



RE: P230110-P230110-02 - Roof

Site Information:

Project Customer: Clover & Hive Project Name: Twin Cobalt
Lot/Block: 53 Subdivision: Osage
Model:
Address: TBD
City: Lee Summit State: MO

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

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 Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16
Roof Load: 45.0 psf Floor Load: N/A psf

Mean Roof Height (feet): 35 Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I56979069	A1	3/6/23	35	I56979103	V11	3/6/23
2	I56979070	A2	3/6/23	36	I56979104	V12	3/6/23
3	I56979071	A3	3/6/23	37	I56979105	V13	3/6/23
4	I56979072	A4	3/6/23	38	I56979106	V14	3/6/23
5	I56979073	B1	3/6/23	39	I56979107	V15	3/6/23
6	I56979074	B2	3/6/23	40	I56979108	V16	3/6/23
7	I56979075	B3	3/6/23	41	I56979109	V17	3/6/23
8	I56979076	B4	3/6/23	42	I56979110	V18	3/6/23
9	I56979077	B5	3/6/23	43	I56979111	V19	3/6/23
10	I56979078	B6	3/6/23	44	I56979112	V20	3/6/23
11	I56979079	C1	3/6/23				
12	I56979080	C2	3/6/23				
13	I56979081	C3	3/6/23				
14	I56979082	CJ1	3/6/23				
15	I56979083	D1	3/6/23				
16	I56979084	D2	3/6/23				
17	I56979085	E1	3/6/23				
18	I56979086	E2	3/6/23				
19	I56979087	E3	3/6/23				
20	I56979088	J1	3/6/23				
21	I56979089	J2	3/6/23				
22	I56979090	J3	3/6/23				
23	I56979091	PB1	3/6/23				
24	I56979092	PB2	3/6/23				
25	I56979093	V1	3/6/23				
26	I56979094	V2	3/6/23				
27	I56979095	V3	3/6/23				
28	I56979096	V4	3/6/23				
29	I56979097	V5	3/6/23				
30	I56979098	V6	3/6/23				
31	I56979099	V7	3/6/23				
32	I56979100	V8	3/6/23				
33	I56979101	V9	3/6/23				
34	I56979102	V10	3/6/23				

The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision based on the parameters
provided by Premier Building Supply (Springhill, KS)20300 W 207th Street.

Truss Design Engineer's Name: Liu, Xuegang

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

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



March 6, 2023

Truss Type	Qty	Ply	Roof	I56979069
Piggyback Base Supported Gable	1	1		

Job Reference (optional)	8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:38 2023 Page 1
Spring Hills, KS - 66083,	ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-7B?WQnWL2pu96GV_er5g4abl31Ojt9YEZpBd1CzefDJ

Scale = 1:99.2

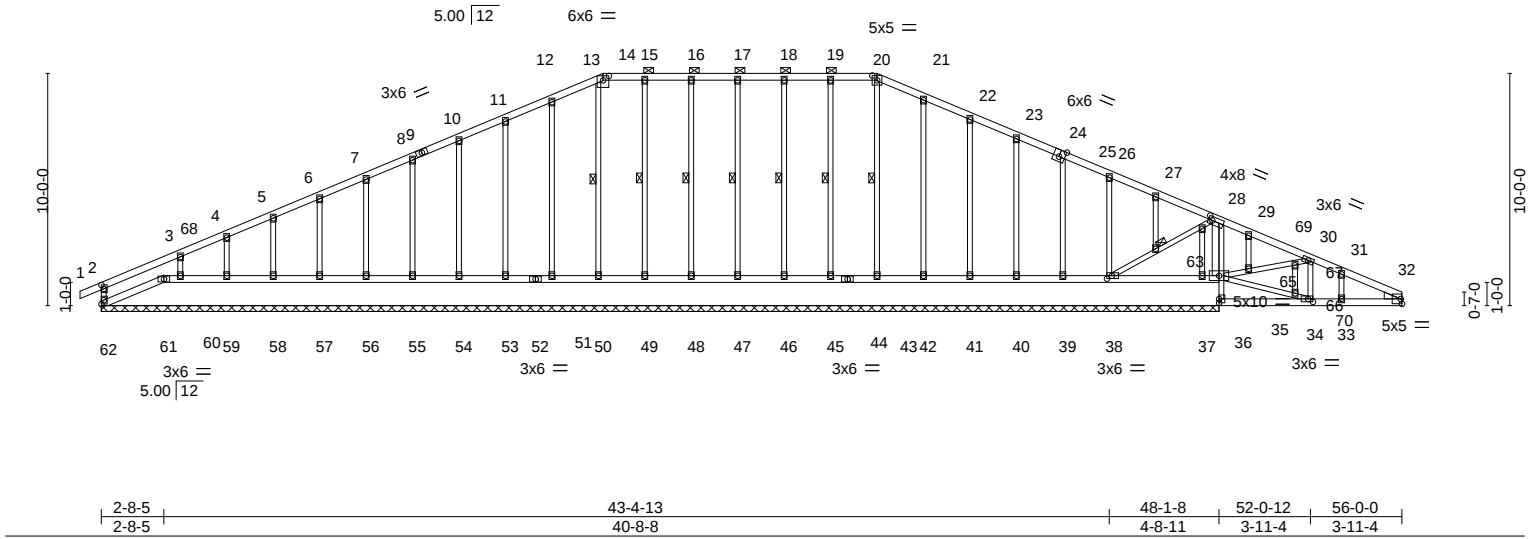


Plate Offsets (X,Y)--	[2:0-2-0,0-1-4], [14:0-3-0,0-2-4], [20:0-2-8,0-2-7], [24:0-3-0,Edge], [28:0-2-0,0-2-0], [34:0-2-8,0-1-8], [38:0-2-8,0-1-8]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.52	Vert(LL) 0.00	2	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) 0.00	2	n/r	90		
BCLL 0.0	Rep Stress Incr NO	WB 0.47	Horz(CT) 0.04	35	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH					Weight: 303 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 5-0-7 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 14-20.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
WEBS 2x3 SPF No.2 *Except*	4-1-15 oc bracing: 35-36.
28-35: 2x3 SPF No.2	1 Row at midpt 20-43, 19-45, 18-46, 17-47, 16-48, 15-49, 13-50
28-36: 2x4 SP No.2	
OTHERS 2x3 SPF No.2	
WEDGE	
Right: 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 63

REACTIONS. All bearings 48-1-8.
(lb) - Max Horz 62=-166(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 62, 61, 45, 46, 47, 48, 49, 51, 53, 54, 55, 56, 57, 58, 59, 42, 41, 40, 39, 37 except 35=-447(LC 9), 60=-110(LC 12), 38=-133(LC 22)
Max Grav All reactions 250 lb or less at joint(s) 62, 61, 43, 45, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 42, 41, 40, 39, 37, 38 except 35=1389(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=-99/261, 12-13=-114/302, 13-14=-110/286, 14-15=-108/297, 15-16=-108/297, 16-17=-108/297, 17-18=-108/297, 18-19=-108/297, 19-20=-108/297, 20-21=-115/305, 21-22=-100/265, 28-29=-1313/1054, 29-30=-1333/1022, 30-31=-386/352, 31-32=-422/337
BOT CHORD 37-38=-896/1324, 36-37=-896/1324, 35-36=-1383/1700, 28-36=-1132/1295, 34-35=-218/277, 33-34=-278/423, 32-33=-278/423
WEBS 26-38=-293/215, 38-63=-1326/983, 28-63=-1287/959, 30-34=-413/220, 36-65=-669/994, 65-67=-665/989, 30-67=-672/1000

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 21-7-3, Corner(3R) 21-7-3 to 26-7-3, Exterior(2N) 26-7-3 to 33-4-13, Corner(3R) 33-4-13 to 38-4-13, Exterior(2N) 38-4-13 to 56-0-0 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 3x4 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.



March 6, 2023

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/28/2023 4:28:37

Job	Truss	Truss Type	Qty	Ply	Roof	I56979069
P236110-P230110-02	AL	Piggyback Base Supported Gable	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:39 2023 Page 2
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-bNZue7Xzp700kQ4BBYcvco8TpRkyccnNoTxAZezefDI

- NOTES
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 62, 61, 45, 46, 47, 48, 49, 51, 53, 54, 55, 56, 57, 58, 59, 42, 41, 40, 39, 37 except (jt=lb) 35=447, 60=110, 38=133.
- 9) N/A
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Truss Type	Qty	Ply	Roof	I56979070
PIGGYBACK BASE	2	1		

Job Reference (optional)
8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:41 2023 Page 1
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-Xmge3oZDLkGkzEzJzeNhDDlaFod4P5gFnQHeXzefDG
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 0-11-0 2-8-5 4-8-12 12-1-12 16-10-8 21-7-3 27-6-0 33-4-13 40-9-2 48-1-8 52-0-6 56-0-0 3-10-14 3-11-10

Scale = 1:109.0

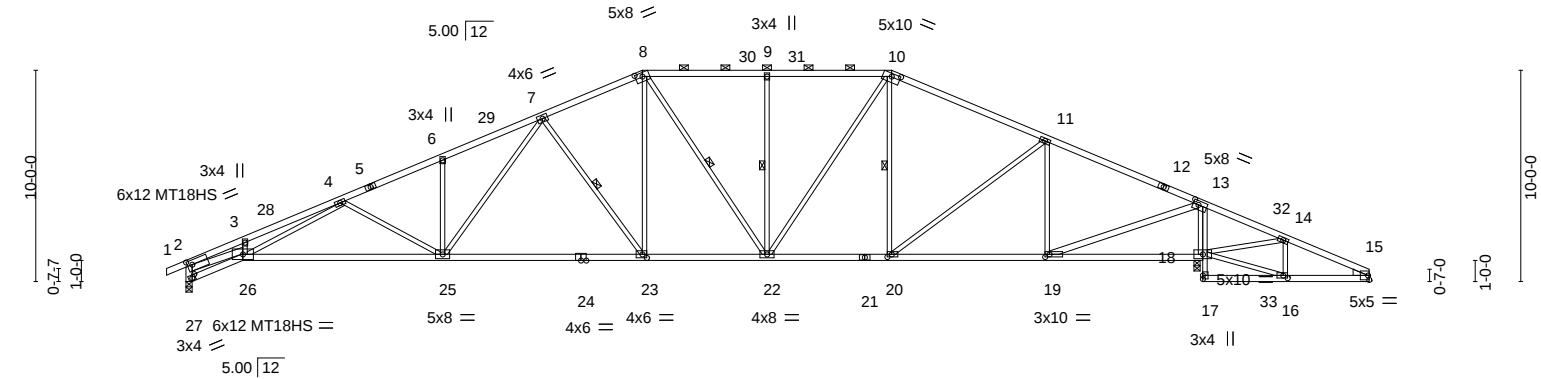


Plate Offsets (X,Y)--	[2:0-2,12,0-2-8], [8:0-4-0,0-2-2], [10:0-5-0,0-1-11], [13:0-3-0,0-2-4], [16:0-2-8,0-1-8], [19:0-2-8,0-1-8], [20:0-2-8,0-1-8], [23:0-2-8,0-2-0], [27:0-2-0,Edge]
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LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) -0.37	25	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.70	Vert(CT) -0.75	25-26	>766	180	MT18HS	197/144
BCLL 0.0	Rep Stress Incr NO	WB 0.93	Horz(CT) 0.31	18	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH						
							Weight: 277 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 5-8,10-12: 2x4 SP 1650F 1.5E, 1-5: 2x4 SP 2400F 2.0E	TOP CHORD Sheathed or 2-5-10 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-9 max.): 8-10.
BOT CHORD 2x4 SP No.2 *Except* 24-26,18-21: 2x4 SP 2400F 2.0E, 13-17: 2x3 SPF No.2 21-24: 2x4 SP 1650F 1.5E	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x3 SPF No.2 *Except* 2-27,13-19: 2x4 SP No.2, 2-26: 2x4 SP 1650F 1.5E	WEBS 1 Row at midpt 7-23, 8-22, 9-22, 10-20
WEDGE Right: 2x4 SP No.2	

REACTIONS. (size) 18=0-3-8 (req. 0-4-9), 27=0-3-8
Max Horz 27=-171(LC 17)
Max Uplift 18=-443(LC 9), 27=-312(LC 12)
Max Grav 18=2923(LC 1), 27=2176(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-27=-2225/384, 2-3=-6343/988, 3-4=-6240/1055, 4-6=-4397/580, 6-7=-4380/667,
7-8=-3111/478, 8-9=-2761/481, 9-10=-2761/481, 10-11=-2642/416, 11-13=-2313/309,
13-14=-1030/1153, 14-15=-308/395
BOT CHORD 26-27=-214/396, 25-26=-761/4663, 23-25=-366/3357, 22-23=-189/2819, 20-22=-136/2335,
19-20=-129/2047, 18-19=-945/1013, 13-18=-2719/798, 15-16=-296/303
WEBS 2-26=-823/5473, 4-26=-316/1270, 4-25=-772/299, 6-25=-300/170, 7-25=-233/1099,
7-23=-940/311, 8-23=-159/918, 9-22=-464/199, 10-22=-180/875, 11-20=-191/453,
11-19=-893/392, 16-18=-264/299, 14-18=-733/765, 14-16=-330/228, 13-19=-888/3165

- 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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-0 to 4-1-0, Interior(1) 4-1-0 to 21-7-3, Exterior(2R) 21-7-3 to 28-8-1, Interior(1) 28-8-1 to 33-4-13, Exterior(2R) 33-4-13 to 40-9-2, Interior(1) 40-9-2 to 56-0-0 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.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 3x6 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - WARNING:** Required bearing size at joint(s) 18 greater than input bearing size.
 - Bearing at joint(s) 27 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb)



March 6,2023

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component**

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/28/2023 4:28:37

Job	Truss	Truss Type	Qty	Ply	Roof
P236110-P230110-02	A2	PIGGYBACK BASE	2	1	I56979070
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:41 2023 Page 2
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-Xmge3oZDLkGkzkEZJzeNhDDlaFOd4P5gFnQHeXzefDG

- NOTES
- 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.

Truss Type	Qty	Ply	Roof	I56979071
GABLE	1	1		
Job Reference (optional)				
8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:46 2023 Page 1				
ID:WcRfdZxs?bG3GRhQ2QHdPbz1SCN-ujUX6WdMAHv14V6X6WEYOGwgCG8gln_PP372JkzefDB				
33-4-13 48-1-8 51-6-12 55-0-0 55-11-0				
0-11-0 21-7-3 11-9-10 14-8-11 3-5-4 0-11-0				

Scale = 1:97.4

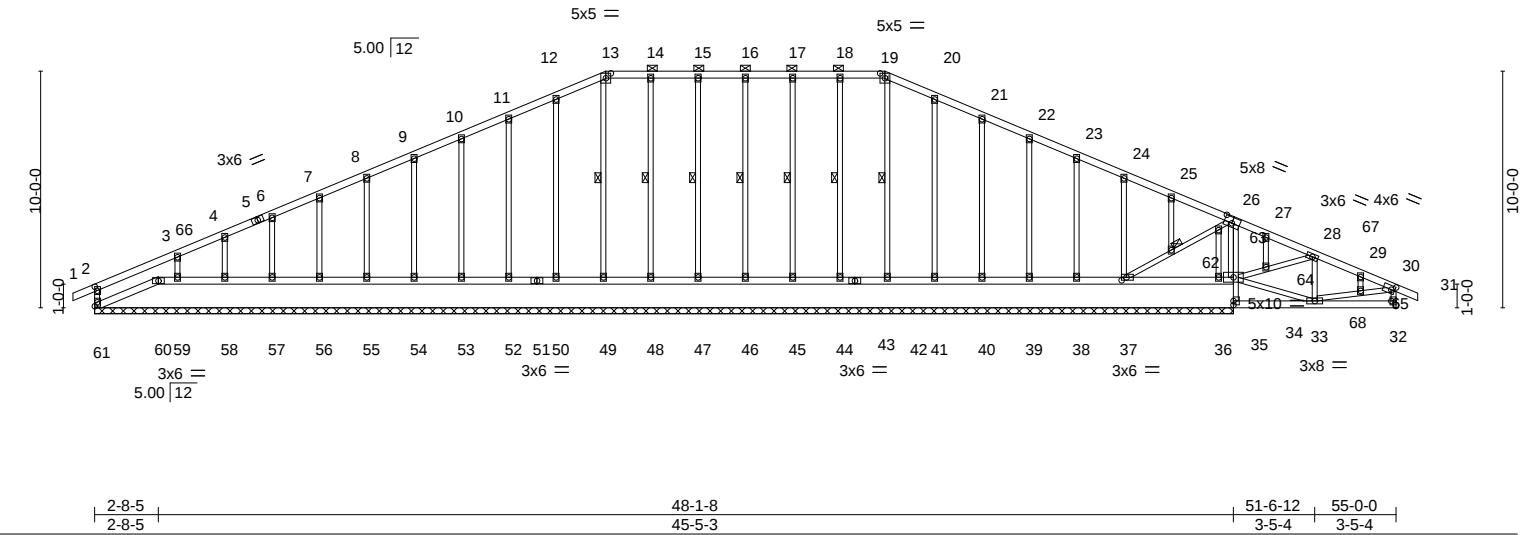


Plate Offsets (X,Y)--	[2:0-2-0,0-1-4], [13:0-2-8,0-2-7], [19:0-2-8,0-2-7], [26:0-4-0,0-3-0], [30:0-1-14,0-2-0], [32:Edge,0-2-8], [37:0-2-8,0-1-8]
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LOADING (psf)	SPACING-	1-11-4	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	-0.01 30-31	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.01 30-31	n/r	90		
BCLL 0.0	Rep Stress Incr	NO	WB 0.50	Horz(CT)	0.03 34	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH						
									Weight: 300 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 5-4-8 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 13-19.
BOT CHORD 2x4 SP No.2 *Except* 26-34: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 4-6-13 oc bracing: 34-35 10-0-0 oc bracing: 32-33.
WEBS 2x3 SPF No.2	WEBS 1 Row at midpt 16-46, 15-47, 14-48, 13-49, 17-45, 18-44, 19-42
OTHERS 2x3 SPF No.2	JOINTS 1 Brace at Jt(s): 62

REACTIONS. All bearings 48-1-8.
(lb) - Max Horz 61=-140(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 61, 60, 46, 47, 48, 50, 52, 53, 54, 55, 56, 57, 58, 45, 44, 41, 40, 39, 38 except 34=-400(LC 9), 59=-114(LC 12), 37=-176(LC 1)
Max Grav All reactions 250 lb or less at joint(s) 61, 60, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 58, 59, 45, 44, 42, 41, 40, 39, 38, 36, 37 except 34=1144(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 11-12=-106/286, 12-13=-121/328, 13-14=-114/317, 14-15=-114/317, 15-16=-114/317, 16-17=-114/317, 17-18=-114/317, 18-19=-114/317, 19-20=-121/327, 20-21=-106/286, 26-27=-1158/1005, 27-28=-1176/975, 28-29=-367/380, 29-30=-386/338 36-37=-869/1171, 35-36=-869/1171, 34-35=-1128/1347, 26-35=-899/972
BOT CHORD 28-33=-420/220, 33-65=-324/434, 30-65=-318/428, 35-64=-616/865, 28-64=-610/859, 37-62=-1193/964, 62-63=-1187/971, 26-63=-1094/879
WEBS

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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 21-7-3, Corner(3R) 21-7-3 to 26-7-3, Exterior(2N) 26-7-3 to 33-4-13, Corner(3R) 33-4-13 to 38-4-13, Exterior(2N) 38-4-13 to 55-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Provide adequate drainage to prevent water ponding.
- All plates are 3x4 MT20 unless otherwise indicated.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 61, 60, 46, 47, 48, 36, 37 except 34=400, 59=114, 37=176.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

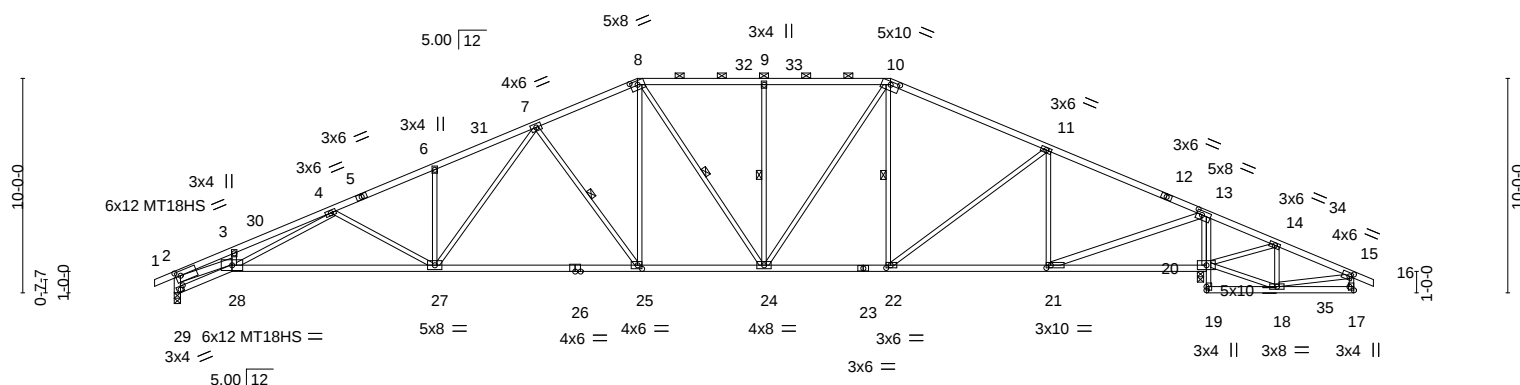
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/28/2023 4:28:38

Job	Truss	Truss Type	Qty	Ply	Roof
P236110-P230110-02	AS	GABLE	1	1	I56979071
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:46 2023 Page 2
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-ujUX6WdMAHv14V6X6WEYOGwgCG8gln_PP372JkzefDB

- NOTES
- 10) N/A
- 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.

Scale = 1:107.4



	2-8-5	12-1-12	21-7-3	27-6-0	33-4-13	40-9-2	48-0-0	48-1-8	55-0-0
Plate Offsets (X,Y)--	2-8-5	9-5-7	9-5-7	5-10-13	5-10-13	7-4-6	7-2-14	0-1-8 3-3-8	3-7-0

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.84	Vert(LL) -0.36 27	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.70	Vert(CT) -0.75 27-28	>766	180	MT18HS	197/144
BCLL 0.0	Rep Stress Incr NO	WB 0.89	Horz(CT) 0.31 20	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH				Weight: 277 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP 1650F 1.5E *Except*
	8-10: 2x4 SP No.2, 1-5,12-16: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP No.2 *Except*
	26-28,20-23: 2x4 SP 2400F 2.0E, 13-19: 2x3 SPF No.2
	23-26: 2x4 SP 1650F 1.5E
WEBS	2x3 SPF No.2 *Except*
	2-29,13-21: 2x4 SP No.2, 2-28: 2x4 SP 1650F 1.5E

BRACING-

TOP CHORD	Sheathed or 2-4-4 oc purlins, except end verticals, and 2-0-0 oc purlins (2-9-7 max.): 8-10.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 9-6-6 oc bracing: 27-28 6-0-0 oc bracing: 20-21,18-19.
WEBS	1 Row at midpt 7-25, 8-24, 9-24, 10-22

REACTIONS.

(size) 20=0-3-8 (req. 0-4-9), 29=0-3-8
 Max Horz 29=-145(LC 17)
 Max Uplift 20=-447(LC 9), 29=-311(LC 12)
 Max Grav 20=2891(LC 1), 29=2180(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-29=-2229/381, 2-3=-6357/978, 3-4=-6254/1047, 4-6=-4409/576, 6-7=-4392/663, 7-8=-3123/475, 8-9=-2775/478, 9-10=-2775/478, 10-11=-2659/413, 11-13=-2348/302, 13-14=-910/1058, 14-15=-308/418
BOT CHORD	28-29=-208/375, 27-28=-752/4675, 25-27=-358/3367, 24-25=-181/2830, 22-24=-127/2352, 21-22=-117/2077, 20-21=-854/890, 13-20=-2679/751
WEBS	2-28=-815/5484, 4-28=-311/1271, 4-27=-772/298, 6-27=-300/171, 7-27=-232/1099, 7-25=-940/311, 8-25=-159/918, 9-24=-464/199, 10-24=-174/870, 11-22=-168/438, 11-21=-871/368, 18-20=-321/322, 14-20=-616/640, 14-18=-381/255, 15-18=-364/345, 13-21=-815/3100

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C;
Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 21-7-3, Exterior(2R) 21-7-3 to 28-8-1, Interior(1) 28-8-1 to 33-4-13, Exterior(2R) 33-4-13 to 40-9-2, Interior(1) 40-9-2 to 55-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) WARNING: Required bearing size at joint(s) 20 greater than input bearing size.
- 7) Bearing at joint(s) 29 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=447, 29=311.

Continued on page 2



March 6, 2023



Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for 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 personnel 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, DSB-89 and BCSI Building Code**

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/28/2023 4:28:38

Job	Truss	Truss Type	Qty	Ply	Roof
P236110-P230110-02	A4	PIGGYBACK BASE	2	1	I56979072
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:49 2023 Page 2
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-II9gkXfETBHbxyr6nfnF0vY5NT7Sy2fs51Miw3zefD8

- NOTES
- 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.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Truss Type	Qty	Ply	Roof	I56979073
Piggyback Base	10	1		
Job Reference (optional)				

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:51 2023 Page 1

ID:WcRfdZxs?bG3GRhQ2QHdPbz1SCN-EhHQ9DgV_pXJAG?Uu4qj5KdS2HkOQ_N8YKrp_yzefD6

Spring Hills, KS - 66083, 21-7-3 27-6-0 33-4-13 38-4-0 4-11-3

0-11-0 2-8-5 6-3-10 6-3-10 6-3-10 5-10-13 5-10-13 4-11-3

Scale = 1:74.6

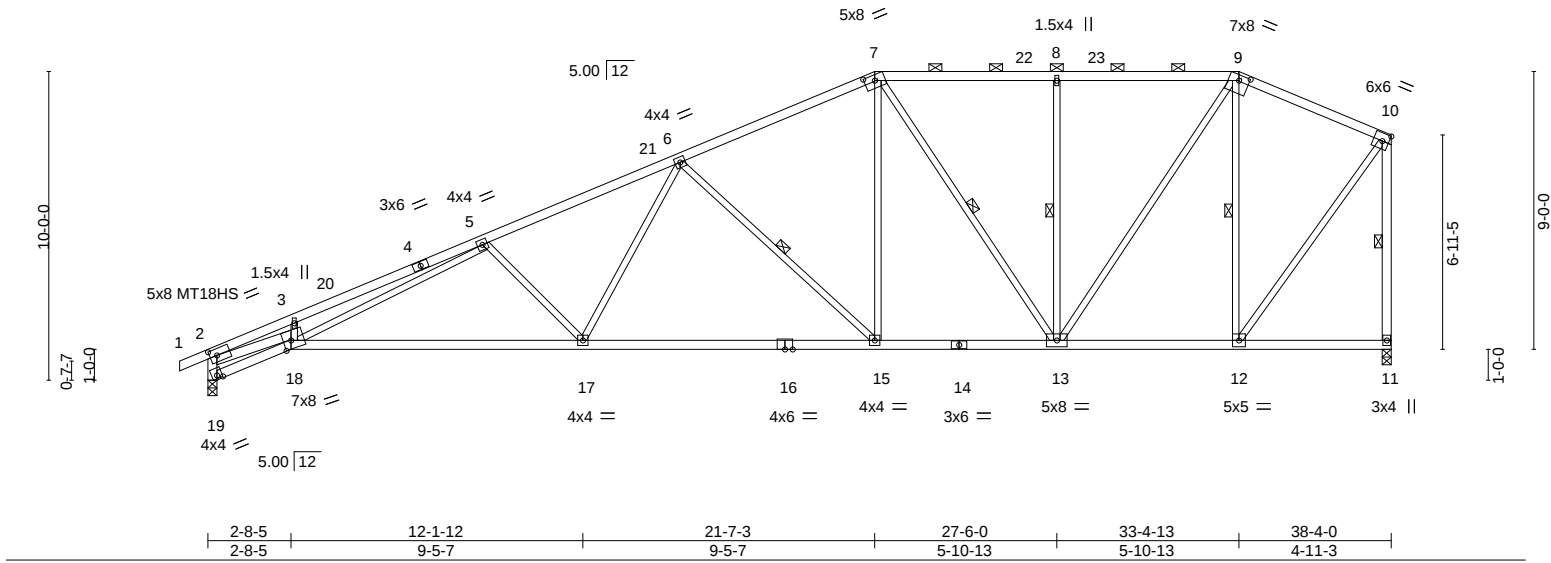


Plate Offsets (X,Y)--		[2:0-2-12,0-2-8], [7:0-4-0,0-2-2], [9:0-4-0,0-2-2], [18:0-3-0,0-3-4], [19:0-2-0,0-1-4]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.30 17-18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.70 17-18	>654	180	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.75	Horz(CT)	0.27 11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH						Weight: 199 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD	TOP CHORD
2x4 SP No.2 *Except*	Sheathed or 2-5-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-1-11 max.): 7-9.
4-7: 2x4 SP 1650F 1.5E, 1-4: 2x4 SP 2400F 2.0E	Rigid ceiling directly applied or 7-7-10 oc bracing.
BOT CHORD	BOT CHORD
2x4 SP No.2 *Except*	1 Row at midpt
16-18: 2x4 SP 1650F 1.5E	6-15, 7-13, 8-13, 9-12, 10-11
WEBS	
2x3 SPF No.2 *Except*	
2-19,10-11: 2x4 SP No.2, 2-18: 2x4 SP 1650F 1.5E	

REACTIONS. (size) 11=0-3-8, 19=0-3-8
Max Horz 19=333(LC 9)
Max Uplift 11=-242(LC 9), 19=-281(LC 12)
Max Grav 11=1711(LC 1), 19=1787(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-19=-1817/365, 2-3=-5188/983, 3-5=-5165/1085, 5-6=-3307/529, 6-7=-2101/384,
7-8=-1541/358, 8-9=-1541/358, 9-10=-986/260, 10-11=-1669/319
BOT CHORD 18-19=-439/457, 17-18=-775/3440, 15-17=-584/2600, 13-15=-399/1864, 12-13=-211/842
WEBS 2-18=-837/4506, 5-18=-513/1473, 5-17=-678/305, 6-17=-109/804, 6-15=-1028/335,
7-15=-136/861, 7-13=-591/157, 8-13=-467/202, 9-13=-230/1273, 9-12=-1038/290,
10-12=-257/1431

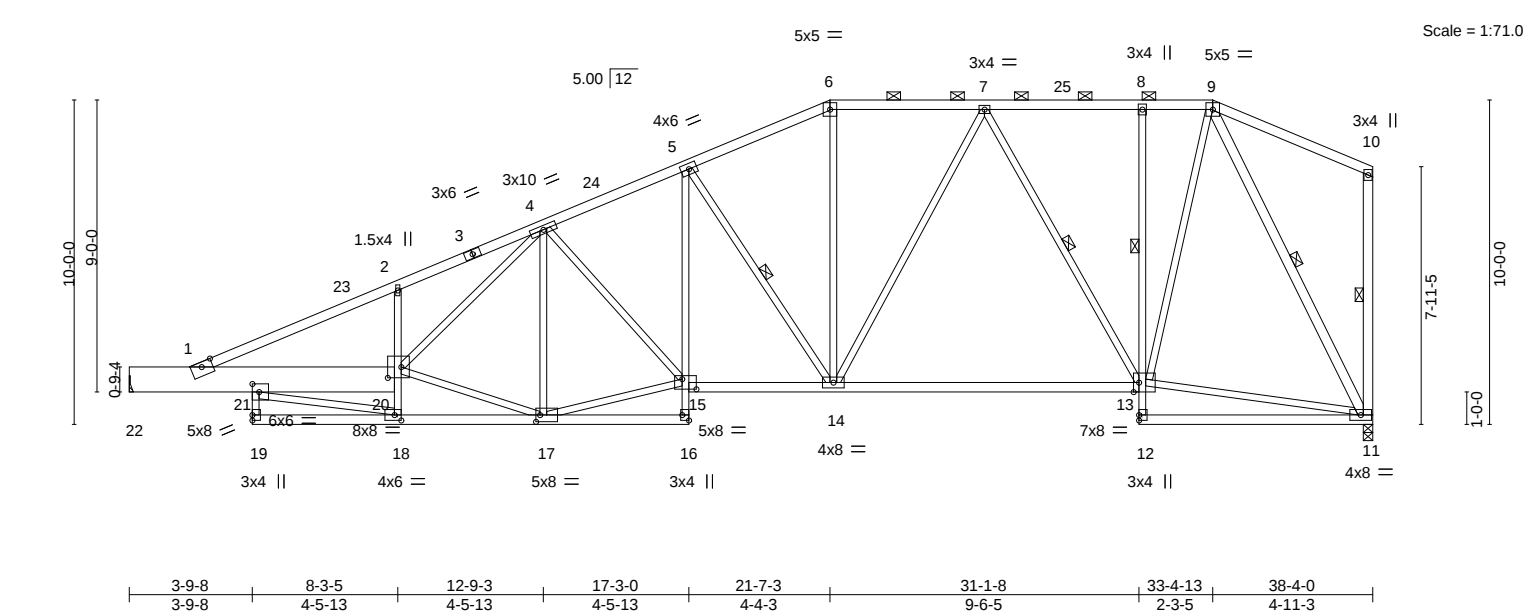
- NOTES-
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 21-7-3, Exterior(2R) 21-7-3 to 28-8-1, Interior(1) 28-8-1 to 33-4-13, Exterior(2E) 33-4-13 to 38-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=-242, 19=281.
 - 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.



March 6, 2023

Truss Type	Qty	Ply	Roof	I56979075
Piggyback Base	2	1		

Job Reference (optional)
8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:55 2023 Page 1
ID:WcRfdZxs?bG3GRhQ2QHdPbz1SCN-7SWx?bk?211ftIG7vufGAoAEuAqMl6kTyp17jzefD2
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 3-9-8 3-9-8 4-5-13 12-9-3 17-3-0 21-7-3 26-4-6 31-1-8 33-4-13 38-4-0 4-11-3



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.69	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.70	Vert(LL) -0.26 13-14 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.96	Vert(CT) -0.58 13-14 >788 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-SH	Horz(CT) -0.13 22 n/a n/a		
	Code IRC2018/TPI2014			Weight: 252 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 1-3: 2x4 SP 1650F 1.5E	TOP CHORD Sheathed or 2-11-15 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-7 max.): 6-9.
BOT CHORD 2x3 SPF No.2 *Except* 20-22: 2x10 SP 2400F 2.0E, 16-19,11-12: 2x4 SP No.2 13-15: 2x4 SP 1650F 1.5E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.
WEBS 2x3 SPF No.2 *Except* 10-11,9-11: 2x4 SP No.2	WEBS 1 Row at midpt 8-13 5-14, 7-13, 10-11, 9-11

REACTIONS. (size) 22=Mechanical, 11=0-3-8
Max Horz 11=324(LC 11)
Max Uplift 22=-194(LC 12), 11=-241(LC 9)
Max Grav 22=1716(LC 1), 11=1716(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3568/491, 2-4=-3496/590, 4-5=-2691/440, 5-6=-2084/394, 6-7=-1869/384,
7-8=-1135/302, 8-9=-1131/303
BOT CHORD 1-21=-370/3170, 20-21=-124/1268, 17-18=-254/1960, 5-15=-132/765, 14-15=-197/2436,
13-14=-88/1612
WEBS 18-20=-442/129, 2-20=-299/199, 17-20=0/505, 4-17=-694/116, 15-17=-241/2425,
5-14=-1029/296, 6-14=-46/484, 7-14=-112/562, 7-13=-992/208, 11-13=0/786,
9-13=-161/1411, 18-21=-250/1884, 4-20=-214/1024, 9-11=-1777/305

- 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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 1-10-3 to 6-10-3, Interior(1) 6-10-3 to 21-7-3, Exterior(2R) 21-7-3 to 28-8-1, Interior(1) 28-8-1 to 33-4-13, Exterior(2E) 33-4-13 to 38-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=194, 11=241.
 - 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.



March 6, 2023

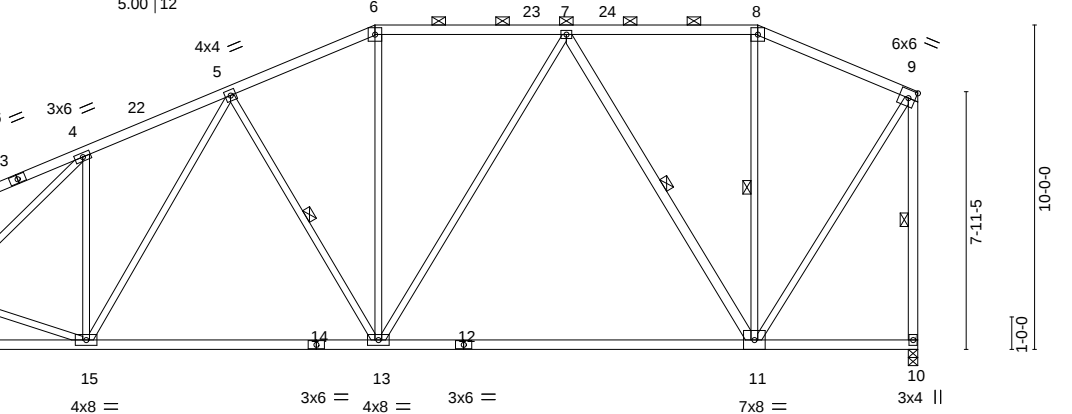
Truss Type	Qty	Ply	Roof	I56979076
Piggyback Base	6	1		

Job Reference (optional)

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:57 2023 Page 1
ID:WcRfdZXS?bG3GRhQ2QHdPbz1SCN-3rehQGIGafHTuBSeFKx7LbtWuinrqii1xGI7CbzefD0

3-9-8 3-9-8 8-2-15 4-5-7 12-8-6 4-5-7 17-1-12 4-5-7 21-7-3 4-5-7 5-10-13 5-10-13 33-4-13 38-4-0 4-11-3

5x5 = 5.00 12 4x4 = 3x6 = 3x6 = 22 1.5x4 || 21 2 3 4 5 6 23 7 24 8 9 6x6 = 10-0-0 7-11-5 1-0-0



10-0-0 9-0-0 7-11-5 1-0-0

3-9-8 3-9-8 8-2-15 4-5-7 12-8-6 4-5-7 17-1-12 4-5-7 21-7-3 4-5-7 5-10-13 5-10-13 33-4-13 38-4-0 4-11-3

Plate Offsets (X,Y)-- [16:0-2-8,0-2-0], [18:0-5-0,0-4-0], [19:0-3-8,0-3-8]

LOADING (psf) SPACING- 2-0-0 CSI. DEFL. in (loc) l/defl L/d PLATES GRIP

TCLL 25.0 Plate Grip DOL 1.15 TC 0.67 Vert(LL) -0.36 11-13 >999 240 MT20 197/144

TCDL 10.0 Lumber DOL 1.15 BC 0.92 Vert(CT) -0.77 11-13 >591 180

BCLL 0.0 Rep Stress Incr NO WB 0.69 Horz(CT) -0.07 20 n/a n/a

BCDL 10.0 Code IRC2018/TPI2014 Matrix-SH Weight: 234 lb FT = 20%

LUMBER- TOP CHORD 2x4 SP No.2 *Except* 1-3: 2x4 SP 1650F 1.5E

BOT CHORD 2x4 SP 1650F 1.5E *Except* 18-20: 2x10 SP 2400F 2.0E, 17-19: 2x4 SPF No.3

WEBS 2x3 SPF No.2 *Except* 9-10,7-11: 2x4 SP No.2

BRACING- TOP CHORD Sheathed or 3-0-5 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-4 max.): 6-8.

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

WEBS 1 Row at midpt 8-11, 9-10, 5-13, 7-11

REACTIONS. (size) 20=Mechanical, 10=0-3-8 Max Horz 10=324(LC 11)

Max Uplift 20=-194(LC 12), 10=-241(LC 9)

Max Grav 20=1716(LC 1), 10=1716(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-3548/483, 2-4=-3477/582, 4-5=-2707/500, 5-6=-1883/380, 6-7=-1683/371,

BOT CHORD 7-8=-780/265, 8-9=-906/260, 9-10=-1700/298

WEBS 1-19=-363/3153, 18-19=-103/1222, 16-17=-25/254, 15-16=-271/1988, 13-15=-170/2071,

11-13=-73/1370, 10-11=-182/284

4-15=-683/234, 6-13=-30/383, 9-11=-240/1444, 5-15=-203/764, 5-13=-783/298,

7-13=-109/625, 7-11=-1177/257, 16-18=-443/122, 2-18=-299/198, 16-19=-254/1792,

15-18=0/487, 4-18=-208/986

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=0.96; Cat. II; Exp C;

Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 1-10-3 to 6-10-3, Interior(1) 6-10-3 to 21-7-3, Exterior(2R)

21-7-3 to 28-8-1, Interior(1) 28-8-1 to 33-4-13, Exterior(2E) 33-4-13 to 38-2-4 zone; cantilever left and right exposed; end vertical left

and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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) Refer to girder(s) for truss to truss connections.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

20=194, 10=241.

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.

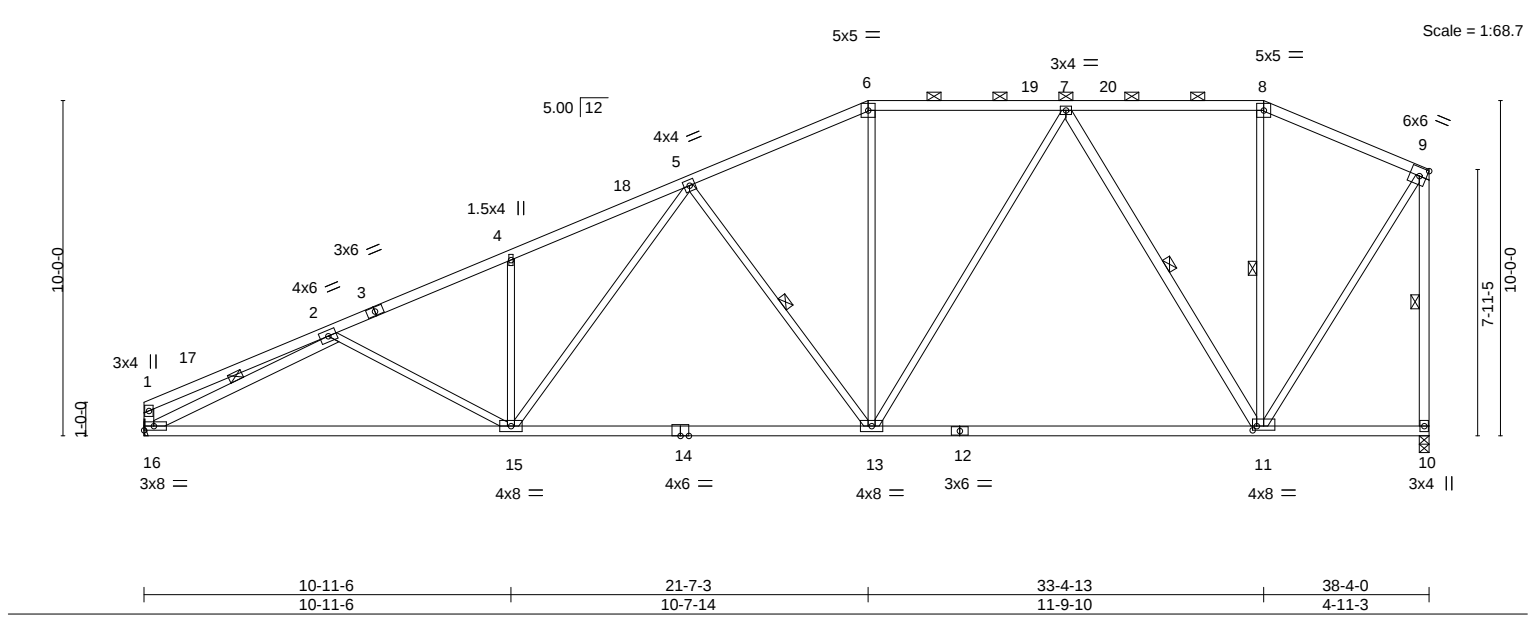
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 6, 2023

Truss Type	Qty	Ply	Roof	156979077
Piggyback Base	2	1	Job Reference (optional)	

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:47:59 2023 Page 1
ID:WcRfdXs?bG3GRhQ2QHdPbz1SCN-?DmSqynW6GYA8Vc1MizcQ0zsgVTVlcDKOanEGUzefD_



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.66	Vert(LL) -0.34 11-13 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.91	Vert(CT) -0.72 11-13 >632 180		
BCLL 0.0	Rep Stress Incr NO	WB 0.69	Horz(CT) 0.10 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH		Weight: 210 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 3-1-5 oc purlins, except end verticals, and 2-0-0 oc purlins (3-11-11 max.): 6-8.
BOT CHORD 2x4 SP 1650F 1.5E	BOT CHORD Rigid ceiling directly applied or 8-7-5 oc bracing.
WEBS 2x3 SPF No.2 *Except*	WEBS 1 Row at midpt 5-13, 7-11, 8-11, 2-16, 9-10
7-11,1-16,2-16,9-10: 2x4 SP No.2	

REACTIONS.
(size) 16=Mechanical, 10=0-3-8
Max Horz 16=339(LC 9)
Max Uplift 16=-256(LC 12), 10=-242(LC 9)
Max Grav 16=1712(LC 1), 10=1712(LC 1)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-430/43, 2-4=-2872/419, 4-5=-2867/520, 5-6=-1893/375, 6-7=-1679/370, 7-8=-778/264, 8-9=-903/259, 1-16=-319/84, 9-10=-1695/300
BOT CHORD 15-16=-660/2640, 13-15=-498/2140, 11-13=-332/1366
WEBS 4-15=-373/197, 5-15=-182/766, 5-13=-792/306, 6-13=-15/375, 7-13=-112/625, 7-11=-1174/258, 2-16=-2643/470, 9-11=-241/1440

- 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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 5-1-12, Interior(1) 5-1-12 to 21-7-3, Exterior(2R) 21-7-3 to 28-8-1, Interior(1) 28-8-1 to 33-4-13, Exterior(2E) 33-4-13 to 38-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=256, 10=242.
 - 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.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979078
Piggyback Base Supported Gable	2	1	Job Reference (optional)	
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:03 2023 Page 1				
ID:WcRfdZxs?bG3GRhQ2QHdPbz1SCN-u_?ygKq0AV2cc6wobb1Ybs7YU6??EXewJCISOFzefCw				
21-7-3	21-7-3	33-4-13	11-9-10	4-11-3

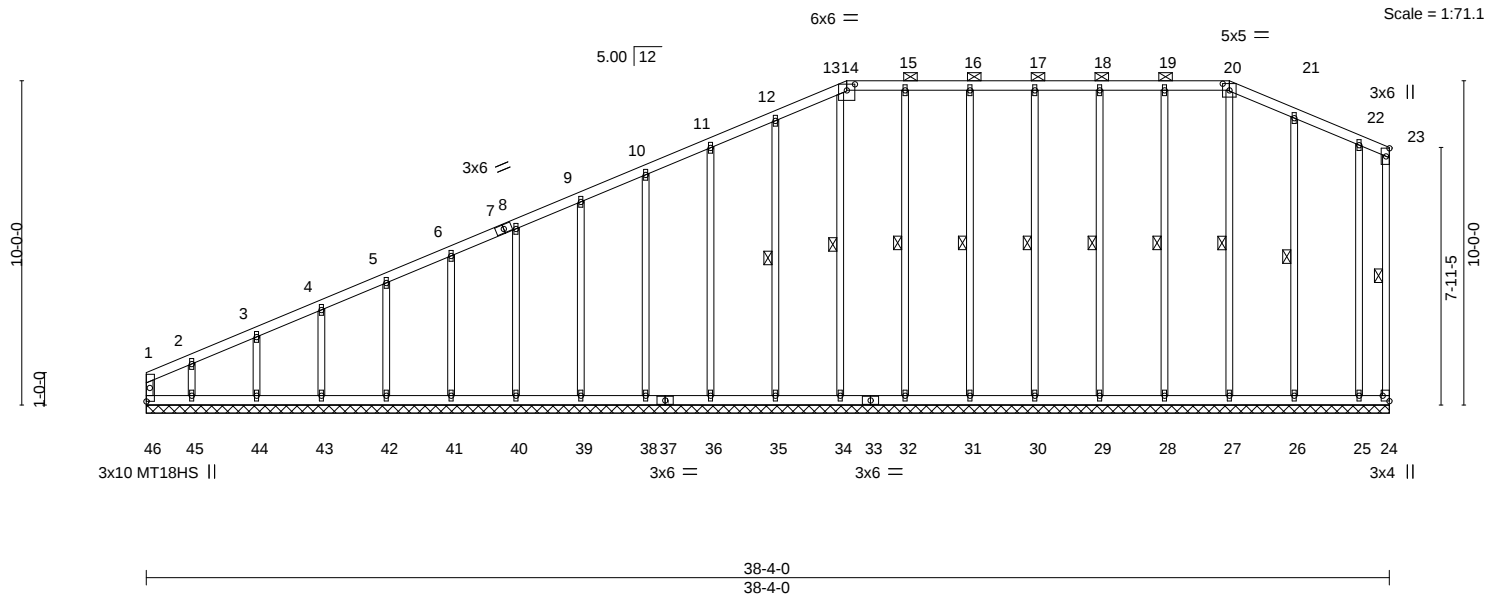


Plate Offsets (X,Y)--	[14:0-3-0,0-2-4], [20:0-2-8,0-2-7], [24:Edge,0-2-8]
-----------------------	---

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.60	Vert(LL) n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) n/a	-	n/a	999	MT18HS	197/144
BCLL 0.0	Rep Stress Incr NO	WB 0.22	Horz(CT) -0.01	24	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R					Weight: 230 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 6'-0-0 oc purlins, except end verticals, and 2'-0-0 oc purlins (6'-0-0 max.): 14-20.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.
WEBS 2x3 SPF No.2	WEBS 1 Row at midpt 23-24, 20-27, 19-28, 18-29, 17-30, 16-31, 15-32, 13-34, 12-35, 21-26
OTHERS 2x3 SPF No.2	

REACTIONS. All bearings 38-4-0.
(lb) - Max Horz 46=338(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 24, 27, 28, 29, 30, 31, 32, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 26, 25 except 45=-237(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 24, 27, 28, 29, 30, 31, 32, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 45, 26, 25 except 46=282(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-417/238, 2-3=-330/197, 3-4=-294/186, 4-5=-251/170, 12-13=-159/265, 13-14=-149/255, 14-15=-147/263, 15-16=-147/263, 16-17=-147/263, 17-18=-147/263, 18-19=-147/263, 19-20=-147/263, 20-21=-159/259

- 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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-4 to 5-4-13, Exterior(2N) 5-4-13 to 21-7-3, Corner(3R) 21-7-3 to 26-7-3, Exterior(2N) 26-7-3 to 33-4-13, Corner(3E) 33-4-13 to 38-2-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 1.5x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2'-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 27, 28, 29, 30, 31, 32, 34, 35, 36, 38, 39, 40, 41, 42, 43, 44, 26, 25 except (it=lb) 45=237.
 - 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.



March 6,2023

Truss Type
Common Supported Gable

Qty
2

Ply
1

Roof
Job Reference (optional)

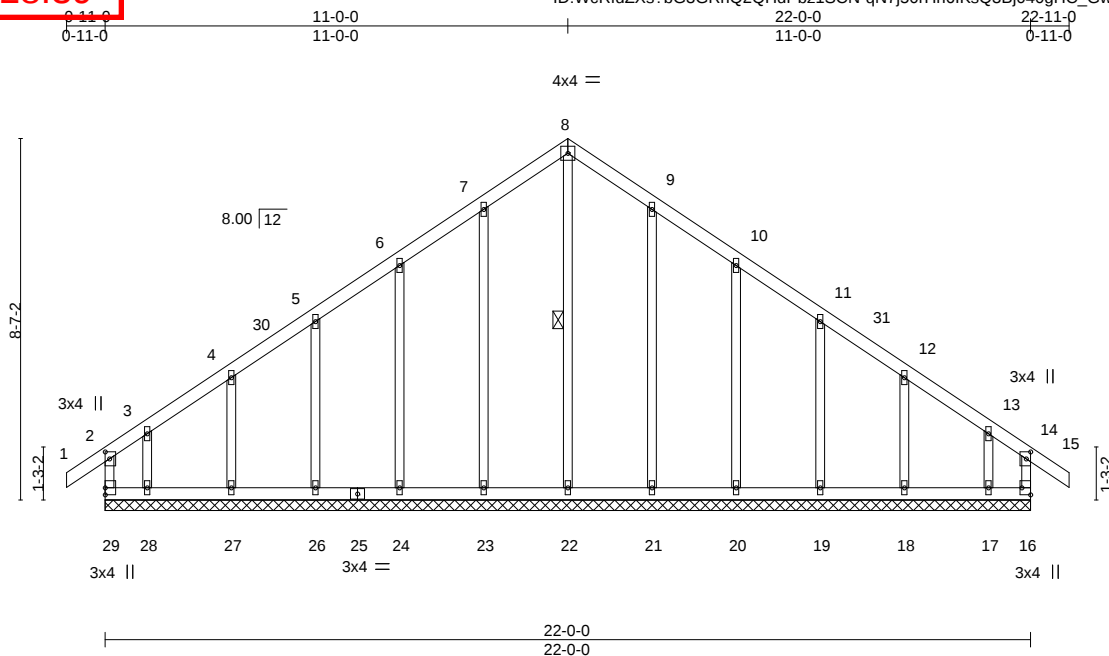
I56979079

Premier Building Supply (Springhill, KS),

Spring Hills, KS - 66083,

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:05 2023 Page 1

ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-qN7j50rHh6IKsQ3Bj040gHC_GwjEISICmWEYT8zefCu



Scale = 1:54.8

Plate Offsets (X,Y)-- [2:0-2-0,0-1-4], [14:0-2-0,0-1-4], [16:Edge,0-2-8]

LOADING (psf)	SPACING-	1-11-4	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.00	15	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.00	15	n/r	90		
BCLL 0.0	Rep Stress Incr	NO	WB 0.18	Horz(CT)	0.00	16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 116 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 Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 8-22

REACTIONS.

All bearings 22-0-0.
(lb) - Max Horz 29=-247(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 26, 27, 21, 20, 19, 18 except 29=-198(LC 8),
16=-166(LC 9), 28=-181(LC 9), 17=-159(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 29, 16, 22, 23, 24, 26, 27, 28, 21, 20, 19, 18, 17

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=-138/272, 7-8=-171/329, 8-9=-171/329, 9-10=-138/272
WEBS 8-22=-285/91

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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 4-1-0, Exterior(2N) 4-1-0 to 11-0-0, Corner(3R) 11-0-0 to 16-0-0, Exterior(2N) 16-0-0 to 22-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 24, 26, 27, 21, 20, 19, 18 except (jt=lb) 29=198, 16=166, 28=181, 17=159.
- 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.



March 6, 2023

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979080
Common	2	1		

Job Reference (optional)
Premier Building Supply (Spring Hill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:07 2023 Page 1
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-mmFTWhTxDjY25kdZqR6UilEukDyAl6VEqjX0zefCs
0-11-0 5-7-12 11-0-0 16-4-4 22-0-0 22-11-0
0-11-0 5-7-12 5-4-4 5-4-4 5-7-12 0-11-0

Scale = 1:54.1

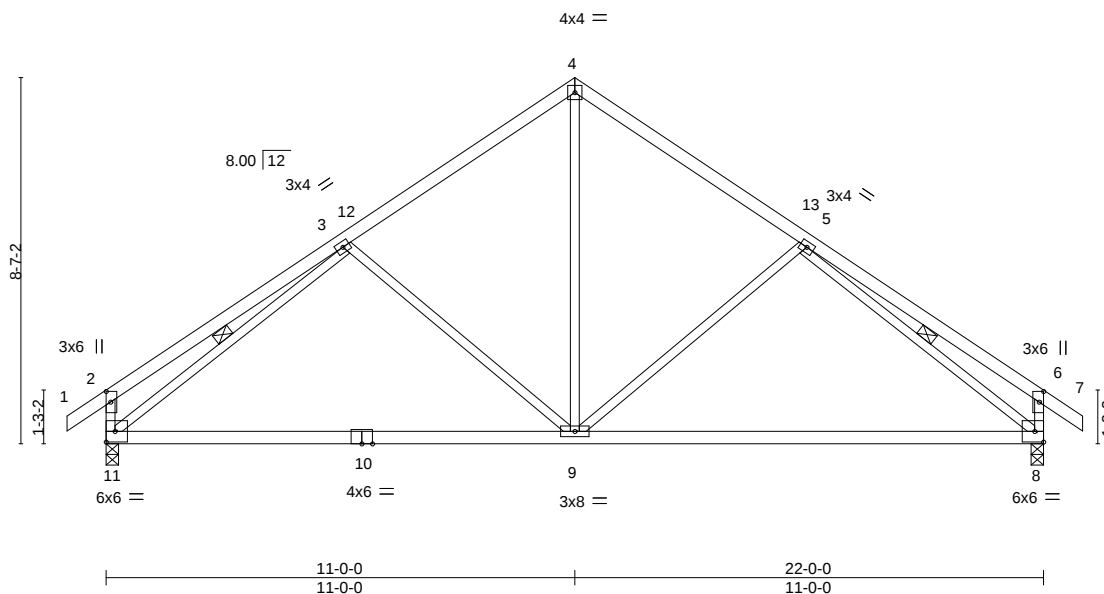


Plate Offsets (X,Y)--	[2:0-3-0,0-1-4], [6:0-3-0,0-1-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) -0.28	9-11	>931	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.88	Vert(CT) -0.57	9-11	>461	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.44	Horz(CT) 0.03	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH					Weight: 106 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 5-6-15 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
8-10: 2x4 SP 1650F 1.5E	WEBS 1 Row at midpt 3-11, 5-8
WEBS 2x3 SPF No.2	

REACTIONS. (size) 11=0-3-8, 8=0-3-8
Max Horz 11=-255(LC 10)
Max Uplift 11=-146(LC 12), 8=-146(LC 13)
Max Grav 11=1052(LC 1), 8=1052(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-346/121, 3-4=-936/209, 4-5=-936/209, 5-6=-345/121, 2-11=-387/152, 6-8=-386/153
BOT CHORD 9-11=-173/912, 8-9=-87/869
WEBS 4-9=-85/562, 5-9=-294/253, 3-9=-293/253, 3-11=-893/128, 5-8=-893/127

- 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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 11-0-0, Exterior(2R) 11-0-0 to 16-0-0, Interior(1) 16-0-0 to 22-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=146, 8=146.
 - 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.



March 6, 2023

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

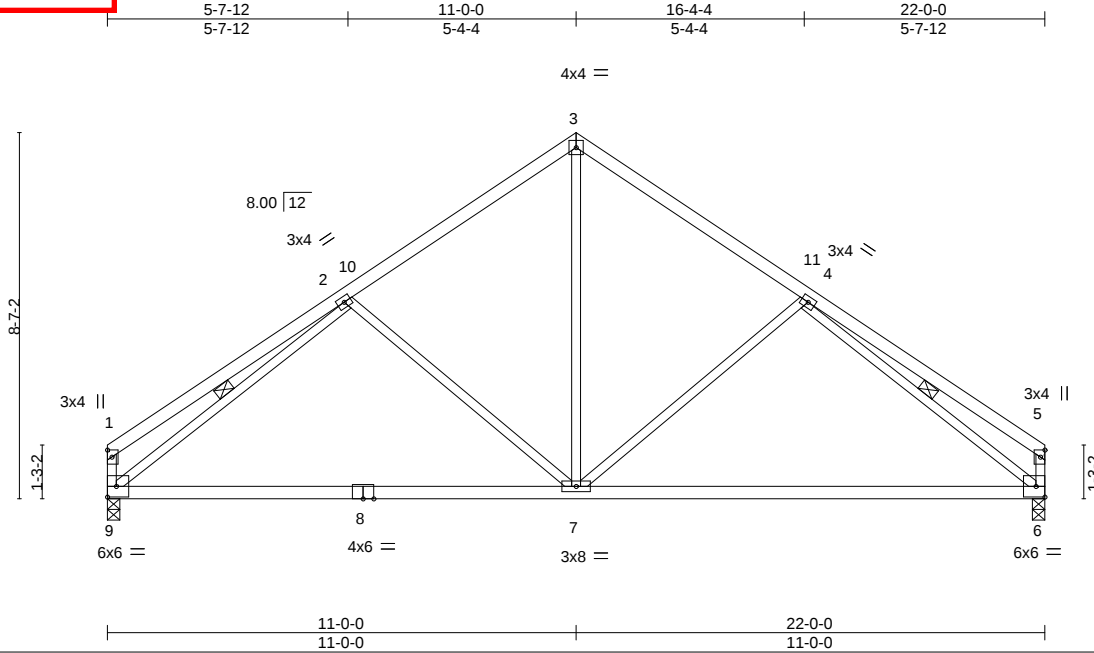
Truss Type	Qty	Ply	Roof	I56979081
Common	9	1		

P236110-P230110-02

Spring Hills, KS - 66083,

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:08 2023 Page 1

ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-Eyprj1u9_1gvjtolO8djlvgQg7ZAvk4fTUSD4TzefCr



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.58	Vert(LL)	-0.28	7-9	>931	240	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.88	Vert(CT)	-0.57	7-9	>461	180		
BCLL 0.0	Lumber DOL 1.15	WB 0.46	Horz(CT)	0.03	6	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-SH							
	Code IRC2018/TPI2014							Weight: 103 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
6-8: 2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Sheathed or 5-7-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-9, 4-6

REACTIONS.

(size) 9=0-3-8, 6=0-3-8
Max Horz 9=236(LC 9)
Max Uplift 9=122(LC 12), 6=122(LC 13)
Max Grav 9=981(LC 1), 6=981(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-312/83, 2-3=-943/209, 3-4=-943/209, 4-5=-312/84, 1-9=-294/103, 5-6=-294/103
BOT CHORD 7-9=-186/913, 6-7=-125/880
WEBS 3-7=-87/573, 4-7=-302/255, 2-7=-301/255, 2-9=-930/166, 4-6=-930/165

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-4 to 5-1-4, Interior(1) 5-1-4 to 11-0-0, Exterior(2R) 11-0-0 to 16-0-0, Interior(1) 16-0-0 to 21-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=122, 6=122.
- 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.



March 6, 2023

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979082
Diagonal Hip Girder	4	1		
Job Reference (optional)				
Spring Hills, KS - 66083,				
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-Q3z01e03OP3LXa8tXyKIEDoM_ZPq_mhG_hdlyKzefCg				

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:19 2023 Page 1
6-5-11
3-5-11

Scale = 1:20.4

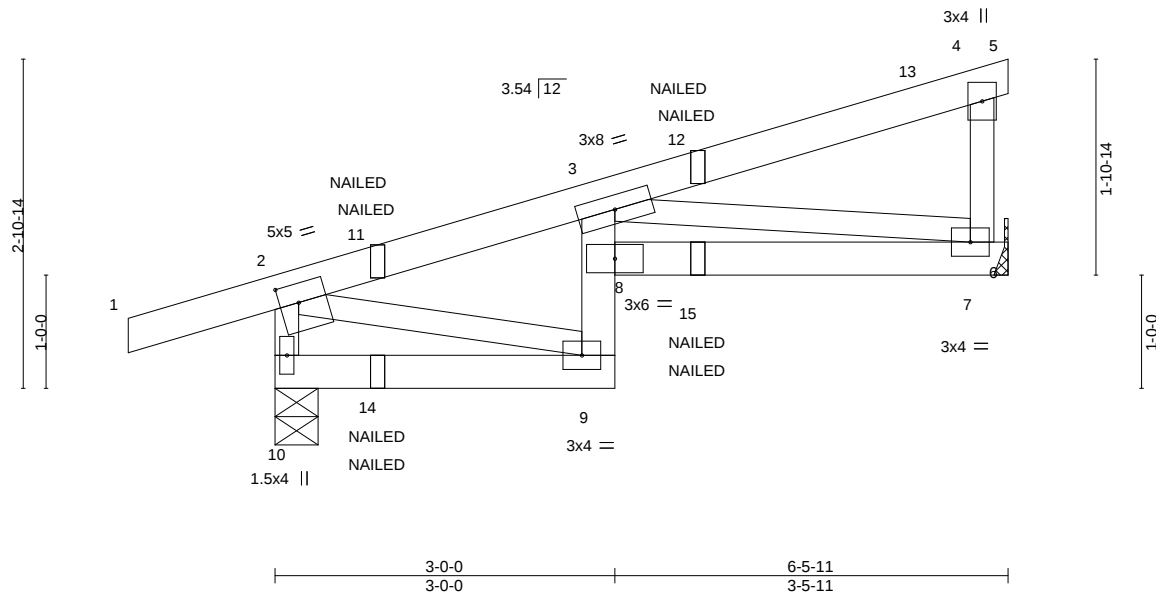


Plate Offsets (X,Y)-- [2:0-2-0,0-2-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.31	Vert(LL) 0.04	7-8	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.49	Vert(CT) -0.05	8	>999	180			
BCLL 0.0	Rep Stress Incr NO		WB 0.21	Horz(CT) 0.03	7	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH							
									Weight: 30 lb	FT = 20%

LUMBER-

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

REACTIONS.

(size) 10=0-4-9, 7=Mechanical
Max Horz 10=104(LC 9)
Max Uplift 10=-136(LC 8), 7=-128(LC 12)
Max Grav 10=328(LC 1), 7=290(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-10=-310/234, 2-3=-270/181
BOT CHORD 7-8=-774/698
WEBS 3-7=-660/717

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-3-9 to 5-9-5, Exterior(2R) 5-9-5 to 6-5-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=136, 7=128.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d skew 45 to 135 degrees (0.148" x 3") toe-nails per NDS guidelines.
- 7) 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 (plf)
Vert: 1-2=-70, 2-4=-70, 4-5=-20, 9-10=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 11=88(F=44, B=44) 15=-46(F=-23, B=-23)



March 6, 2023

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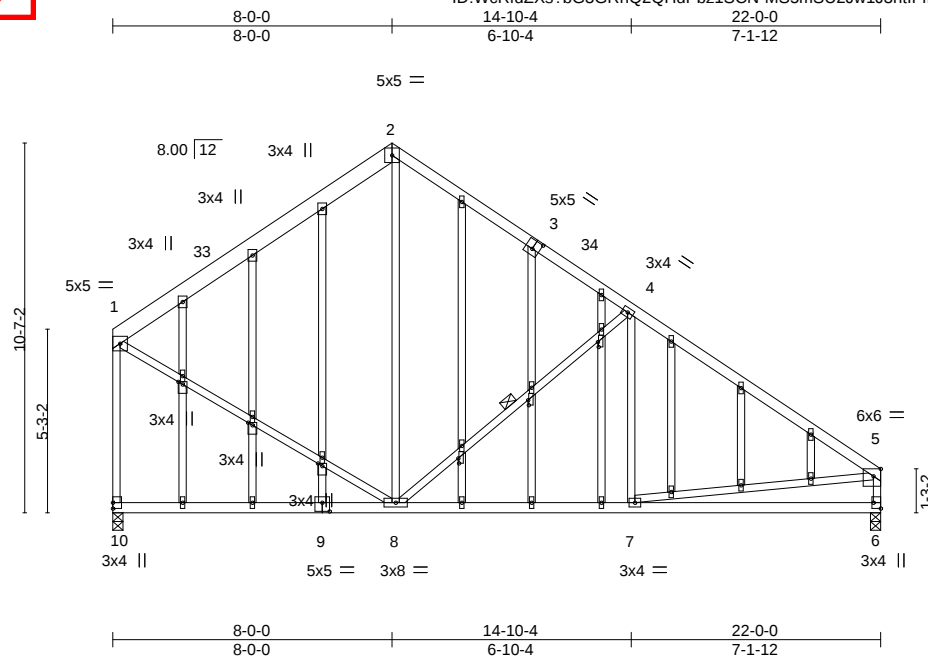
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:21 2023 Page 1
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Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:21 2023 Page 1
ID:WcRfdZXs?bG3GRhO2QHdPbz1SCN-MS5mSU2Jw1J3ntlFfNmMJetZ9N3OSefZS?6P1CzefCe



Scale = 1:66.0

	300	310	312
Plate Offsets (X,Y)--	[3:0-2-8,0-3-0], [5:0-2-8,Edge], [6:Edge,0-2-8], [9:0-2-8,0-3-0], [11:0-0-15,0-1-8], [13:0-0-15,0-1-8], [16:0-0-15,0-1-8], [19:0-1-11,0-0-4], [23:0-1-11,0-0-4], [26:0-1-11,0-0-4]		

LOADING (psf)	SPACING- 1-11-4	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.85	Vert(LL) -0.12 8-10 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.25 8-10 >999 180		
BCLL 0.0	Rep Stress Incr NO	WB 0.37	Horz(CT) 0.01 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH		Weight: 154 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except*
	1-2: 2x6 SPF No.2
BOT CHORD	2x4 SP No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2

BRACING-

TOP CHORD	Sheathed or 3-11-2 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-8

REACTIONS.

(size) 10=0-3-8, 6=0-3-8
 Max Horz 10=-333(LC 8)
 Max Uplift 10=-121(LC 13), 6=-124(LC 13)
 Max Grav 10=952(LC 1), 6=950(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

FORCES: (lb) max. Comp./max. Tens. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-711/203, 2-4=-739/228, 4-5=-1153/178, 1-10=-883/188, 5-6=-884/160
BOT CHORD 8-10=-246/300, 7-8=-81/863
WEBS 2-8=-49/312, 4-8=-526/255, 1-8=-87/586, 5-7=-31/699

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-0 to 5-1-0, Interior(1) 5-1-0 to 8-0-0, Exterior(2R) 8-0-0 to 13-0-0, Interior(1) 13-0-0 to 21-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=121, 6=124.
- 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.



March 6, 2023



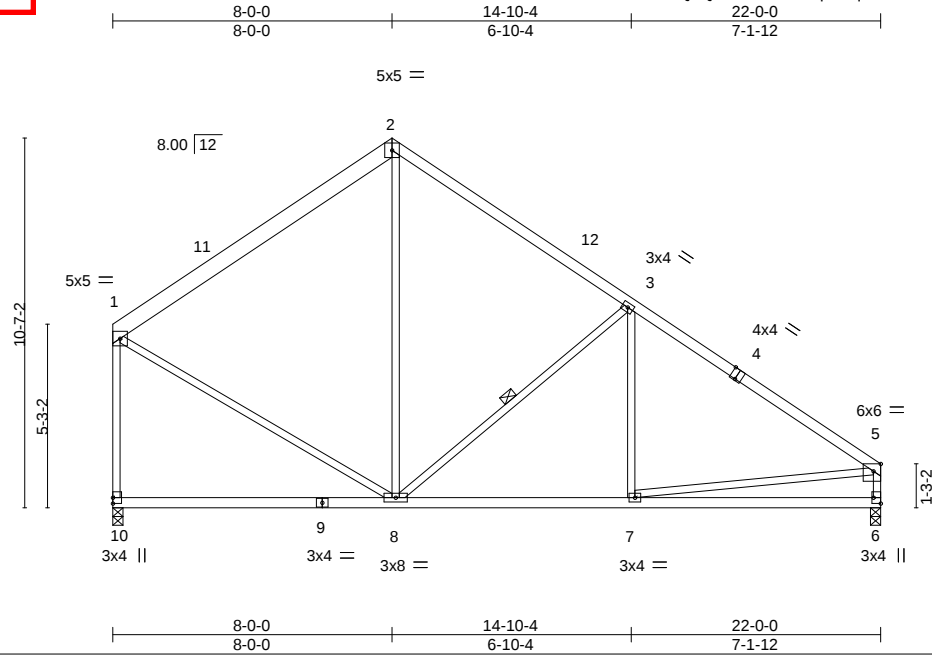
WARNING - verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH/473 (rev. 5/19/2020) BEFORE USE. Design valid for use only with MiTEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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/P11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Common	Qty	8	Ply	1	Roof	I56979084
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Job Reference (optional)
 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:22 2023 Page 1
 ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-qef8fq2xhKRwO1tSD4t?ssPkOnOIB4jjhfyZfzefCd



Scale = 1:66.0

Plate Offsets (X,Y)-- [4:0-2-0,Edge], [5:0-2-8,Edge], [6:Edge,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.88	Vert(LL)	-0.13	8-10	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.63	Vert(CT)	-0.25	8-10	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.39	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH						Weight: 113 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
 1-2: 2x6 SPF No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x3 SPF No.2

BRACING-

TOP CHORD Sheathed or 3-8-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 3-8

REACTIONS.

(size) 10=0-3-8, 6=0-3-8
 Max Horz 10=-344(LC 8)
 Max Uplift 10=-125(LC 13), 6=-128(LC 13)
 Max Grav 10=982(LC 1), 6=981(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-734/209, 2-3=-762/235, 3-5=-1191/184, 1-10=-912/194, 5-6=-912/165
 BOT CHORD 8-10=-254/309, 7-8=-84/891
 WEBS 2-8=-51/323, 3-8=-544/263, 1-8=-90/605, 5-7=-33/723

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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-0 to 5-1-0, Interior(1) 5-1-0 to 8-0-0, Exterior(2R) 8-0-0 to 13-0-0, Interior(1) 13-0-0 to 21-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=125, 6=128.
- 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.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	156979085
Hip Girder	2	1	Job Reference (optional)	
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:25 2023 Page 1				
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-EDKHlr5q_FpUFVb1uDRiU1J?_LfOVY9Nd4cAzzefCa				
0-11-0	2-2-0	4-8-0	8-8-0	11-2-0
0-11-0	2-2-0	2-6-0	4-0-0	2-6-0
				2-2-0
				0-11-0

Scale = 1:25.5

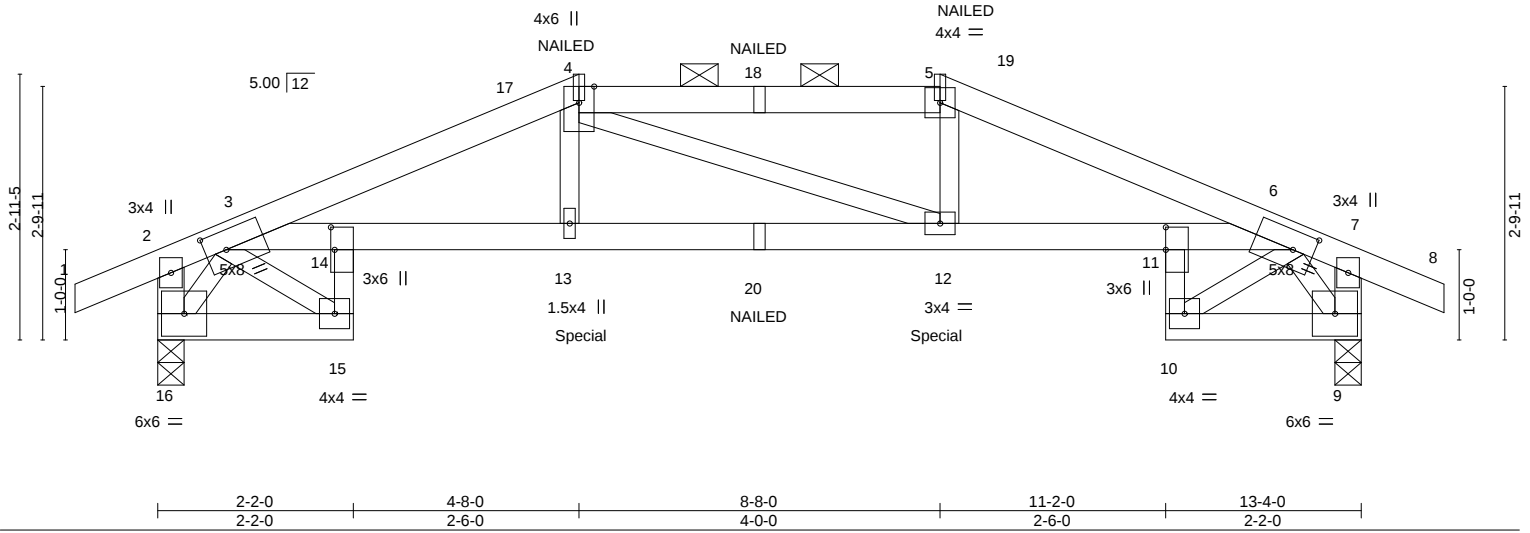


Plate Offsets (X,Y)-- [3:0-2-12,0-2-8], [6:0-2-12,0-2-8], [11:0-3-0,0-0-0], [14:0-3-0,0-0-8]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.60	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.91	Vert(LL) -0.10 13-14 >999 240		
BCLL 0.0	Rep Stress Incr NO	WB 0.19	Vert(CT) -0.18 13-14 >878 180		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH	Horz(CT) 0.20 9 n/a n/a	Weight: 60 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
14-15,10-11: 2x3 SPF No.2, 3-6: 2x4 SP 1650F 1.5E
WEBS 2x3 SPF No.2 *Except*
2-16,7-9: 2x4 SP No.2

BRACING-

TOP CHORD Sheathed or 3-0-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-8 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 7-5-0 oc bracing. Except: 7-6-0 oc bracing: 11-12

REACTIONS.

(size) 16=0-3-8, 9=0-3-8
Max Horz 16=24(LC 11)
Max Uplift 16=-333(LC 12), 9=-333(LC 13)
Max Grav 16=1080(LC 1), 9=1080(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-2574/1036, 4-5=-2337/971, 5-6=-2574/1023, 2-16=-319/169, 7-9=-319/174
BOT CHORD 15-16=-275/656, 14-15=-259/657, 3-14=-870/2327, 13-14=-889/2372, 12-13=-877/2336,
11-12=-873/2372, 6-11=-855/2328, 10-11=-235/657, 9-10=-250/656
WEBS 4-13=-185/545, 5-12=-180/541, 3-15=-844/356, 6-10=-844/324, 3-16=-958/394,
6-9=-958/392

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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 4-8-0, Exterior(2E) 4-8-0 to 14-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=333, 9=333.
- 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.
- "NAILED" indicates 3-10d Nails (0.148" x 3") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 304 lb down and 183 lb up at 4-8-0, and 304 lb down and 183 lb up at 8-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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



March 6, 2023

Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/28/2023 4:28:40

Job	Truss	Truss Type	Qty	Ply	Roof
P236110-P230110-02	E1	Hip Girder	2	1	I56979085
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:25 2023 Page 2
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-EDKHlr5q_FpUFVb1uDRiUU1J?_LfOVY9Nd4cAzzefCa

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 4-5=-70, 5-7=-70, 7-8=-70, 15-16=-20, 11-14=-20, 9-10=-20
Concentrated Loads (lb)
Vert: 4=-62(B) 5=-62(B) 13=-304(B) 12=-304(B) 18=-62(B) 20=-43(B)

Truss Type	Qty	Ply	Roof	156979086
Roof Special	2	1	Job Reference (optional)	
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:27 2023 Page 1				
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-BcS1jX64Wt3CVolP?dTAAZv7cgo0frQCSqxZjFszefCY				
0-11-0	2-2-0	6-8-0	11-2-0	13-4-0
0-11-0	2-2-0	4-6-0	4-6-0	2-2-0
0-11-0	2-2-0	4-6-0	4-6-0	14-3-0
0-11-0	2-2-0	4-6-0	4-6-0	0-11-0

Scale = 1:25.8

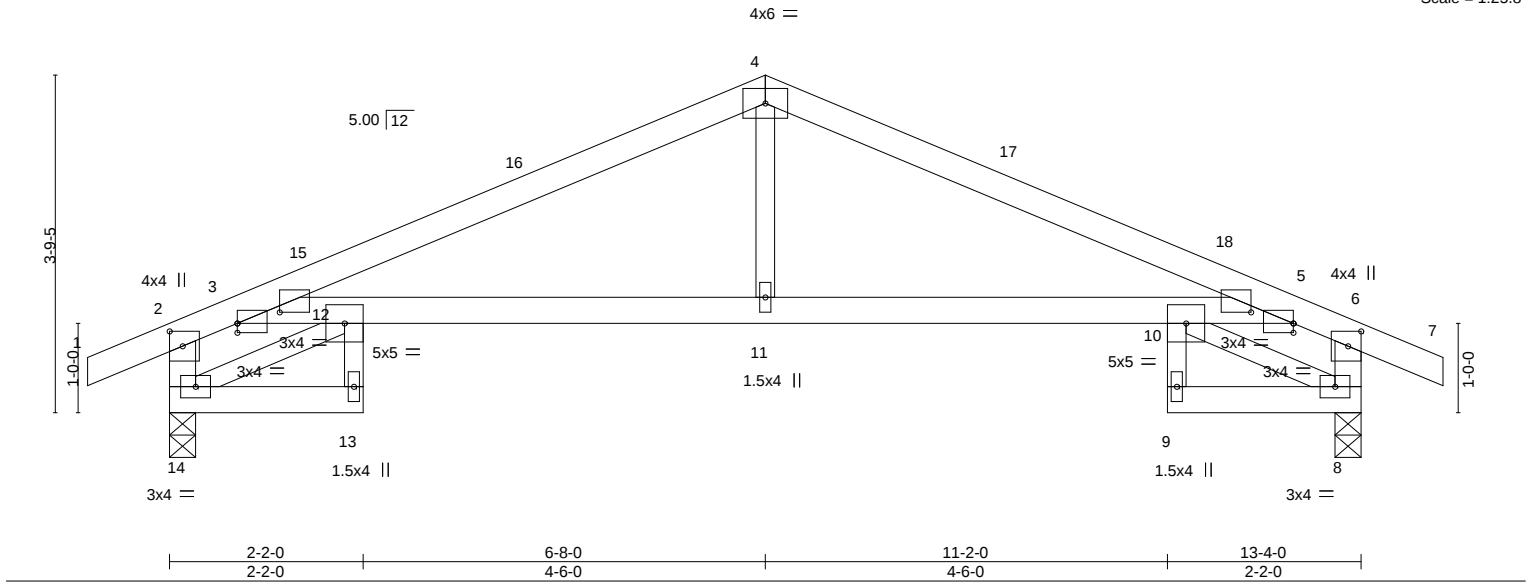


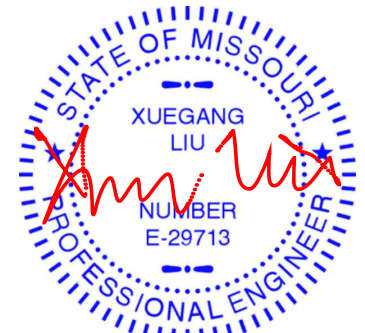
Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [3:0-0-0,0-1-4], [3:0-5-11,0-1-8], [5:0-0-0,0-1-4], [5:0-5-11,0-1-8], [6:0-2-0,0-1-12]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	in (loc)	l/defl	MT20	GRIP
TCDL	10.0	Lumber DOL	1.15	BC	1.00	11-12	>999		197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.11	11-12	>750		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH		8	n/a	Weight: 56 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Sheathed or 4-1-5 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS	2x3 SPF No.2 *Except*		10-0-0 oc bracing: 10-11
	2-14,6-8: 2x4 SP No.2		

REACTIONS. (size) 8=0-3-8, 14=0-3-8
Max Horz 14=31(LC 16)
Max Uplift 8=-108(LC 13), 14=-108(LC 12)
Max Grav 8=661(LC 1), 14=661(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-455/233, 3-4=-1044/351, 4-5=-1044/367, 5-6=-455/218, 2-14=-704/287,
6-8=-704/302
BOT CHORD 3-12=-119/672, 11-12=-233/912, 10-11=-233/912, 5-10=-143/672
WEBS 4-11=-10/358

- 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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 6-8-0, Exterior(2R) 6-8-0 to 11-8-0, Interior(1) 11-8-0 to 14-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=108, 14=108.
 - 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.



March 6, 2023

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979087
ROOF SPECIAL GIRDER	2	3	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:30 2023 Page 1
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-bB8ALZ9ypoRnMGU_hm0tBYICu?2H2m8uWvnNrBzefCV

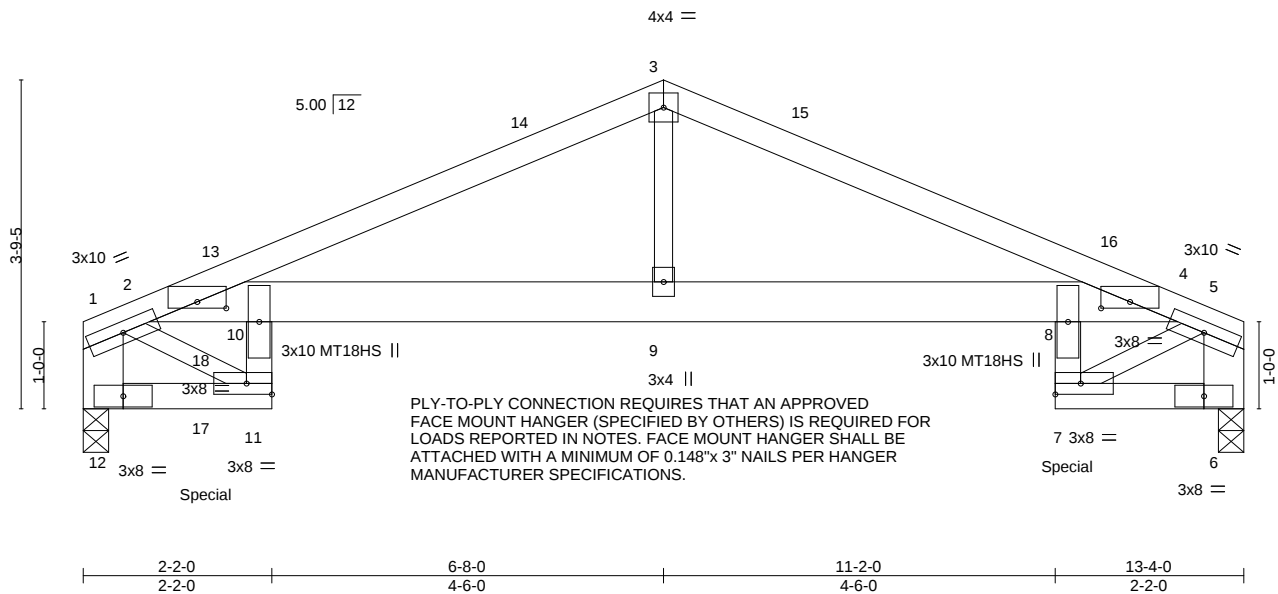


Plate Offsets (X,Y)-- [2:0-4-0,0-0-14], [4:0-4-0,0-0-14]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.08 8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.14 8-9	>999	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.13 6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-SH						Weight: 172 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
2-4: 2x6 SPF No.2	10-0-0 oc bracing: 8-9
WEBS 2x3 SPF No.2 *Except*	
1-12,5-6: 2x6 SPF No.2	

REACTIONS. (size) 12=0-3-8, 6=0-3-8
Max Horz 12=25(LC 9)
Max Uplift 12=-362(LC 12), 6=-336(LC 13)
Max Grav 12=2351(LC 1), 6=2192(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1414/338, 2-3=-2650/643, 3-4=-2641/653, 4-5=-1554/367, 1-12=-1795/415,
5-6=-2225/482
BOT CHORD 11-12=-189/626, 10-11=-195/1172, 2-10=-378/1788, 9-10=-533/2413, 8-9=-533/2413,
4-8=-405/1855, 6-7=-128/519
WEBS 3-9=-218/1434

- NOTES-
- 1) N/A
 - 2) 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 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 2 rows staggered at 0-4-0 oc, 2x6 - 3 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x3 - 1 row at 0-9-0 oc.
 - 3) 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.
 - 4) Unbalanced roof live loads have been considered for this design.
 - 5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C;
Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 5-2-12, Interior(1) 5-2-12 to 6-8-0, Exterior(2R) 6-8-0 to 11-8-0, Interior(1) 11-8-0 to 13-1-4 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
 - 6) All plates are MT20 plates unless otherwise indicated.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) Bearing at joint(s) 12, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=362, 6=336.
 - 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.



March 6, 2023

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/28/2023 4:28:41

Job	Truss	Truss Type	Qty	Ply	Roof
P236110-P230110-02	ES	ROOF SPECIAL GIRDER	2	3	I56979087

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:30 2023 Page 2
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-bB8ALZ9ypoRnMGU_hm0tBYICu?2H2m8uWvnNrBzefCV

NOTES
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1692 lb down and 276 lb up at 1-5-0, and 1692 lb down and 276 lb up at 11-3-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-5=-70, 11-12=-20, 8-10=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 8=-1692(F) 17=-1692(F)

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Lee's Summit, MO
Premier Building Supply (Springhill, KS),
Spring Hills, KS - 66083,

Truss Type
Jack-Open

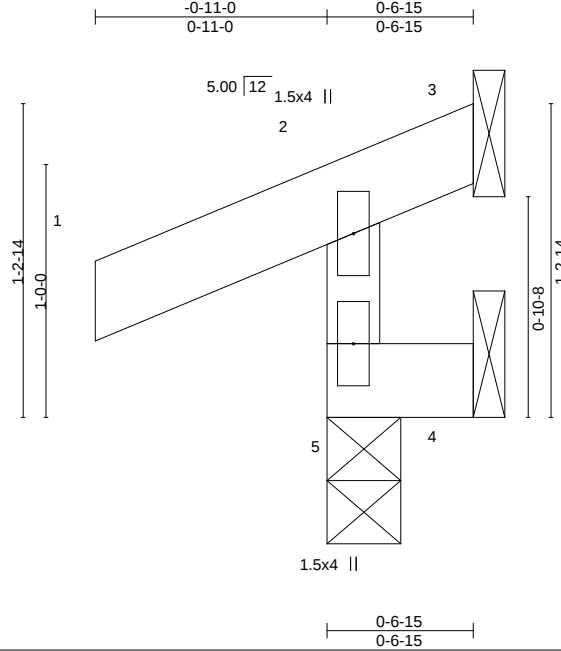
Qty
8

Ply
1

Roof
Job Reference (optional)

I56979088

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:31 2023 Page 1
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-3NiYv9aa5aezQ3AETY6jllHTOPcnnFy1IZXwOdzeFCU



Scale = 1:9.1

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.00	5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	5	>999	180	197/144
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-R						
								Weight: 4 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Sheathed or 0-6-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=31(LC 9)
Max Uplift 5=49(LC 8), 3=55(LC 1), 4=17(LC 9)
Max Grav 5=171(LC 1), 3=20(LC 8), 4=7(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 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.



March 6, 2023

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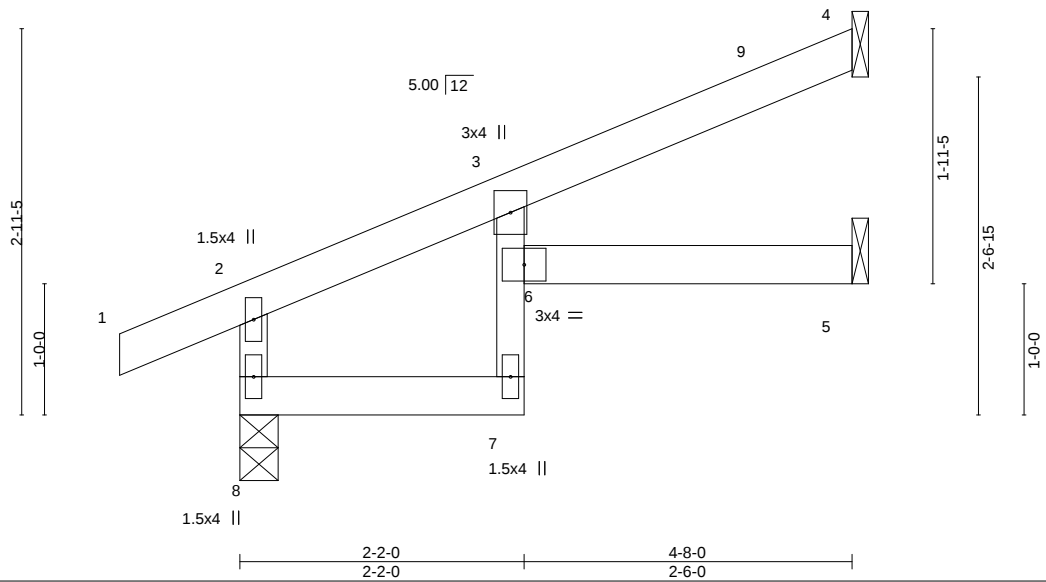
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979090
Jack-Open	6	1		

Spring Hills, KS - 66083, ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-UyNgBwCTs0yDqtnlwc5pLOvvtcaa_biURXlb_yzefCR
8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:34 2023 Page 1
Job Reference (optional)



Scale = 1:17.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.33	Vert(LL) 0.05	6	>999	240	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.28	Vert(CT) -0.05	7	>991	180		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT) -0.03	5	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-R					Weight: 18 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Sheathed or 4-8-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 3-7: 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=84(LC 12)
Max Uplift 8=-38(LC 12), 4=-62(LC 12), 5=-6(LC 12)
Max Grav 8=282(LC 1), 4=132(LC 1), 5=72(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-257/178

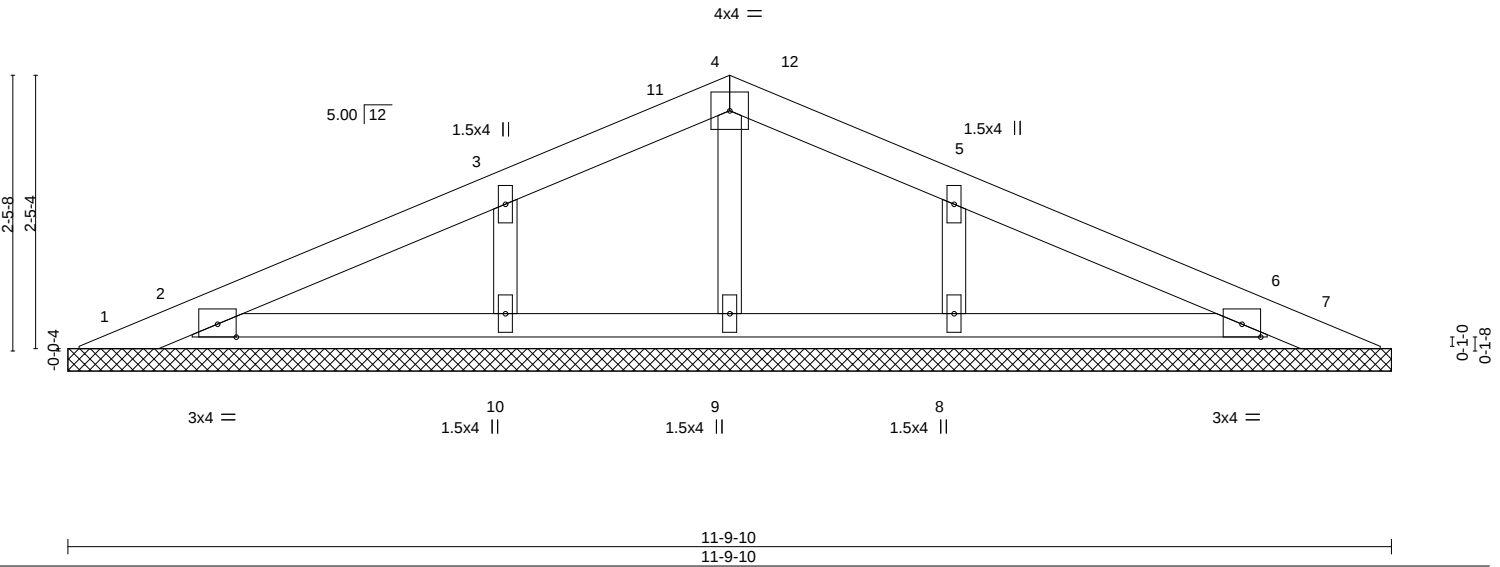
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 4-1-0, Interior(1) 4-1-0 to 4-7-4 zone; cantilever left and right exposed; end vertical left and 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) Refer to girder(s) for truss to truss connections.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4, 5.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023

Truss Type	Piggyback	Qty	4	Ply	1	Roof	I56979091
Spring Hills, KS - 66083,		Job Reference (optional)					
5-10-13		8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:36 2023 Page 1					
5-10-13		ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-QLVRbcDjOeCw4Bx8107Hqp?JgQlzSVTmvrEh3rzefCP					
		11-9-10					
		5-10-13					

Scale = 1:20.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH						Weight: 30 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-9-10.
(lb) - Max Horz 1=-41(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6, 9, 10, 8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-7 to 5-5-7, Interior(1) 5-5-7 to 5-10-13, Exterior(2R) 5-10-13 to 10-8-5, Interior(1) 10-8-5 to 11-4-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 2, 6, 10, 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 6, 2023

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

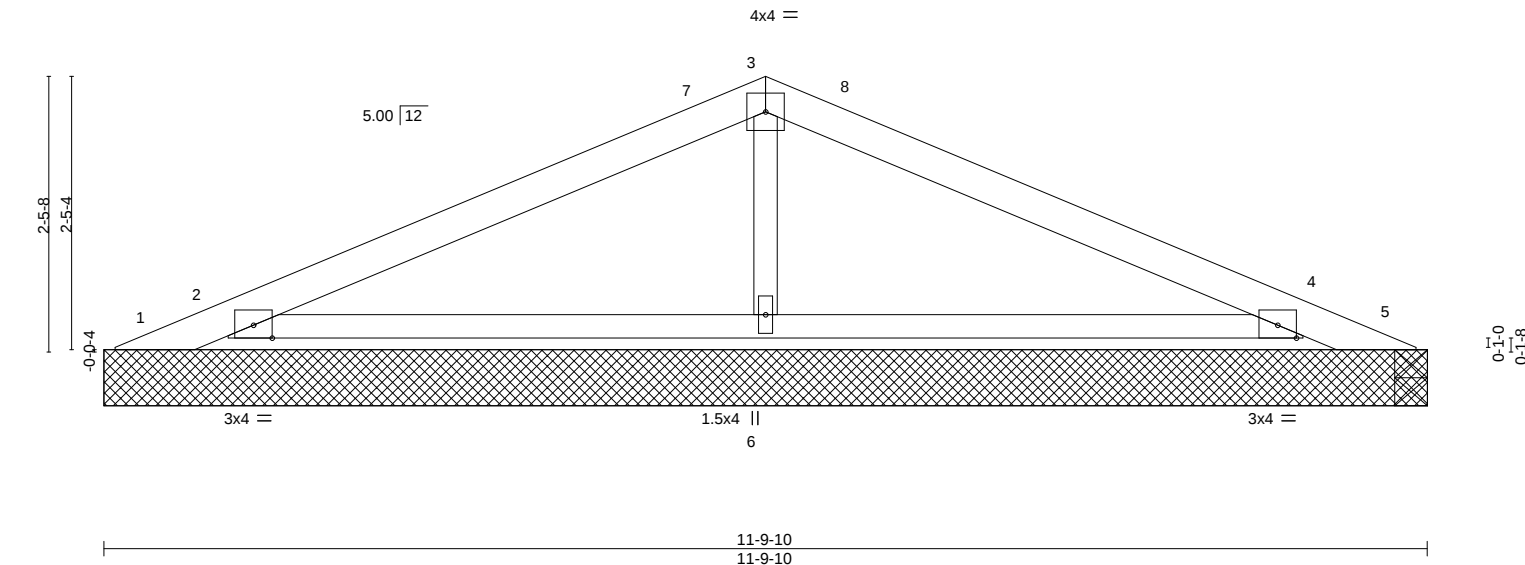
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Piggyback	Qty	26	Ply	1	Roof	I56979092
Spring Hills, KS - 66083,		Job Reference (optional)					
5-10-13		8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:37 2023 Page 1					
5-10-13		ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-uX3ppyEL9xKnhLWKbkeWz0XOFqb4ByYw7U_FbHzefCO					
		11-9-10					
		5-10-13					

Scale = 1:20.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	-0.02	4-6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.04	4-6	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH						Weight: 28 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-9-10.
 (lb) - Max Horz 1=-45(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 6 except 1=-247(LC 25), 5=-161(LC 26), 5=-149(LC 1), 2=-169(LC 12), 4=-140(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=548(LC 25), 4=479(LC 26), 6=390(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-6=-286/181

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-7 to 5-5-7, Interior(1) 5-5-7 to 5-10-13, Exterior(2R) 5-10-13 to 10-8-5, Interior(1) 10-8-5 to 11-6-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 1=247, 5=161, 2=169, 4=140.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 6, 2023

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979093
GABLE	2	1		
Job Reference (optional)				

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:39 2023 Page 1
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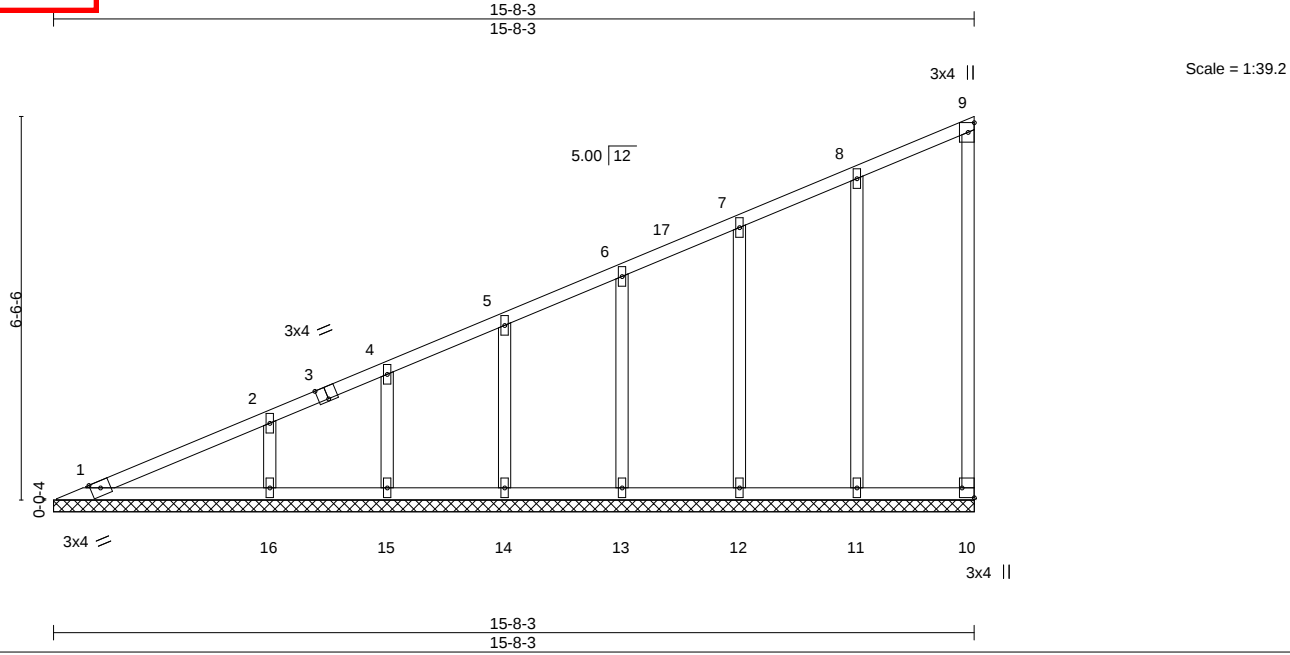


Plate Offsets (X,Y)--		[3:0-2-0,Edge], [10:Edge,0-2-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.47	in (loc)
TCDL 10.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) n/a - n/a 999
BCLL 0.0	Lumber DOL 1.15	WB 0.11	Vert(CT) n/a - n/a 999
BCDL 10.0	Rep Stress Incr NO	Matrix-SH	Horz(CT) -0.00 10 n/a n/a
	Code IRC2018/TPI2014		
		PLATES	GRIP
		MT20	197/144
		Weight: 47 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x3 SPF No.2	TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	
OTHERS 2x3 SPF No.2	

REACTIONS. All bearings 15-8-3.
(lb) - Max Horz 1=284(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 10, 11, 12, 13, 14, 15, 16
Max Grav All reactions 250 lb or less at joint(s) 10, 1, 11, 12, 13, 14, 15 except 16=289(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-366/208, 2-4=-307/175, 4-5=-272/165

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-10 to 5-8-3, Interior(1) 5-8-3 to 15-6-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) All plates are 1.5x4 MT20 unless otherwise indicated.
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 11, 12, 13, 14, 15, 16.
 - 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.



Truss Type

GABLE

Qty

2

Ply

1

Roof

I56979094

Job Reference (optional)

Premier Building Supply (Springhill, KS),

Spring Hills, KS - 66083,

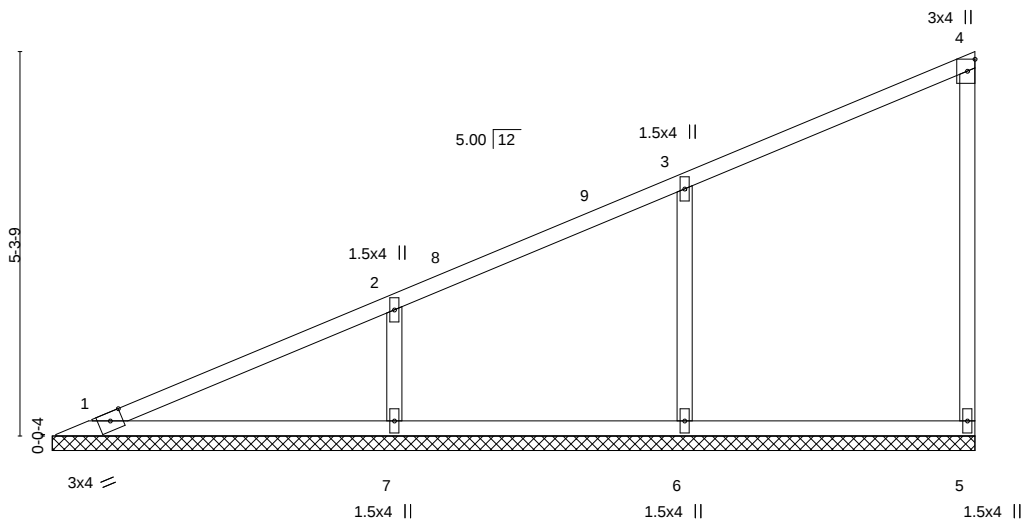
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ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-Qc1sAQQOosLWcokPX5xGcOC8MG3LxAvHp_s59MzefC8

12-8-9

12-8-9

Scale: 3/8"=1'



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.10	Horz(CT)	-0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH						Weight: 29 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 12-8-9.

(lb) - Max Horz 1=228(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 5 except 6=-106(LC 12), 7=-118(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=372(LC 1), 7=412(LC 1)

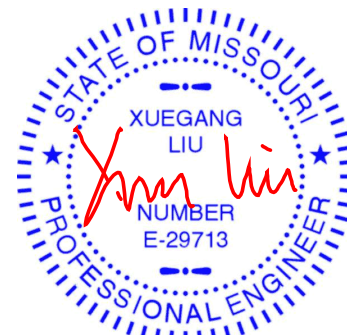
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-304/178

WEBS 3-6=-295/224, 2-7=-304/215

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-10 to 5-6-10, Interior(1) 5-6-10 to 12-7-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=106, 7=118.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



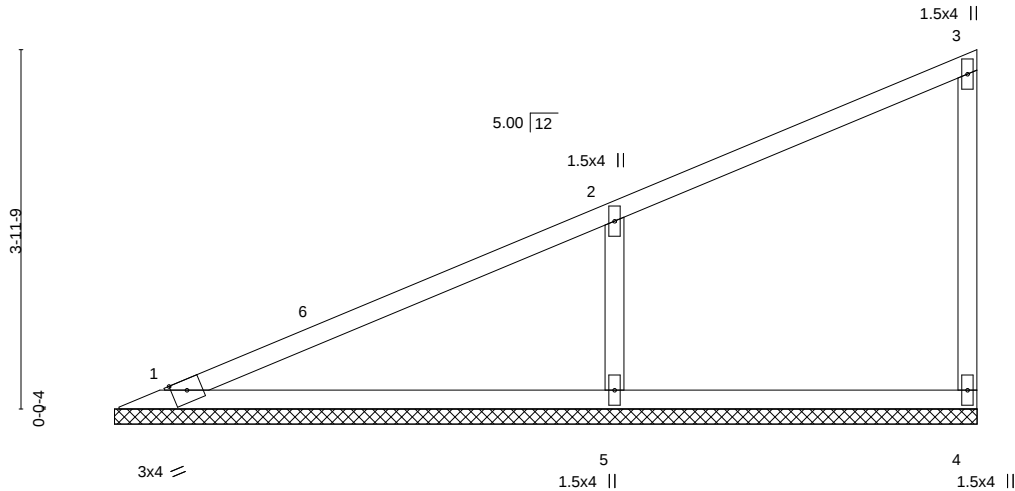
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

P236110-P230110-02
 Premier Building Supply (Springhill, KS),
 Spring Hills, KS - 66083,

Truss Type	Qty	Ply	Roof	
GABLE	2	1		I56979095
Job Reference (optional)				

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:55 2023 Page 1
 ID:WcRfdZxs?bG3GRhQ2QHdPbz1SCN-M?8db6SewTbEs6uoEwzkhpHQB4j_P4IZGILCEEzefC6
 9-6-3
 9-6-3

Scale = 1:25.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.68	Vert(LL)	n/a	-	999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.38	Vert(CT)	n/a	-	999		
BCLL 0.0	Lumber DOL 1.15	WB 0.07	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-SH						
	Code IRC2018/TPI2014						Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=9-6-3, 4=9-6-3, 5=9-6-3
 Max Horz 1=167(LC 9)
 Max Uplift 1=-2(LC 12), 4=-25(LC 9), 5=-141(LC 12)
 Max Grav 1=180(LC 1), 4=120(LC 1), 5=496(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-5=-367/302

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-10 to 5-6-3, Interior(1) 5-6-3 to 9-4-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=141.
- 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.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component

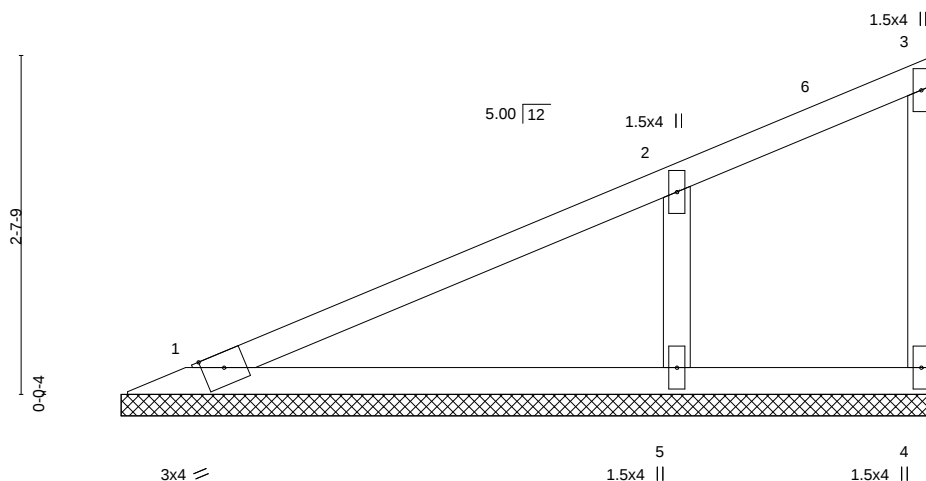
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:57 2023 Page 1
ID:WcRfdZXs?bG3GRhQ2QHdPbZ1SCN-INGN0oUuS5ry5P2Amx?CnEMqZuR0t_KskcqJl7zefC4
6-3-12
6-3-12

Scale = 1:17.9

Weight: 13 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-3-12, 4=6-3-12, 5=6-3-12
 Max Horz 1=107(LC 9)
 Max Uplift 1=-8(LC 12), 4=-11(LC 9), 5=-99(LC 12)
 Max Grav 1=138(LC 1), 4=23(LC 1), 5=349(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS 2-5=-271/275

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-10 to 5-6-10, Interior(1) 5-6-10 to 6-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE (H-7473 (REV. 3/19/2020) BEFORE USE.

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601.

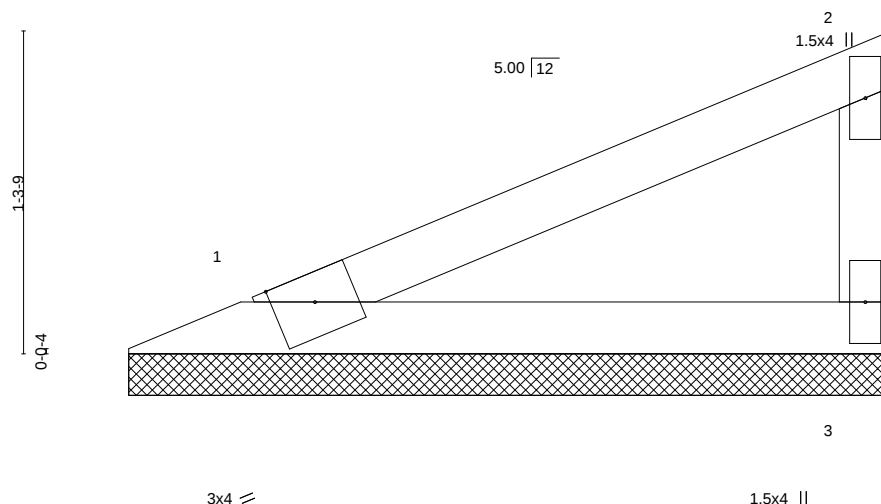


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:58 2023 Page 1
ID:WcRfdZxs?bG3GRhQ2QHdPbz1SCN-naqlD7UWDOzpjZdMkeXRJsv2CHpacSe0yGZsrZzeFC3

3-1-6

Scale = 1:9.3



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL) n/a	- n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) n/a	- n/a	999		
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: 5 lb	FT = 20%

LUMBER-
TOP CHORD 2x3 SPF No.2
BOT CHORD 2x3 SPF No.2
WEBS 2x3 SPF No.2

BRACING-	
TOP CHORD	Sheathed or 3-1-6 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-0-12, 3=3-0-12
 Max Horz 1=47(LC 9)
 Max Uplift 1=-18(LC 12), 3=-27(LC 12)
 Max Grav 1=110(LC 1), 3=110(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023



WARNING: Velly design parameters are READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MM-1475 (Rev. 3/25/2020) 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, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type

GABLE

Qty

1

Ply

1

Roof

I56979098

Job Reference (optional)

Spring Hills, KS - 66083,

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:59 2023 Page 1

ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-FmO7QTV8_i5gKjCztM2gsfS99h7LtG9BwJPN?zefC2

15-7-12

15-7-12

Scale = 1:41.1

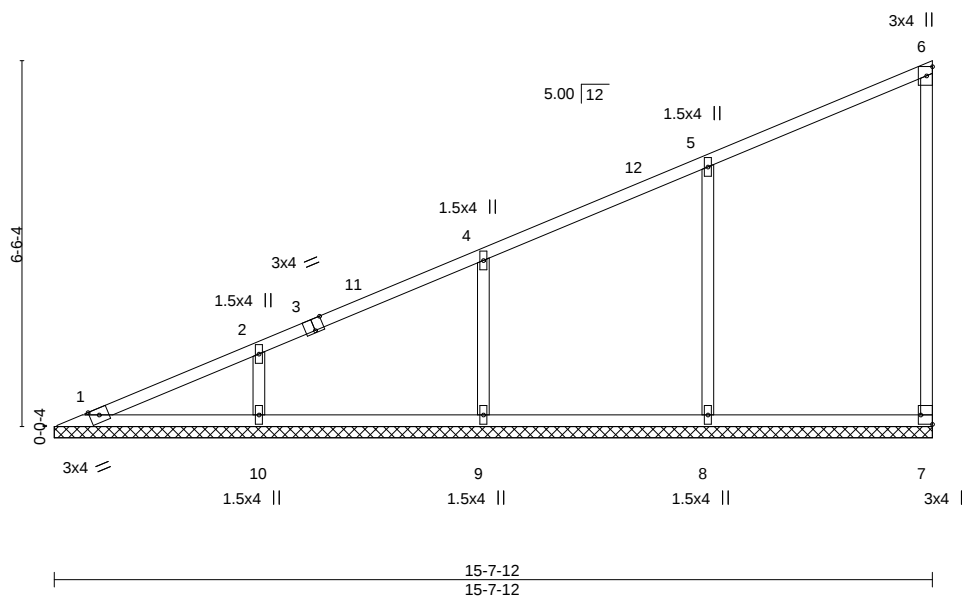


Plate Offsets (X,Y)-- [3:0-2-0,Edge], [7:Edge,0-2-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.49	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.22	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr NO		WB 0.17	Horz(CT)	-0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH						Weight: 38 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 15-7-12.

(lb) - Max Horz 1=283(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 7 except 8=111(LC 12), 9=101(LC 12), 10=102(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 7, 1 except 8=389(LC 1), 9=355(LC 1), 10=356(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-368/207, 2-4=-294/177

WEBS 5-8=-303/210, 4-9=-277/168, 2-10=-269/172

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-10 to 5-6-10, Interior(1) 5-6-10 to 15-6-8 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
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 8=111, 9=101, 10=102.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

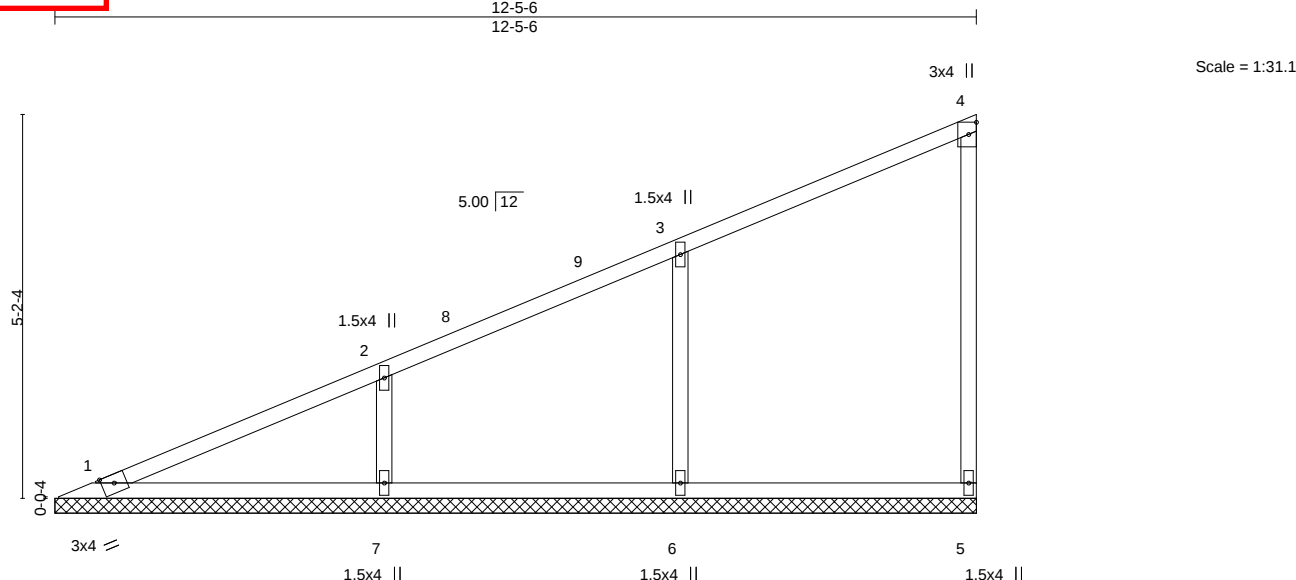
Job #	Truss Type	Qty	Ply	Roof	156979099
P230110-P230110-02	GABLE	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS),

Spring Hills, KS - 66083.

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:49:01 2023 Page 1

0.0000 5 NOV 15 2022 MINTER INDUSTRIES, INC. 1111 Main St 10:45:01 2020 Page
ID:WcRfdZXs?bG3GRhO2OHdPbz1SCN-B9Wur9XPVJLNa1Lx?m48x4XWdVoppovSfDoWRyuzefC0



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.43	Vert(LL) n/a - n/a 999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr NO	WB 0.09	Horz(CT) -0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH		Weight: 28 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

ONS. All bearings 12-5-6.
(lb) - Max Horz 1=223(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 5 except 6=-107(LC 12), 7=-113(LC 12)
Max Grav Max reactions 250 lb or less at joint(s) 1. 5 except 6=378(LC 1). 7=395(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-301/176
WEBS 3-6=-298/228, 2-7=-293/211

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-10 to 5-6-10, Interior(1) 5-6-10 to 12-4-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 6=107, 7=113.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023



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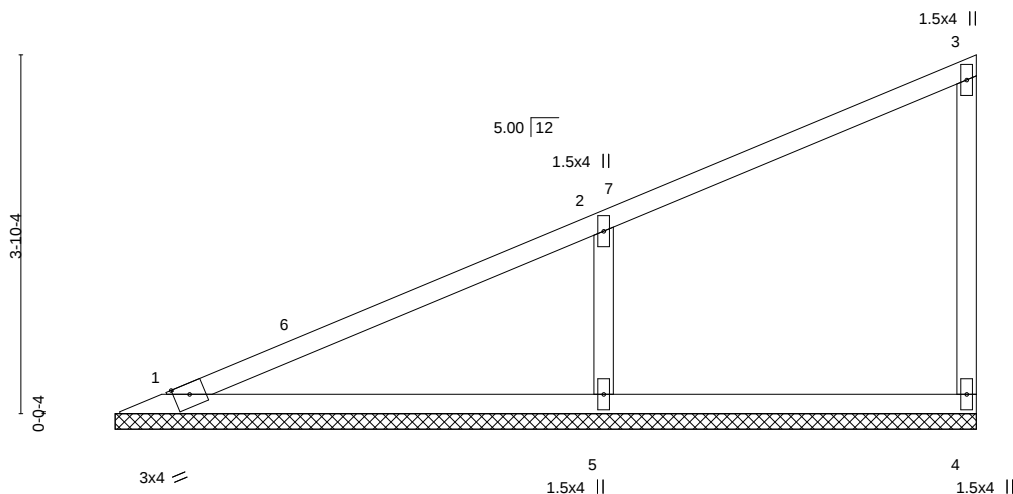


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979100
GABLE	1	1		

Spring Hills, KS - 66083, ID:WcRfdZxs?bG3GRhQ2QHdPbz1SCN-fL4G3VX1GdUEBAw8ZUbNUI4eRv6LYFUbtX3_KzefC? 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:49:02 2023 Page 1
 9-2-15 9-2-15

Scale = 1:24.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	n/a	-	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	n/a	-	999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.07	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-SH					Weight: 19 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=9-2-15, 4=9-2-15, 5=9-2-15
 Max Horz 1=162(LC 9)
 Max Uplift 4=-25(LC 9), 5=-136(LC 12)
 Max Grav 1=170(LC 1), 4=126(LC 1), 5=478(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

WEBS 2-5=-354/298

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-10 to 5-6-10, Interior(1) 5-6-10 to 9-1-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=136.
- 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.



March 6, 2023

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

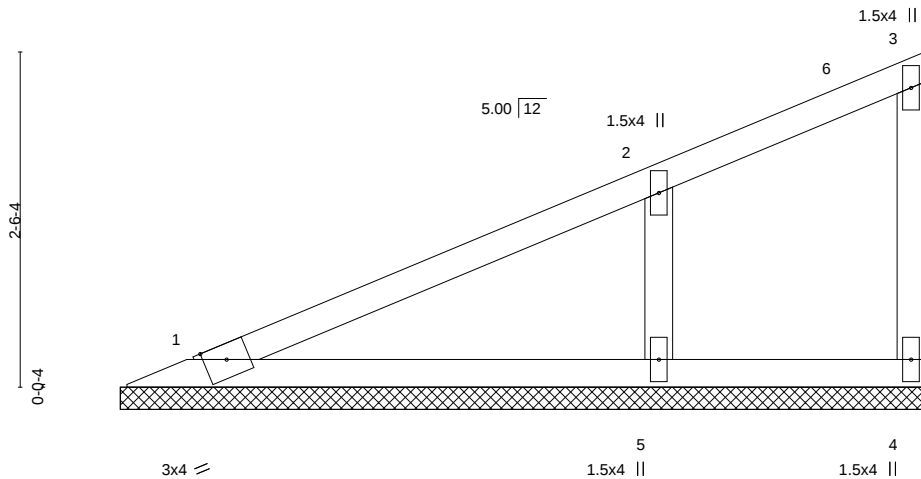


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

P236110-P230110-02
Premier Building Supply (Springhill, KS),
VS

Truss Type	Qty	Ply	Roof	I56979101
GABLE	2	1		

Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:49:03 2023 Page 1
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-7XdGrYf1xc5pKVk6B6c0Vct0IVuHtl6XHdWnzefC_



Scale = 1:17.3

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0		TC 0.37	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15		BC 0.18	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Lumber DOL 1.15		WB 0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO		Matrix-P						Weight: 12 lb	FT = 20%
	Code IRC2018/TPI2014									

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-0-9, 4=6-0-9, 5=6-0-9
Max Horz 1=102(LC 9)
Max Uplift 1=-6(LC 12), 4=-11(LC 9), 5=-93(LC 12)
Max Grav 1=128(LC 1), 4=31(LC 1), 5=326(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-253/262

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-10 to 5-6-10, Interior(1) 5-6-10 to 5-11-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979102
Valley	2	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS),

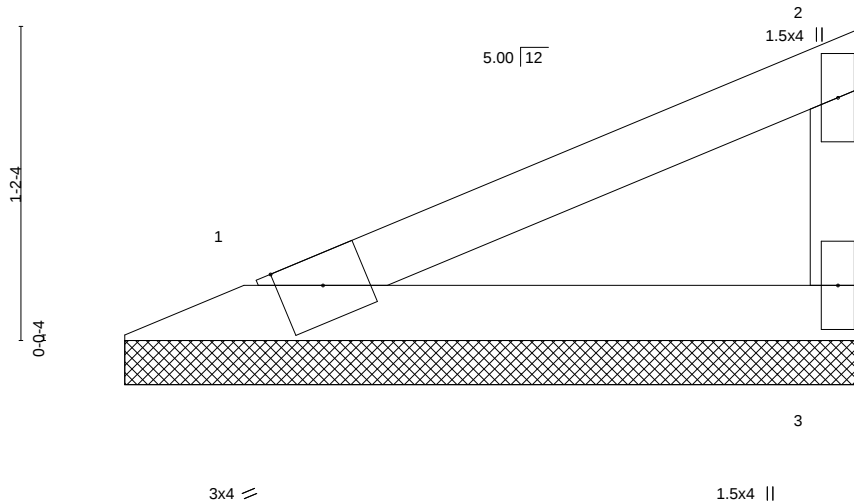
Spring Hills, KS - 66083,

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:40 2023 Page 1

ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-I6kyRzGESSiMYoFvGsCDbf9_b1goOJBMPSCvCczefCL

2-10-3
2-10-3

Scale = 1:8.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.19	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P					Weight: 5 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-

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

BRACING-

TOP CHORD Sheathed or 2-10-3 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-9-9, 3=2-9-9
 Max Horz 1=42(LC 9)
 Max Uplift 1=-16(LC 12), 3=-24(LC 12)
 Max Grav 1=98(LC 1), 3=98(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Lee's Summit, MO
 Premier Building Supply (Springhill, KS),
 P236110-P230110-02 V1.1

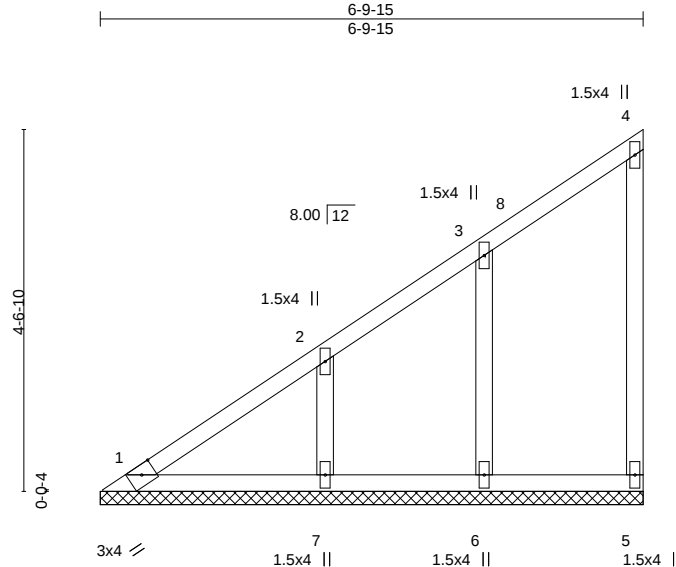
Truss Type	Qty	Ply	Roof
GABLE	1	1	
Job Reference (optional)			

I56979103

Spring Hills, KS - 66083,

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:41 2023 Page 1

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Scale = 1:29.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.35	Vert(LL)	n/a	-	999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	n/a	-	999		
BCLL 0.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P					Weight: 19 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 6-9-15.
 (lb) - Max Horz 1=175(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6, 7
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6, 7

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-314/205

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-3 to 5-4-3, Interior(1) 5-4-3 to 6-8-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6, 7.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

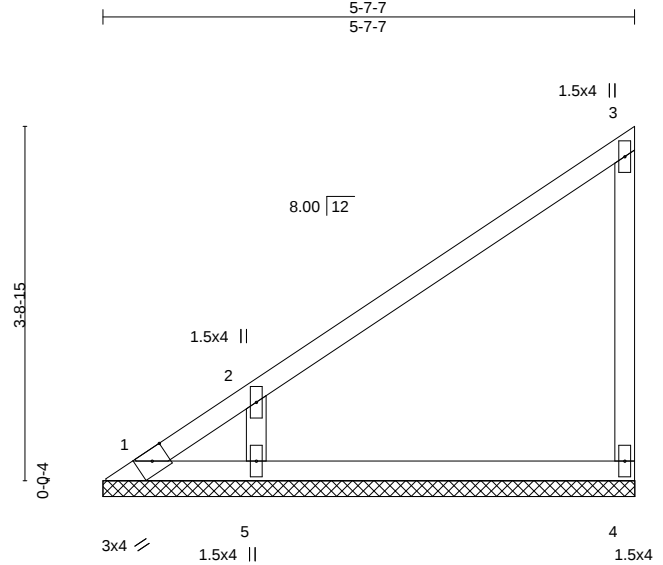
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979104
GABLE	1	1	Job Reference (optional)	

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:42 2023 Page 1
 ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-FVsisfU_Uy4o6OI0HEng4EFsrJEsCXfHmh0GUzefCJ



Scale = 1:24.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.46	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.23	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.15	WB 0.07	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P					Weight: 13 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x3 SPF No.2	TOP CHORD Sheathed or 5-7-7 oc purlins, except end verticals.
BOT CHORD 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	
OTHERS 2x3 SPF No.2	

REACTIONS. (size) 1=5-7-7, 4=5-7-7, 5=5-7-7
 Max Horz 1=142(LC 9)
 Max Uplift 1=-84(LC 19), 4=-37(LC 9), 5=-153(LC 12)
 Max Grav 1=93(LC 12), 4=156(LC 19), 5=387(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-321/210
 WEBS 2-5=-305/301

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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) Gable requires continuous bottom chord bearing.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=153.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

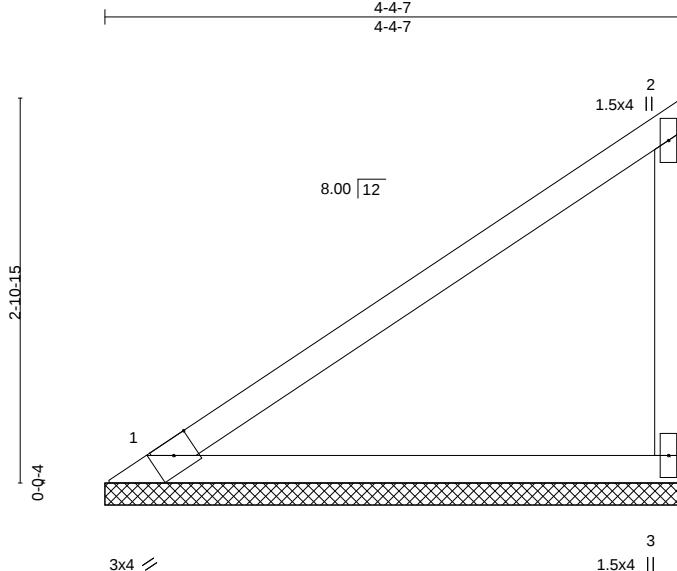


March 6, 2023

Truss
 P236110-P230110-02 V13
 Premier Building Supply (Springhill, KS),
 Spring Hills, KS - 66083,

Truss Type	Qty	Ply	Roof	I56979105
GABLE	1	1	Job Reference (optional)	

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:44 2023 Page 1
 ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-Bt_SHLJkW5Co1PYgViG9IVKYrezpK7Ayk4A7LNzefCH



Scale = 1:17.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.69	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.35	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P					Weight: 9 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=4-4-7, 3=4-4-7
 Max Horz 1=108(LC 9)
 Max Uplift 1=-17(LC 12), 3=-55(LC 12)
 Max Grav 1=176(LC 1), 3=191(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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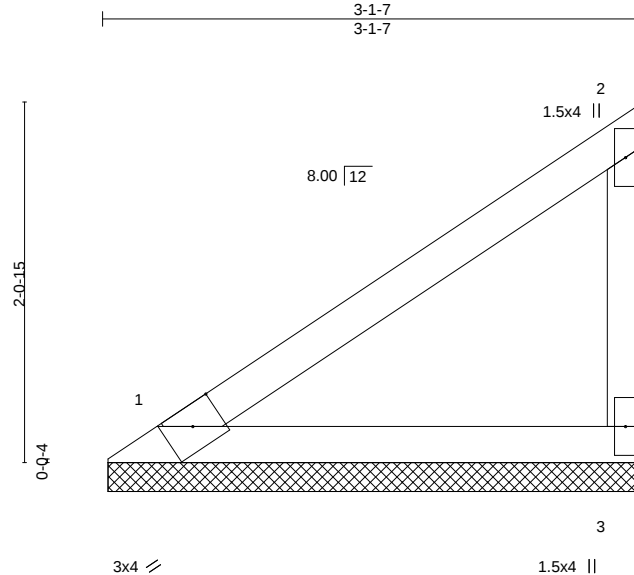
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979106
Valley	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:45 2023 Page 1
ID:WcRfdZxs?bG3GRhQ2QHdPbz1SCN-f4YrUhKMHPKffZ7t3PoOHispf2M83aQ5zkwtgtpzefCG



Scale = 1:13.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.30	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P					Weight: 7 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x3 SPF No.2	TOP CHORD Sheathed or 3-1-7 oc purlins, except end verticals.
BOT CHORD 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 1=3-1-1, 3=3-1-1
Max Horz 1=73(LC 9)
Max Uplift 1=-11(LC 12), 3=-37(LC 12)
Max Grav 1=120(LC 1), 3=130(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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) Gable requires continuous bottom chord bearing.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

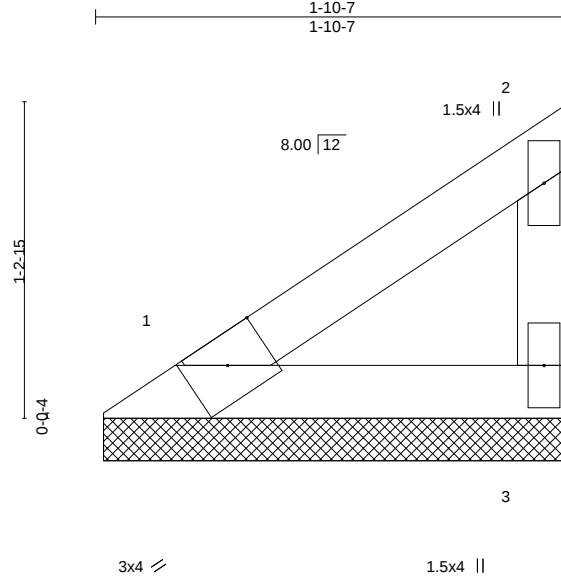


March 6, 2023

Lee's Summit, MO
 P236110-P230110-02 V13
 Premier Building Supply (Springhill, KS),
 Spring Hills, KS - 66083,

Truss Type	Qty	Ply	Roof	I56979107
Valley	1	1	Job Reference (optional)	

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:46 2023 Page 1
 ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-7G6Di1L?2iTWGjj3d7JdqwP1uSk9o1gFCOfDQGzefCF



Scale = 1:9.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P					Weight: 4 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x3 SPF No.2	TOP CHORD Sheathed or 1-10-7 oc purlins, except end verticals.
BOT CHORD 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.2	

REACTIONS. (size) 1=1-10-1, 3=1-10-1
 Max Horz 1=39(LC 9)
 Max Uplift 1=-6(LC 12), 3=-20(LC 12)
 Max Grav 1=64(LC 1), 3=69(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023

Truss Type

Valley

Qty

1

Ply

1

Roof

I56979108

Job Reference (optional)

Premier Building Supply (Springhill, KS),

Spring Hills, KS - 66083,

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:47 2023 Page 1

ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-bSfbvNMdo0bNuthFAqqsN7y6Ls1tXUJOQ2PnyizefCE

3-7-15

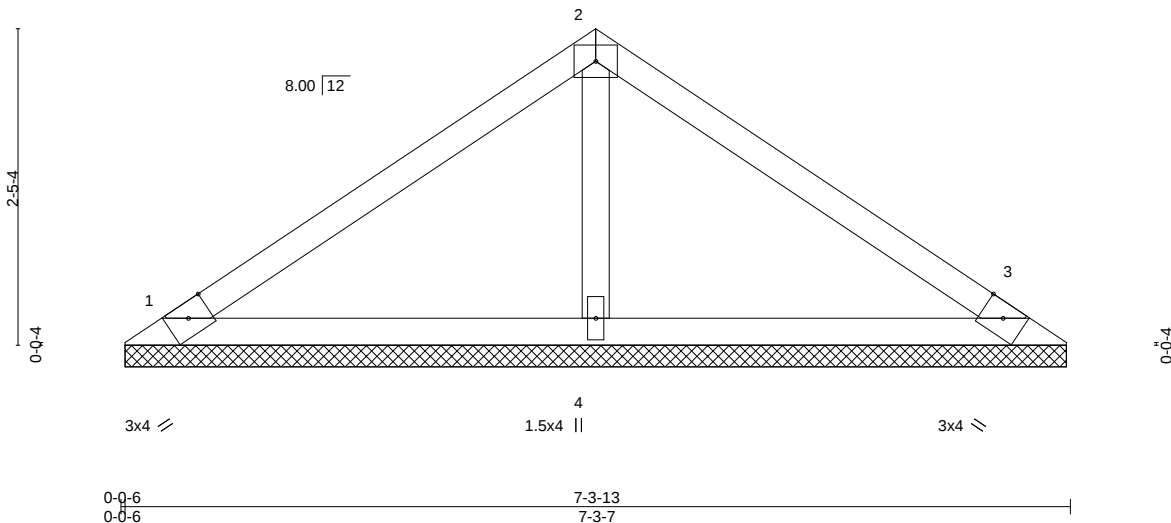
3-7-15

7-3-13

3-7-15

3x4 =

Scale = 1:17.8



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr NO	WB 0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-3-1, 3=7-3-1, 4=7-3-1
 Max Horz 1=60(LC 11)
 Max Uplift 1=-38(LC 12), 3=-46(LC 13), 4=-1(LC 12)
 Max Grav 1=161(LC 1), 3=161(LC 1), 4=273(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 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.



March 6, 2023

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type

Valley

Qty

1

Ply

1

Roof

I56979109

Job Reference (optional)

Premier Building Supply (Springhill, KS),

Spring Hills, KS - 66083,

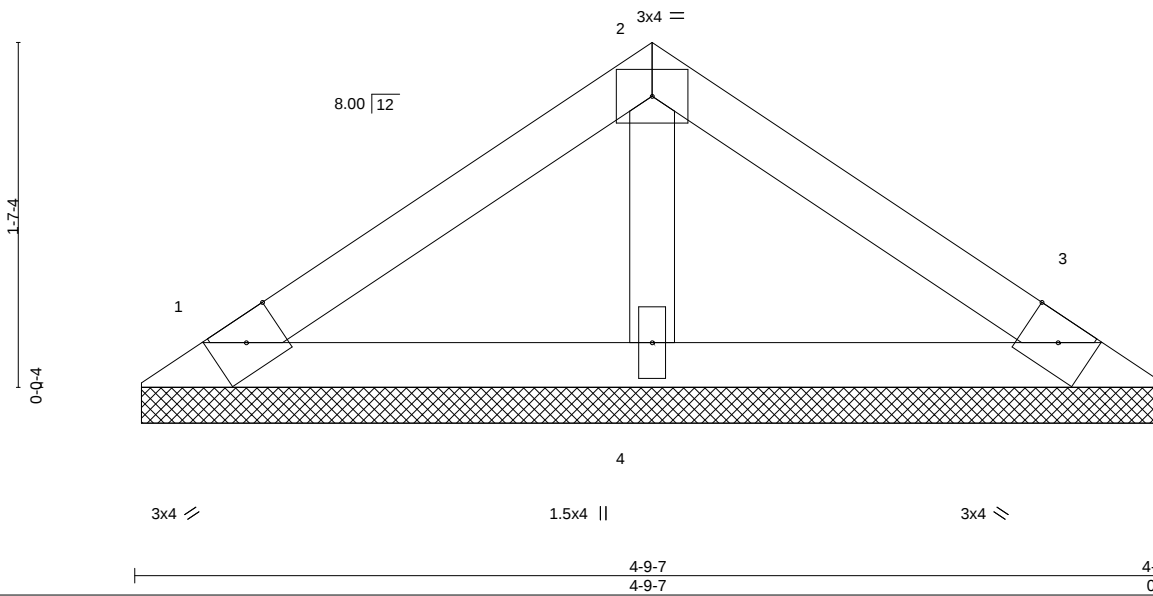
8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:49 2023 Page 1

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2-4-15
2-4-15

4-9-13
2-4-15

Scale = 1:10.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.17	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.15	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-P						
	Code IRC2018/TPI2014						Weight: 9 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Sheathed or 4-9-13 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-9-1, 3=4-9-1, 4=4-9-1
 Max Horz 1=37(LC 11)
 Max Uplift 1=-24(LC 12), 3=-29(LC 13), 4=-1(LC 12)
 Max Grav 1=100(LC 1), 3=100(LC 1), 4=170(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 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.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type
Valley

Qty	Ply	Roof
1	1	

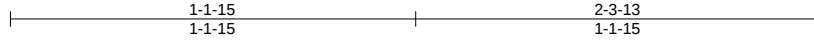
I56979110

Job Reference (optional)

Spring Hills, KS - 66083,

8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:50 2023 Page 1

ID:WcRfdXs?bG3GRhQ2QHdPbz1SCN-01LkYOOV5xzxIK0qszNZ_majb35qkrfq70dRZ1zefCB



Scale = 1:6.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
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: 3 lb	FT = 20%

LUMBER-

TOP CHORD 2x3 SPF No.2
BOT CHORD 2x3 SPF No.2

BRACING-

TOP CHORD Sheathed or 2-3-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-3-1, 3=2-3-1
Max Horz 1=-15(LC 10)
Max Uplift 1=-9(LC 12), 3=-9(LC 13)
Max Grav 1=73(LC 1), 3=73(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

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=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 6, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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, DSB-89 and BCSI Building Component

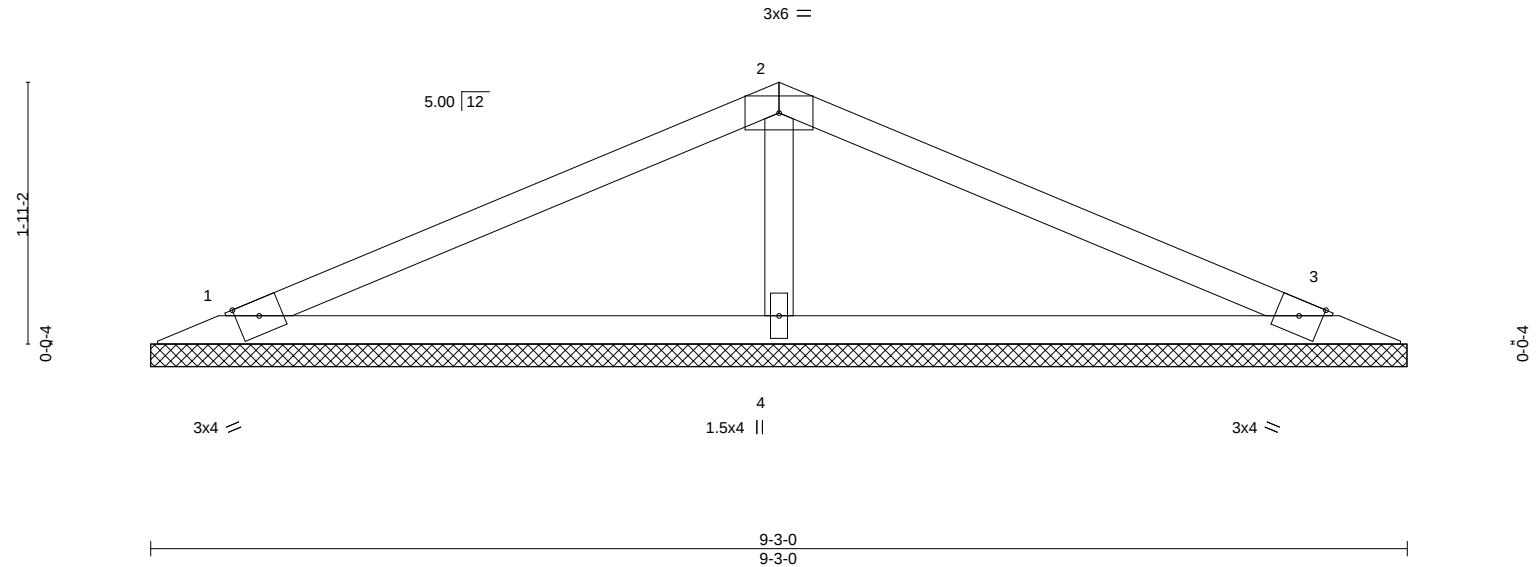
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	Roof	I56979111
GABLE	2	1	Job Reference (optional)	
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, 8.630 s Nov 19 2022 MiTek Industries, Inc. Fri Mar 3 10:48:52 2023 Page 1				
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-yQTUy4QldYdF?e9DzNQ14Bfy5tjGCKL7aK6YdvzeFC9				
4-7-8	4-7-8	9-3-0	4-7-8	

Scale = 1:17.0



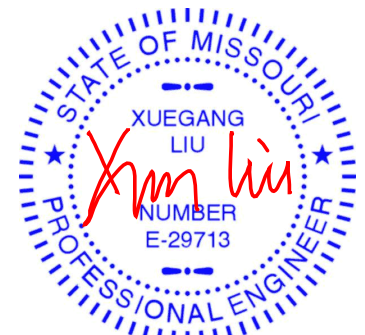
LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.48	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.31	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-SH							
	Code IRC2018/TPI2014							Weight: 16 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x3 SPF No.2	TOP CHORD Sheathed or 6-0-0 oc purlins.
BOT CHORD 2x3 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x3 SPF No.2	

REACTIONS.	(size)
1=9-3-0, 3=9-3-0, 4=9-3-0	
Max Horz 1=31(LC 12)	
Max Uplift 1=-35(LC 12), 3=-40(LC 13), 4=-35(LC 12)	
Max Grav 1=164(LC 25), 3=164(LC 26), 4=415(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS	2-4=-273/192

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end 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
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 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.

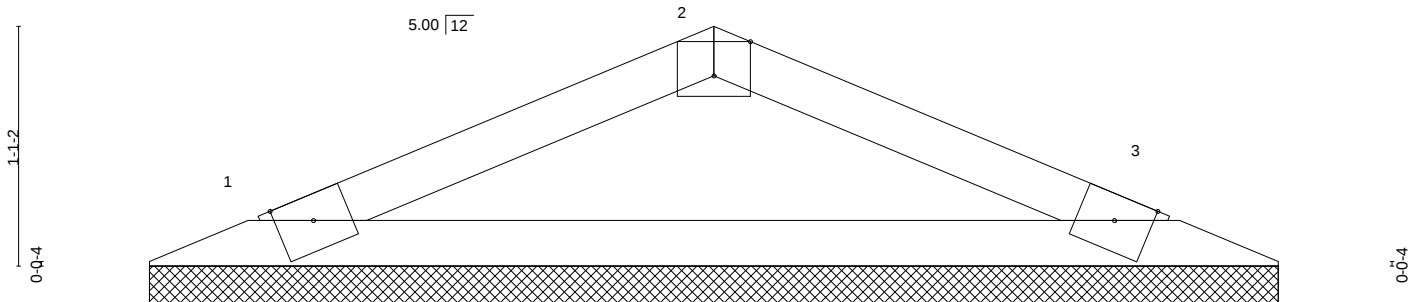


March 6, 2023

Truss Type	Qty	Ply	Roof	I56979112
Valley	2	1	Job Reference (optional)	
Spring Hills, KS - 66083,				
ID:WcRfdZXs?bG3GRhQ2QHdPbz1SCN-uobENmR09ATNEyJb5oSV9ckMngMCgefQ2ebeiozefC7				
2-7-8	2-7-8	5-3-0	2-7-8	

3x4 =

Scale = 1:10.5



0-0-10	5-3-0
0-0-10	5-2-7
Plate Offsets (X,Y)-- [2:0-2:0,Edge]	
LOADING (psf)	SPACING- 2-0-0
TCLL 25.0	Plate Grip DOL 1.15
TCDL 10.0	Lumber DOL 1.15
BCLL 0.0	Rep Stress Incr NO
BCDL 10.0	Code IRC2018/TPI2014
	CSI.
	TC 0.21
	BC 0.41
	WB 0.00
	Matrix-P
	DEFL.
	in (loc) l/defl L/d
	Vert(LL) n/a - n/a 999
	Vert(CT) n/a - n/a 999
	Horz(CT) 0.00 3 n/a n/a
	PLATES GRIP
	MT20 197/144
	Weight: 8 lb FT = 20%

LUMBER-

TOP CHORD 2x3 SPF No.2
 BOT CHORD 2x3 SPF No.2

REACTIONS.

(size) 1=5-1-13, 3=5-1-13
 Max Horz 1=-16(LC 17)
 Max Uplift 1=-27(LC 12), 3=-27(LC 13)
 Max Grav 1=186(LC 1), 3=186(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

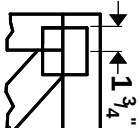
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Ke=0.96; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



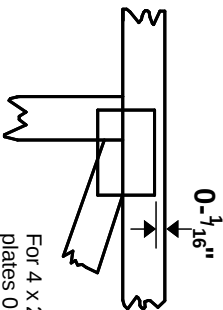
March 6, 2023

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{3}{16}$ " from outside edge of truss.

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

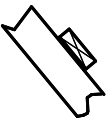
* Plate location details available in **MiTek 20120** software or upon request.

PLATE SIZE

4 X 4

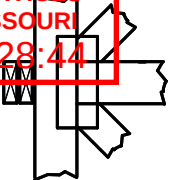
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



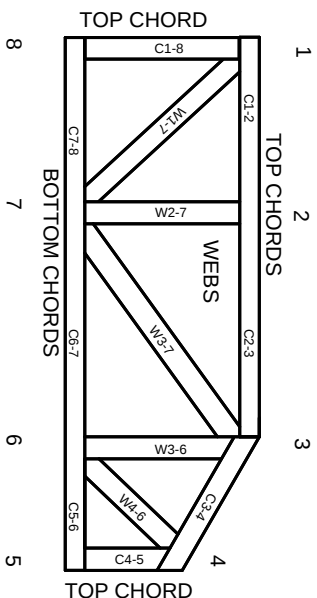
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
BCS: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020



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 T or 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.