC 12), 7=174 (LC 13),

8=220 (LC 20), 9=225 (LC 20).

10=142 (LC 22), 11=226 (LC 19),

12=219 (I C 19)

FORCES (lb) - Maximum Compression/Maximum

TOP CHORD 1-2=-264/171, 2-3=-150/105, 3-4=-135/124, 4-5=-135/119, 5-6=-125/71, 6-7=-243/171

BOT CHORD 1-12=-129/187, 11-12=-130/188,

10-11=-130/188, 9-10=-130/188,

8-9=-130/188, 7-8=-129/187 2-12=-218/185, 3-11=-221/192,

4-10=-114/77, 5-9=-221/191, 6-8=-218/185

WEBS NOTES

Unbalanced roof live loads have been considered for 1) 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) 0-3-12 to 5-3-12, Interior (1) 5-3-12 to 5-10-10, Exterior(2R) 5-10-10 to 10-10-10, Interior (1) 10-10-10 to 11-5-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 1, 57 lb uplift at joint 7, 168 lb uplift at joint 12, 167 lb uplift at joint 11, 165 lb uplift at joint 9 and 168 lb uplift at joint 8.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 8,2024

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW



MARNING - 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



Job Truss Truss Type Qty Ply Roof - HR Lot 202 P240906-01 V3 Valley Job Reference (optional

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

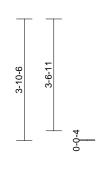
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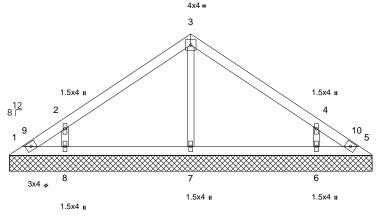
LEE'S SUMMIT. MISSOURI c. Mon 👊

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES 166720491







11-6-7

3x4 👟

Scale = 1:36.6

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	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 40 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=11-6-7, 5=11-6-7, 6=11-6-7,

7=11-6-7, 8=11-6-7

Max Horiz 1=-99 (LC 8)

Max Uplift 1=-53 (LC 10), 5=-34 (LC 11),

6=-157 (LC 13), 8=-157 (LC 12)

1=66 (LC 12), 5=53 (LC 13), 6=351

(LC 20), 7=284 (LC 1), 8=351 (LC

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-103/87, 2-3=-144/97, 3-4=-141/94, 4-5=-80/54

1-8=-23/69, 7-8=-23/69, 6-7=-23/69, 5-6=-23/69

WEBS 3-7=-198/44, 2-8=-293/223, 4-6=-292/223

NOTES

BOT CHORD

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=1.00; Cat. II; Exp C; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-5-12 to 5-5-12. Interior (1) 5-5-12 to 5-9-10, Exterior(2R) 5-9-10 to 10-9-10, Interior (1) 10-9-10 to 11-1-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 1, 34 lb uplift at joint 5, 157 lb uplift at joint 8 and 157 lb uplift at joint 6.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 8,2024



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



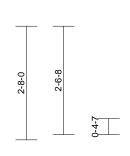
Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 202	
P240906-01	PB01	Piggyback	30	1	Job Reference (optional	

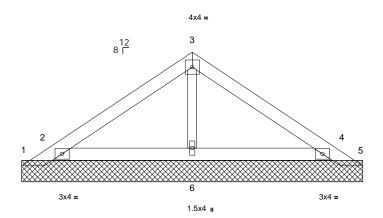
Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon 17 2024 MiTek Indu

LEE'S SUMMIT. MISSOURI

RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720492

-0-8-9	3-3-1	6-6-2	7-2-11	
0-8-9	3-3-1	3-3-1	0-8-9	





6-6-2

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=8-0-0, 2=8-0-0, 4=8-0-0,

5=8-0-0, 6=8-0-0

Max Horiz 1=-69 (LC 8)

Max Uplift 1=-195 (LC 19), 2=-213 (LC 12), 4=-196 (LC 13), 5=-166 (LC 20)

1=149 (LC 12), 2=404 (LC 19), Max Grav

4=385 (LC 20), 5=123 (LC 13),

6=223 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-113/159, 2-3=-111/70, 3-4=-110/70,

4-5=-92/99

BOT CHORD 2-6=-19/51, 4-6=-19/51 WEBS 3-6=-142/60

NOTES

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCF 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.
- 4) Gable requires continuous bottom chord bearing.

- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 195 lb uplift at joint 1, 166 lb uplift at joint 5, 213 lb uplift at joint 2 and 196 lb uplift at joint 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



July 8,2024



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



Ply Job Truss Truss Type Qty Roof - HR Lot 202 P240906-01 V4 Valley

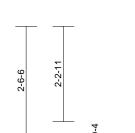
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

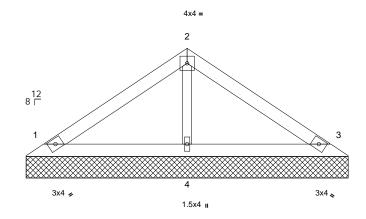
Job Reference (optional Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries. In

DEVELOPMENT SERVICES 166720493 LEE'S SUMMIT. MISSOURI c. Mon 👊 ID:xZSeMX2?vivX?zjLnmzlIEz0P5t-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWCDoi7Je

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

3-9-4 7-1-4 3-9-4 3-4-1





7-6-7

Scale = 1:27

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins.

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

bracing.

REACTIONS (size) 1=7-6-7, 3=7-6-7, 4=7-6-7

Max Horiz 1=-62 (LC 10)

Max Uplift 1=-42 (LC 12), 3=-50 (LC 13)

Max Grav 1=168 (LC 1), 3=168 (LC 1), 4=261

(LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-105/64, 2-3=-100/64

BOT CHORD 1-4=-13/50, 3-4=-13/50

WFBS 2-4=-178/96

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
- 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 6) chord live load nonconcurrent with any other live loads.

- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1 and 50 lb uplift at joint 3.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 8,2024

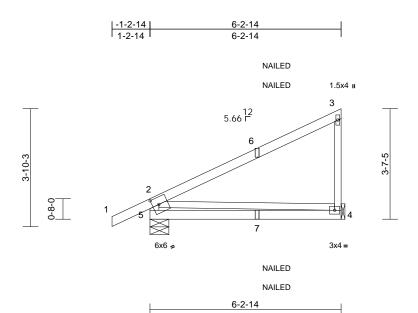




Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 202	
P240906-01	CG1	Diagonal Hip Girder	1	1	Job Reference (optional)	

ID:pR?9DCfs_NQriIRFY6Pn8_z0P7g-RfC?PsB70Hq3NSgPqnL8w3uITXbGk WrCDoi734zJO

RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720494 LEE'S SUMMIT. MISSOURI



Scale = 1:37.6

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.08	4-5	>931	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.15	4-5	>466	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 29 lb	FT = 20%

LUMBER

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

2x3 SPF No.2 *Except* 5-2:2x4 SP No.2 WEBS

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 9-5-12 oc

bracing.

REACTIONS 4= Mechanical, 5=0-7-6 (size)

Max Horiz 5=159 (LC 9)

Max Uplift 4=-94 (LC 9), 5=-94 (LC 12)

Max Grav 4=258 (LC 1), 5=378 (LC 1) (lb) - Maximum Compression/Maximum

FORCES

Tension 2-5=-318/302, 1-2=0/41, 2-3=-228/126,

3-4=-198/246 **BOT CHORD** 4-5=-353/181 WFBS 2-4=-129/307

NOTES

TOP CHORD

- 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 6-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 5 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 94 lb uplift at joint 5 and 94 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "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: 1-2=-70, 2-3=-70, 4-5=-20

> OF MISS SCOTT M. SEVIER PE-200101880'

July 8,2024





Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 202	
P240906-01	CG2	Diagonal Hip Girder	1	1	Job Reference (optional)	

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LEE'S SUMMIT. MISSOURI

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720495

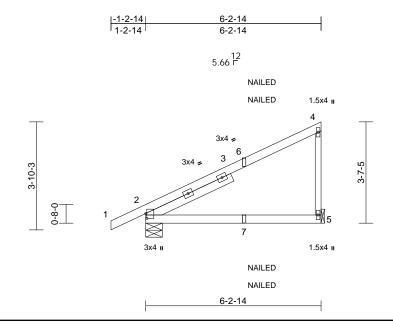


Plate Offsets (X, Y): [2:0-2-2,0-0-7]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.08	2-5	>867	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.17	2-5	>433	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 No.2 **BOT CHORD** 2x4 SP No.2 2x3 SPF No.2 WEBS

SLIDER Left 2x4 SP No.2 -- 3-4-4

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-4-11 oc purlins, except end verticals.

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

bracing.

REACTIONS (size) 2=0-7-0, 5= Mechanical

Max Horiz 2=152 (LC 9)

Max Uplift 2=-90 (LC 12), 5=-96 (LC 12) Max Grav 2=371 (LC 1), 5=267 (LC 1)

FORCES Tension

(lb) - Maximum Compression/Maximum

TOP CHORD 1-2=0/15, 2-4=-251/130, 4-5=-208/272

BOT CHORD 2-5=-67/73

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 Corner (3) -1-2-14 to 5-10-0, Exterior(2R) 5-10-0 to 6-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 5 and 90 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.
- "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: 1-4=-70, 2-5=-20



July 8,2024



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



Truss Type Job Truss Qty Ply Roof - HR Lot 202 P240906-01 J1 Jack-Open

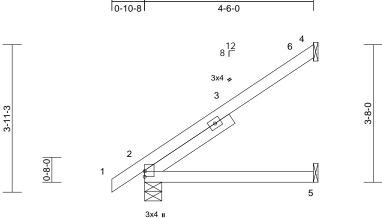
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

DEVELOPMENT SERVICES 166720496 LEE'S SUMMIT. MISSOURI Job Reference (optional

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, II c. Mon 👊 ID:grcYDVh33UDLUrkgJbSnMvz0P8x-RfC?PsB70Hq3NSgPqnL8w3ulTXbGl(WrCDoi7y423e

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

<u>-0-1</u>0-8l 4-6-0



Scale = 1:30.7

Loading	(psf)	Spacing	2-0-0	csı		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.02	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.05	2-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 20%

4-6-0

LUMBER

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

Left 2x4 SP No.2 -- 2-8-10 SLIDER

BRACING

TOP CHORD Structural wood sheathing directly applied or

4-6-0 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=153 (LC 12)

Max Uplift 2=-15 (LC 12), 4=-121 (LC 12)

2=267 (LC 1), 4=163 (LC 19), 5=89 Max Grav

(LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/16, 2-4=-131/80

BOT CHORD 2-5=0/0

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) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 4-5-4 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 4 and 15 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



July 8,2024



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



Job	Truss	Truss Type	Qty	Ply	Roof - HR Lot 202
P240906-01	V5	Valley	1	1	Job Reference (optional

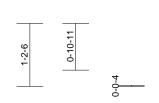
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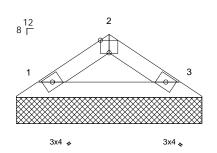
S NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 166720497 LEE'S SUMMIT. MISSOURI c. Mon 🕡 🕦

RELEASE FOR CONSTRUCTION



3x4 =





3-6-7

Scale = 1:21.9

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-3 oc purlins.

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

bracing.

REACTIONS (size) 1=3-6-7, 3=3-6-7

Max Horiz 1=25 (LC 9)

Max Uplift 1=-17 (LC 12), 3=-17 (LC 13) Max Grav 1=119 (LC 1), 3=119 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=-104/71, 2-3=-104/71

BOT CHORD 1-3=-26/69

NOTES

- 1) 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
- 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. 5)
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 1 and 17 lb uplift at joint 3.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



July 8,2024



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



Job Truss Truss Type Qty Ply Roof - HR Lot 202 P240906-01 J2 Jack-Open

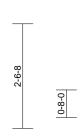
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

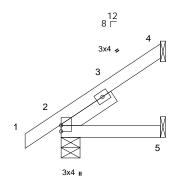
DEVELOPMENT SERVICES 166720498 LEE'S SUMMIT. MISSOURI Job Reference (optional

RELEASE FOR CONSTRUCTION S NOTED FOR PLAN REVIEW

Run: 8.95 S 8.63 Jun 17 2024 Print: 8.630 S Jun 17 2024 MiTek Industries, Irc. Mon Jul ID:szniXGpyTscnIX4oSP8MIDz0P8m-RfC?PsB70Hq3NSgPqnL8w3uITXbGkWrCDoi734z36?

-0-10-8	2-4-15
0-10-8	2-4-15







Scale = 1:28

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	0.12	Vert(LL)	0.00	2-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00	2-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 12 lb	FT = 20%

LUMBER

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

Left 2x4 SP No.2 -- 1-5-9 SLIDER

BRACING

TOP CHORD Structural wood sheathing directly applied or

2-4-15 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

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

Max Horiz 2=92 (LC 12)

Max Uplift 2=-16 (LC 12), 4=-67 (LC 12)

Max Grav 2=178 (LC 1), 4=80 (LC 19), 5=47

(LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-2=0/16, 2-4=-78/47

BOT CHORD 2-5=0/0

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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- Bearings are assumed to be: , Joint 2 SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 4 and 16 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



July 8,2024



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



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

Apply plates to both sides of truss Dimensions are in ft-in-sixteenths

* Plate location details available in MiTek software or upon request

connector plates.

required direction of slots in This symbol indicates the ₹

edge of truss.

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

PLATE SIZE

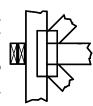
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

LATERAL BRACING LOCATION



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

BEARING



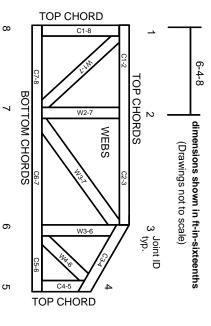
Min size shown is for crushing only number/letter where bearings occur reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

Industry Standards:

National Design Specification for Metal Plate Connected Wood Trusses Installing, Restraining & Bracing of Metal Guide to Good Practice for Handling, Building Component Safety Information, Design Standard for Bracing. Plate Connected Wood Truss Construction.

DSB-22: ANSI/TPI1:

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

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

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

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

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other

'n

- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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- 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 camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.