



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

11/30/2020

MiTek USA, Inc.

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

Re: 2523907

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

Pages or sheets covered by this seal: I43654583 thru I43654663

My license renewal date for the state of Missouri is December 31, 2021.

Missouri COA: Engineering 001193



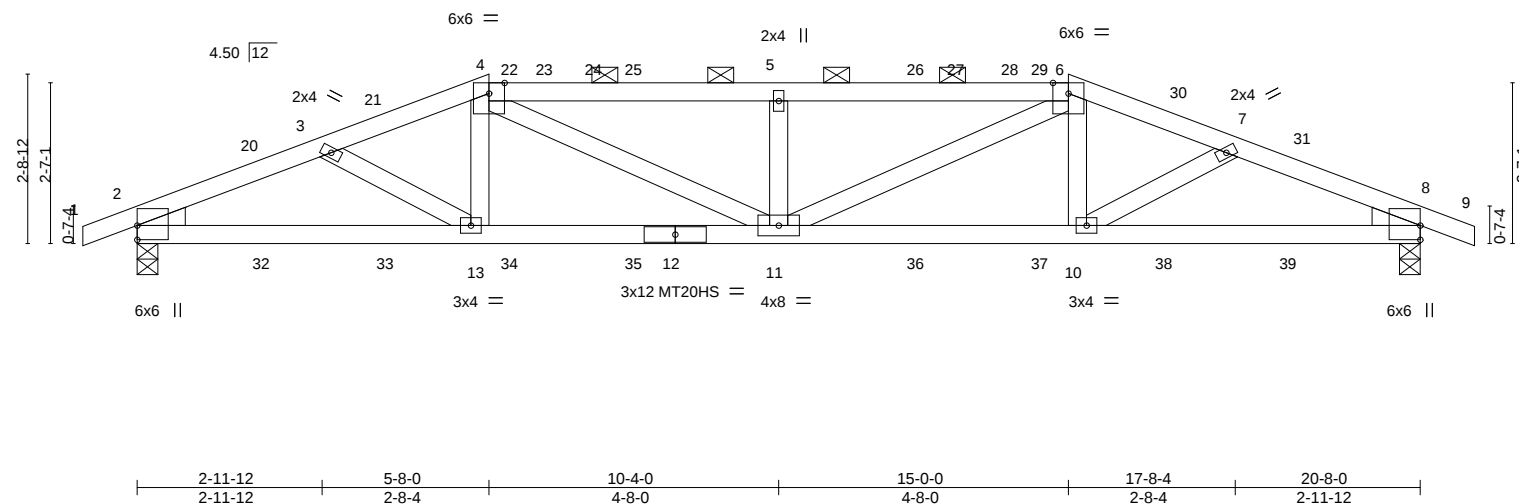
November 17, 2020

Johnson, Andrew ,Engineer

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.

Job 2523907	Truss A01	Truss Type HIP GIRDER	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	143654583
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			
0-10-8 0-10-8 2-11-12 2-11-12 5-8-0 2-8-4			10-4-0 4-8-0 15-0-0 4-8-0 17-8-4 2-8-4 20-8-0 2-11-12 21-6-8 0-10-8			

Scale = 1:37.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.15	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.33	MT20HS	148/108		
TCDL	20.0	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.08				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-8-15 oc purlins, except
BOT CHORD	2x4 SPF 1650F 1.5E		2-0-0 oc purlins (2-0-5 max.); 4-6.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE			
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2			

REACTIONS.	
(size)	2=0-4-0, 8=0-4-0
Max Horz	2=-34(LC 10)
Max Uplift	2=-197(LC 12), 8=-197(LC 12)
Max Grav	2=1736(LC 35), 8=1736(LC 35)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-3140/341, 3-4=-3094/345, 4-5=-3927/434, 5-6=-3927/434, 6-7=-3094/345, 7-8=-3140/341
BOT CHORD	2-13=-275/2846, 11-13=-267/2916, 10-11=-267/2916, 8-10=-275/2846
WEBS	4-11=-108/1128, 5-11=-841/172, 6-11=-108/1128

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=197, 8=197.
 - 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.



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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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job		Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply	143654583	
2523907		A01	HIP GIRDER			1	Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,				8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:15 2020 Page 2 ID:wH4RYhEsTNeUP2dxvOfi1syQY8e-SX4rCDz7ypeZsyqzNmfxZWYFLApsrtT9NTf5TnylJlW				
NOTES-								
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 72 lb down at 2-0-12, 54 lb down and 36 lb up at 4-0-12, 115 lb down and 62 lb up at 6-0-12, 115 lb down and 61 lb up at 8-0-12, 115 lb down and 61 lb up at 10-0-12, 115 lb down and 61 lb up at 10-7-4, 115 lb down and 61 lb up at 12-7-4, 115 lb down and 62 lb up at 14-7-4, and 54 lb down and 36 lb up at 16-7-4, and 72 lb down at 18-7-4 on top chord, and 125 lb down and 42 lb up at 2-0-12, 82 lb down and 36 lb up at 4-0-12, 35 lb down at 6-0-12, 35 lb down at 8-0-12, 35 lb down at 10-0-12, 35 lb down at 10-7-4, 35 lb down at 12-7-4, 35 lb down at 14-7-4, and 82 lb down and 36 lb up at 16-7-4, and 125 lb down and 42 lb up at 18-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.								
13) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15								
Uniform Loads (plf)								
Vert: 1-4=-71, 4-6=-81, 6-9=-71, 14-17=-20								
Concentrated Loads (lb)								
Vert: 11=-56(F) 5=-167(F) 20=-15(F) 21=-19(F) 22=-86(F) 25=-83(F) 26=-83(F) 29=-86(F) 30=-19(F) 31=-15(F) 32=-125(F) 33=-73(F) 34=-28(F) 35=-28(F) 36=-28(F) 37=-28(F) 38=-73(F) 39=-125(F)								

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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

Job

2523907

Truss

A02

Truss Type

HIP

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/30/2020

Ply

1

ID: wH4RYhEstNeUP2dXvOfi1syQY8e-OwBcdv_NURuH5G_LUBiPexdko_XAJp3Sqm8BYfylJlu

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:17 2020 Page 1

Job Reference (optional)

143654584

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

0-10-8

4-3-12

8-4-0

12-4-0

16-4-4

20-8-0

21-6-8

0-10-8

4-3-12

4-0-4

4-0-0

4-0-4

4-3-12

0-10-8

Scale = 1:37.1

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.16 11-14 >999	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.27 11-14 >929				
TCDL	20.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.06 7 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL	10.0										
								Weight: 69 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (4-4-1 max.): 4-5.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEDGE			
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2			

REACTIONS.	
(size)	2=0-4-0, 7=0-4-0
Max Horz	2=-49(LC 14)
Max Uplift	2=-102(LC 16), 7=-102(LC 16)
Max Grav	2=1249(LC 39), 7=1249(LC 39)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-2222/313, 3-4=-1874/261, 4-5=-1713/263, 5-6=-1874/261, 6-7=-2222/313
BOT CHORD	2-11=-241/2007, 9-11=-154/1713, 7-9=-247/2007
WEBS	3-11=-416/103, 4-11=0/288, 5-9=0/288, 6-9=-416/103

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-4-0, Exterior(2E) 8-4-0 to 12-4-0, Exterior(2R) 12-4-0 to 16-6-9, Interior(1) 16-6-9 to 21-6-8 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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) 2=102, 7=102.
- 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 17, 2020

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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

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2523907	Truss A03	Truss Type COMMON	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	143654585
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:18 2020 Page 1 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-s6l_qF??Fk08jQZY2vDeB9AuUOqN2DQb3Qul46ylJlt			
0-10-8 0-10-8	5-3-12 5-3-12	10-4-0 5-0-4	11/30/2020	15-4-4 5-0-4	20-8-0 5-3-12	21-6-8 0-10-8

Scale = 1:35.9

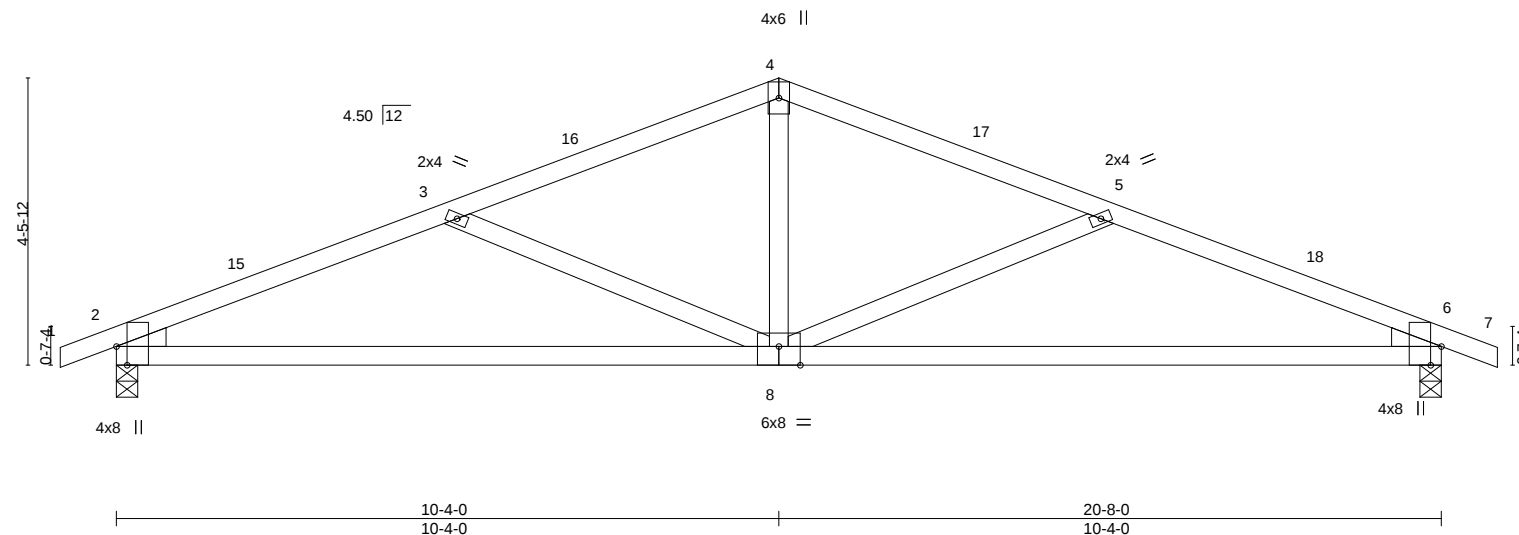


Plate Offsets (X,Y)--		[2:0-0-0,0-6-3], [2:0-3-8,Edge], [6:0-3-8,Edge], [6:0-0-0,0-6-3], [8:0-4-0,Edge]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15
TCDL	20.0	Rep Stress Incr	YES
BCLL	0.0	Code IRC2018/TPI2014	
BCDL	10.0		
		CSI.	
		TC	0.42
		BC	0.82
		WB	0.33
		Matrix-AS	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	-0.14 8-11 >999 240
		Vert(CT)	-0.31 8-11 >790 180
		Horz(CT)	0.06 6 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 70 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		
WEDGE			
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2			

REACTIONS.	(size) 2=0-4-0, 6=0-4-0
	Max Horz 2=-60(LC 14)
	Max Uplift 2=-102(LC 16), 6=-102(LC 16)
	Max Grav 2=1215(LC 2), 6=1215(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2184/350, 3-4=-1648/260, 4-5=-1648/260, 5-6=-2184/350
BOT CHORD	2-8=-262/1976, 6-8=-267/1976
WEBS	3-8=-599/162, 4-8=-32/634, 5-8=-599/162

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-4-0, Exterior(2R) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 21-6-8 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 2=102, 6=102.
 - 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



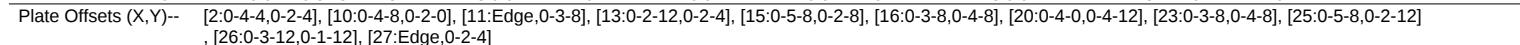
November 17, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017



DATE	BY	REMARKS
11/11/19	W. J. H.	...

BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 2-4-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-3 max.): 1-3, 9-11.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 1, 11, 23, 20, 16

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

TOP CHORD
1-27=-1526/103, 1-2=-930/71, 2-3=-10627/666, 3-4=-12008/730, 4-5=-10821/677,
5-6=-8207/533, 6-7=-8220/533, 7-8=-10884/696, 8-9=-13058/861, 9-10=-9688/662,
10-11=-388/41, 11-12=-517/45

BOT CHORD
23-25=-2105/152, 22-23=-3052/238, 20-22=-3052/238, 18-20=-2991/219,
16-18=-2991/219, 15-16=-954/22, 26-27=-613/10243, 24-26=-811/13216,
21-24=-806/13101, 17-21=-806/13101, 14-17=-806/13101, 13-14=-818/13250,
12-13=-593/9005

WEBS
24-25=-4/569, 4-25=-128/516, 4-23=-1492/92, 5-23=-110/2356, 5-20=-3050/200,
6-20=-326/5405, 7-20=-3121/222, 7-16=-126/2396, 8-16=-2429/205, 8-15=-114/1157,
2-26=-200/3563, 2-27=-10631/652, 25-26=-2437/158, 3-25=-339/115, 3-26=-3442/195,
10-13=-240/4335, 10-12=-10431/705, 13-15=-1243/23, 9-13=-5045/323, 17-18=0/254

NOTES-

- 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc, 2x4 - 1 row at 0-3-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-2-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 27-2 2x4 - 1 row at 0-7-0 oc, member 26-3 2x4 - 1 row at 0-7-0 oc, member 10-12 2x4 - 1 row at 0-7-0 oc, member 13-9 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1-0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1-10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.



November 17.2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020	Ply	2	
2523907	A04	ROOF SPECIAL GIRDER				I43654586
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	Job Reference (optional)			

- NOTES-**
- 6) Unbalanced snow loads have been considered for this design.
 - 7) Provide adequate drainage to prevent water ponding.
 - 8) All plates are MT20 plates unless otherwise indicated.
 - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 27=446, 12=466.
 - 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.
 - 13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-7-4 from the left end to 2-7-4 to connect truss(es) to front face of top chord.
 - 14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 4-7-4 from the left end to 16-5-12 to connect truss(es) to front face of bottom chord.
 - 15) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss) or equivalent at 18-7-4 from the left end to connect truss(es) to front face of top chord.
 - 16) Fill all nail holes where hanger is in contact with lumber.

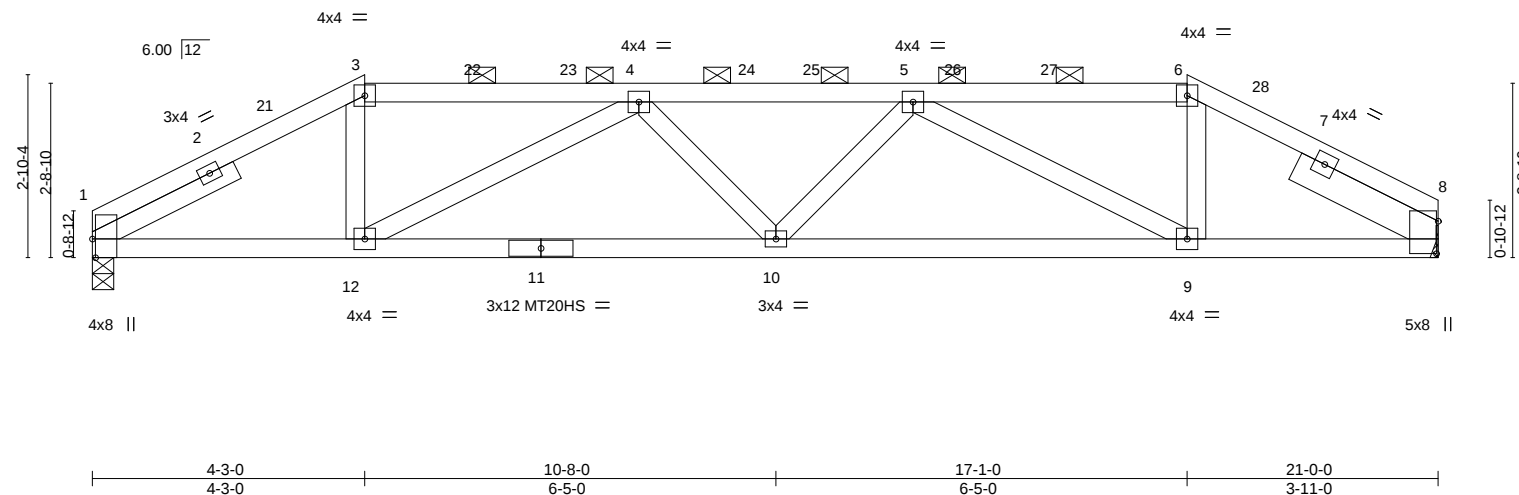
- LOAD CASE(S)** Standard
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-81, 3-6=-71, 6-9=-71, 9-11=-81, 15-25=-20, 12-27=-20
 - Concentrated Loads (lb)
 - Vert: 20=-1205(F) 2=-900(F) 10=-1681(F) 15=-1086(F) 18=-1116(F) 28=-923(F) 33=-958(F) 34=-958(F) 35=-1294(F) 36=-1027(F)

			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020			
Job	Truss	Truss Type	Q	Ply	I43654587	
2523907	B01	HIP GIRDER	1	1	Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:28 2020 Page 2		ID:wH4RYhEsTNeUP2dXvOf1syQY8e-Z1Mmwf7GupHjwyKTe?O_bFaVaQCEOf14M_JHRXylJlj	
NOTES-						
14) Fill all nail holes where hanger is in contact with lumber.						
15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.						
16) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-4=-71, 4-8=-81, 8-9=-71, 16-20=-20
- Concentrated Loads (lb)
- Vert: 3=37(F) 24=-74(F) 25=-74(F) 26=-74(F) 27=-74(F) 28=-74(F) 29=-74(F) 31=-74(F) 32=-74(F) 33=37(F) 34=-220(F) 35=-43(F) 36=-43(F) 37=-43(F) 38=-43(F) 39=-43(F) 40=-43(F) 41=-43(F) 42=-43(F) 43=-220(F)

Job 2523907	Truss B02	Truss Type Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/18/2020	Ply 1	I43654588
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) ID: wH4RYhEsTNeUP2dXvOf1syY8e-WQUWLL8XQQXR9GUrIQQSggv3Dy3saHMpl0NVPyIJih 11/18/2020		



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	in	(loc)	l/defl	L/d	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.76	Vert(LL)	-0.12	10	>999	MT20HS	148/108		
TCDL	20.0	Rep Stress Incr	YES	WB	0.59	Vert(CT)	-0.27	9-10	>939				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS		Horz(CT)	0.08	8	n/a				
BCDL	10.0												
										Weight: 80 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-4-5 max.): 3-6.

BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 8=Mechanical

Max Horz 1=38(LC 15)

Max Uplift 1=-77(LC 16), 8=-77(LC 16)

Max Grav 1=1155(LC 2), 8=1155(LC 2)

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

TOP CHORD 1-3=-1850/230, 3-4=-1589/225, 4-5=-2697/284, 5-6=-1483/213, 6-8=-1754/220

BOT CHORD 1-12=-154/1622, 10-12=-251/2640, 9-10=-254/2611, 8-9=-147/1517

WEBS 3-12=-9/615, 4-12=-1202/111, 5-9=-1291/123, 6-9=-12/633

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-3-0, Exterior(2R) 4-3-0 to 8-6-5, Interior(1) 8-6-5 to 17-1-0, Exterior(2E) 17-1-0 to 21-0-0 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
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - 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) 1, 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

Job

2523907

Truss

B03

Truss Type

Hip

143654589

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MITek Industries, Inc.

Tue Nov 17 10:03:31 2020

Page 1

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5-9-0

5-9-0

10-8-0

4-11-0

15-7-0

4-11-0

21-0-0

5-5-0

11/30/2020

Scale = 1:36.0

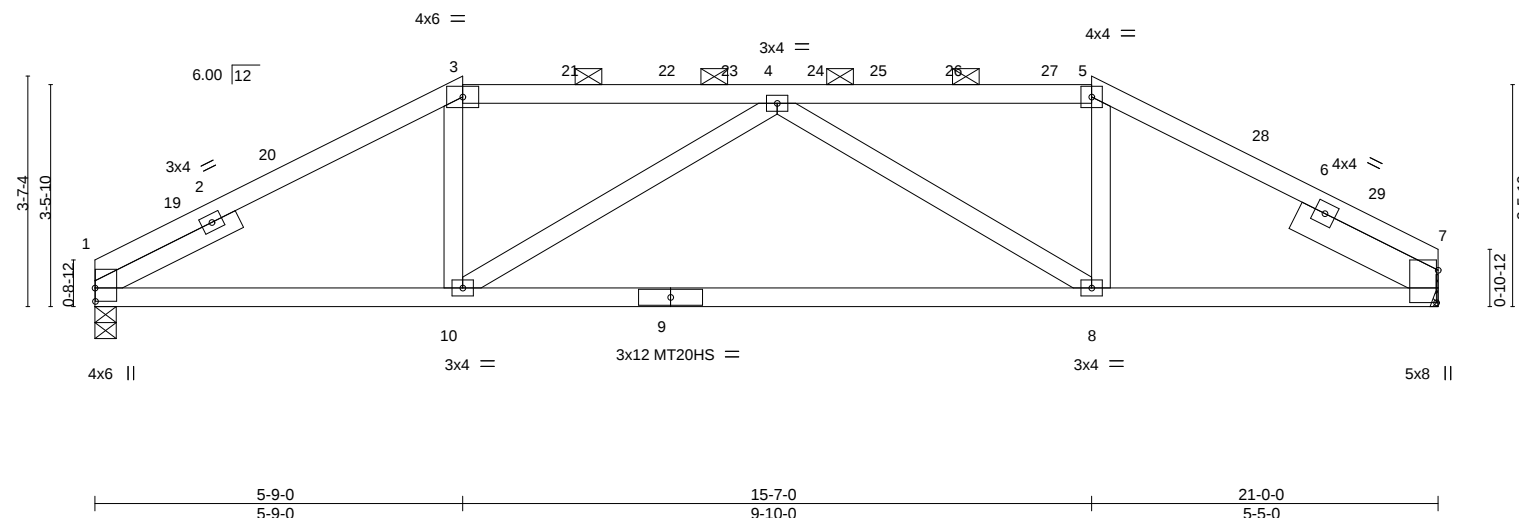


Plate Offsets (X,Y)--		[1:0-2-8,0-0-1], [7:0-6-1,0-0-5]	
LOADING (psf)		SPACING-	
TCLL (roof)	25.0	2-0-0	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15
TCDL	20.0	Lumber DOL	1.15
BCLL	0.0	Rep Stress Incr	YES
BCDL	10.0	Code	IRC2018/TPI2014
		CSI.	
		TC	0.63
		BC	0.83
		WB	0.42
		Matrix-AS	
		DEFL.	
		in	(loc)
		Vert(LL)	-0.27 8-10 >949
		Vert(CT)	-0.60 8-10 >423
		Horz(CT)	0.08 7 n/a
		L/d	240
			180
			n/a
		PLATES	
		MT20	197/144
		MT20HS	148/108
		Weight: 77 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (4-3-10 max.): 3-5.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0		

REACTIONS. (size) 1=0-4-0, 7=Mechanical
Max Horz 1=52(LC 15)
Max Uplift 1=-77(LC 16), 7=-77(LC 16)
Max Grav 1=1155(LC 2), 7=1155(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1810/218, 3-4=-1546/224, 4-5=-1468/216, 5-7=-1737/213
BOT CHORD 1-10=-135/1562, 8-10=-211/1968, 7-8=-127/1485
WEBS 3-10=0/466, 4-10=-587/89, 4-8=-666/100, 5-8=0/484

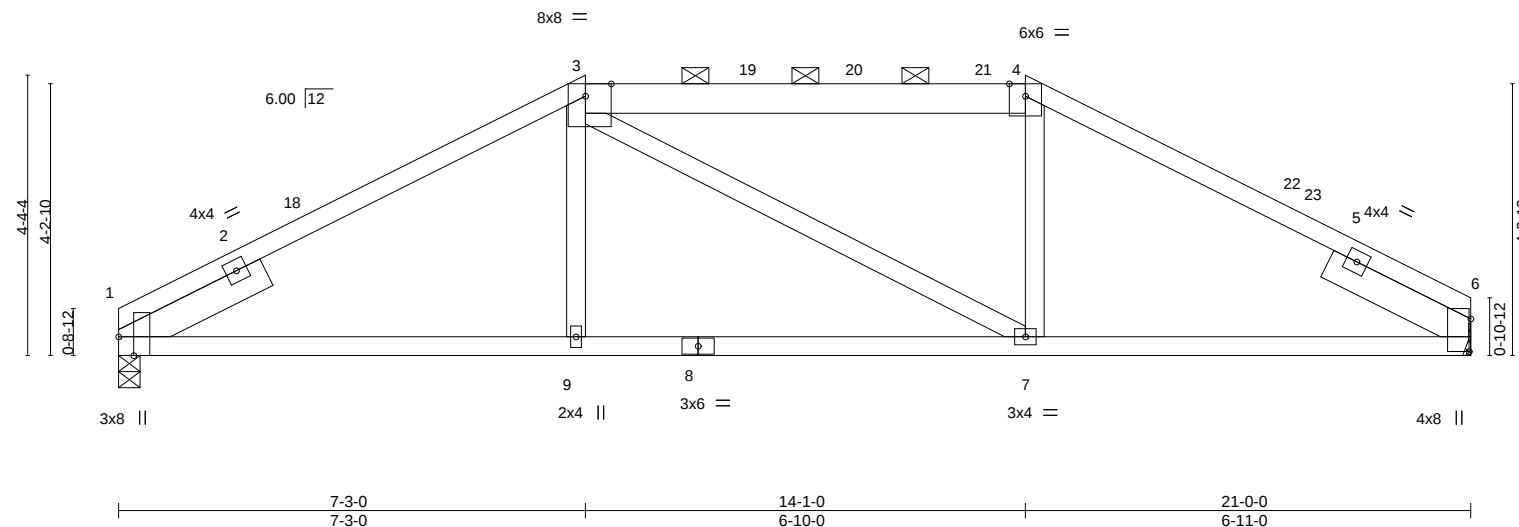
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-9-0, Exterior(2R) 5-9-0 to 9-11-15, Interior(1) 9-11-15 to 15-7-0, Exterior(2R) 15-7-0 to 19-9-15, Interior(1) 19-9-15 to 21-0-0 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - 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) 1, 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17,2020

Job 2523907	Truss B04	Truss Type Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	I43654590
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:33 2020 Page 1 ID: wH4RYhEsTNeUP2dxvOf1syQY8e-w?9f_NBPjLv70jCQqY_9lJlQIR0430BpWG026kylJle			
7-3-0 7-3-0			11-30-2020 6-10-0 21-0-0 6-11-0			

Scale = 1:35.8



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.08	in	(loc)	I/defl	L/d	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.17	7-9	>999		240		
TCDL	20.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.06	6	n/a	n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS									
BCDL	10.0											Weight: 81 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

SLIDER Left 2x6 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (5-2-0 max.): 3-4.

BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 6=Mechanical

Max Horz 1=66(LC 15)

Max Uplift 1=-77(LC 16), 6=-77(LC 16)

Max Grav 1=1155(LC 2), 6=1155(LC 2)

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

TOP CHORD 1-3=-1678/234, 3-4=-1399/247, 4-6=-1659/228

BOT CHORD 1-9=-142/1465, 7-9=-144/1459, 6-7=-129/1405

WEBS 3-9=0/287, 4-7=0/285

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-3-0, Exterior(2R) 7-3-0 to 11-5-15, Interior(1) 11-5-15 to 14-1-0, Exterior(2R) 14-1-0 to 18-3-15, Interior(1) 18-3-15 to 21-0-0 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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) 1, 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

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

Job: 2523907

Truss: B05

Truss Type: Hip

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

Ply: 1

Job Reference (optional): 143654591

Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID: wH4RYhEsTNeUP2dXvOfi1syQY8e-OBj1BjB1Uf1setnc_GVOQWqeDqLNoVxykwmbAyiJld

11/30/2020 13:30

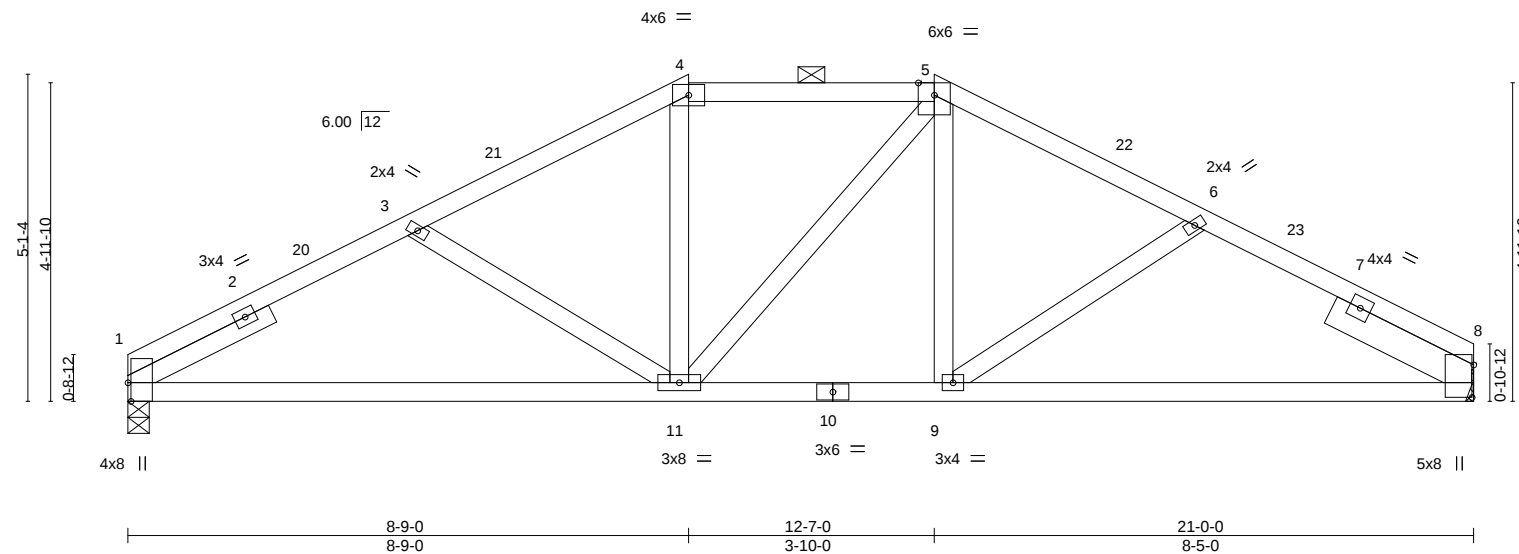
4-6-4
4-6-4

8-9-0
4-2-12

16-7-12
4-0-12

21-0-0
4-4-4

Scale = 1:36.0



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.10 11-14	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.61	Vert(CT)	-0.21 11-14	>999	180		
TCDL 20.0	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.05 8	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL 10.0								Weight: 85 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (5-1-0 max.): 4-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0	

REACTIONS. (size) 1=0-4-0, 8=Mechanical
Max Horz 1=81(LC 15)
Max Uplift 1=-77(LC 16), 8=-77(LC 16)
Max Grav 1=1228(LC 38), 8=1225(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1848/264, 3-4=-1528/231, 4-5=-1281/239, 5-6=-1494/228, 6-8=-1747/250
BOT CHORD 1-11=-195/1609, 9-11=-98/1262, 8-9=-171/1496
WEBS 3-11=-384/104, 4-11=-12/299, 5-9=0/263, 6-9=-283/87

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-9-0, Exterior(2E) 8-9-0 to 12-7-0, Exterior(2R) 12-7-0 to 16-9-7, Interior(1) 16-9-7 to 21-0-0 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
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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) 1, 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

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

Job 2523907	Truss B06	Truss Type Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	143654592
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:36 2020 Page 1 ID: wH4RYhEsTNeUP24XvOf1syQY8e-KarncPDIOGlatBx76hXsvxwyXe77GNIFCEfij3ylJlb						

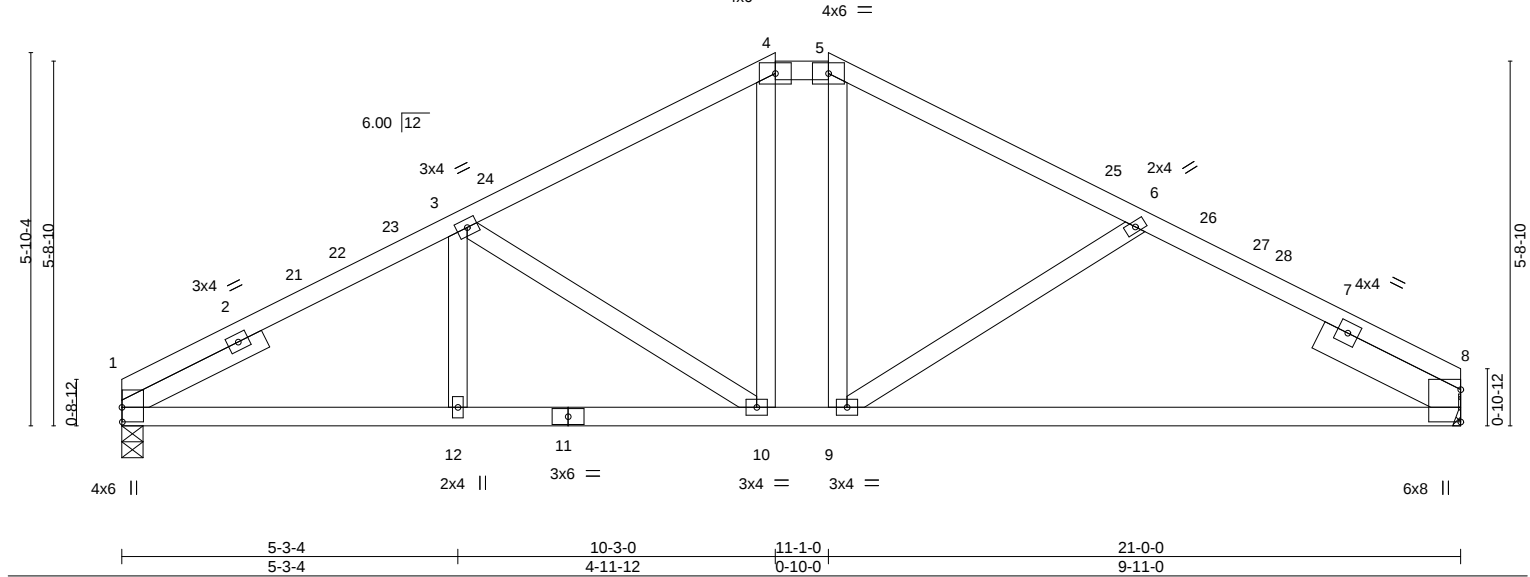


Plate Offsets (X,Y)-- [1:0-2-12,0-0-1]							
LOADING (psf)		SPACING-		CSI.		DEFL.	
TCLL (roof)	25.0	2-0-0		TC	0.45	in (loc)	l/def
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.72	Vert(LL)	L/d
TCDL	20.0	Lumber DOL	1.15	WB	0.30	Vert(CT)	
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	
BCDL	10.0	Code IRC2018/TPI2014					
						PLATES	GRIP
						MT20	197/144
						Weight: 86 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (4-8-12 max.): 4-5.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0		

REACTIONS. (size) 1=0-4-0, 8=Mechanical
 Max Horz 1=95(LC 15)
 Max Uplift 1=-77(LC 16), 8=-77(LC 16)
 Max Grav 1=1314(LC 38), 8=1314(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-2009/217, 3-4=-1545/212, 4-5=-1276/209, 5-6=-1541/205, 6-8=-1897/230
 BOT CHORD 1-12=-150/1736, 10-12=-150/1736, 9-10=-56/1276, 8-9=-146/1626
 WEBS 3-10=-535/110, 4-10=-72/327, 5-9=0/411, 6-9=-405/115

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-3-0, Exterior(2E) 10-3-0 to 11-1-0, Exterior(2R) 11-1-0 to 15-3-15, Interior(1) 15-3-15 to 21-0-0 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
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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) 1, 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

Job

2523907

Truss

B07

Truss Type

Common

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

ID: wH4RYhEsTNeUP2dXvOfi1syQY8e-pmPApkEwnaQrVLWBfO35S9S8M2N7?s4OQu_FFvylJla

11/30/2020

Ply

1

Job Reference (optional)

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 17 10:03:37 2020

Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

5-5-12

5-5-12

10-8-0

5-2-4

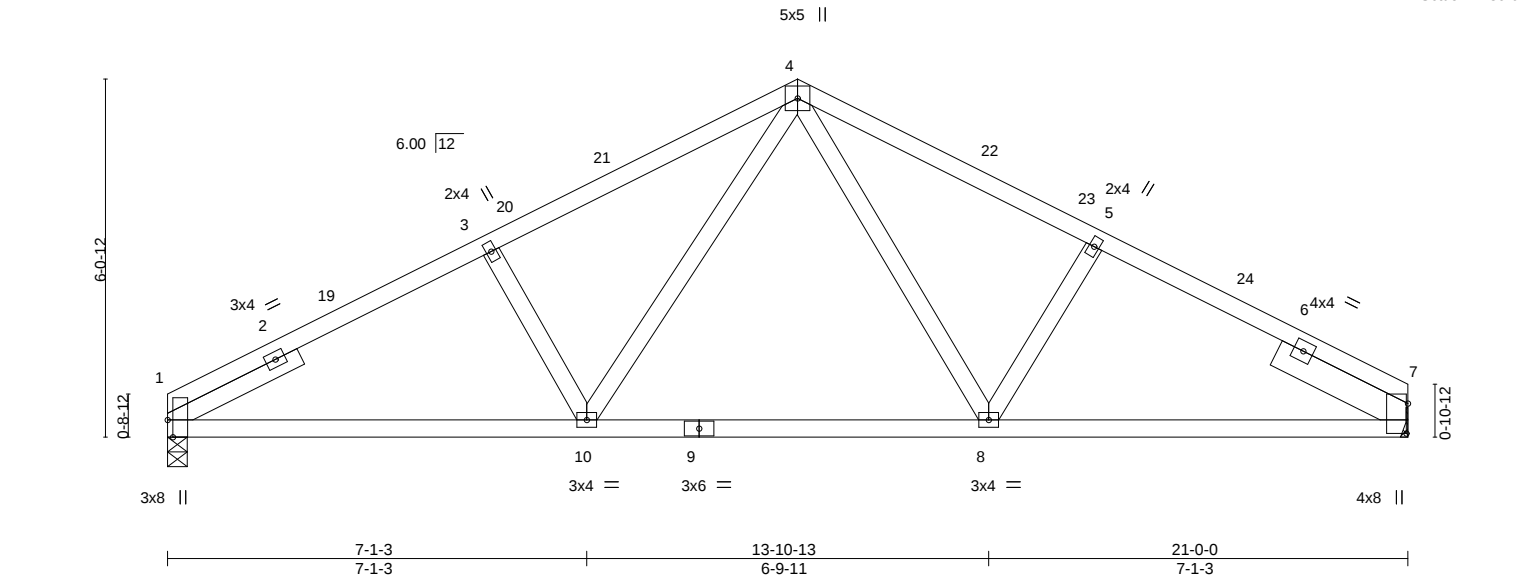
15-8-4

5-0-4

21-0-0

5-3-12

Scale = 1:39.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.07	MT20	197/144		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.17				
TCDL	20.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.05				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL	10.0										
								Weight: 81 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0		

REACTIONS. (size) 1=0-4-0, 7=Mechanical
Max Horz 1=100(LC 15)
Max Uplift 1=-77(LC 16), 7=-77(LC 16)
Max Grav 1=1155(LC 2), 7=1155(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1764/283, 3-4=-1615/307, 4-5=-1533/294, 5-7=-1685/274
BOT CHORD 1-10=-196/1525, 8-10=-82/1074, 7-8=-178/1438
WEBS 3-10=-392/147, 4-10=-84/563, 4-8=-66/478, 5-8=-340/135

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-8-0, Exterior(2R) 10-8-0 to 13-8-0, Interior(1) 13-8-0 to 21-0-0 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - 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) 1, 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17,2020

Scale = 1:60.9



1) 2-ply truss to be connected together with 10d (0 120"x3") nails as follows:

- d.20. Graphical pulvin representation does not depict the size or the orientation of the pulvin along the top and/or bottom chord



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020					
Job	Truss	Truss Type	Ply			143654594		
2523907	C01	HIP GIRDER	2			Job Reference (optional)		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:40 2020 Page 2 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-DL4lSmGo4Vo0MoFmLWco4n4aqFRmC0ir7rDvsqylJlX					
NOTES- 13) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-7-4 from the left end to 6-7-4 to connect truss(es) to front face of bottom chord. 14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 8-7-4 from the left end to 30-7-4 to connect truss(es) to front face of bottom chord. 15) Fill all nail holes where hanger is in contact with lumber.								

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-71, 3-8=-81, 8-10=-71, 11-20=-20
Concentrated Loads (lb)
Vert: 18=-604(F) 17=-604(F) 24=-577(F) 25=-574(F) 26=-645(F) 27=-604(F) 28=-604(F) 29=-717(F) 30=-717(F) 31=-717(F) 32=-717(F) 33=-717(F) 34=-715(F) 35=-637(F) 36=-579(F) 37=-635(F)

Job

2523907

Truss

C02

Truss Type

Roof Special

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/30/2020

ID: wH4RYhEsTNeUP2dXvOf1syQY8e-dwmR40lhMQAbDGzL0f9viQi3MTN6PPnHppRaS9yIJiU

Ply

1

Job Reference (optional)

I43654595

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 17 10:03:43 2020

Page 1

1-10-0

6-6-5

11-2-11

14-2-0

18-5-5

21-2-0

25-2-0

32-0-0

1-10-0

4-8-5

4-8-5

2-11-5

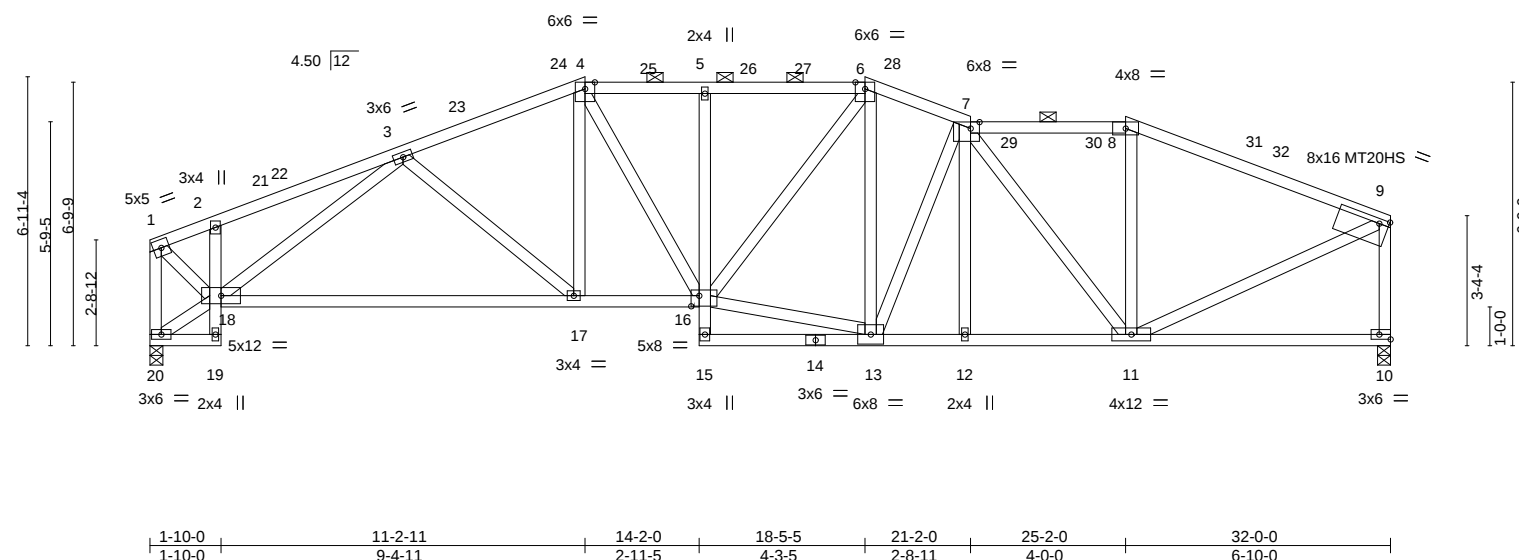
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2-8-11

4-0-0

6-10-0

Scale = 1:59.4



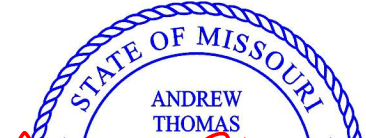
LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-8-4 max.): 4-5, 7-8.
BOT CHORD	2x4 SPF No.2	BOT CHORD	
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.

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

TOP CHORD	1-2=-1475/225, 2-3=-2800/334, 3-4=-2801/409, 4-5=-2156/330, 5-6=-2364/338, 6-7=-2402/314, 7-8=-1339/212, 8-9=-1483/202, 1-22=-1785/235, 9-10=-1702/221
BOT CHORD	2-20=-1228/200, 19-20=-293/1505, 18-19=-261/2125, 17-18=-203/2151, 12-13=-295/2318, 11-12=-296/2315
WEBS	2-19=-111/1074, 3-19=-644/144, 15-17=0/259, 5-17=-74/601, 7-11=-1463/161, 9-11=-199/1680, 1-20=-228/1873, 4-19=-98/588, 7-13=-299/52, 6-13=-358/49, 13-17=-218/2215, 4-17=-76/350

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-10-11, Exterior(2E) 13-10-11 to 15-9-5, Exterior(2R) 15-9-5 to 18-9-5 to Interior(1) 18-9-5 to 27-10-0, Exterior(2R) 27-10-0 to 30-10-0, Interior(1) 30-10-0 to 31-10-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 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=116, 22=115.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





November 17, 2020

Job 2523907	Truss C04	Truss Type ROOF SPECIAL	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	I43654597
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) ID: wH4RYhEsTNeUP2dXVOfi1syQY8e-Wh?yw9LBQfg0htH6FUERsGtnl4kiLHHtkRPncwylJIQ 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:47 2020 Page 1		

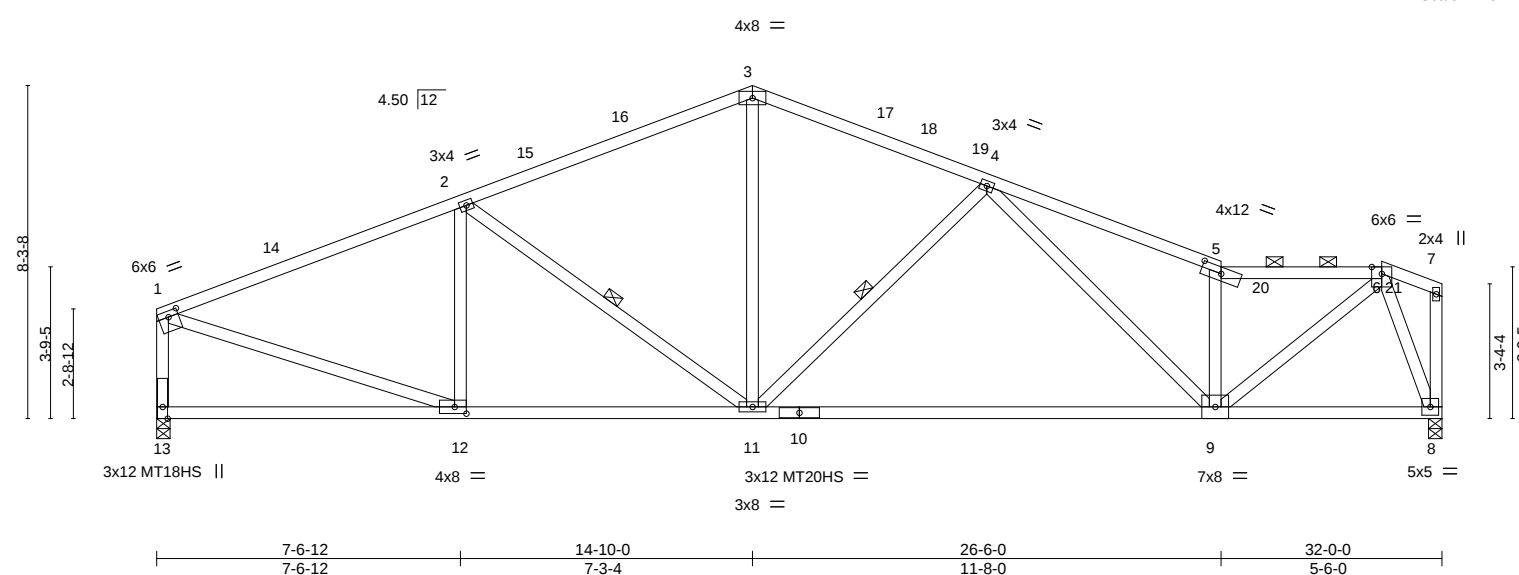


Plate Offsets (X,Y)--		[1:0-3-0,0-1-12], [5:0-6-0,0-1-15], [12:0-3-8,0-2-0]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	20.0	Rep Stress Incr	YES
BCLL	0.0	Code	IRC2018/TPI2014
BCDL	10.0		
		CSI.	
		TC	0.74
		BC	0.78
		WB	0.54
		Matrix-AS	
		DEFL.	
		Vert(LL)	-0.37 9-11 >999 240
		Vert(CT)	-0.81 9-11 >470 180
		Horz(CT)	0.07 8 n/a n/a
		PLATES	GRIP
		MT20	197/144
		MT20HS	148/108
		MT18HS	197/144
		Weight: 146 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-7-12 max.): 5-6.
BOT CHORD	2x4 SPF 1650F 1.5E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 2-11, 4-11

REACTIONS.	(size) 13=0-4-0, 8=0-4-0
	Max Horz 13=172(LC 15)
	Max Uplift 13=-115(LC 16), 8=-116(LC 16)
	Max Grav 13=1744(LC 2), 8=1744(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-2223/242, 2-3=-2019/270, 3-4=-1988/273, 4-5=-2521/283, 5-6=-2326/230, 1-13=-1664/202
BOT CHORD	11-12=-255/1983, 9-11=-262/2199, 8-9=-107/654
WEBS	2-12=-501/116, 2-11=-394/89, 3-11=-53/787, 4-11=-700/139, 5-9=-1309/187, 6-9=-185/2200, 1-12=-178/1961, 6-8=-1805/227

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 14-10-0, Exterior(2R) 14-10-0 to 17-10-0, Interior(1) 17-10-0 to 30-6-0, Exterior(2E) 30-6-0 to 31-10-4 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=115, 8=116.
 - 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

Job 2523907	Truss C05	Truss Type ROOF SPECIAL	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020	Ply 1	I43654598
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:49 2020 Page 1 ID: wH4RYhEsTNeUP2dXvOf1syQY8e-S47iKrNSyGwKxBRVMvGvxhy4OtOKpCH9BluugpylJIO		

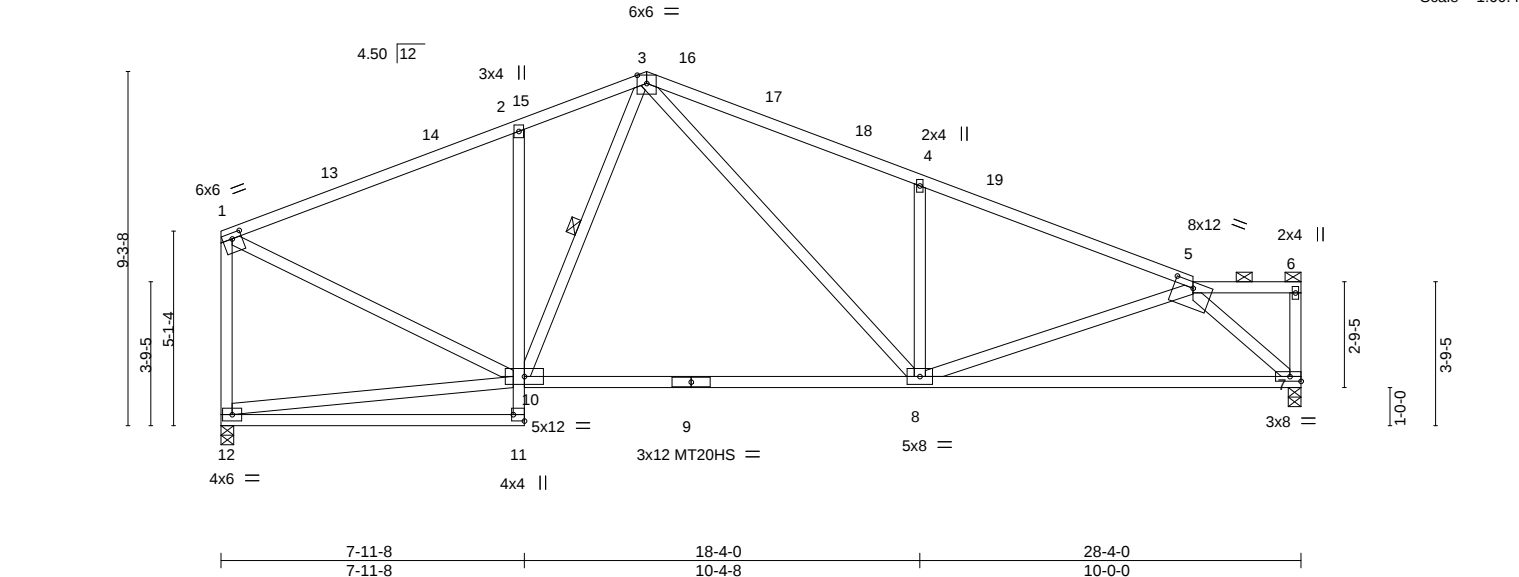


Plate Offsets (X,Y)-- [1:0-3-0,0-1-12], [5:0-6-0,0-1-15], [11:Edge,0-3-8]					
LOADING (psf)		SPACING-	2-0-0	CSI.	DEFL.
TCLL (roof) 25.0		Plate Grip DOL	1.15	TC 0.89	in (loc) l/defl L/d
Snow (Pf/Pg) 20.4/20.0		Lumber DOL	1.15	BC 0.90	Vert(LL) -0.24 8-10 >999 240
TCDL 20.0		Rep Stress Incr	YES	WB 0.51	Vert(CT) -0.54 8-10 >625 180
BCLL 0.0		Code IRC2018/TPI2014		Matrix-AS	Horz(CT) 0.06 7 n/a n/a
BCDL 10.0					
				Weight: 140 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x4 SPF No.2		BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 5-6.
WEBS 2x4 SPF No.2		WEBS	Rigid ceiling directly applied.
			1 Row at midpt 3-10

REACTIONS.	(size) 7=0-4-0, 12=0-4-0
	Max Horz 12=-212(LC 14)
	Max Uplift 7=-102(LC 16), 12=-103(LC 16)
	Max Grav 7=1542(LC 2), 12=1542(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 1-2=-1559/233, 2-3=-1494/292, 3-4=-2249/339, 4-5=-2228/247, 1-12=-1478/191	
BOT CHORD 2-10=-590/146, 8-10=-150/1298, 7-8=-207/1511	
WEBS 3-10=-139/292, 3-8=-138/1169, 4-8=-814/185, 5-8=-11/503, 5-7=-2019/281, 1-10=-150/1451	

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 28-2-4 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
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=102, 12=103.
 - 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

Job 2523907	Truss C06	Truss Type ROOF SPECIAL	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	I43654599
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) ID:wH4RYhESTNeUP2dXvOf1syQY8e-wGh4YBO4ja2bZK0hwdn8UuVFHHEYfvJQPcRFyIJIN 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:50 2020 Page 1			
7-11-8 7-11-8			11-2-0 3-2-8		16-9-8 5-7-8	
4x6 =			22-5-0 5-7-8		28-4-0 5-11-0	

Scale = 1:58.4

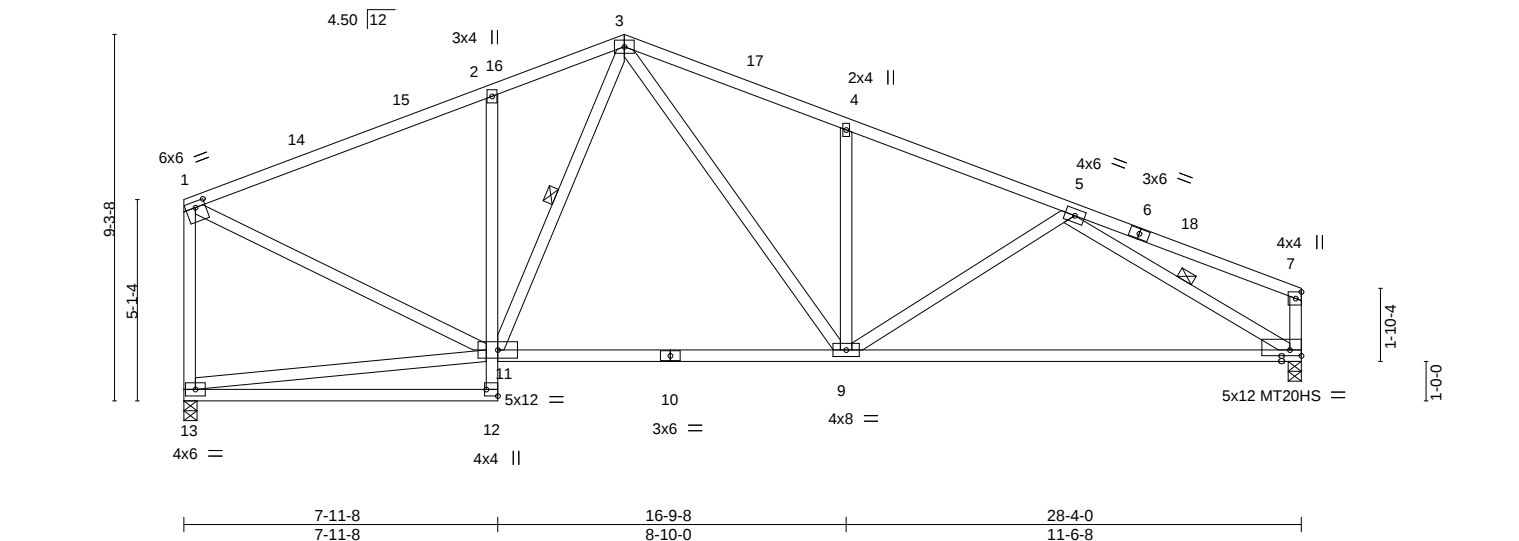


Plate Offsets (X,Y)--		[1:0-3-0,0-1-12], [8:Edge,0-1-12], [12:Edge,0-3-8]	
LOADING (psf)		SPACING-	
TCLL (roof)	25.0	2-0-0	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15
TCDL	20.0	Lumber DOL	1.15
BCLL	0.0	Rep Stress Incr	YES
BCDL	10.0	Code IRC2018/TPI2014	
		CSI.	
		TC	0.88
		BC	0.79
		WB	0.48
		Matrix-AS	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	-0.33 8-9 >999
		Vert(CT)	-0.69 8-9 >487
		Horz(CT)	0.07 8 n/a
		PLATES	
		MT20	197/144
		MT20HS	148/108
		Weight: 142 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SPF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied.
	8-10: 2x4 SPF 1650F 1.5E	WEBS	1 Row at midpt 3-11, 5-8
WEBS	2x4 SPF No.2		

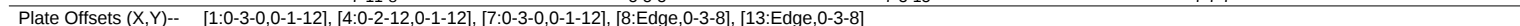
REACTIONS.	
(size)	13=0-4-0, 8=0-4-0
Max Horz	13=-215(LC 14)
Max Uplift	13=-103(LC 16), 8=-101(LC 16)
Max Grav	13=1542(LC 2), 8=1542(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-1553/236, 2-3=-1494/297, 3-4=-2077/327, 4-5=-2067/258, 5-7=-308/51, 1-13=-1472/194, 7-8=-323/59
BOT CHORD	2-11=-599/151, 9-11=-102/1294, 8-9=-226/1895
WEBS	4-9=-542/142, 3-9=-119/1004, 3-11=-123/272, 5-8=-2019/270, 1-11=-154/1446

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 28-2-4 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=103, 8=101.
 - 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020



LUMBER		BRACING	
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

- 



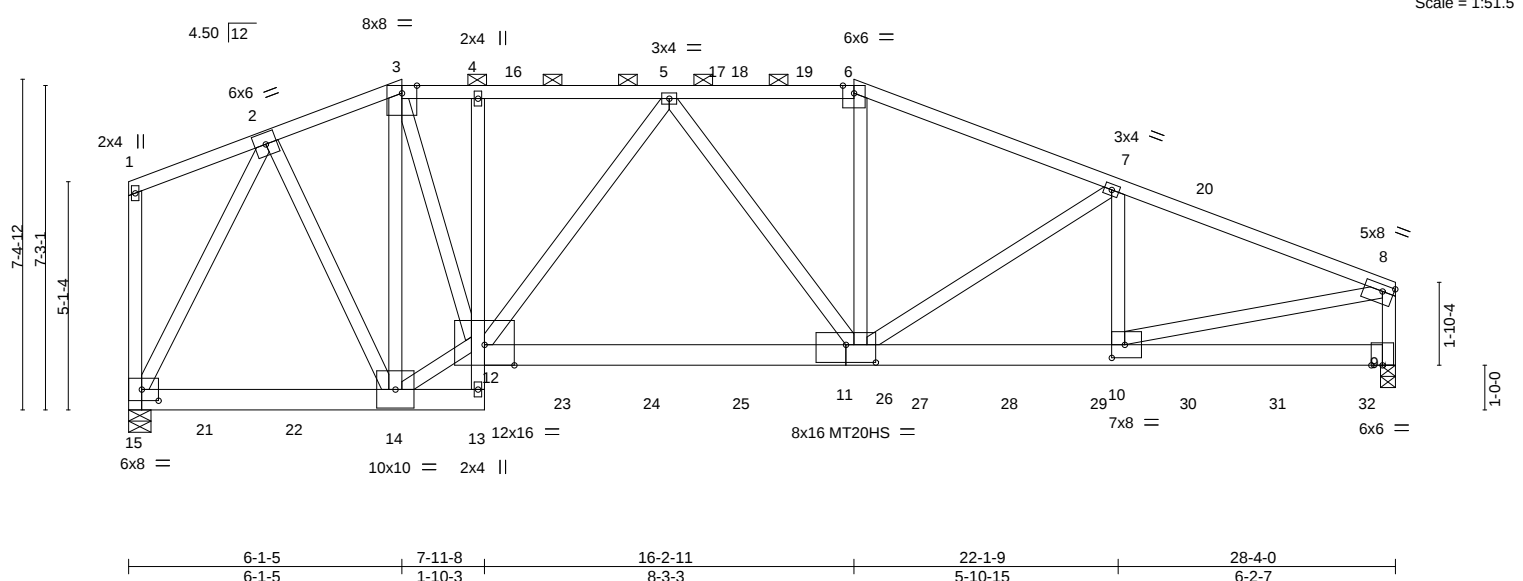


Plate Offsets (X,Y)--		[8:0-3-0,0-1-12], [10:0-3-8,0-3-8], [11:0-8-0,0-4-12], [15:0-4-8,0-3-0]	
LOADING (psf)		SPACING-- 2-0-0	
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	20.0	Rep Stress Incr	NO
BCLL	0.0	Code IRC2018/TPI2014	
BCDL	10.0		
		CSL	
		TC	0.63
		BC	0.81
		WB	0.98
		Matrix-MS	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	-0.22 11-12 >999 240
		Vert(CT)	-0.50 11-12 >680 180
		Horz(CT)	0.10 9 n/a n/a
		PLATES	
		MT20	197/144
		MT20HS	148/108
		Weight: 338 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 6-8: 2x4 SPF 1650F 1.5E	TOP CHORD	Structural wood sheathing directly applied or 4-8-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-14 max.): 3-6.
BOT CHORD	2x6 SPF 2100F 1.8E *Except* 13-15: 2x6 SPF No.2, 4-13: 2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 13-14.
WEBS	2x4 SPF No.2		

REACTIONS.		(size) 15=0-6-0, 9=0-4-0
		Max Horz 15=-184(LC 55)
		Max Uplift 15=-664(LC 12), 9=-691(LC 12)
		Max Grav 15=6137(LC 2), 9=6386(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-4738/605, 3-4=-6060/766, 4-5=-6126/772, 5-6=-7598/968, 6-7=-8101/1005, 7-8=-8664/1003, 8-9=-5176/599
BOT CHORD	14-15=-277/2748, 13-14=-407/121, 4-12=-434/64, 11-12=-748/7070, 10-11=-863/8025, 9-10=-50/480
WEBS	2-14=-405/3885, 3-14=-3909/437, 12-14=-552/5551, 3-12=-646/5631, 5-12=-1642/222, 5-11=-201/1095, 6-11=-281/2426, 7-11=-716/70, 7-10=-340/267, 2-15=-5963/642, 8-10=-854/7795

- NOTES-**
- 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TC LL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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) 15, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

			RELEASE FOR CONSTRUCTION		
Job	Truss	Truss Type	2	Ply	
2523907	C08	HIP GIRDER	AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)		
NOTES-			ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-HEUzbuSCX6huf6ufjANJBByCAyIT4DoN2ZhLCuSylJII		
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=664, 9=691.			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:55 2020 Page 2		
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.					
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.					
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 703 lb down and 84 lb up at 1-8-12, 726 lb down and 83 lb up at 3-8-12, 703 lb down and 84 lb up at 5-8-12, 712 lb down and 83 lb up at 7-9-12, 671 lb down and 113 lb up at 9-8-12, 671 lb down and 113 lb up at 11-8-12, 671 lb down and 113 lb up at 13-8-12, 671 lb down and 113 lb up at 15-8-12, 736 lb down and 107 lb up at 17-8-12, 647 lb down and 97 lb up at 19-8-12, 643 lb down and 88 lb up at 21-8-12, 658 lb down and 82 lb up at 23-8-12, and 687 lb down and 76 lb up at 25-8-12, and 728 lb down and 72 lb up at 27-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.					
LOAD CASE(S) Standard					
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15					
Uniform Loads (plf)					
Vert: 1-3=-71, 3-6=-81, 6-8=-71, 13-15=-20, 9-12=-20					
Concentrated Loads (lb)					
Vert: 13=-709(F) 14=-687(F) 21=-654(F) 22=-726(F) 23=-658(F) 24=-658(F) 25=-658(F) 26=-658(F) 27=-736(F) 28=-636(F) 29=-577(F) 30=-642(F) 31=-687(F) 32=-728(F)					

 **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

Job
2523907

Truss
D01

Truss Type
HALF HIP GIRDER

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

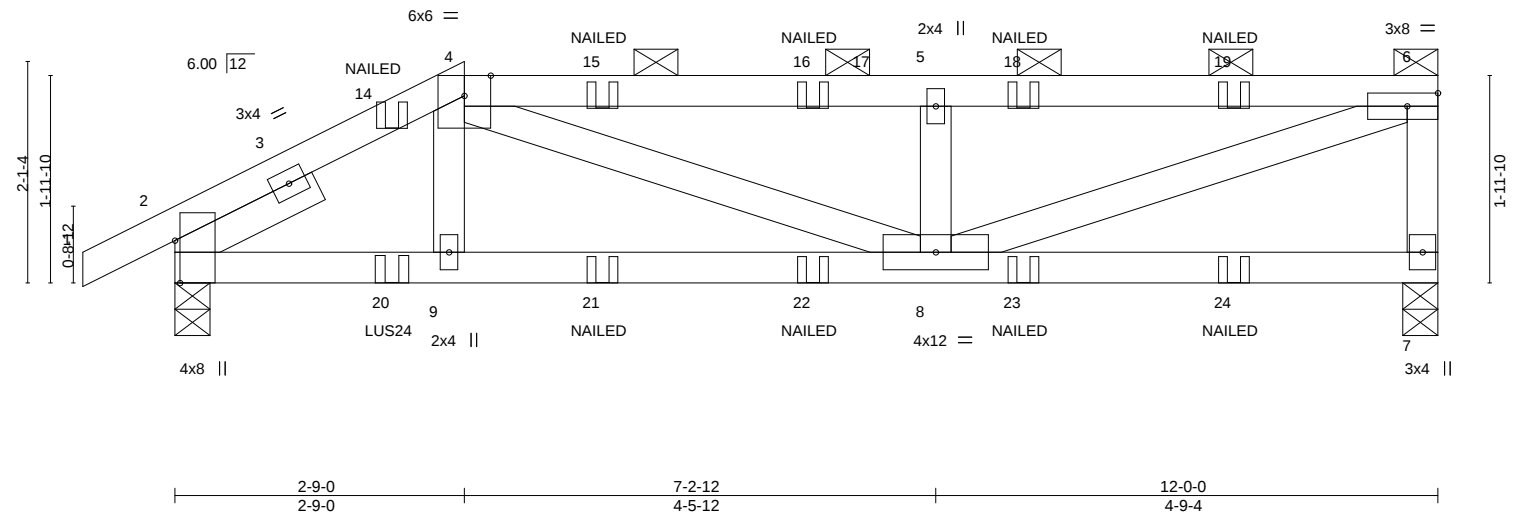
Ply
1

Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:57 2020 Page 1

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

0-10-8 2-9-0 7-2-12 11/30/2020 12-0-0 4-9-4

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Dccj0aTT3jxbuP21qbPnGNHW469kpsL17qJyLylJIG



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	2-0-0	TC	0.59	Vert(LL)	-0.06	in	(loc)	I/defl	L/d
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.12	8-9	>999	240	
TCDL	20.0	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.01	7	n/a	180	
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										
Weight: 46 lb											FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 4-4-3 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-0 max.): 4-6.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 1-6-0		

REACTIONS. (size) 7=0-4-0, 2=0-4-0
Max Horz 2=62(LC 11)
Max Uplift 7=-75(LC 9), 2=-133(LC 12)
Max Grav 7=985(LC 31), 2=1034(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1442/153, 4-5=-1896/150, 5-6=-1892/149, 6-7=-904/95
BOT CHORD 2-9=-157/1268, 8-9=-159/1253
WEBS 4-8=-14/685, 5-8=-701/123, 6-8=-153/1911

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 7 except (jt=lb) 2=133.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 2-0-12 from the left end to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
Continued on page 2



November 17,2020

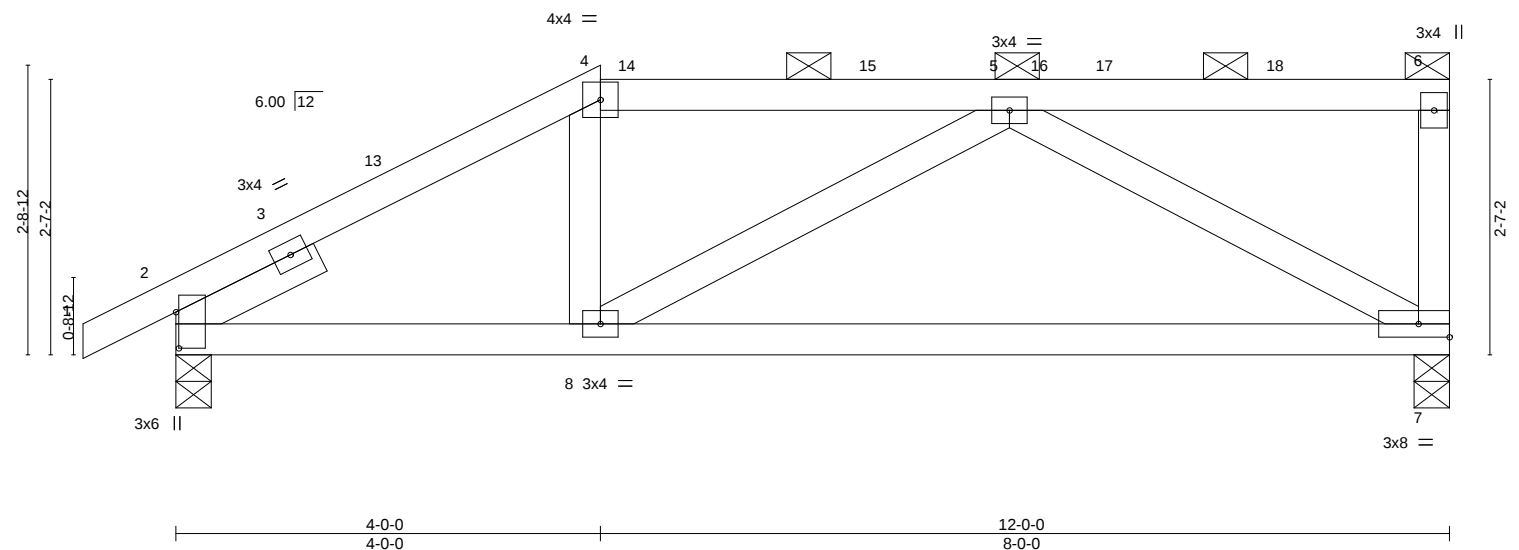
Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020			
2523907	D01	HALF HIP GIRDER			1	I43654602
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:57 2020 Page 2			
			ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Dccj0aTT3jxbuP21qbPnGNHW469khsL1?qJyLyIJIG			
			Job Reference (optional)			

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-4=-71, 4-6=-81, 7-10=-20
- Concentrated Loads (lb)
 - Vert: 14=37(F) 15=-74(F) 16=-74(F) 18=-74(F) 19=-74(F) 20=-220(F) 21=-43(F) 22=-43(F) 23=-43(F) 24=-43(F)



Job 2523907	Truss D02	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply 1 Job Reference (optional) ID:WH4RYhEsTNeUP2dXvOfi1syQY8e-hpA6DwU5q13SWZdEOlx0paqm7WZJQI8UGfasUnylJIF
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:58 2020 Page 1 Scale = 1:21.7		



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	2-0-0	TC	0.31	in	(loc)	l/defl	L/d	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.46	Vert(LL)	-0.10	7-8	>999				
TCDL	20.0	Rep Stress Incr	YES	WB	0.34	Vert(CT)	-0.22	7-8	>651				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS		Horz(CT)	0.02	7	n/a				
BCDL	10.0												
										Weight: 46 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 4-6.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 1-6-0		

REACTIONS.	
(size)	2=0-4-0, 7=0-4-0
Max Horz	2=83(LC 15)
Max Uplift	2=-70(LC 16), 7=-58(LC 13)
Max Grav	2=734(LC 2), 7=714(LC 35)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-4=-922/181, 4-5=-769/188
BOT CHORD	2-8=-205/774, 7-8=-212/832
WEBS	5-7=-880/221

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-0, Exterior(2R) 4-0-0 to 8-2-15, Interior(1) 8-2-15 to 11-10-4 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 2, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

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

Job 2523907	Truss D03	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply 1 Job Reference (optional) 143654604
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:03:59 2020 Page 1 ID: wH4RYhEsTNeUP2dXvOfi1syQY8e-97kURGvJbLBj8JCQy0SFL0NpZvxc9hFeUJJQ1EylJIE		

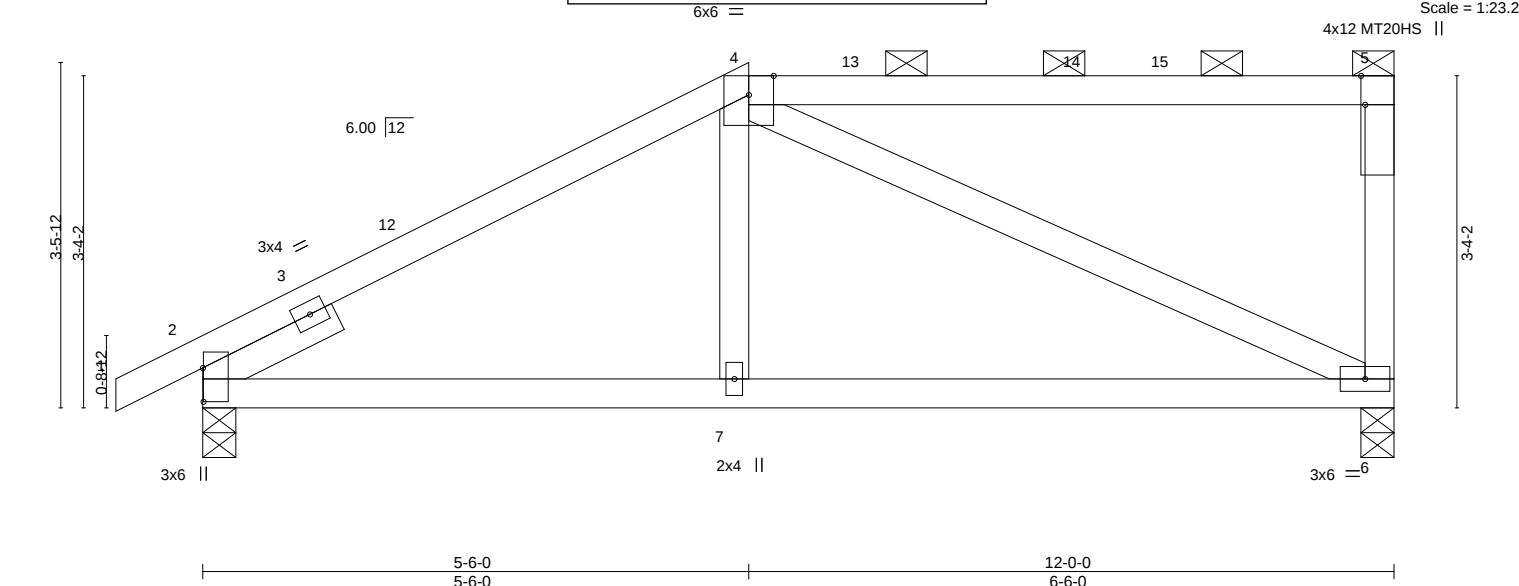


Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [5:0-3-8,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC 0.78		Vert(LL)	-0.05 6-7 >999 240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC 0.33		Vert(CT)	-0.09 6-7 >999 180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB 0.60		Horz(CT)	0.01 6 n/a n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS					
BCDL	10.0							Weight: 45 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 1-6-0		

REACTIONS. (size) 2=0-4-0, 6=0-4-0
 Max Horz 2=110(LC 15)
 Max Uplift 2=-69(LC 16), 6=-59(LC 13)
 Max Grav 2=754(LC 36), 6=680(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-851/177, 5-6=-348/97
 BOT CHORD 2-7=-232/701, 6-7=-234/695
 WEBS 4-6=-680/210

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-6-0, Exterior(2R) 5-6-0 to 9-8-15, Interior(1) 9-8-15 to 11-10-4 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
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

Job 2523907	Truss D04	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:01 2020 Page 1 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-6OsEsyWz7yR1N1Lp3RUjQDSBPjbJdd?xydoW56ylJIC
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

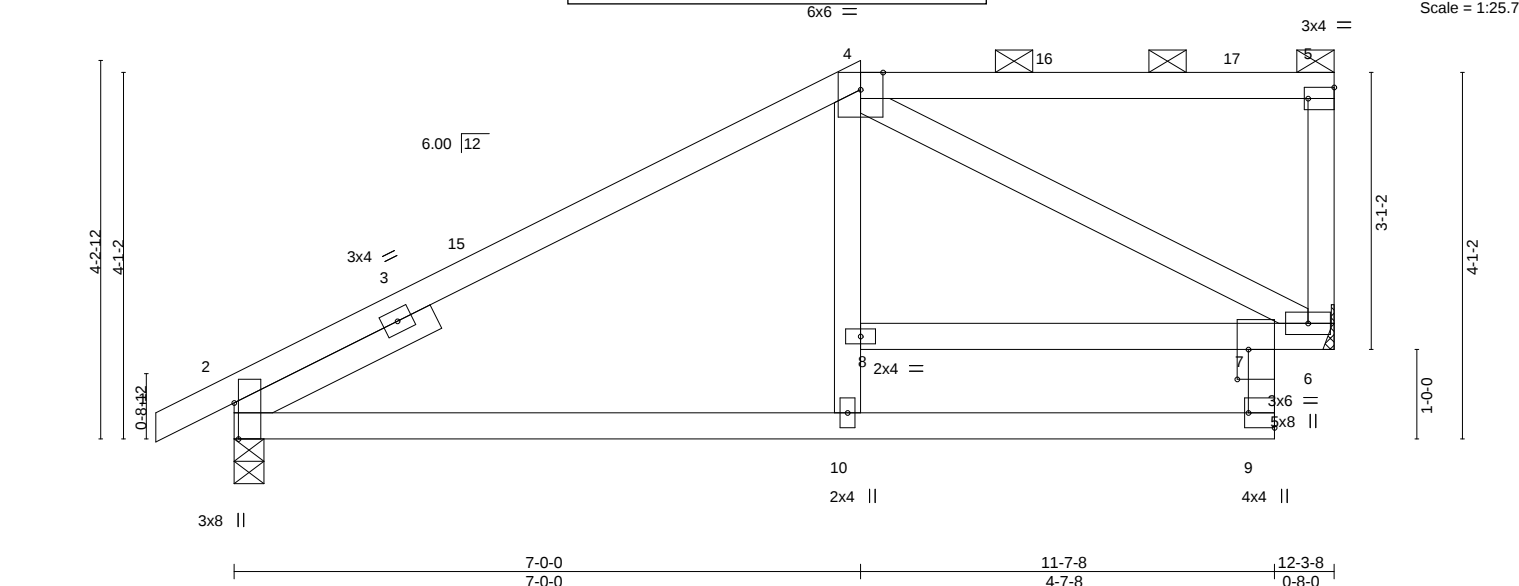


Plate Offsets (X,Y)--		[2:0-4-13,Edge], [5:Edge,0-1-8], [7:0-4-0,0-1-8], [9:Edge,0-3-8]			
LOADING (psf)		SPACING		CSI	
TCLL (roof)	25.0	2-0-0		TC	0.69
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.50
TCDL	20.0	Lumber DOL	1.15	WB	0.46
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS	
BCDL	10.0	Code IRC2018/TPI2014			
				DEFL.	in (loc) l/defl L/d
				Vert(LL)	-0.09 10-13 >999 240
				Vert(CT)	-0.18 10-13 >816 180
				Horz(CT)	0.06 6 n/a n/a
				PLATES	GRIP
				MT20	197/144
				Weight: 53 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 2-6-0		

REACTIONS. (size) 6=Mechanical, 2=0-4-0
 Max Horz 2=116(LC 13)
 Max Uplift 6=-59(LC 13), 2=-68(LC 16)
 Max Grav 6=665(LC 2), 2=808(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-692/150, 5-6=-269/73
 BOT CHORD 2-10=-200/588, 9-10=-122/393, 7-8=-108/259, 6-7=-230/652
 WEBS 4-6=-732/232

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-0-0, Exterior(2R) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 12-1-12 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) TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - 4) Unbalanced snow loads have been considered for this design.
 - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 6) Provide adequate drainage to prevent water ponding.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) Refer to girder(s) for truss to truss connections.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
 - 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

Job
2523907

Truss
D05

Truss Type
HALF HIP

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

Ply
1

Job Reference (optional)
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-aaPc3lXbuGZu?Aw?d87yzQ?S_7yTM7i4AGY4dYyJlB

I43654606

Page 1

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:02 2020

-0-10-8
0-10-8

4-4-12
4-4-12

11-7-8
3-1-8

12-3-8
0-8-0

11/30/2020

Scale = 1:29.6

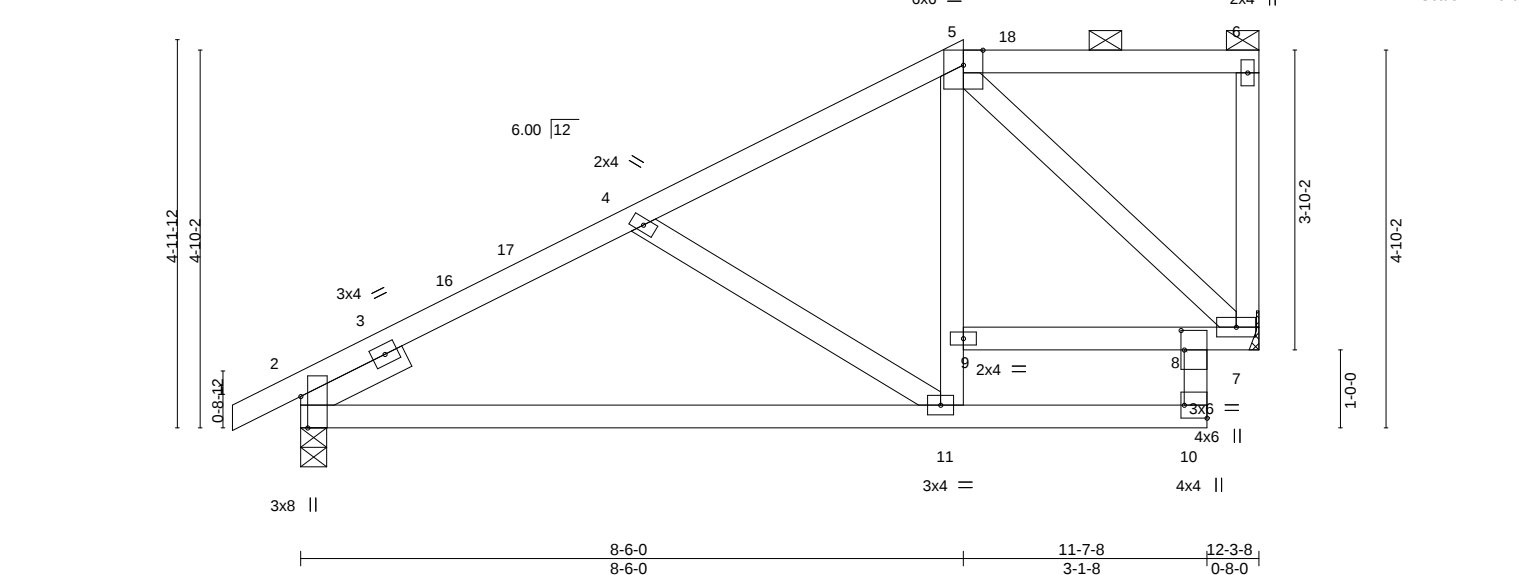


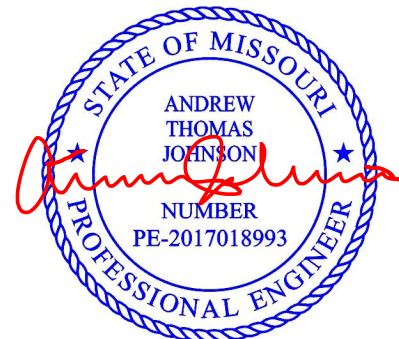
Plate Offsets (X,Y)-- [2:0-4-13,Edge], [8:0-3-0,0-0-8], [10:Edge,0-3-8]													
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0								in (loc)	l/defl	L/d		
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.09	11-14	>999	240	MT20	197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.19	11-14	>781	180			
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.04	7	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 56 lb	FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (6-0-0 max.): 5-6.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 1-6-0		

REACTIONS. (size) 7=Mechanical, 2=0-4-0
 Max Horz 2=142(LC 13)
 Max Uplift 7=-59(LC 13), 2=-67(LC 16)
 Max Grav 7=665(LC 2), 2=840(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-911/171, 4-5=-556/127
 BOT CHORD 2-11=-296/808, 10-11=-115/306, 7-8=-163/423
 WEBS 4-11=-475/170, 9-11=-8/352, 5-9=-9/325, 5-7=-594/175

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-6-0, Exterior(2E) 8-6-0 to 12-1-12 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 7, 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17,2020

Job

2523907

Truss

D06

Truss Type

HALF HIP

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-2mz?GdYEFZhlckVBBSWBWexBdXEe5ZUDPwHdA?yIJA

11/30/2020

Ply

1

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:03 2020 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

0-10-8

5-1-12

10-0-0

11-7-8

12-3-8

0-10-8

5-1-12

4-10-4

1-7-8

0-8-0

6x6 =

2x4 ||

5-8-12

5-7-2

6.00 12

2x4 = 17

4

3x4 = 16

3

2

0-8-12

4x8 ||

5-7-2

4-7-2

5-7-2

1-0-0

11

10

3x4 =

3x4 ||

4x6 ||

10-0-0

11-7-8

12-3-8

10-0-0

1-7-8

0-8-0

Scale = 1:34.9

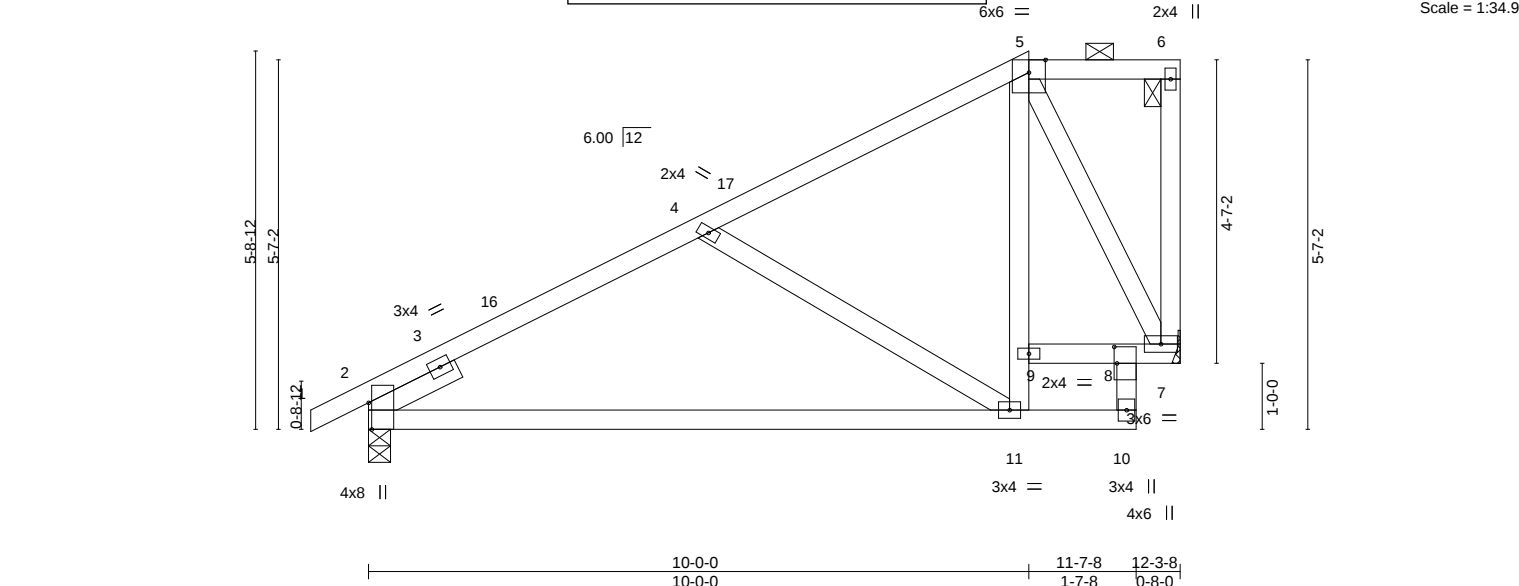


Plate Offsets (X,Y)-- [2:0-4-13,Edge], [8:0-3-0,0-0-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.39	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.58	Vert(LL)	>939		197/144
TCDL	20.0	Lumber DOL	1.15	WB	0.33	Vert(CT)	-0.32 11-14		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.03 7		
BCDL	10.0	Code IRC2018/TPI2014					n/a		
								Weight: 57 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 5-6.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 1-6-0		

REACTIONS.	
(size)	7=Mechanical, 2=0-4-0
Max Horz	2=168(LC 13)
Max Uplift	7=-58(LC 13), 2=-65(LC 16)
Max Grav	7=665(LC 2), 2=860(LC 36)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-4=-913/163, 4-5=-449/103
BOT CHORD	2-11=-285/803, 7-8=-118/284
WEBS	4-11=-603/200, 9-11=-12/499, 5-9=-34/427, 5-7=-648/165

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2E) 10-0-0 to 12-1-12 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 7, 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17,2020

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

Job

2523907

Truss

D07

Truss Type

HALF HIP

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/30/2020

1

8.240 s Mar 9 2020

Job Reference (optional)

143654608

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

0-10-8,

0-10-8

5-10-12

5-10-12

11-6-0

5-7-4

12-3-8

0-9-8

6x12 MT20HS =

Scale = 1:41.4

Plate Offsets (X,Y)--		[2:0-3-13,0-0-1], [5:0-3-8,Edge], [5:0-0-0,0-1-2], [8:0-0-0,0-1-12], [10:Edge,0-3-8], [10:0-0-0,0-1-12]	
LOADING (psf)		SPACING- 2-0-0	
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	20.0	Rep Stress Incr	YES
BCLL	0.0	Code	IRC2018/TPI2014
BCDL	10.0	CSI.	
		TC	0.46
		BC	0.62
		WB	0.64
		Matrix-AS	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	-0.07 11-14 >999 240
		Vert(CT)	-0.13 11-14 >999 180
		Horz(CT)	0.07 7 n/a n/a
		PLATES	
		MT20	197/144
		MT20HS	148/108
		GRIP	
		Weight: 59 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (5-10-1 max.): 5-6.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 2-6-0		

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=194(LC 13)
Max Uplift 7=-57(LC 13), 2=-63(LC 16)
Max Grav 7=735(LC 36), 2=837(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-864/128, 4-5=-1138/246, 5-6=-881/249, 6-7=-602/230
BOT CHORD 2-11=-243/772, 10-11=-112/485, 8-9=-494/141
WEBS 4-9=-685/271, 6-9=-311/1162

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-6-0, Exterior(2E) 11-6-0 to 12-1-12 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- 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) 7, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 17,2020

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job		Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			Ply	I43654609		
2523907		D08	JACK-CLOSED	8.240 s Mar 9 2020 MiTek Industries, Inc.			1	Job Reference (optional)		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,				ID:wH4RYhEsTNeUP2dKvOfi1syQY8e- 95lhJZUBBxTsefalGZfb3ctVKy2ZOKWtEmkEtylJl8			Tue Nov 17 10:04:05 2020 Page 1			
0-10-8		5-11-8		11-7-8		12-3-8				
0-10-8		5-11-8		5-8-0		0-8-0				

Scale = 1:38.4

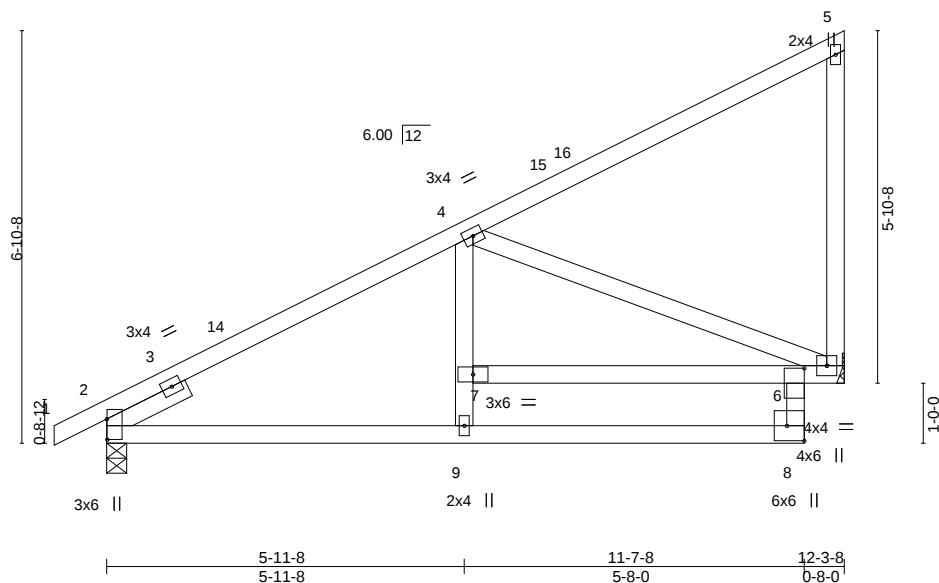


Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [6:0-0-8,0-4-8], [8:Edge,0-3-8]

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	25.0		2-0-0	TC	0.62	in	(loc)	l/defl	L/d	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.45	Vert(LL)	-0.06	6-7	>999		
TCDL	20.0	Lumber DOL	1.15	WB	0.69	Vert(CT)	-0.11	9-12	>999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.08	6	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 57 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 1-6-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 6=Mechanical
 Max Horz 2=187(LC 16)
 Max Uplift 2=-11(LC 16), 6=-58(LC 16)
 Max Grav 2=781(LC 2), 6=744(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-846/0
 BOT CHORD 2-9=-166/730, 8-9=-59/445, 6-8=-27/350, 6-7=-151/403
 WEBS 4-7=0/289, 5-6=-254/119, 4-6=-910/225

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-1-12 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
 - 2) TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020

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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

Job 2523907	Truss D09	Truss Type JACK-CLOSED	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	143654610 Job Reference (optional)
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:06 2020 Page 1 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-SLf7vfa6yU3KToEms_4u7G95CkLaltbg5uWHnKylJI7	
0-10-8 0-10-8		6-1-12 6-1-12		11/30/2020 12-3-8 6-1-12	

Scale = 1:38.3

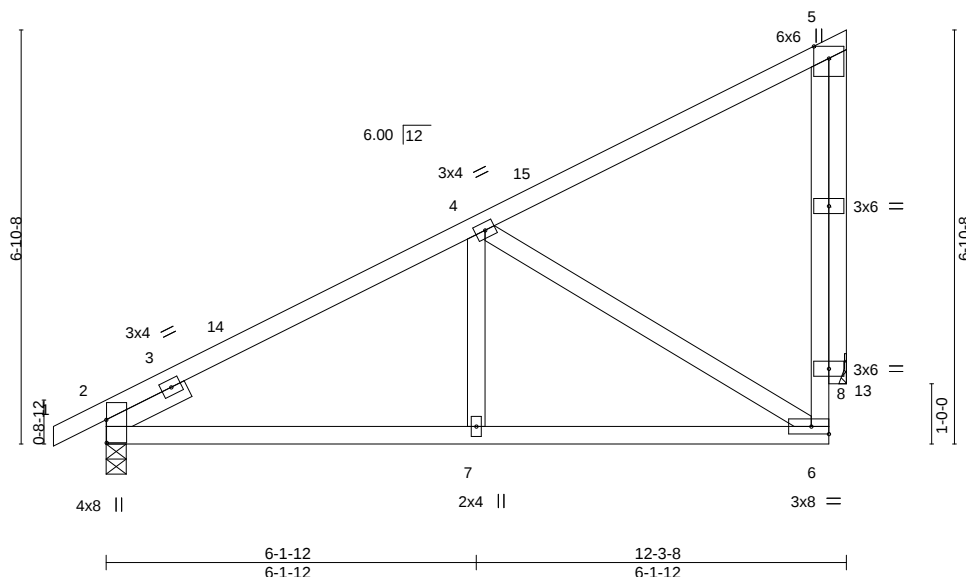


Plate Offsets (X,Y)-- [2:0-4-9,0-0-1]

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.43	in (loc)	l/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.31	Vert(LL)	-0.03 6-7 >999	240			
TCDL	20.0	Lumber DOL	1.15	WB	0.56	Vert(CT)	-0.05 6-7 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.02 13 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 57 lb		FT = 20%	

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 13=Mechanical
Max Horz 2=163(LC 16)
Max Uplift 2=-27(LC 16), 13=-86(LC 16)
Max Grav 2=754(LC 2), 13=629(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-830/131, 6-8=-66/436, 5-8=-66/436
BOT CHORD 2-7=-166/685, 6-7=-166/685
WEBS 4-7=0/252, 4-6=-731/170, 5-13=-631/136

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-10-4 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 2, 13.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 1-6-0		

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

TOP CHORD	2-4=-797/29, 6-8=-72/439, 5-8=-72/439
BOT CHORD	2-7=-171/677, 6-7=-171/677
WEBS	4-7=0/254, 4-6=-727/179, 5-13=-631/136

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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Job

2523907

Truss

D11

Truss Type

HALF HIP

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/30/2020

10-7-14

5-2-3

1

Job Reference (optional)

143654612

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MiTek Industries, Inc.

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Page 1

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0-10-8

0-10-8

5-5-11

5-5-11

12-3-8

1-7-10

6x6 =

6x6 ||

5

6

3x6 =

3x6 =

9

14

3x8 =

4x4 =

2x4 ||

4

16

17

6.00 12

3x4 =

3

15

2

0-8-12

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5-5-11

5-5-11

10-7-14

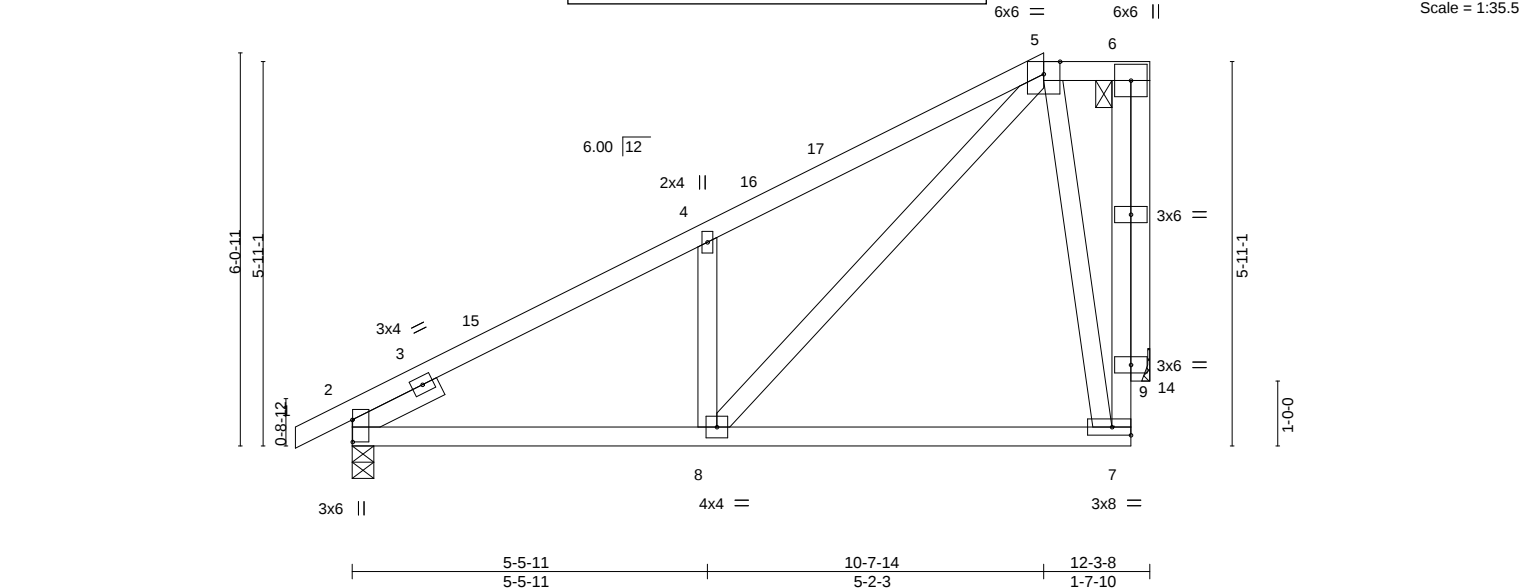
5-2-3

12-3-8

1-7-10

Plate Offsets (X,Y)--

[2:0-4-1,0-0-1]



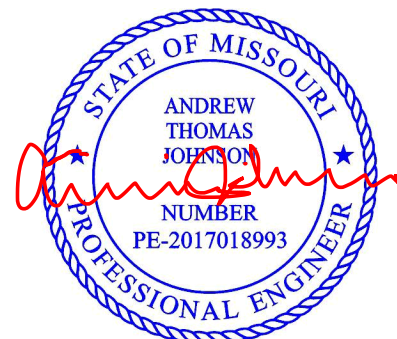
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.04	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.10				
TCDL	20.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.01				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL	10.0										
								Weight: 61 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 5-6.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.
OTHERS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 1-6-0		

REACTIONS.	
(size)	2=0-4-0, 14=Mechanical
Max Horz	2=144(LC 16)
Max Uplift	2=-37(LC 16), 14=-76(LC 16)
Max Grav	2=870(LC 36), 14=665(LC 36)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-4=-1007/60, 4-5=-1047/180, 7-9=-214/726, 6-9=-214/726
BOT CHORD	2-8=-222/823
WEBS	4-8=-565/209, 5-8=-216/930, 5-7=-677/243, 6-14=-667/175

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-7-14, Exterior(2E) 10-7-14 to 11-10-4 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 2, 14.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

Job 2523907	Truss D12	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply 1 Job Reference (optional) ID:wH4RYhEsTNeUP2dXvOf1syQY8e-twLGXhc_EPSuKfZLX6dblvneOxJZVJL6nskyNeylJl4
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:09 2020 Page 1 Page 1 of 1	

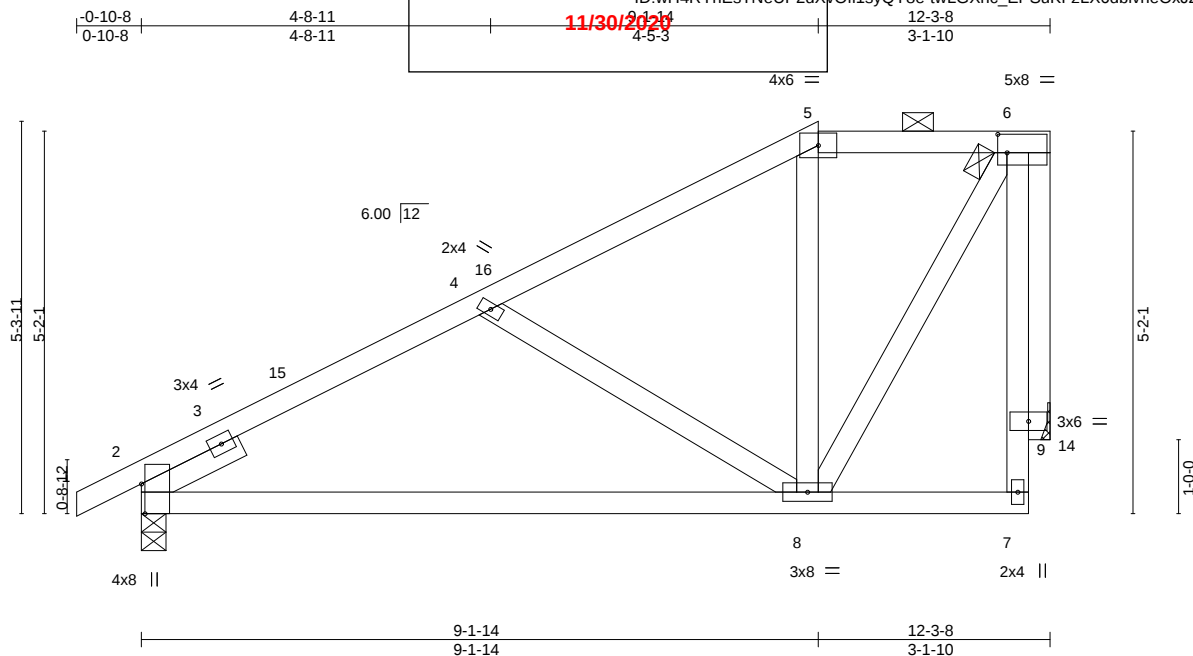


Plate Offsets (X,Y)-- [2:0-4-13,Edge], [6:0-1-8,0-3-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.31	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.48	Vert(LL)	-0.11 8-12 >999		197/144
TCDL	20.0	Lumber DOL	1.15	WB	0.24	Vert(CT)	-0.22 8-12 >664		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.02 14 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 59 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 5-6.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.
OTHERS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 1-6-0		

REACTIONS. (size) 2=0-4-0, 14=Mechanical
Max Horz 2=123(LC 16)
Max Uplift 2=46(LC 16), 14=67(LC 16)
Max Grav 2=854(LC 36), 14=629(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-925/125, 4-5=-526/54, 5-6=-372/91
BOT CHORD 2-8=-257/817
WEBS 4-8=-527/180, 6-8=-153/645, 6-14=-632/155

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-1-14, Exterior(2E) 9-1-14 to 11-10-4 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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) 2, 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



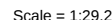
November 17, 2020

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



LUMBER-			BRACING-	
TOP CHORD	2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2			2-0-0 oc purlins (6-0-0 max.): 5-6.
WEBS	2x4 SPF No.2		BOT CHORD	Rigid ceiling directly applied.
OTHERS	2x4 SPF No.2			
SLIDER	Left 2x4 SPF No.2 1-6-0			

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

TOP CHORD	2-4=-954/154, 4-5=-627/101, 5-6=-508/125
BOT CHORD	2-8=-263/802
WEBS	6-8=-150/581, 4-8=-384/149, 6-14=-635/152

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-7-14, Exterior(2E) 7-7-14 to 11-10-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

Job 2523907	Truss D14	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	I43654615
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:11 2020 Page 1 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-pJS0yMeFm1icaZ6kfXg3qKstdl_Cz9TPFAD2SXylJl2		

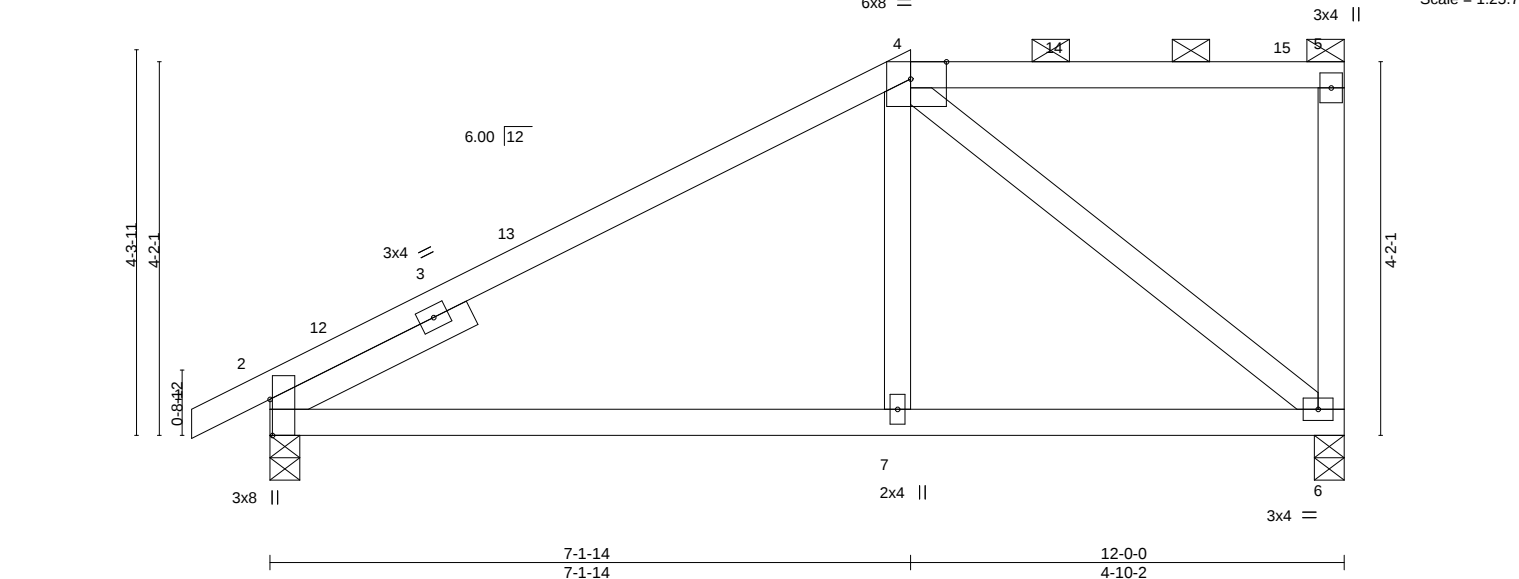


Plate Offsets (X,Y)-- [2'-0"-4'-13,Edge], [4'-0"-4'-13,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.71	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.53	Vert(LL)	-0.08 7-10 >999		197/144
TCDL	20.0	Lumber DOL	1.15	WB	0.46	Vert(CT)	-0.15 7-10 >924		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.04 2 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 47 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 2-6-0		

REACTIONS.	
(size)	2=0-4-0, 6=0-4-0
Max Horz	2=138(LC 15)
Max Uplift	2=-68(LC 16), 6=-58(LC 13)
Max Grav	2=799(LC 36), 6=649(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-4=-661/149
BOT CHORD	2-7=-220/563, 6-7=-221/556
WEBS	4-7=0/279, 4-6=-702/234

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-1-14, Exterior(2R) 7-1-14 to 11-4-13, Interior(1) 11-4-13 to 11-10-4 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 2, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

Job

2523907

Truss

D15

Truss Type

ROOF SPECIAL GIRDER

Release for Construction

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/30/2020

Ply

1

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:20 2020 Page 1

Builders FirstSource (Valley Center),

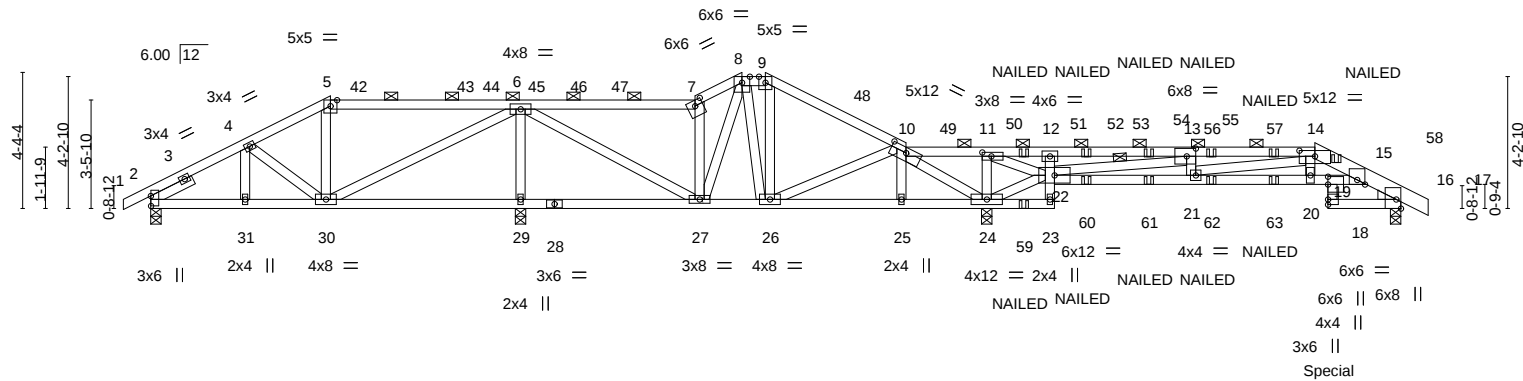
Valley Center, KS - 67147,

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0-10-8 3-0-4 5-9-0 11-10-0 17-5-0 18-11-0 19-8-0 24-2-0 26-9-0 28-11-0 33-1-0 33-3-8 37-3-0 37-8-0 40-0-0 40-10-8

0-10-8 3-0-4 2-8-12 6-1-0 5-7-0 1-6-0 0-9-0 4-6-0 2-7-0 2-2-0 4-2-0 0-2-8 3-11-8 0-5-0 2-4-0 0-10-8

Scale = 1:73.7



Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020	Ply	1	i43654616 Job Reference (optional)
2523907	D15	ROOF SPECIAL GIRDER				

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 17 10:04:21 2020

Page 2

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- NOTES-**
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 16=156, 29=205, 24=221.
 - 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.
 - 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 221 lb down and 38 lb up at 37-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 13) 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-5=-71, 5-7=-81, 7-8=-71, 8-9=-81, 9-10=-71, 10-14=-81, 14-17=-71, 23-32=-20, 19-22=-20, 18-39=-20
 - Concentrated Loads (lb)
 - Vert: 19=-220(B) 51=-74(B) 53=41(B) 55=41(B) 56=41(B) 57=41(B) 58=37(B) 59=-43(B) 60=-206(B) 61=-206(B) 62=-206(B) 63=-206(B)



NUMBER	DESCRIPTION	BRACING
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98	...	...
99	...	...
100	...	...

5-6-12 oc bracing: 15-16.

0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00

1) Unbal

- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



Figure 1

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020			
2523907	D17	ROOF SPECIAL GIRDER		Ply	1	I43654618
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			
			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:27 2020 Page 2			
			ID: wH4RYhEsTNeUP2dXvOfi1syQY8e-LOQ3JrqH?xjLV0LobuyypUiXfeCTKjNulwf5v?cylJHo			

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-4=-71, 4-7=-81, 7-8=-71, 8-10=-81, 10-12=-71, 20-24=-20
- Concentrated Loads (lb)
- Vert: 6=-75(B) 16=-47(B) 3=37(B) 28=-74(B) 29=-74(B) 31=-74(B) 32=-74(B) 35=-220(B) 36=-43(B) 37=-43(B) 38=-43(B) 39=-43(B)

Job: 2523907

Truss: E02

Truss Type: HALF HIP

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/30/2020

Ply: 1

Job Reference (optional): 143654619

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:29 2020 Page 1

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-HmYqkWsXXZz3kKUBiJ_HZ7cvg?7PBLZ2Oza?4UyIJHm

-0-10-8
0-10-8

2-4-0
2-4-0

4-1-14
1-9-14

11-1-0
6-11-2

13-5-0
2-4-0

Scale = 1:24.3

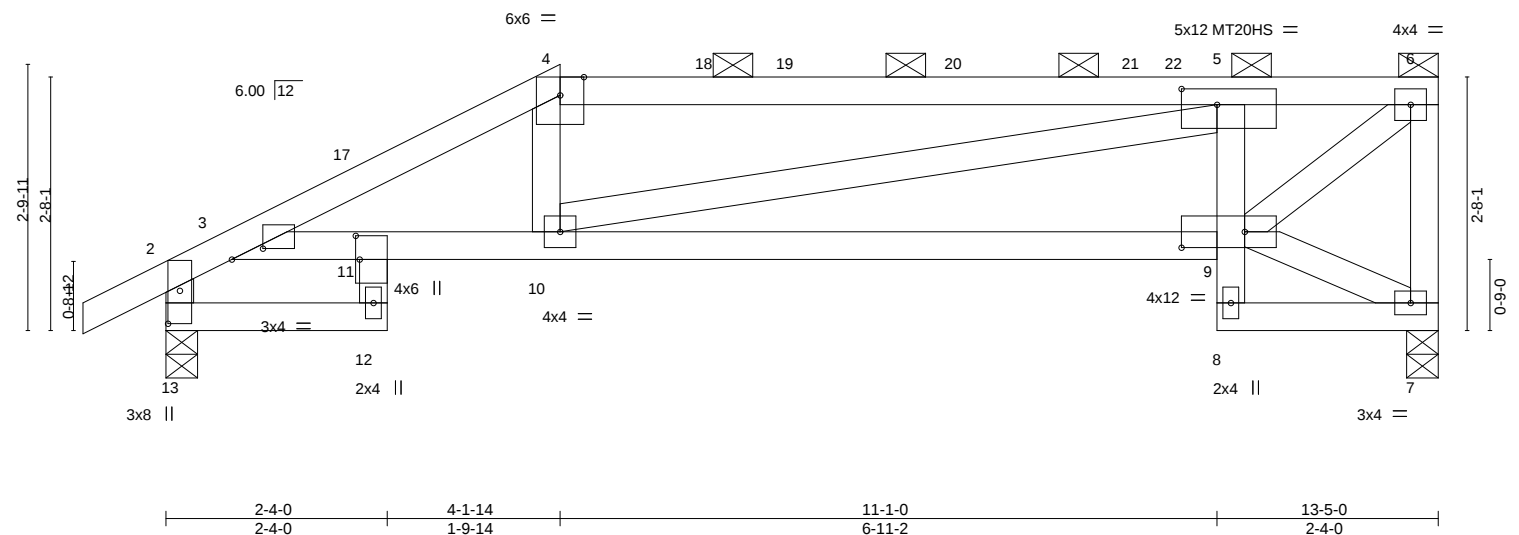


Plate Offsets (X,Y)--		[3:0-3-15,0-1-6], [5:0-4-8,0-2-0], [9:0-8-0,0-2-0], [11:0-3-0,0-0-8], [13:0-4-3,0-1-8]							
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC 0.93		in (loc) l/defl L/d		MT20	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL 1.15		BC 0.53		Vert(LL) -0.07 9-10 >999 240		MT20HS	
TCDL	20.0	Lumber DOL 1.15		WB 0.29		Vert(CT) -0.16 9-10 >999 180			
BCLL	0.0	Rep Stress Incr YES		Matrix-AS		Horz(CT) 0.05 7 n/a n/a			
BCDL	10.0	Code IRC2018/TPI2014						Weight: 54 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (2-2-0 max.): 4-6.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.

REACTIONS.	
(size)	7=0-4-0, 13=0-4-0
Max Horz	13=90(LC 15)
Max Uplift	7=-63(LC 13), 13=-79(LC 16)
Max Grav	7=799(LC 35), 13=817(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-529/100, 3-4=-1505/268, 4-5=-1359/280, 5-6=-928/155, 6-7=-735/134, 2-13=-808/201
BOT CHORD	3-11=-184/1176, 10-11=-324/1368, 9-10=-213/1170, 5-9=-694/182
WEBS	4-10=0/267, 5-10=-116/369, 6-9=-205/1190

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-1-14, Exterior(2R) 4-1-14 to 8-4-13, Interior(1) 8-4-13 to 13-3-4 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
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 13.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17,2020

Job

2523907

Truss

E03

Truss Type

HALF HIP

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/18/2020

1

8.240 s Mar

143654620

Job Reference (optional)

9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:31 2020 Page 1

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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

0-10-8

2-4-0

4-7-14

8-8-7

11-1-0

13-4-0

0-10-8

2-4-0

2-3-14

4-0-9

2-4-9

2-3-0

Scale = 1:26.0

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.08 10-11 >999	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.17 10-11 >929				
TCDL	20.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.05 18 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL	10.0										
								Weight: 53 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (5-2-1 max.): 4-6.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.
OTHERS	2x4 SPF No.2		

REACTIONS. (size) 14=0-4-0, 18=Mechanical
Max Horz 14=73(LC 16)
Max Uplift 14=-73(LC 16), 18=-58(LC 13)
Max Grav 14=817(LC 2), 18=742(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-574/89, 3-4=-1381/231, 4-5=-1201/246, 5-6=-254/0, 6-9=-75/528, 2-14=-802/196
BOT CHORD 13-14=-141/286, 3-12=-122/943, 11-12=-261/1216, 10-11=-237/1276, 9-10=-187/1301
WEBS 4-11=0/296, 5-9=-1114/288, 6-18=-764/118

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-7-14, Exterior(2R) 4-7-14 to 8-8-7, Interior(1) 8-8-7 to 12-10-12 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
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- Bearing at joint(s) 14 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) 14, 18.
- 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 17,2020

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

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

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2523907	Truss E04	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	Job Reference (optional) I43654621
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:32 2020 Page 1 ID:wH4RYhEstNeUP2dXvOfi1syQY8e-iLDyMYuQqULeboDmORY_BIEQQD5YOhIV4xpfpgpylJHj			

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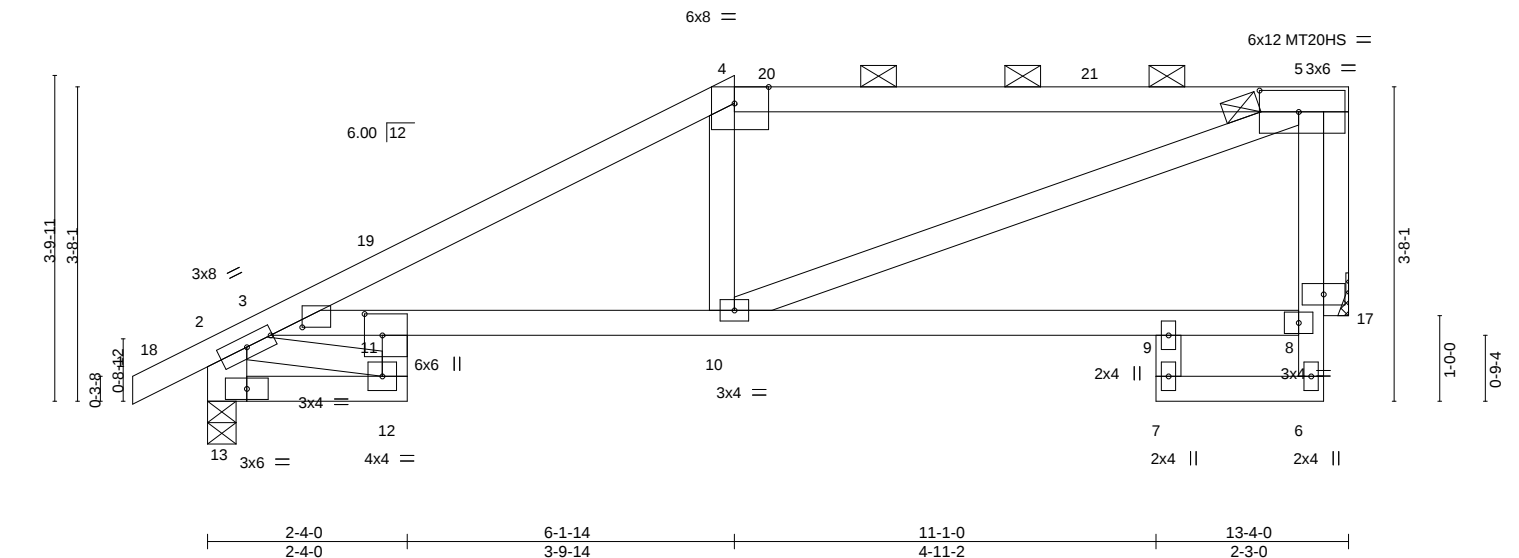


Plate Offsets (X,Y)--		[3:0-4-7,0-1-2], [4:0-4-13,Edge], [5:0-5-8,0-3-0], [11:0-3-0,0-2-8]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	20.0	Rep Stress Incr	YES
BCLL	0.0	Code	IRC2018/TPI2014
BCDL	10.0		
		CSI.	
		TC	0.90
		BC	0.83
		WB	0.33
		Matrix-AS	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	-0.09 10-11 >999 240
		Vert(CT)	-0.17 10-11 >922 180
		Horz(CT)	0.06 17 n/a n/a
		PLATES	GRIP
		MT20	197/144
		MT20HS	148/108
		Weight: 56 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (2-2-0 max.): 4-5.
WEBS	2x4 SPF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied.
	2-13: 2x6 SPF No.2		
OTHERS	2x4 SPF No.2		

REACTIONS. (size) 13=0-4-0, 17=Mechanical
 Max Horz 13=95(LC 16)
 Max Uplift 13=-71(LC 16), 17=-56(LC 13)
 Max Grav 13=841(LC 36), 17=703(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-627/72, 3-4=-1166/202, 4-5=-1013/236, 2-13=-842/190
 BOT CHORD 3-11=-98/723, 10-11=-247/1006, 9-10=-38/264, 8-9=-16/312
 WEBS 5-10=-229/839, 5-17=-719/130

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-1-14, Exterior(2R) 6-1-14 to 10-4-13, Interior(1) 10-4-13 to 12-10-12 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 13 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) 13, 17.
- 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

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

Job 2523907	Truss E05	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	Job Reference (optional) I43654622
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:34 2020 Page 1 ID:wH4RYhEsTNeUP2dXVOfi1syQY8e-ekLnEwgM5bLq5N8VsaSGAJsn0pRsc4nXFimliyJHh			
-0-10-8 2-4-0 4-8-13 7-11-1 11-1-0 13-4-0 0-10-8 2-4-0 2-4-13 2-11-1 3-5-2 2-3-0						

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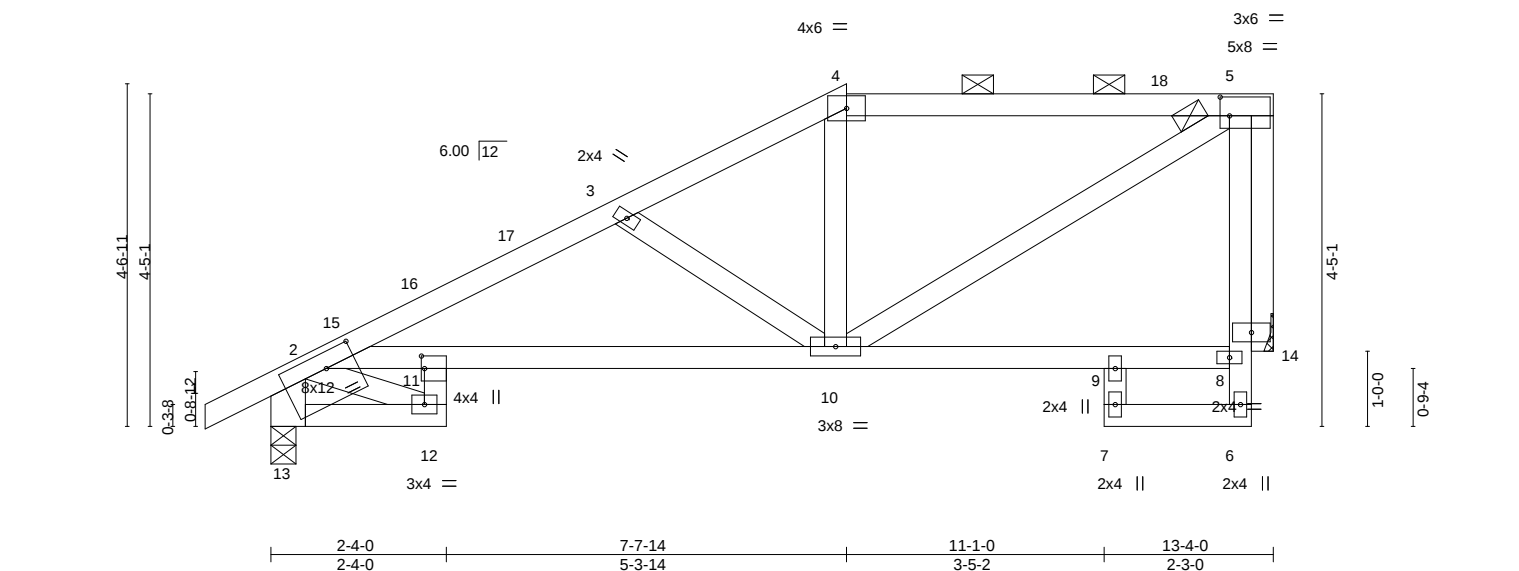


Plate Offsets (X, Y)--		[2-0-4-12,0-2-8], [5-0-1-8,0-3-0], [11-0-2-0,0-0-8], [13-0-0-13,0-1-9]			
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	25.0	2-0-0		in (loc) l/defl L/d	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL 1.15		Vert(LL) -0.07 10-11 >999 240	
TCDL	20.0	Lumber DOL 1.15		Vert(CT) -0.20 10-11 >796 180	
BCLL	0.0	Rep Stress Incr YES		Horz(CT) 0.07 14 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014			
		Matrix-AS			
				PLATES	
				MT20	
				GRIP	
				197/144	
				Weight: 62 lb	
				FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (5-9-13 max.): 4-5.
WEBS	2x4 SPF No.2 *Except*		Rigid ceiling directly applied.
	2-13: 2x6 SPF No.2		
OTHERS	2x4 SPF No.2		

REACTIONS. (size) 13=0-4-0, 14=Mechanical
 Max Horz 13=125(LC 16)
 Max Uplift 13=-81(LC 16), 14=-62(LC 16)
 Max Grav 13=884(LC 36), 14=672(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1250/241, 3-4=-888/170, 4-5=-749/178, 2-13=-907/161
 BOT CHORD 12-13=-191/284, 2-11=-253/874, 10-11=-336/1077
 WEBS 5-10=-184/728, 3-10=-465/172, 5-14=-679/141

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-7-14, Exterior(2R) 7-7-14 to 11-10-13, Interior(1) 11-10-13 to 12-10-12 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- Bearing at joint(s) 13 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) 13, 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2523907	Truss E06	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	143654623
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) ID: wH4RYhEsTNeUP2dXvOfi1syQY8e-6ww5_axl7PjCSFyL3a5hpOs1DQ71b3Rxxmv1KH8ylJHg 11/30/2020			

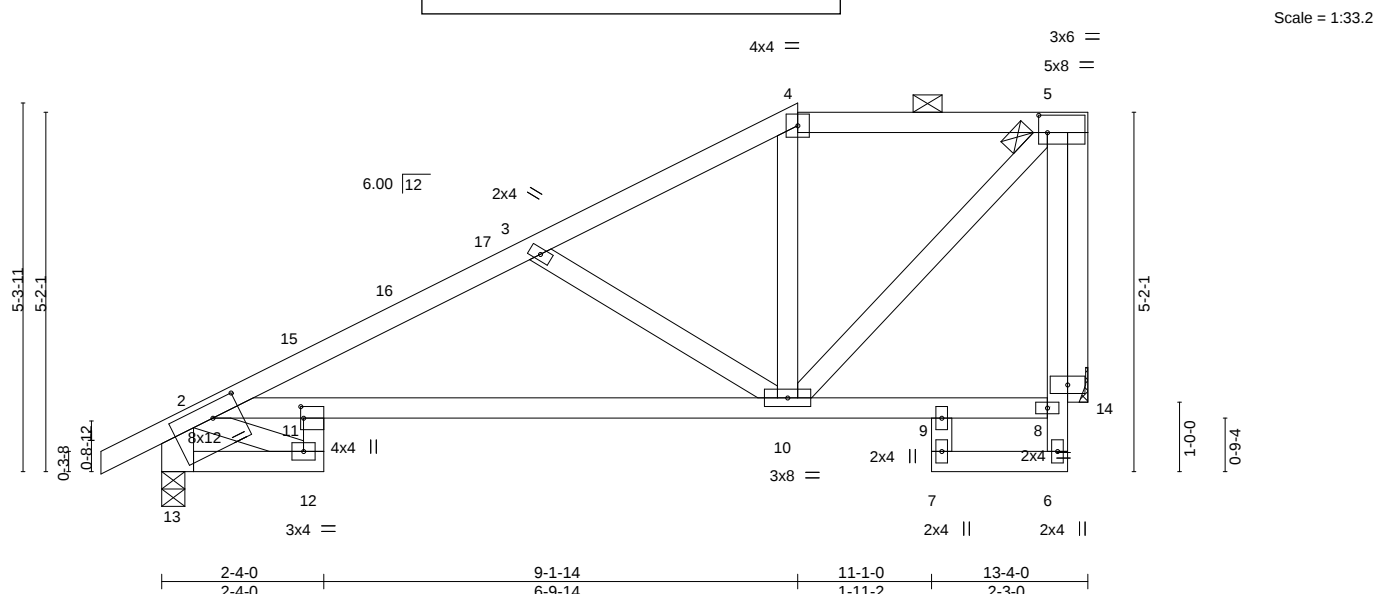


Plate Offsets (X,Y)--		[2:0-4-12,0-2-8], [5:0-1-8,0-3-0], [11:0-2-0,0-0-8], [13:0-0-13,0-1-9]	
LOADING (psf)		SPACING	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	20.0	Rep Stress Incr	YES
BCLL	0.0	Code	IRC2018/TPI2014
BCDL	10.0		
		CSI	
		TC	0.54
		BC	0.71
		WB	0.20
		Matrix	AS
		DEFL.	
		Vert(LL)	-0.13 10-11 >999 240
		Vert(CT)	-0.33 10-11 >471 180
		Horz(CT)	0.10 14 n/a n/a
		PLATES	MT20
		GRIP	197/144
		Weight:	65 lb
		FT =	20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS	2x4 SPF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied.
	2-13: 2x6 SPF No.2		
OTHERS	2x4 SPF No.2		

REACTIONS. (size) 13=0-4-0, 14=Mechanical
 Max Horz 13=145(LC 16)
 Max Uplift 13=-74(LC 16), 14=-69(LC 16)
 Max Grav 13=917(LC 36), 14=672(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1238/204, 3-4=-717/117, 4-5=-552/136, 2-13=-924/150
 BOT CHORD 12-13=-212/264, 2-11=-230/858, 10-11=-322/1062
 WEBS 5-10=-173/707, 3-10=-608/202, 5-14=-676/149

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-1-14 to 12-10-12 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- Bearing at joint(s) 13 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) 13, 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2523907	Truss E07	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply 1 Job Reference (optional) ID: wH4RYhEstNeUP2dXvOfi1syQY8e-2J1rPFyYe0zwhZ6jA?79upxJ?EoA3x7EDDWQM1ylJHe
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:37 2020 Page 1 0-10-8 2-4-0 6-5-15 10-7-14 11-1-0 13-4-0 0-10-8 2-4-0 4-1-15 4-1-15 0-5-2 2-3-0		

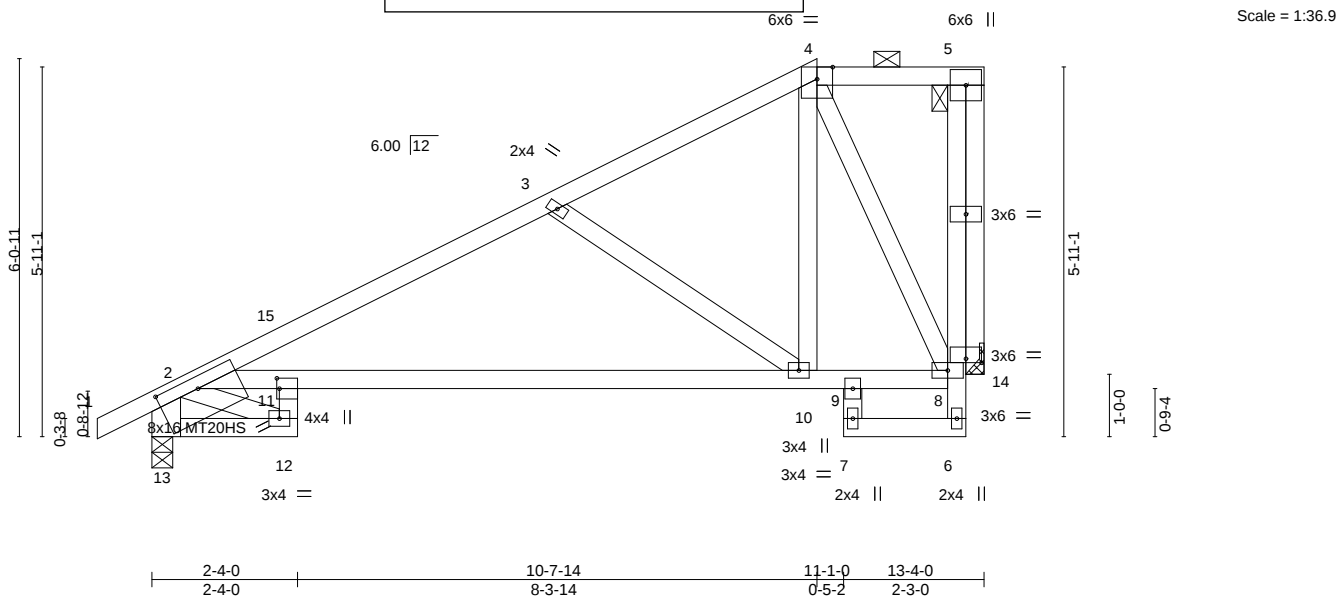


Plate Offsets (X, Y)--		[2:0-8-0,0-2-4], [8:0-3-0,0-0-12], [11:0-2-0,0-0-8], [13:0-0-13,0-1-9]	
LOADING (psf)		SPACING	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	20.0	Rep Stress Incr	YES
BCLL	0.0	Code	IRC2018/TPI2014
BCDL	10.0		
		CSI	
		TC	0.72
		BC	0.80
		WB	0.38
		Matrix	AS
		DEFL.	
		in (loc)	l/defl L/d
		Vert(LL)	-0.22 10-11 >711 240
		Vert(CT)	-0.54 10-11 >288 180
		Horz(CT)	0.14 14 n/a n/a
		PLATES	
		MT20	197/144
		MT20HS	148/108
		GRIP	
			Weight: 68 lb FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS	2x4 SPF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied.
	2-13: 2x6 SPF No.2		
OTHERS	2x4 SPF No.2		

REACTIONS. (size) 13=0-4-0, 14=Mechanical
 Max Horz 13=166(LC 16)
 Max Uplift 13=-65(LC 16), 14=-78(LC 16)
 Max Grav 13=935(LC 36), 14=677(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1154/149, 3-4=-560/62, 5-8=-153/620, 2-13=-949/144
 BOT CHORD 12-13=-247/281, 2-11=-178/750, 10-11=-286/970, 9-10=-101/364, 8-9=-98/426
 WEBS 4-8=-762/172, 4-10=-83/659, 3-10=-708/220, 5-14=-678/165

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-7-14, Exterior(2E) 10-7-14 to 12-10-12 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 13 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) 13, 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

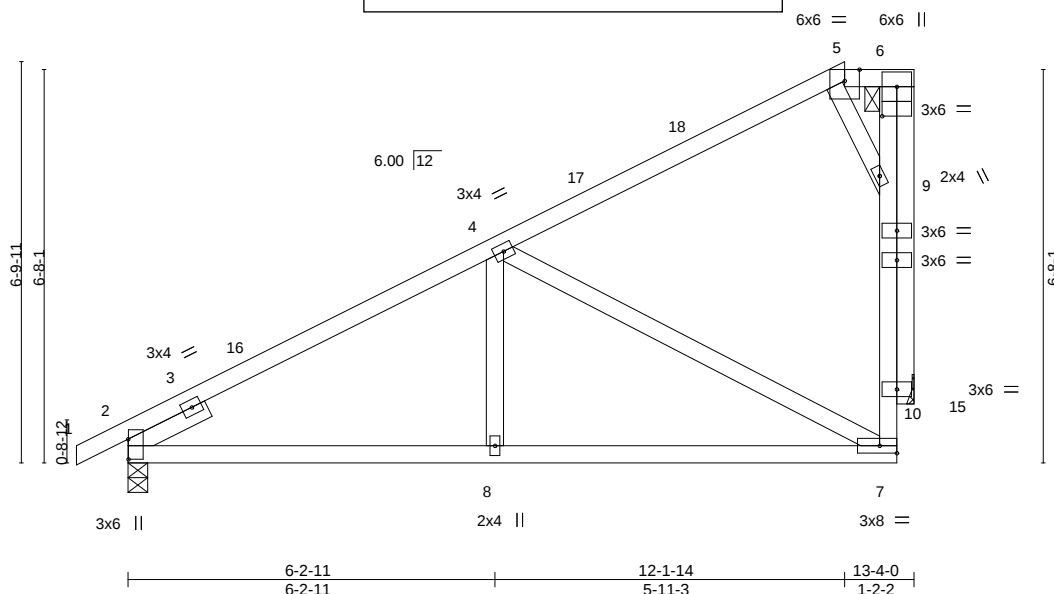
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

Job 2523907	Truss E08	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			1	143654625
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) ID: wH4RYhEsTNeUP2dXvOf1syQY8e-WVbDdbzBPK5nJgwkifOQ0UXfeF9oGVNSIG_uTyIJHd				8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:38 2020 Page 1 11/30/2020 12-1-14 5-11-3 13-4-0 1-2-2



Scale = 1:39.1

Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [9:0-0-8,1-0-3]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.53	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.36	Vert(LL)	-0.05 7-8 >999		197/144
TCDL	20.0	Lumber DOL	1.15	WB	0.89	Vert(CT)	-0.10 7-8 >999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.03 15 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 62 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 OTHERS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 1-6-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 15=Mechanical
 Max Horz 2=184(LC 16)
 Max Uplift 2=-33(LC 16), 15=-87(LC 16)
 Max Grav 2=891(LC 36), 15=756(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-1057/42, 4-5=-275/5, 7-10=-64/485, 9-10=-65/487, 6-9=-281/996
 BOT CHORD 2-8=-201/901, 7-8=-201/901
 WEBS 4-8=0/273, 4-7=-896/191, 5-9=-559/236, 6-15=-758/183

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-1-14, Exterior(2E) 12-1-14 to 12-10-12 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 2, 15.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



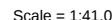
November 17, 2020

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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16023 Swingley Ridge Rd
 Chesterfield, MO 63017



LUMBER-		BRACING-
TOP CHORD	2x4 SPF No.2	TOP CHORD
BOT CHORD	2x4 SPF No.2 *Except*	BOT CHORD
	2-11: 2x8 SP 2400F 2.0E	
WEBS	2x4 SPF No.2	
OTHERS	2x4 SPF No.2	

Structural wood sheathing directly applied, except end verticals.
Rigid ceiling directly applied.

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

TOP CHORD	2-3=-2039/194, 3-5=-2146/307, 6-9=-108/624
BOT CHORD	2-11=-376/1821, 10-11=-142/506, 9-10=-144/488
WEBS	3-11=-393/154. 5-9=-692/190, 5-11=-295/1597, 6-15=-692/137

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-10-12 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
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 2 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) 2, 15.
- 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020

Job 2523907	Truss E10	Truss Type JACK-CLOSED	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020	Ply 1	Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:40 2020 Page 1 ID:WH4RYhEsTNeUP2dXvOfi1syQY8e-Tui_1H_RxxMVY0qls7hsVRZugRsnGB0gwBl5yLylJHb
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,			
0-10-8 0-10-8		3-4-0 3-4-0	6-6-8 3-2-8	13-4-0 6-9-8	

Scale = 1:41.0

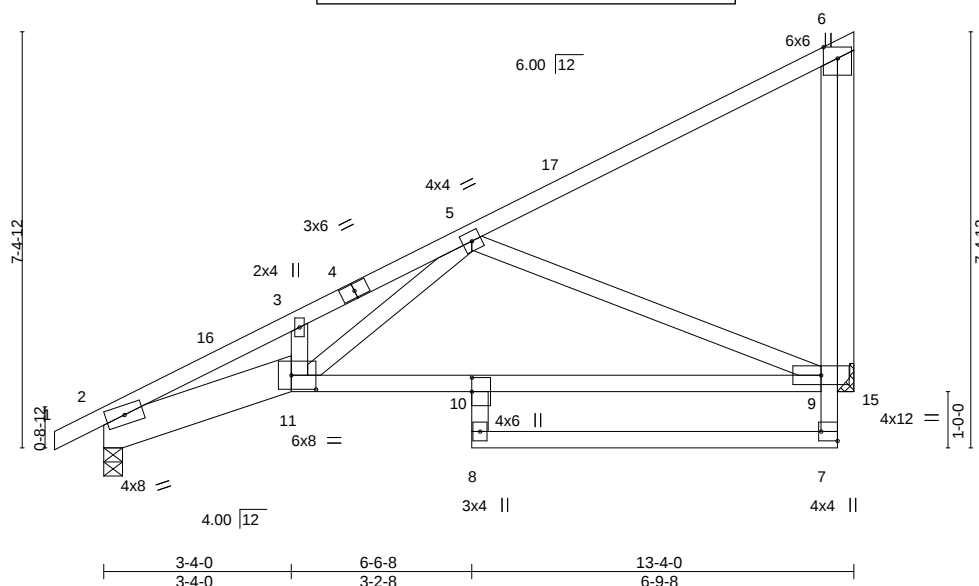


Plate Offsets (X,Y)-- [7:Edge,0-3-8], [10:0-3-0,0-0-0], [11:0-5-4,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.50	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.67	Vert(LL) -0.11 8 >999 240		
TCDL 20.0	Lumber DOL 1.15	WB 0.80	Vert(CT) -0.26 10 >599 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.05 15 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 76 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 2-11: 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 2=0-4-0, 15=Mechanical
Max Horz 2=178(LC 16)
Max Uplift 2=27(LC 16), 15=93(LC 16)
Max Grav 2=806(LC 2), 15=691(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1924/164, 3-5=-1843/208, 6-9=-58/458
BOT CHORD 2-11=-343/1693, 10-11=-247/921, 9-10=-283/791
WEBS 5-11=-118/967, 5-9=-936/234, 6-15=-692/137

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-10-12 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- Bearing at joint(s) 2 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) 2, 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job

2523907

Truss

E11

Truss Type

JACK-CLOSED

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 17 10:04:41 2020

Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

0-10-8

0-10-8

6-8-0

6-8-0

11/30/2020

13-4-0

6-8-0

6.00

12

1

Job Reference (optional)

I43654628

ID: wH4RYhEsTNeUP2dXvOfiLsyQY8e-x4GMFd?3iEUMAAPVPqC52f62prGm?emp8rUeVoylJHa

Plate Offsets (X,Y)-- [2:0-4-1,0-0-1]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.53	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.37	Vert(LL)	-0.04 9-10 >999		197/144
TCDL	20.0	Lumber DOL	1.15	WB	0.79	Vert(CT)	-0.08 9-10 >999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.02 9 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 55 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 1-6-0		

REACTIONS. (size) 2=0-4-0, 9=Mechanical
 Max Horz 2=247(LC 15)
 Max Uplift 2=-64(LC 16), 9=-63(LC 13)
 Max Grav 2=800(LC 2), 9=732(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-872/141, 6-9=-293/155
 BOT CHORD 2-10=-258/739, 9-10=-258/739
 WEBS 4-10=0/283, 4-9=-828/211

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-4-0 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
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

November 17,2020

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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

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2523907	Truss E12	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			1	Job Reference (optional)
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:WH4RYhEsTNeUP2dXvOfi1syQY8e-PGqkSz0hTYcDoK_hzYjKbsfDBFcrk4KzNVEB1EylJHZ 11/30/2020				8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:42 2020 Page 1 0-10-8, 0-10-8 6-7-12 6-7-12 13-4-0 6-4-4 13-4-0 0-4-0

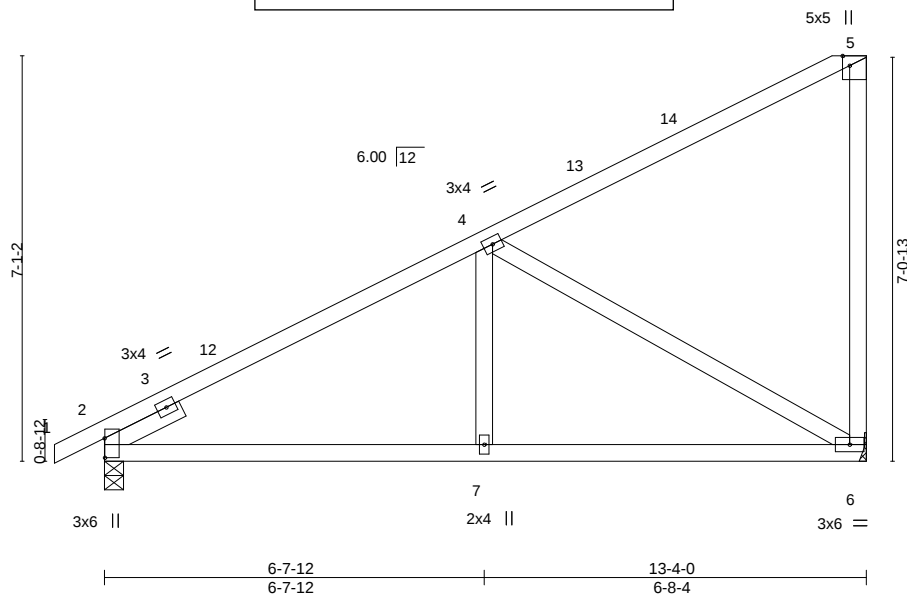


Plate Offsets (X,Y)-- [2:0-4-1,0-0-1], [5:0-2-1,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.38	Vert(CT)	-0.09	6-7	>999	180		
TCDL 20.0	Rep Stress Incr	YES	WB 0.83	Horz(CT)	0.02	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 55 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 1-6-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 6=Mechanical
 Max Horz 2=247(LC 15)
 Max Uplift 2=-66(LC 16), 6=-64(LC 13)
 Max Grav 2=807(LC 2), 6=723(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-891/143, 5-6=-272/141
 BOT CHORD 2-7=-252/757, 6-7=-252/757
 WEBS 4-7=0/287, 4-6=-846/204

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17,2020

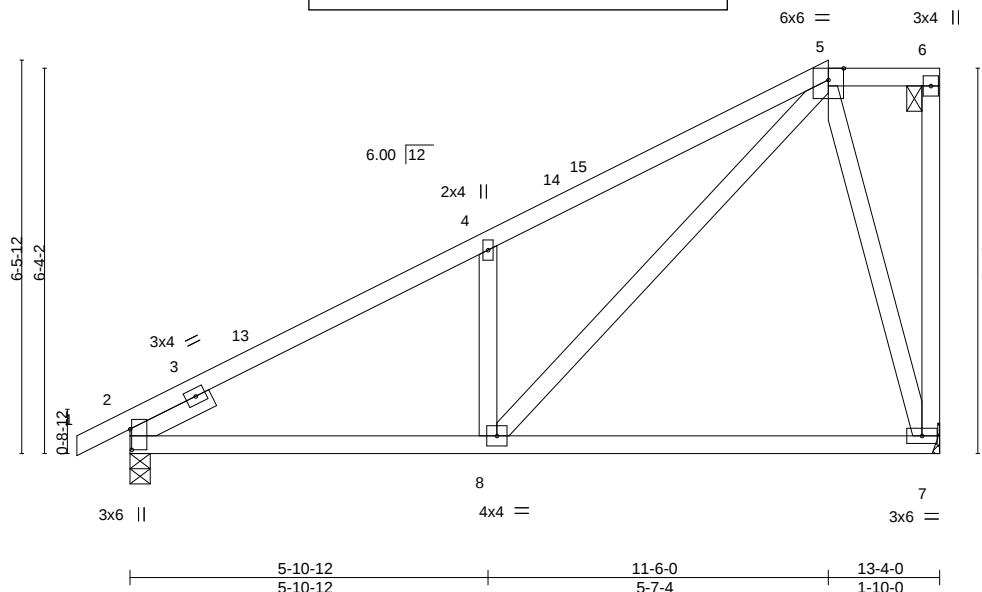
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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2523907	Truss E13	Truss Type HALF HIP	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1 Job Reference (optional) I43654630
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:44 2020 Page 1 ID: wH4RYhEsTNeUP2dXvOfi1syQY8e-LfyVtf2x79sx1e835zlogHkaF2H5C3jGrpjl57ylJHX		
0-10-8 5-10-12 11-6-0 13-4-0 0-10-8 5-10-12 5-7-4 1-10-0			11/30/2020		



Scale = 1:37.9

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

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.46	in (loc)	l/defl	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.39	7-8	>999				
TCDL	20.0	Lumber DOL	1.15	WB	0.52	7-8	>972				
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		7	n/a				
BCDL	10.0	Code IRC2018/TPI2014					n/a				
								Weight: 61 lb		FT = 20%	

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 1-6-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 7=Mechanical
 Max Horz 2=214(LC 15)
 Max Uplift 2=-69(LC 16), 7=-63(LC 13)
 Max Grav 2=898(LC 36), 7=746(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-1112/145, 4-5=-1154/254
 BOT CHORD 2-8=-279/909
 WEBS 4-8=-616/215, 5-8=-212/1036, 5-7=-750/307

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-6-0, Exterior(2E) 11-6-0 to 13-2-4 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
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 2, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17, 2020

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

Job

2523907

Truss

E14

Truss Type

HALF HIP

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-prWt5?2amT_ofnjGegH1CVGnCSaTxZzP3TSseZyJHW

11/30/2020

Ply

1

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:45 2020 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Plate Offsets (X,Y)-- [2:0-4-13,Edge]							
LOADING (psf)		SPACING-		CSI.		DEFL.	
TCLL (roof)	25.0	2-0-0		TC	0.38	in (loc)	L/defl
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.58	Vert(LL)	240
TCDL	20.0	Lumber DOL	1.15	WB	0.33	Vert(CT)	180
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	n/a
BCDL	10.0	Code IRC2018/TPI2014					
						PLATES	GRIP
						MT20	197/144
						Weight: 59 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 5-6.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 1-6-0		

REACTIONS. (size) 7=Mechanical, 2=0-4-0
 Max Horz 2=188(LC 15)
 Max Uplift 7=-64(LC 13), 2=-70(LC 16)
 Max Grav 7=723(LC 2), 2=915(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-1019/176, 4-5=-561/122, 5-6=-394/137, 6-7=-723/206
 BOT CHORD 2-8=-319/895
 WEBS 4-8=-591/184, 6-8=-207/738

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2E) 10-0-0 to 13-2-4 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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) 7, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 17, 2020

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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

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	1	I43654632
2523907	G01	HIP GIRDER	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:49 2020 Page 1		Job Reference (optional)		
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-idlOwM54qiUD8P01tWLzNLRkb3t0tN7?_4Q3nKylJHS			
-0-10-8 0-10-8		2-9-0 2-9-0		7-7-8 4-10-8		12-6-0 4-10-8	
				11/30/2020		15-3-0 2-9-0	

Scale = 1:27.4

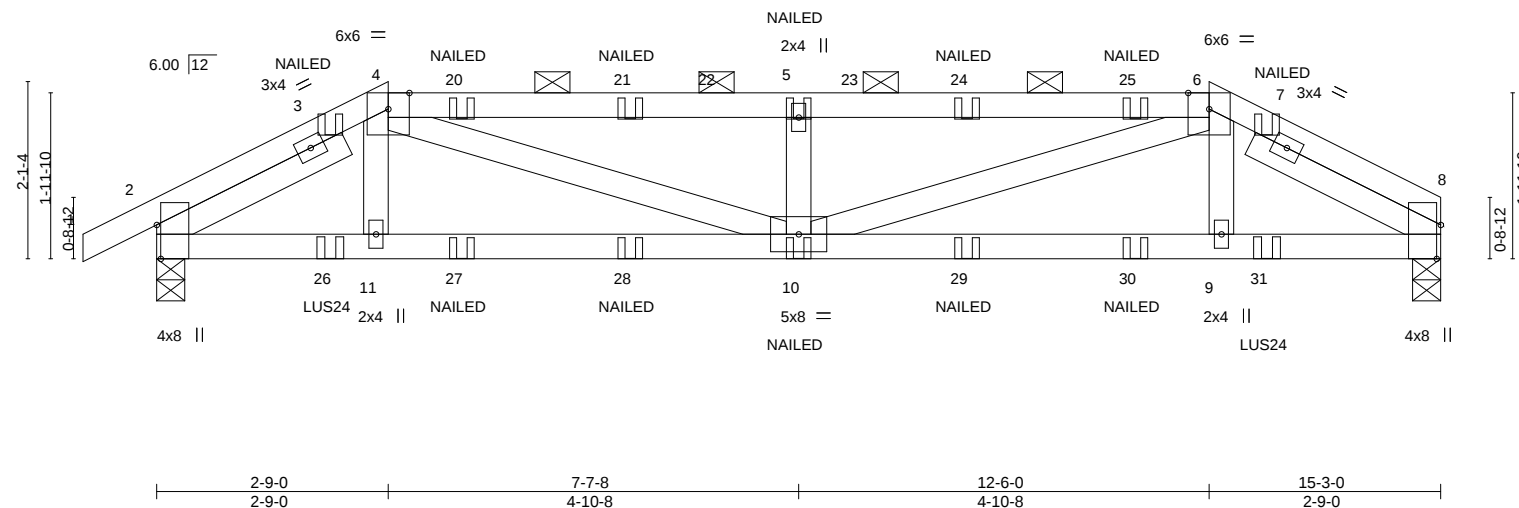


Plate Offsets (X,Y)-- [2:0-4-13,Edge], [8:0-4-13,Edge]		2-9-0 2-9-0		7-7-8 4-10-8		12-6-0 4-10-8		15-3-0 2-9-0	
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC 0.93		in (loc) l/defl L/d		MT20	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL 1.15		BC 0.86		Vert(LL) -0.11 10 >999 240		GRIP	
TCDL	20.0	Lumber DOL 1.15		WB 0.38		Vert(CT) -0.22 10-11 >825 180		197/144	
BCLL	0.0	Rep Stress Incr NO		Matrix-MS		Horz(CT) 0.04 8 n/a n/a		Weight: 59 lb	
BCDL	10.0	Code IRC2018/TPI2014						FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-4-7 oc purlins, except
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (2-3-0 max.): 4-6.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
SLIDER	Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0		

REACTIONS. (size) 8=0-4-0, 2=0-4-0
Max Horz 2=31(LC 11)
Max Uplift 8=-134(LC 12), 2=-161(LC 12)
Max Grav 8=1253(LC 2), 2=1336(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2032/188, 4-5=-3233/269, 5-6=-3233/269, 6-8=-2039/192
BOT CHORD 2-11=-156/1786, 10-11=-159/1769, 9-10=-156/1777, 8-9=-154/1794
WEBS 4-11=0/261, 4-10=-88/1550, 5-10=-816/130, 6-10=-90/1541, 6-9=0/263

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 8=134, 2=161.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 11-1-8 oc max. starting at 2-0-12 from the left end to 13-2-4 to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
Continued on page 2



November 17, 2020

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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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020			
Job	Truss	Truss Type	Q	Ply	I43654632	
2523907	G01	HIP GIRDER	1	1	Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:49 2020 Page 2 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-idlOwM54qiUD8P01tWLzNLRKb3t0tN7?_4Q3nKylJHS			
LOAD CASE(S) Standard 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15						

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-4=-71, 4-6=-81, 6-8=-71, 12-16=-20
- Concentrated Loads (lb)
 - Vert: 10=-43(F) 5=-74(F) 3=37(F) 7=37(F) 20=-75(F) 21=-74(F) 24=-74(F) 25=-75(F) 26=-220(F) 27=-43(F) 28=-43(F) 29=-43(F) 30=-43(F) 31=-220(F)

Job: 2523907

Truss: H01

Truss Type: HIP GIRDER

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/30/2020

Ply: 1

Job Reference (optional):

I43654633

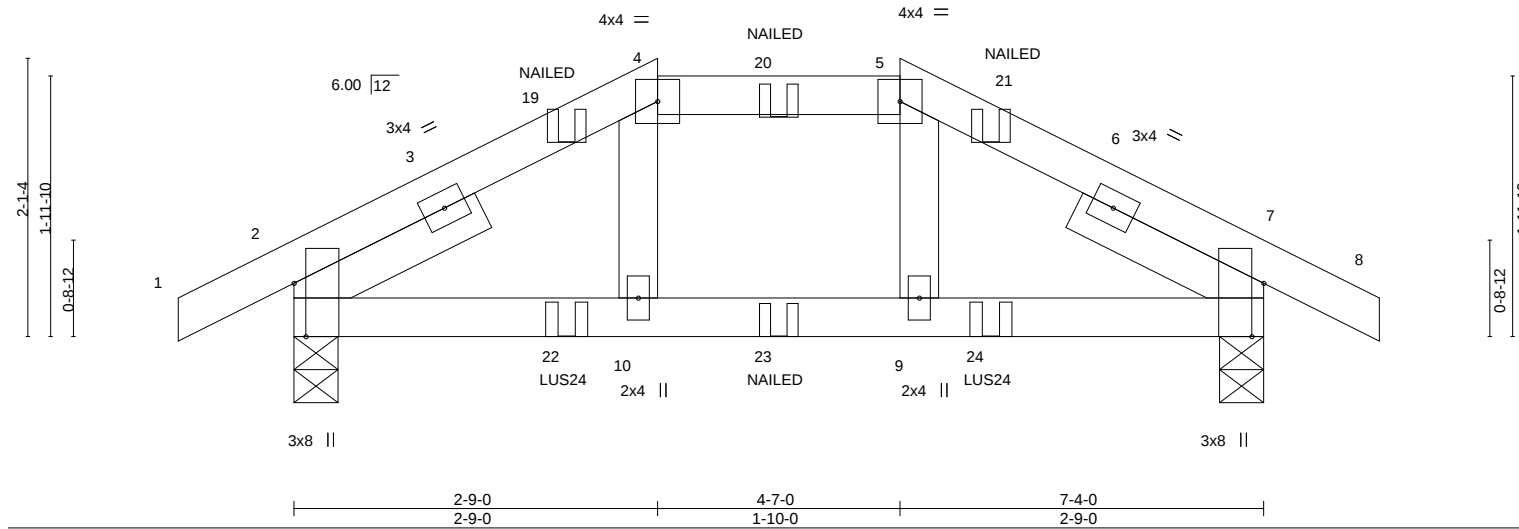
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:53 2020 Page 1

-0-10-8 2-9-0 1-7-9 1-10-0

7-4-0 8-2-8 0-10-8

Scale = 1:17.4



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	25.0	2-0-0		TC	0.16	in	(loc)	l/defl	L/d	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.37	Vert(LL)	-0.01	9	>999		
TCDL	20.0	Rep Stress Incr	NO	WB	0.05	Vert(CT)	-0.02	9	>999		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MP		Horz(CT)	0.01	7	n/a		
BCDL	10.0									Weight: 27 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied or 10-0-0 oc bracing.
SLIDER	Left 2x4 SPF No.2 1-6-15, Right 2x4 SPF No.2 1-6-15		

REACTIONS. (size) 2=0-4-0, 7=0-4-0
 Max Horz 2=33(LC 11)
 Max Uplift 2=-124(LC 12), 7=-124(LC 12)
 Max Grav 2=751(LC 35), 7=751(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-802/140, 4-5=-678/130, 5-7=-802/140
 BOT CHORD 2-10=-83/694, 9-10=-84/678, 7-9=-84/694

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 2=124, 7=124.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 3-2-8 oc max. starting at 2-0-12 from the left end to 5-3-4 to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

November 17,2020



			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020			
Job	Truss	Truss Type	Q	Ply	I43654633	
2523907	H01	HIP GIRDER	1	1		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			
			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:53 2020 Page 2 ID:wH4RYhEsTNeUP2dXvOf1syQY8e-aO?umk9btw_fc0Ko6MQvXBcBdhNbpFGaviPHw5yIJHO			
LOAD CASE(S) Standard 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15						

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-4=-71, 4-5=-81, 5-8=-71, 11-15=-20
- Concentrated Loads (lb)
- Vert: 19=37(F) 20=-75(F) 21=37(F) 22=-220(F) 23=-43(F) 24=-220(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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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2523907	Truss H02	Truss Type COMMON	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply 1 Job Reference (optional) 143654634
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:54 2020 Page 1 ID:WH4RYhEsTNeUP2dXvOfiLsyQY8e-2aZH_39DeE6WEAv_g3x84O8ML4JYImk8M8qSYyIJHN		

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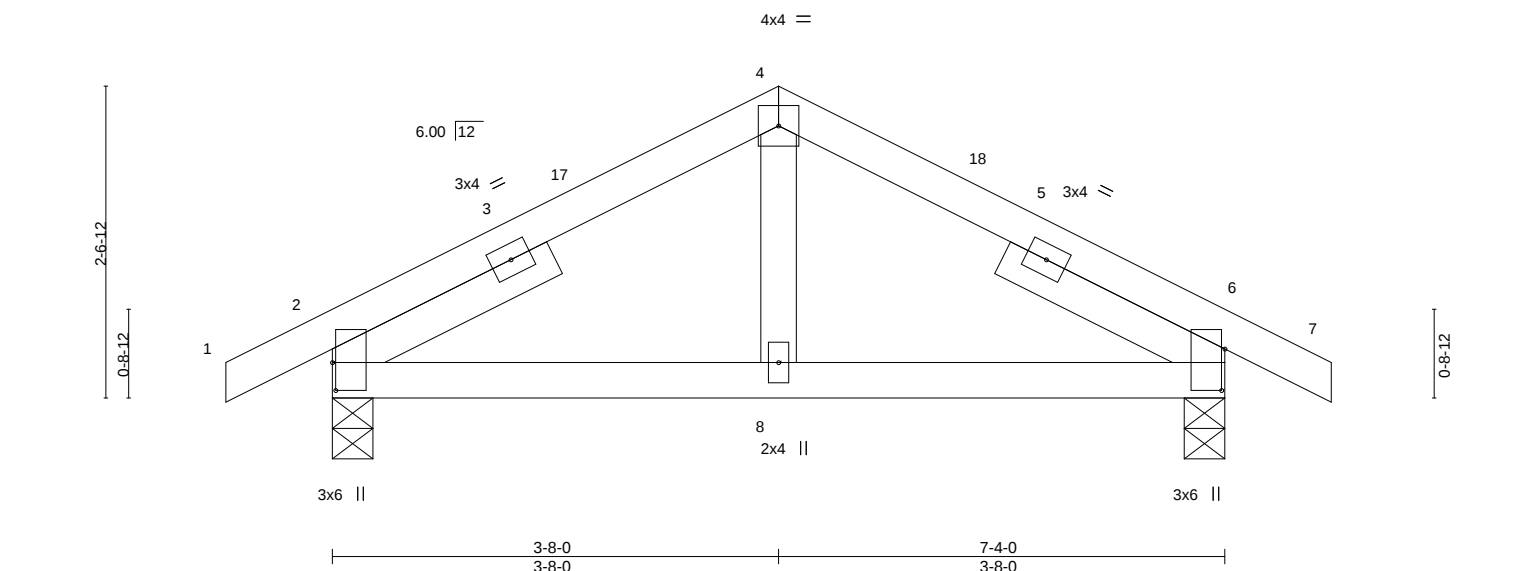


Plate Offsets (X,Y)-- [2:0-2-12,0-0-5], [6:0-4-1,0-0-5]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.01 8-15 >999 240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01 8-15 >999 180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00 2 n/a n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 27 lb	FT = 20%
BCDL	10.0								

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 2-0-3, Right 2x4 SPF No.2 2-0-3

BRACING-
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 6=0-4-0
 Max Horz 2=43(LC 15)
 Max Uplift 2=-53(LC 16), 6=-53(LC 16)
 Max Grav 2=482(LC 2), 6=482(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-384/185, 4-6=-384/185
 BOT CHORD 2-8=-63/332, 6-8=-63/332

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-8-0, Exterior(2R) 3-8-0 to 6-10-14, Interior(1) 6-10-14 to 8-2-8 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 2, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020

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

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			1	Job Reference (optional)
2523907	J01	JACK-OPEN					

Builders First Source, Valley Center, KS 67147

8.240 s Apr 4 2020 MiTek Industries, Inc. Tue Nov 17 12:11:52 2020 Page 1
ID:WH4RYhESTNeUP2dKvOfi1syQY8e-cGNJf1ABcmTGQprH32?cj7fFsxolS5C1uaVxq_yIHQL

-0-10-8 11/30/2020 2-0-0 2-0-0

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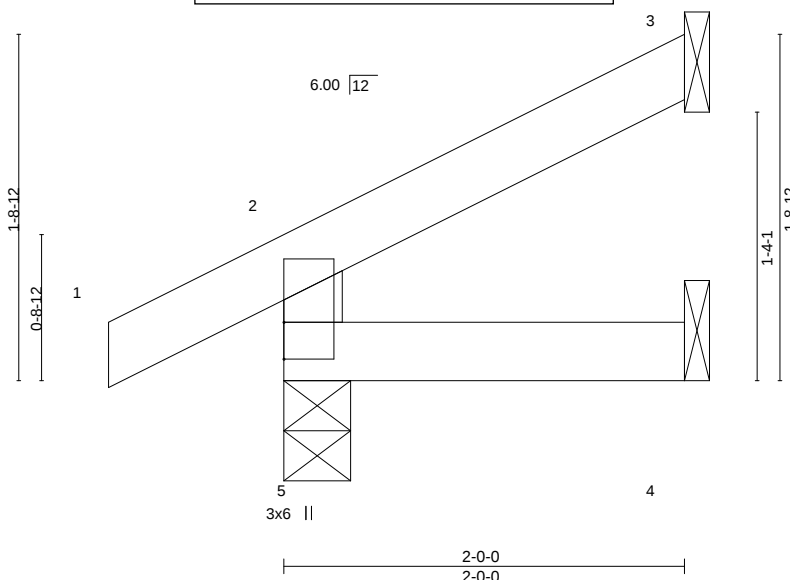


Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [5:0-0-0,0-1-12]

LOADING (psf)		SPACING-		CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	5	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-5	>999	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MR								
BCDL	10.0										Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (lb/size) 5=176/0-4-0, 3=48/Mechanical, 4=15/Mechanical
Max Horz 5=58(LC 16)
Max Uplift 5=-29(LC 16), 3=-18(LC 16)
Max Grav 5=224(LC 21), 3=63(LC 21), 4=33(LC 7)

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 5 and 18 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 17, 2020

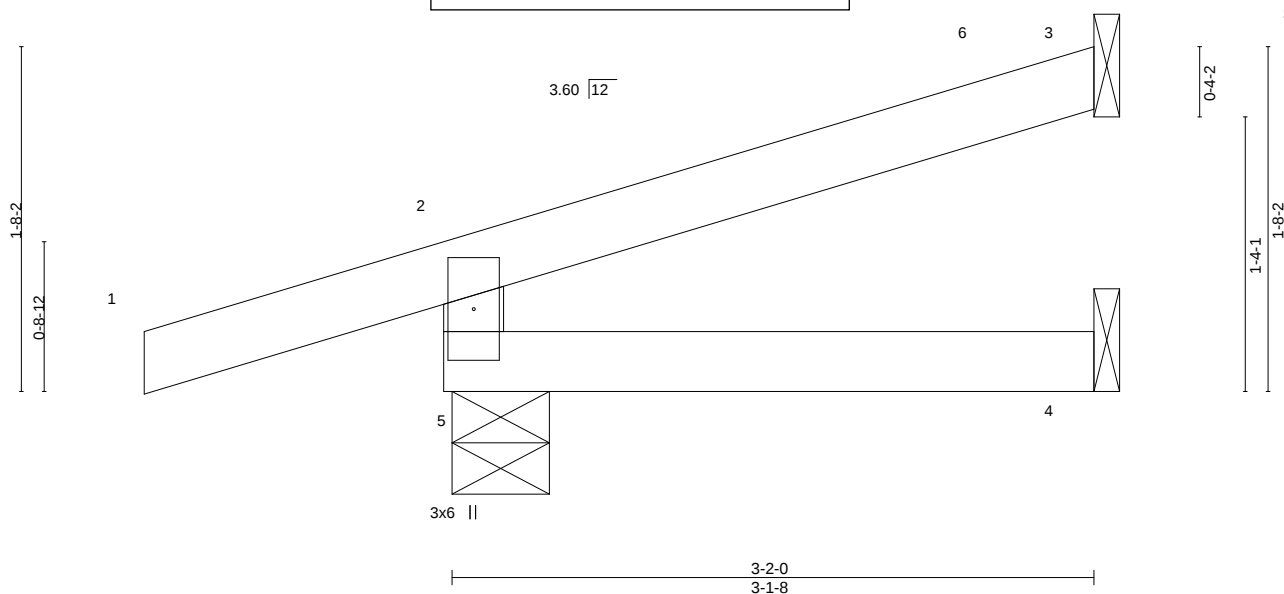
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

Job 2523907	Truss J02	Truss Type JACK-OPEN	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply 1	Job Reference (optional) I43654636
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID: wH4RYhEsTNeUP2dXvOf1syQY8e-?zg1OIBTArNETU3NoUzc9pEhuuS10co1bgdxXQylJHL			



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.22	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.07	Vert(LL)	-0.00 4-5 >999	240			
TCDL	20.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.01 4-5 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		Horz(CT)	0.00 3 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 9 lb	FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-5-11, 3=Mechanical, 4=Mechanical
Max Horz 5=56(LC 16)
Max Uplift 5=63(LC 16), 3=-18(LC 16)
Max Grav 5=354(LC 21), 3=102(LC 21), 4=52(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-319/200

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) -1-5-8 to 2-9-7, Exterior(2R) 2-9-7 to 3-1-4 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- 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.



November 17, 2020

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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16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
11/30/2020

Job 2523907	Truss J03	Truss Type HALF HIP GIRDER	Ply 1	I43654637
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:57 2020 Page 1
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0-10-8

3-0-0
3-0-0

4-0-0
1-0-0

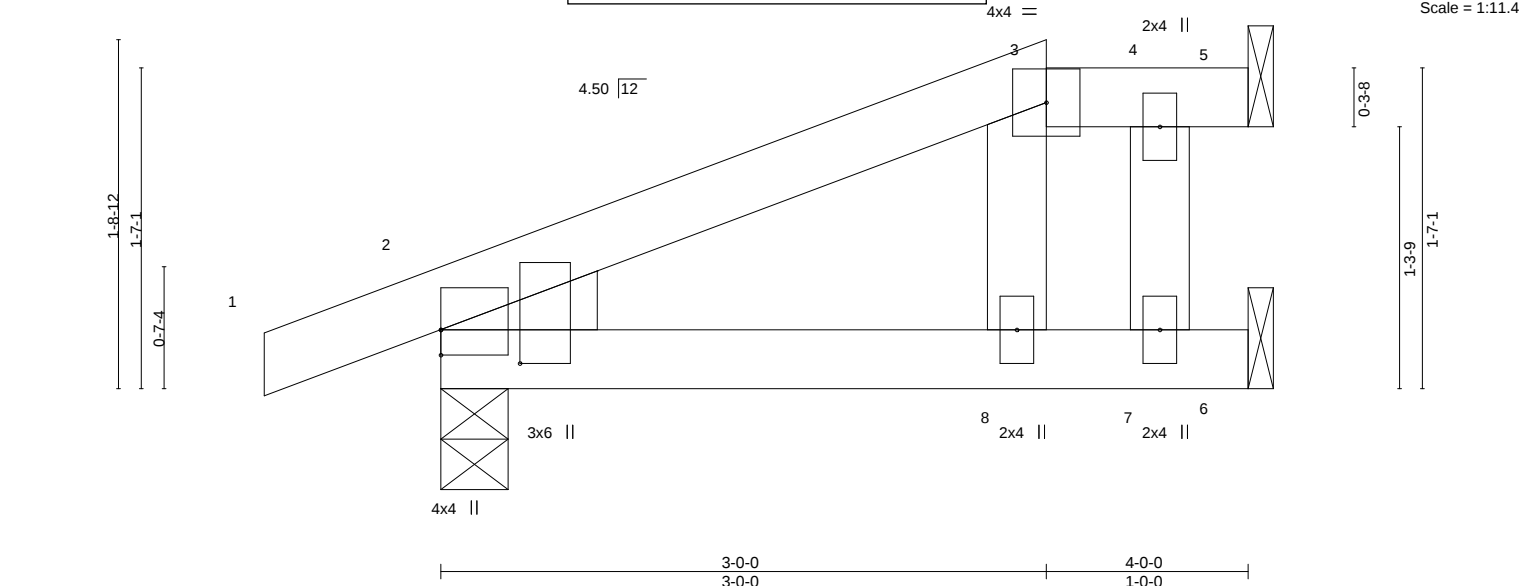


Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	-0.02 8-11 >999 240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.05 8-11 >938 180
TCDL	20.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.03 5 n/a n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MP			
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						Weight: 14 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SPF No.2		
WEDGE			
Left: 2x4 SPF No.2			

REACTIONS. (size) 5=Mechanical, 2=0-4-0, 6=Mechanical
 Max Horz 2=48(LC 11)
 Max Uplift 5=-70(LC 36), 2=-43(LC 12), 6=-18(LC 9)
 Max Grav 5=37(LC 50), 2=335(LC 32), 6=241(LC 2)

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 5, 2, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 50 lb down and 34 lb up at 3-11-4, and 54 lb down and 29 lb up at 3-0-0 on top chord, and 29 lb down and 9 lb up at 3-0-0 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
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15



November 17, 2020

Job	Truss	Truss Type	9		Ply	
2523907	J03	HALF HIP GIRDER	1			I43654637
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		Job Reference (optional)		
				8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:58 2020 Page 2		
				ID:wh4RYhEsTNeUP2dXvOfi1syQY8e-xLonpRCkITdxjnCmvv04EEJ1Qh41UW1J3_62bJylJHJ		
				11/30/2020		

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-71, 3-4=-81, 4-5=-81, 6-9=-20

Concentrated Loads (lb)

Vert: 3=-1(B) 5=-38(B) 8=0(B)



Job 2523907	Truss J04	Truss Type JACK-OPEN	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020	Ply 1	I43654638
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) ID:wH4RYhEstNeUP2dXvOfi1syQY8e-PYMA1nDMTmloKxnyTcXKnSsCr5SWDzXTHeSb7lylJHI 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:59 2020 Page 1		

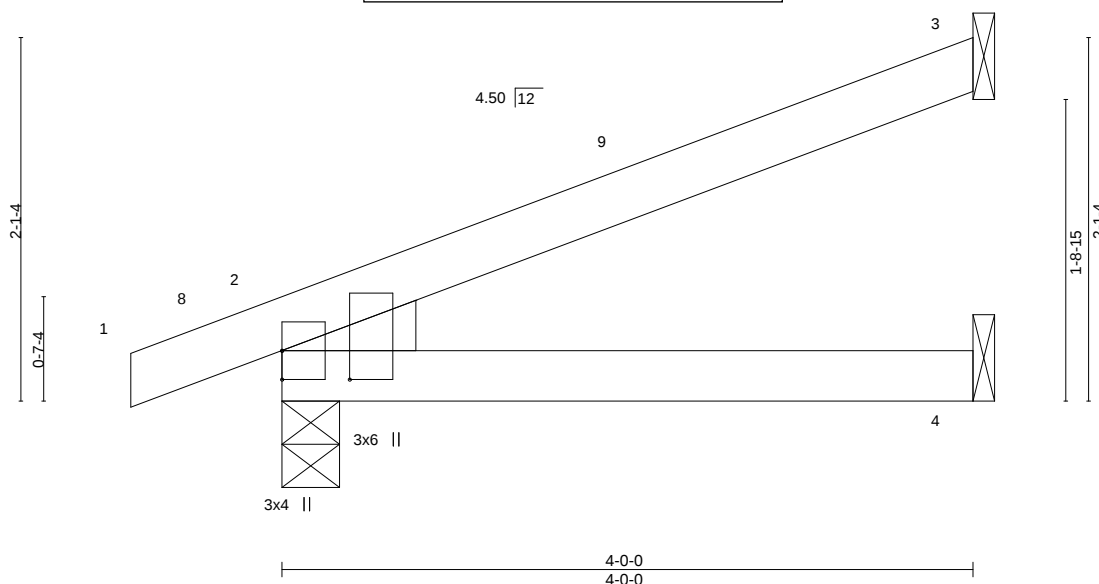


Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.03	4-7	>999	180		
TCDL 20.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 12 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
 Max Horz 2=55(LC 16)
 Max Uplift 3=-28(LC 16), 2=-33(LC 16)
 Max Grav 3=155(LC 21), 2=320(LC 21), 4=77(LC 7)

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2523907	Truss J05	Truss Type JACK-OPEN	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	Job Reference (optional) I43654639
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:04:59 2020 Page 1 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-PYMA1nDMTmloKxnyTcXKnSsEa5V9DzXTHeSb7lyJHl		
-0-10-8 0-10-8		11/30/2020		2-0-0 2-0-0		

Scale = 1:9.6

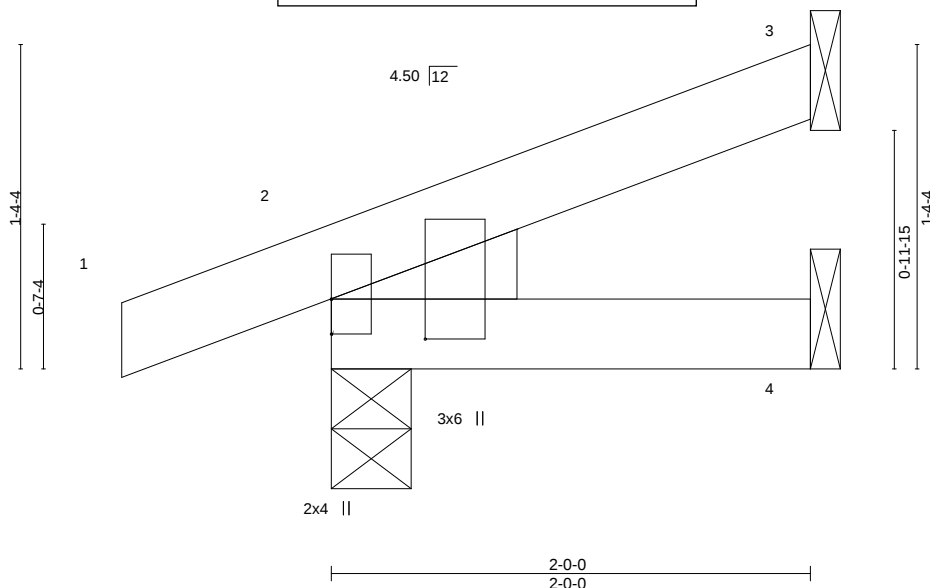


Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	7	>999	180		
TCDL 20.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MP							
BCDL 10.0									Weight: 7 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
 Max Horz 2=35(LC 16)
 Max Uplift 3=-11(LC 16), 2=-32(LC 16)
 Max Grav 3=62(LC 2), 2=205(LC 2), 4=36(LC 7)

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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) 3, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 17, 2020

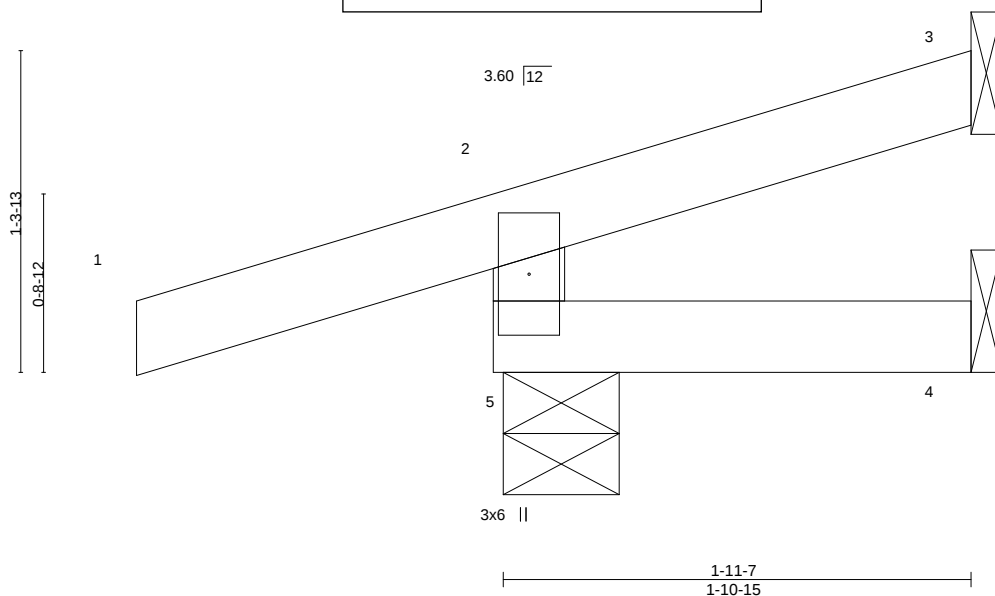
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

Job 2523907	Truss J06	Truss Type JACK-OPEN	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	I43654640
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:00 2020 Page 1 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-tkwYE7E_E4tfy5M81K2ZJfONyVq0yQncWlb8gBylJHH		



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.22	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.06	Vert(LL)	0.00 5 >999	240			
TCDL	20.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	0.00 5 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		Horz(CT)	-0.00 3 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 7 lb	FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-11-7 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-11, 3=Mechanical, 4=Mechanical
 Max Horz 5=46(LC 16)
 Max Uplift 5=67(LC 16), 3=-8(LC 13)
 Max Grav 5=308(LC 2), 3=34(LC 2), 4=25(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-272/186

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- 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.



November 17,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:wH4RYhEsTNeUP2dXvOf1syQY8e-p71IfpGEmh7NBPWX8I41P4UkmJVmQKCvzc4Fk4JyJHF		Ply	1	I43654641
2523907	J07	HALF HIP GIRDER	Job Reference (optional)				

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:02 2020 Page 1

0-10-8 1-3-0 4-0-0 11/30/2020 2-9-0

4x4 =

Scale = 1:9.9

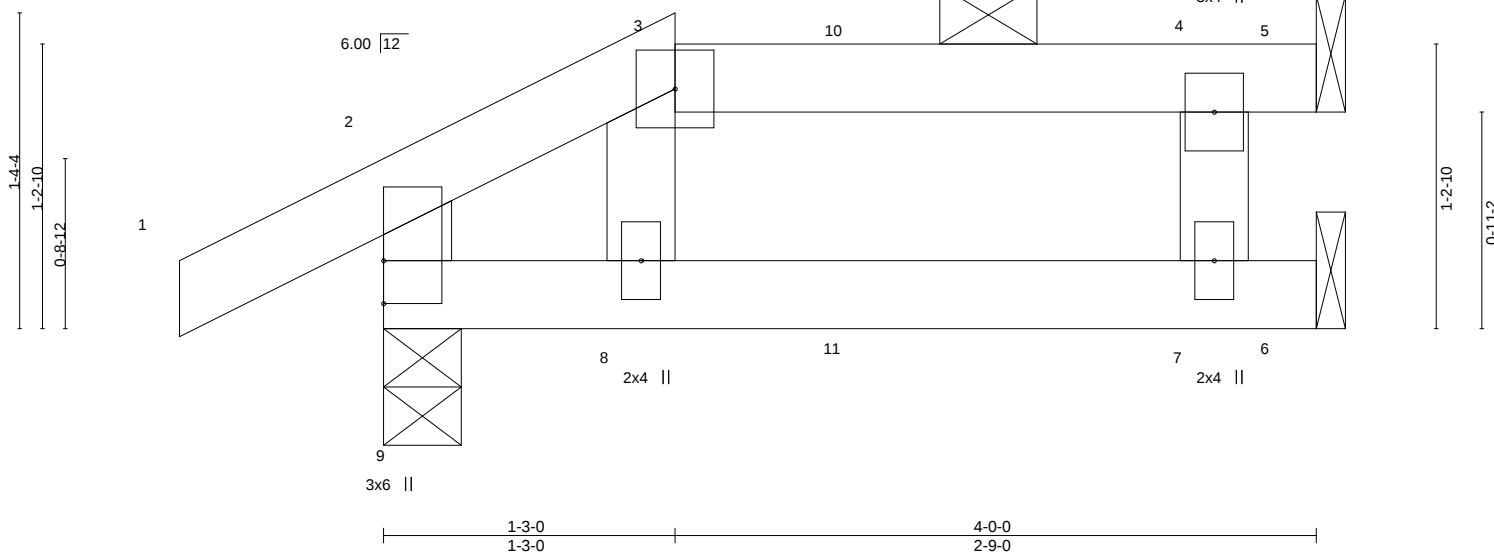


Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [9:0-0-0,0-1-12]

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.13	in	(loc)	I/defl	L/d	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.11	Vert(LL)	-0.00	7-8	>999		
TCDL	20.0	Rep Stress Incr	NO	WB	0.01	Vert(CT)	-0.01	7-8	>999		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MR		Horz(CT)	0.00	5	n/a		
BCDL	10.0									Weight: 12 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 9=0-4-0, 6=Mechanical
Max Horz 9=39(LC 11)
Max Uplift 9=47(LC 12), 6=23(LC 9)
Max Grav 5=86(LC 31), 9=323(LC 32), 6=145(LC 59)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=268/50

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 9, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 46 lb down and 19 lb up at 1-3-0, and 28 lb down and 23 lb up at 2-0-12 on top chord, and 7 lb down and 9 lb up at 1-3-0, and 15 lb down and 2 lb up at 2-0-12 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
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=71, 2-3=71, 3-4=81, 4-5=81, 6-9=20



November 17, 2020

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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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply	1	I43654641
2523907	J07	HALF HIP GIRDER	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:02 2020 Page 2		Job Reference (optional)		
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		ID:wH4RYhEsTNeUP2dXvOfiLsyQY8e-p71IfpGEmh7NBPWX8I41P4UkmJVmQK Cvzc4Fk4yIJHF			

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 8=1(B) 11=-10(B)



Job

2523907

Truss

J08

Truss Type

HALF HIP

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/30/2020

Ply

1

Job Reference (optional)

I43654642

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 17 10:05:03 2020

Page 1

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-0-10-8

0-10-8

2-9-0

2-9-0

4-0-0

1-3-0

4x4 =

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2x4 ||

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6.00 |12

11

10

9

8

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6

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4

3

2

1

2-1-4

1-11-10

0-8-12

1-11-10

1-8-2

2-9-0

2-9-0

4-0-0

1-3-0

Scale = 1:13.3

Plate Offsets (X,Y)--		[2:0-0-14,0-1-12], [9:0-0-0,0-1-12]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	20.0	Rep Stress Incr	YES
BCLL	0.0	Code	IRC2018/TPI2014
BCDL	10.0		
		CSI.	
		TC	0.13
		BC	0.07
		WB	0.01
		Matrix-AS	
		DEFL.	
		in (loc)	l/defl L/d
		Vert(LL)	-0.00 8 >999 240
		Vert(CT)	-0.01 8-9 >999 180
		Horz(CT)	0.01 5 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 14 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins: 3-5.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 5=Mechanical, 9=0-4-0, 6=Mechanical
Max Horz 9=65(LC 15)
Max Uplift 5=-15(LC 16), 9=-46(LC 16), 6=-16(LC 13)
Max Grav 5=94(LC 2), 9=355(LC 36), 6=102(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-314/152

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-9-0, Exterior(2E) 2-9-0 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 5, 9, 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 17,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2523907	Truss J09	Truss Type JACK-OPEN	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020	Ply 1	I43654643
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:04 2020 Page 1 ID:wH4RYhEstNeUP2dXvOfi1syQY8e-mV934UHUHJN5RigvG96VUVZ2E6AquEmCRwZMpyyIJHD		

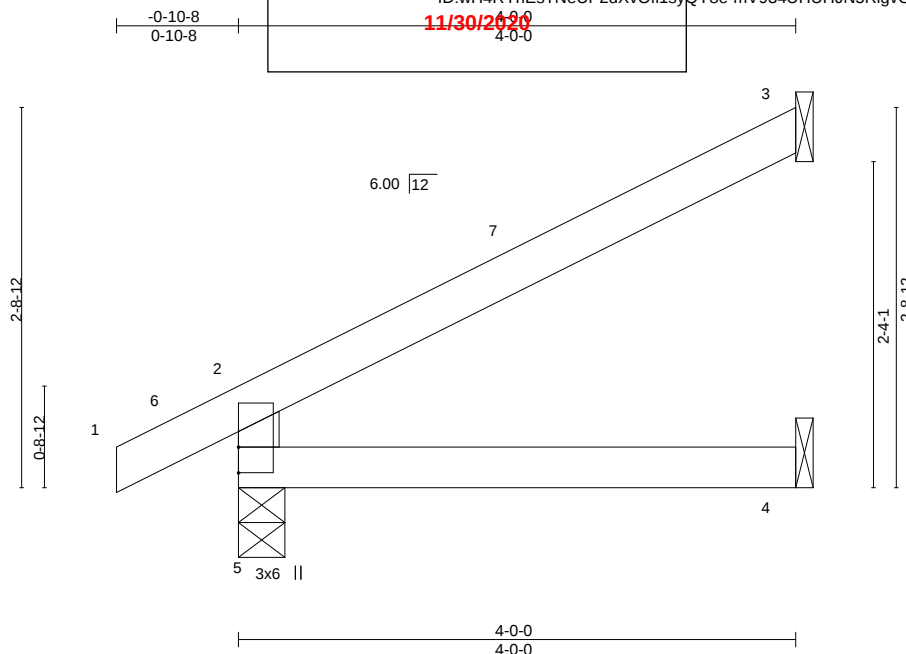


Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [5:0-0-0,0-1-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.26	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.02	4-5	>999	180		
TCDL 20.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 11 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
 Max Horz 5=85(LC 16)
 Max Uplift 5=-27(LC 16), 3=-39(LC 16)
 Max Grav 5=340(LC 21), 3=164(LC 21), 4=74(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-312/140

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2523907	Truss J10	Truss Type JACK-OPEN	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: wH4RYhEsTNeUP2dXvOfi1syQY8e-EijRHqI72cVy2sF6ptek0j6CJWWAdhWLgaJvLPyIJHC 11/30/2020		Ply 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:05 2020 Page 1 4-0-0 1-8-0
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,			

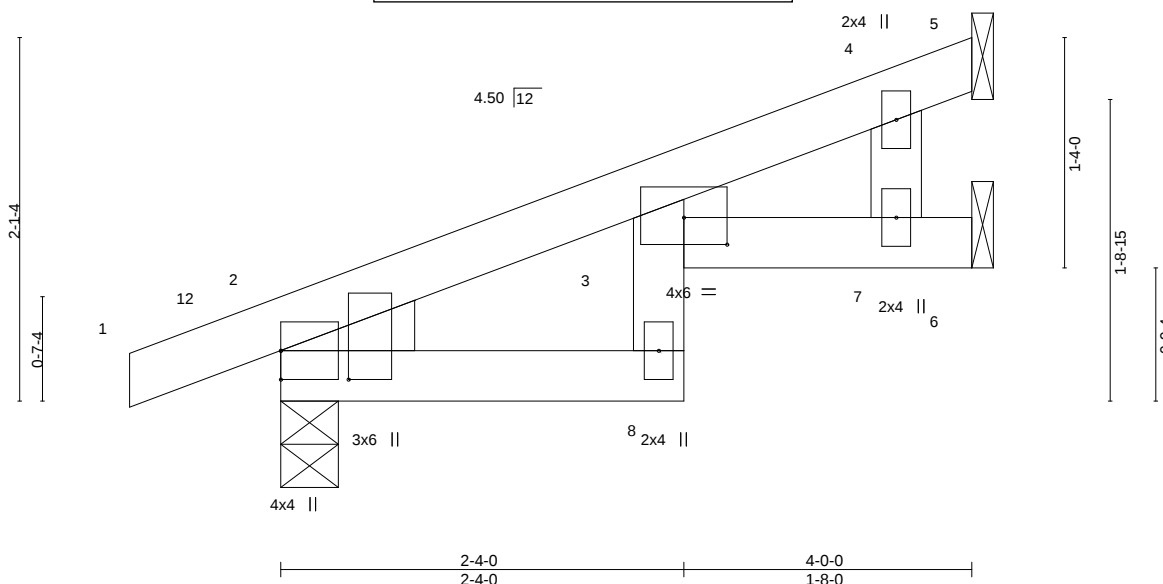


Plate Offsets (X,Y)-- [2:0-2-0,0-4-11], [3:0-3-0,0-1-14]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	-0.03	8	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.06	8	>761	180		
TCDL 20.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.04	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 13 lb	FT = 20%
BCDL 10.0										

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
WEDGE	
Left: 2x4 SPF No.2	

REACTIONS. (size) 5=Mechanical, 2=0-4-0, 6=Mechanical
 Max Horz 2=55(LC 16)
 Max Uplift 5=7(LC 21), 2=-32(LC 16), 6=-27(LC 16)
 Max Grav 5=4(LC 16), 2=320(LC 21), 6=226(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 4-7=-260/160

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-1, Interior(1) 2-1-1 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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, 2, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020

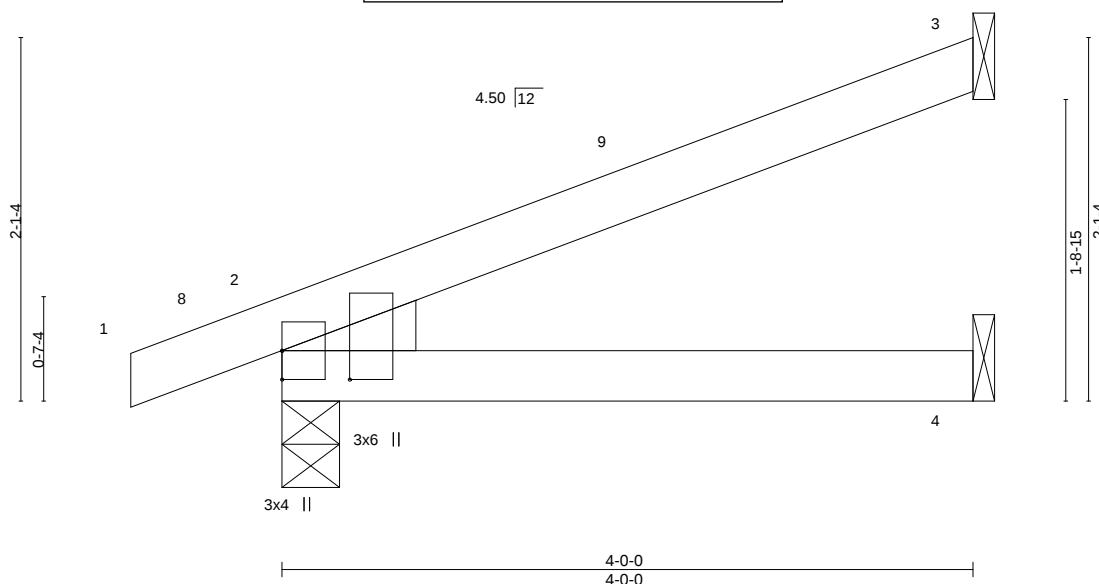
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

Job 2523907	Truss J11	Truss Type JACK-OPEN	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply 1 Job Reference (optional) 143654645
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:06 2020 Page 1 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-iuHpVAJlpwdpgOpINa9zZweP4wr9M8GVuE2TryIJHB		



Scale = 1:13.3

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

LOADING (psf)		SPACING-		CSI.		DEFL.		(loc)		I/defl		L/d		PLATES	GRIP
TCLL (roof)	25.0		2-0-0	TC	0.24	in	0.02	4-7	>999				240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.21	Vert(LL)	-0.03	4-7	>999				180		
TCDL	20.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	0.01	2	n/a				n/a		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)									
BCDL	10.0	Code IRC2018/TPI2014												Weight: 12 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
 Max Horz 2=55(LC 16)
 Max Uplift 3=-28(LC 16), 2=-33(LC 16)
 Max Grav 3=155(LC 21), 2=320(LC 21), 4=77(LC 7)

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020

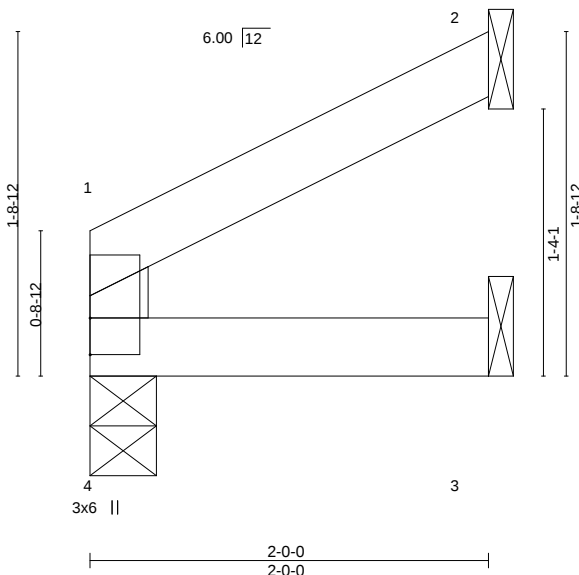
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

Job 2523907	Truss J12	Truss Type JACK-OPEN	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	I43654646
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:07 2020 Page 1 ID:wH4RYhEsTNeUP2dXvOf1syQY8e-A4rBiWJNaElglAOUxlgC68BdeKD_5bWe7uo0PHyIJHA		



Scale = 1:11.6

Plate Offsets (X,Y)-- [1:0-0-14,0-1-12], [4:0-0-0,0-1-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	4	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	3-4	>999	180		
TCDL 20.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MR							
BCDL 10.0									Weight: 5 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2

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

REACTIONS. (size) 4=0-4-0, 2=Mechanical, 3=Mechanical
 Max Horz 4=37(LC 16)
 Max Uplift 2=22(LC 16)
 Max Grav 4=101(LC 2), 2=77(LC 2), 3=37(LC 7)

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 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) 2.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 17,2020

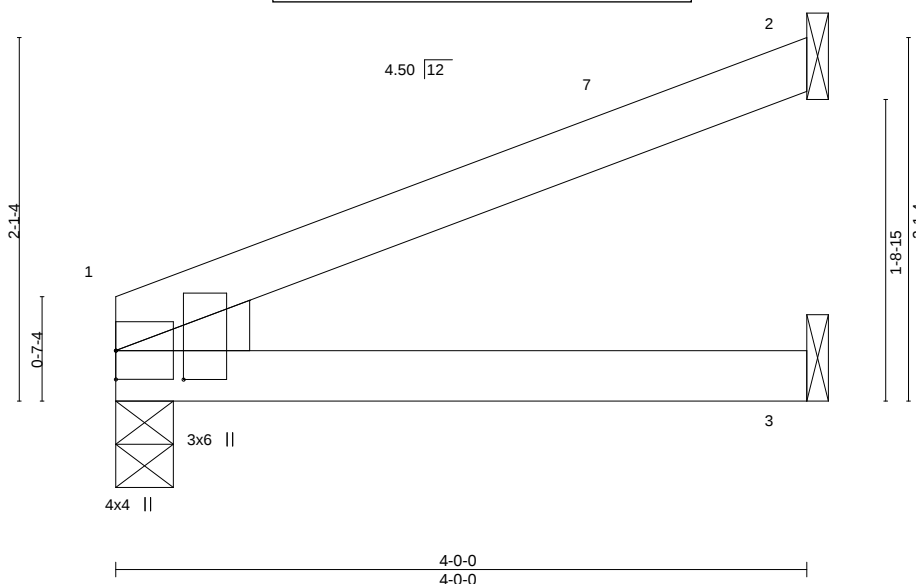
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2523907	Truss J13	Truss Type JACK-OPEN	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: wH4RYhEsTNeUP2dXVoFi1syQY8e-eGPZwsK?LXIXvKzhV?BReLjRjWEq2moMYXZykJH9 11/30/2020		Ply 1 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:08 2020 Page 1
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					



Scale = 1:13.3

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.02	3-6	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	-0.04	3-6	>999	180		
TCDL 20.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	1	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 10 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 2=Mechanical, 3=Mechanical
 Max Horz 1=41(LC 16)
 Max Uplift 1=-4(LC 16), 2=-30(LC 16)
 Max Grav 1=222(LC 20), 2=156(LC 20), 3=79(LC 7)

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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) 1, 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 17, 2020

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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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job
2523907

Truss
LG01

Truss Type
GABLE

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

Ply
1

Job Reference (optional)
I43654648

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:09 2020 Page 1

ID:3seZTgShN_qvhelqPBz4myNXMX-6Tzx7CLd6r?OXTYt2jigBZGxU7vQZS1xaCH7UAylJH8

11/30/2020

1-2-7
0-11-11
0-11-11
0-2-12

3-2-7
2-0-0

5-2-7
2-0-0

7-2-7
2-0-0

8-4-14
0-7-4

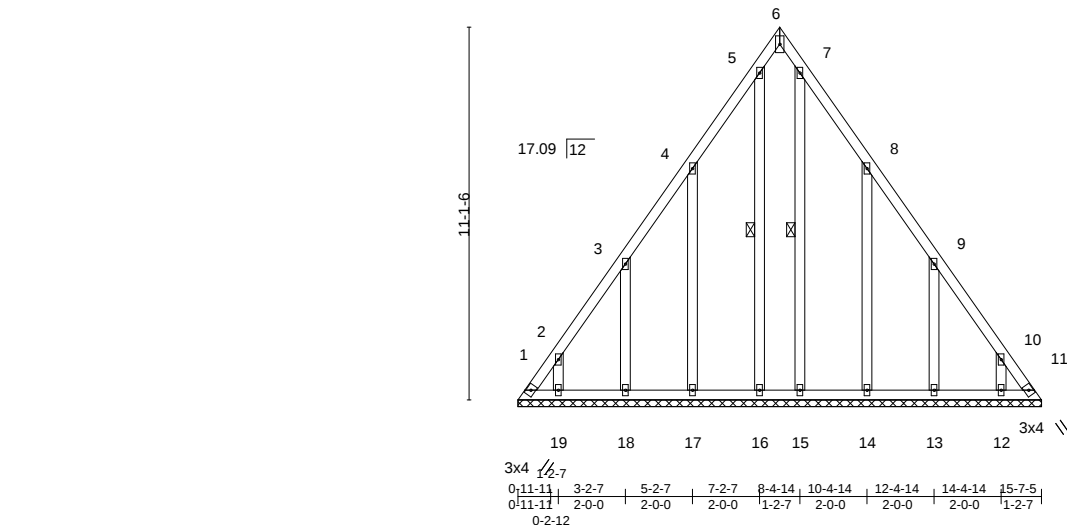
12-4-14
2-0-0

14-4-14
2-0-0

15-7-5
1-2-7

3x6

Scale = 1:68.7



LOADING (psf)	SPACING-	CS.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
TCDL 20.0	Lumber DOL 1.15	WB 0.24	Horz(CT)	0.01	11	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-S						Weight: 97 lb	FT = 20%
BCDL 10.0	Code IRC2018/TPI2014								

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 5-16, 7-15

REACTIONS. All bearings 15-7-5.
 (lb) - Max Horz 1=-300(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 16 except 1=-245(LC 12), 11=-215(LC 13), 19=-108(LC 14), 18=-127(LC 14), 17=-145(LC 14), 12=-108(LC 14), 13=-127(LC 14), 14=-145(LC 14)
 Max Grav All reactions 250 lb or less at joint(s) 19, 16, 12, 15 except 1=287(LC 14), 11=287(LC 14), 18=283(LC 23), 17=291(LC 23), 13=283(LC 24), 14=294(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-415/387, 2-3=-288/275, 9-10=-288/275, 10-11=-415/387
 WEBS 3-18=-264/176, 4-17=-286/197, 9-13=-264/176, 8-14=-286/197

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-6 to 3-2-7, Interior(1) 3-2-7 to 7-9-11, Exterior(2R) 7-9-11 to 10-9-11, Interior(1) 10-9-11 to 15-3-15 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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) 16 except (jt=lb) 1=245, 11=215, 19=108, 18=127, 17=145, 12=108, 13=127, 14=145.
 - 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.



November 17,2020

Job
2523907

Truss
LG02

Truss Type
GABLE

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

Ply
1

Job Reference (optional)
I43654649

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:10 2020 Page 1

ID:3seZTgShN_qvhelqPBz4myNXMX-afWKKYMFt98F9d73cQDvjmp6QXFqlxl5ps0g0cylJH7

11/30/2020

4-5-14
4-5-14

8-11-11
4-5-13

4x4 =

Scale = 1:25.3

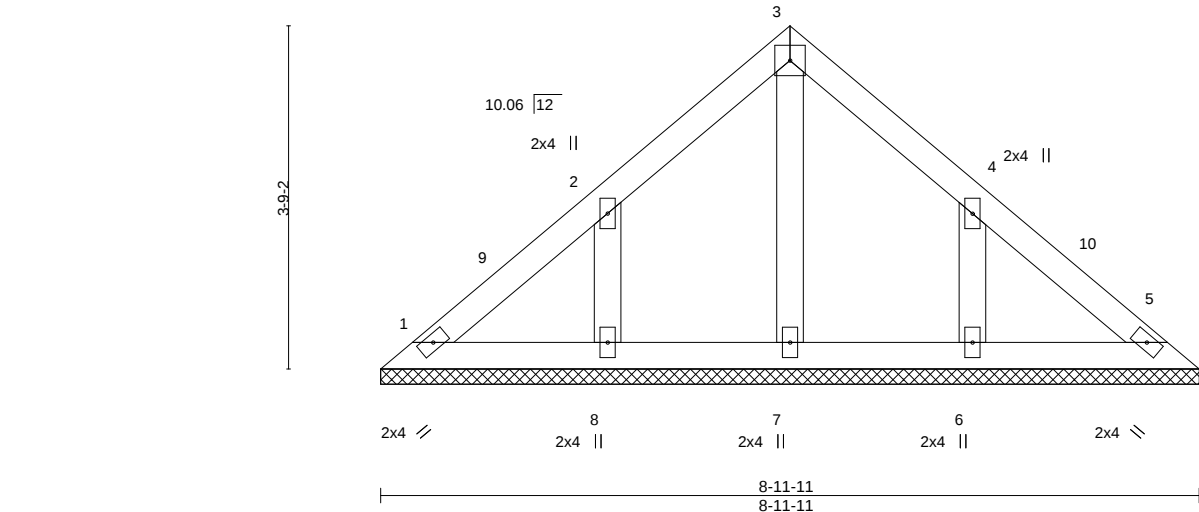


Plate Offsets (X,Y)--		[4:0-0-0,0-0-0]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15
TCDL	20.0	Rep Stress Incr	YES
BCLL	0.0	Code IRC2018/TPI2014	
BCDL	10.0		
		CSI.	
		TC	0.09
		BC	0.03
		WB	0.03
		Matrix-P	
DEFL.	in (loc)	l/defl	L/d
Vert(LL)	n/a	-	n/a
Vert(CT)	n/a	-	n/a
Horz(CT)	0.00	5	n/a
PLATES	GRIP		
MT20	197/144		
Weight: 30 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SPF No.2		

REACTIONS. All bearings 8-11-11.
 (lb) - Max Horz 1=-79(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 8, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=288(LC 23), 6=287(LC 24)

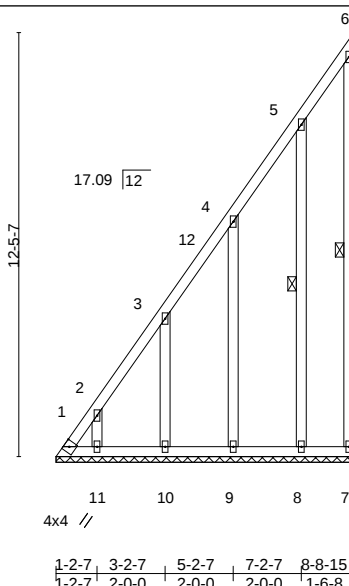
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 4-5-14, Exterior(2R) 4-5-14 to 7-5-14, Interior(1) 7-5-14 to 8-6-14 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 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) 8, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 17,2020

Job 2523907	Truss LG03	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020	Ply 1	ID:3seZTgShN_qvheIqPBpz4m 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:11 2020 Page 1 myNXMX-2r4iYuMteSG5mniGA8k8G_LGCxbC1LqE2WmEZ2ylJH6
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)		



Scale = 1:67.7

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0	Plate Grip DOL	1.15	TC	0.15	in (loc)	I/defl	L/d	MT20	197/144
Snow (Pf/Pg)	15.4/20.0		Lumber DOL	1.15	BC	0.02	Vert(LL)	n/a	999		
TCDL	20.0		Rep Stress Incr	YES	WB	0.24	Vert(CT)	n/a	999		
BCLL	0.0		Code IRC2018/TPI2014		Matrix-P		Horz(CT)	0.00	n/a		
BCDL	10.0									Weight: 65 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7, 5-8

REACTIONS.

All bearings 8-8-15.
(lb) - Max Horz 1=328(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-288(LC 12), 11=-107(LC 14), 10=-130(LC 14), 9=-130(LC 14), 8=-116(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 7, 11 except 1=455(LC 14), 10=285(LC 23), 9=284(LC 23), 8=256(LC 23)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-782/679, 2-3=-614/553, 3-4=-401/386
WEBS 3-10=-283/236, 4-9=-283/202, 5-8=-253/174

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-3-6 to 4-6-4, Exterior(2R) 4-6-4 to 8-7-3 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- All plates are 2x4 MT20 unless otherwise indicated.
- 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) 7 except (jt=lb) 1=288, 11=107, 10=130, 9=130, 8=116.
- 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.



November 17, 2020

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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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job
2523907

Truss
LG04

Truss Type
GABLE

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
11/30/2020

Ply
1

Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:12 2020 Page 1
ID:3seZTgShN_qvhelqPBpz4mYNXMX-X2e4IDNWPmOyOxHSkrGNoBuS1Lx9mrzNH9Vn5VylJH5

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

6-3-3
6-3-3

12-6-6
6-3-3

3x6 =

Scale = 1:32.3

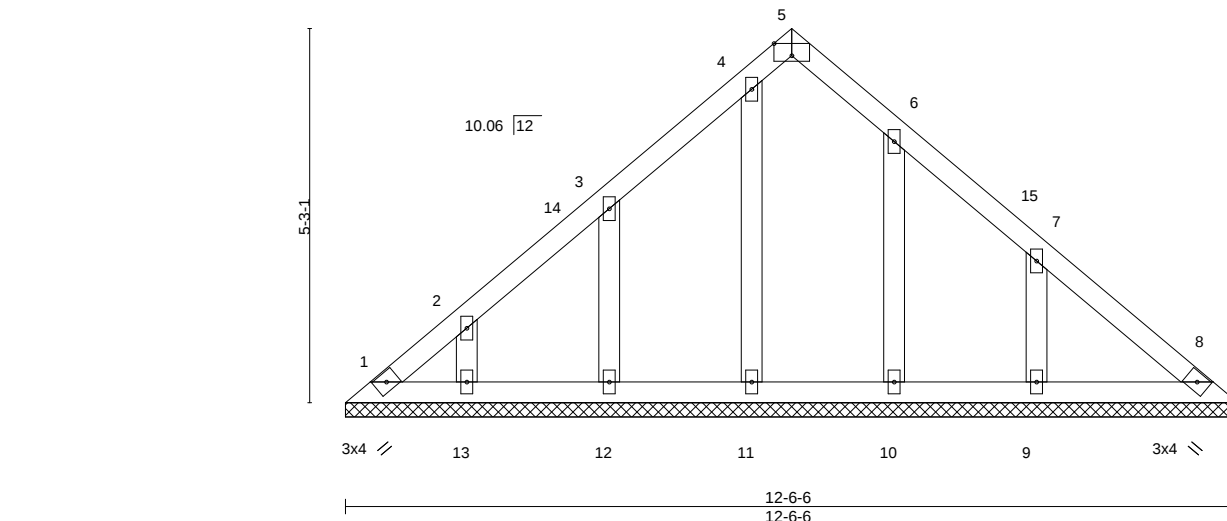


Plate Offsets (X,Y)-- [5:0-3-0,Edge]											
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.08	in (loc)	l/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.04	n/a	-	n/a			
TCDL	20.0	Lumber DOL	1.15	WB	0.05	n/a	-	n/a			
BCLL	0.0	Rep Stress Incr	YES	Matrix-S		Horz(CT)	0.00	8			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 47 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SPF No.2		

REACTIONS. All bearings 12-6-6.
(lb) - Max Horz 1=-113(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 12, 10, 9
Max Grav All reactions 250 lb or less at joint(s) 1, 8, 13, 12, 11, 10 except 9=301(LC 24)

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 6-3-3, Exterior(2R) 6-3-3 to 9-3-3, Interior(1) 9-3-3 to 12-1-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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, 13, 12, 10, 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.



November 17,2020

Job 2523907	Truss LG05	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020	Ply 1	I43654652
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:13 2020 Page 1 ID:3seZTgShN_qvheIqPBpZ4mYnXMX-?ECsZ08A4Wp05seHYncLPRczkG5VIMXVpFKdxylJH4 10-5-1 5-2-9		

Scale = 1:26.0

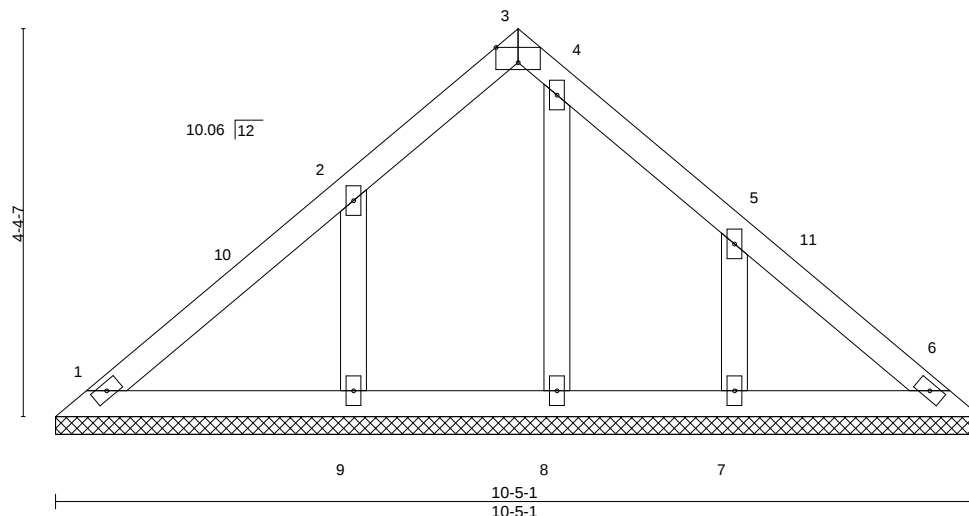


Plate Offsets (X,Y)-- [3:0-3:0,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
TCDL 20.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-S							
BCDL 10.0									Weight: 35 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. All bearings 10-5-1.
 (lb) - Max Horz 1=93(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 7, 9
 Max Grav All reactions 250 lb or less at joint(s) 1, 6, 8 except 7=302(LC 24), 9=359(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-9=-283/182

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-13 to 3-4-4, Interior(1) 3-4-4 to 5-2-8, Exterior(2R) 5-2-8 to 8-2-8, Interior(1) 8-2-8 to 10-0-4 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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) 7, 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 17, 2020

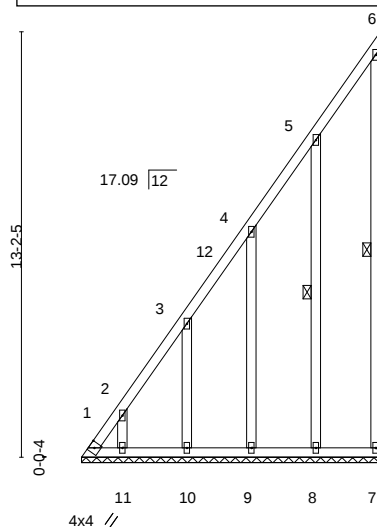
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

Job 2523907	Truss LG06	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020	Ply 1	Job Reference (optional) 143654653
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:14 2020 Page 1 ID:wH4RYhEstNeUP2dXvOfi1syQY8e-TQmqAvPmxNegdFRqrGlrucznP8ctEicgkT_u9NylJH3		



Scale = 1:71.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
TCDL 20.0	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.00	7	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-S						Weight: 68 lb	FT = 20%
BCDL 10.0										

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7, 5-8

REACTIONS.

All bearings 9-3-3.
(lb) - Max Horz 1=349(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-301(LC 12), 8=-130(LC 14), 9=-127(LC 14), 10=-130(LC 14), 11=-108(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 7, 11 except 1=481(LC 14), 8=291(LC 23), 9=276(LC 23), 10=286(LC 23)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-809/705, 2-3=-647/585, 3-4=-435/418, 4-5=-258/260
WEBS 5-8=-287/197, 4-9=-273/194, 3-10=-284/234

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-3-6 to 4-6-4, Exterior(2R) 4-6-4 to 9-1-7 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- All plates are 2x4 MT20 unless otherwise indicated.
- 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) 7 except (jt=lb) 1=301, 8=130, 9=127, 10=130, 11=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.



November 17, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job
2523907

Truss
LG07

Truss Type
GABLE

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

Ply
1

Job Reference (optional)
I43654654

Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:15 2020 Page 1

ID:3seZTgShN_qvheIqPBpZ4mynXMX-xdKDOFQOihmXFO01Pzp4QqWzoYynzBKqz7kRiqylJH2

4-9-3 11/30/2020 9-6-5

4-9-3 4-9-2

4x4 =

Scale = 1:44.7

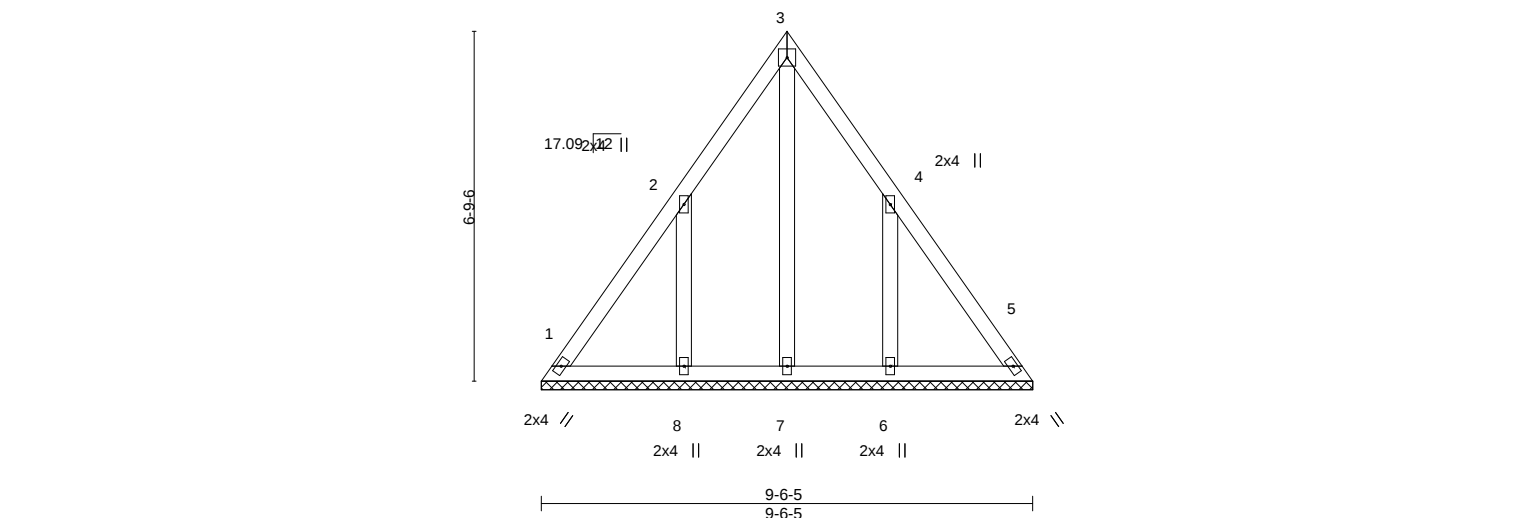


Plate Offsets (X,Y)-- [4:0-0-1,0-0-0]													
LOADING (psf)		SPACING-			CSI.		DEFL.				PLATES		GRIP
TCLL (roof)	25.0	Plate Grip DOL	2-0-0	1.15	TC	0.11	Vert(LL)	in	(loc)	l/defl	L/d	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL		1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES		WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014			Matrix-S							Weight: 43 lb	FT = 20%
BCDL	10.0												

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SPF No.2		

REACTIONS. All bearings 9-6-5.
 (lb) - Max Horz 1=-179(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-171(LC 14), 6=-171(LC 14)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=382(LC 23), 6=381(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-352/238, 4-6=-352/238

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-6 to 3-3-6, Interior(1) 3-3-6 to 4-9-3, Exterior(2R) 4-9-3 to 7-9-3, Interior(1) 7-9-3 to 9-2-15 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
 - 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, 5 except (jt=lb) 8=171, 6=171.
 - 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.



November 17,2020

Job Reference (optional)

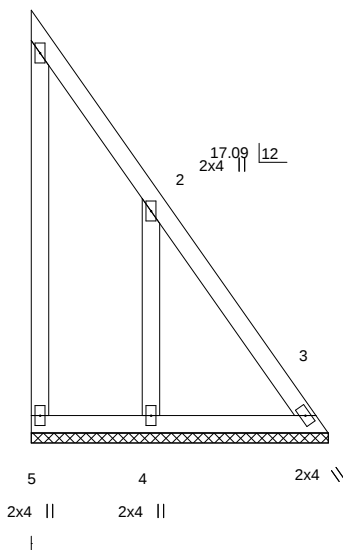
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11/4-11/9/2020

$$\frac{1}{2 \times 4} \parallel$$

7-0-13



Scale = 1:38.5

[illegible]

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

TOP CHORD	Structural wood sheathing directly applied or 4-11-9 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

(size) 5=4-11-9, 3=4-11-9, 4=4-11-9

Max Horz 5=-225(LC 10)

Max Uplift 5=-99(LC 12), 3=-76(LC 13), 4=-182(LC 14)

Max Grav 5=102(LC 24), 3=238(LC 12), 4=403(LC 24)

TOP CHORD 2-3=-464/500
BOT CHORD 4-5=-310/320, 3-4=-310/320
WEBS 2-4=-419/294

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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) 5, 3 except (jt=lb 4=182).
- 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.



November 17, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2523907	Truss LG09	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1 ID:3seZTgShN_qvheIqPBpz4myNXMX-LC?L0HSG_c866skc46Mn2S8UWI_eAYQGf5y5I9yIjH?
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:18 2020 Page 1 11-5-5 11-5-5 15-10-6 4-5-1	

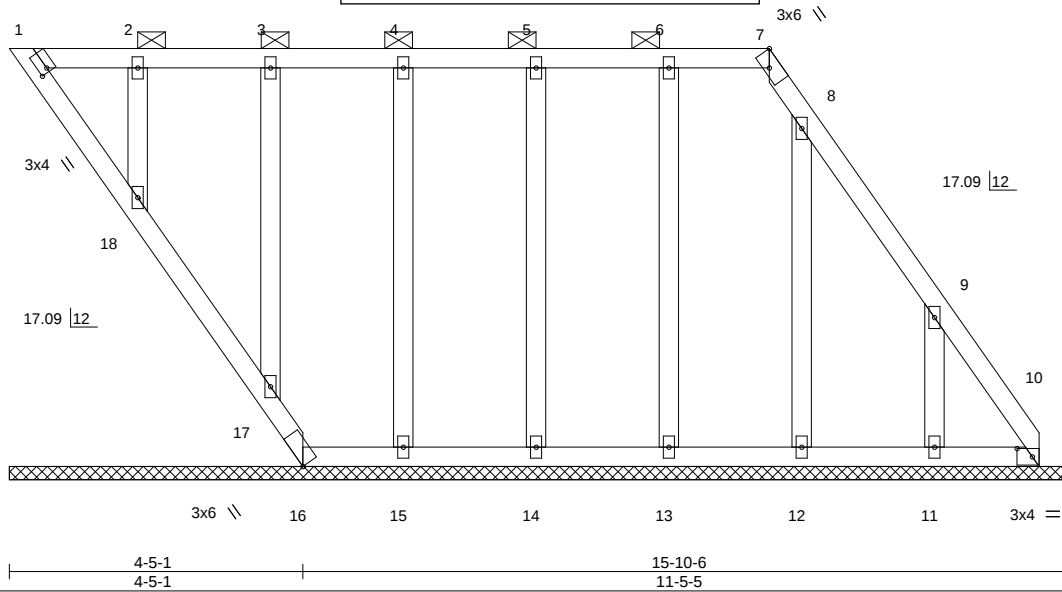


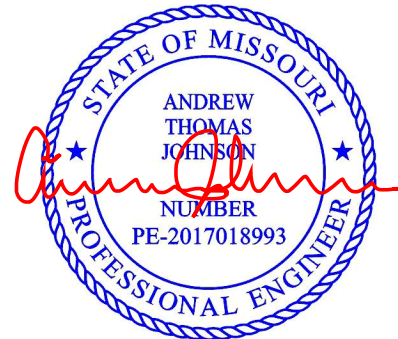
Plate Offsets (X,Y)--		[1:0-0-12,0-1-8], [7:0-2-14,Edge], [10:0-2-12,0-1-8], [16:0-0-0,Edge]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	20.0	Rep Stress Incr	YES
BCLL	0.0	Code IRC2018/TPI2014	
BCDL	10.0		
		CSI.	
		TC	0.08
		BC	0.04
		WB	0.12
		Matrix-S	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	n/a - 999
		Vert(CT)	n/a - 999
		Horz(CT)	0.01 10 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 78 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (6-0-0 max.): 1-7.
OTHERS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 15-10-6.
 (lb) - Max Horz 1=-166(LC 14)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 14, 15, 17, 18, 13, 12 except 16=-146(LC 14),
 11=-153(LC 14)
 Max Grav All reactions 250 lb or less at joint(s) 1, 10, 16, 14, 15, 17, 18, 13, 12 except 11=294(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 9-11=-283/200

- 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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-6 to 3-3-6, Interior(1) 3-3-6 to 11-5-5, Exterior(2R) 11-5-5 to 14-5-5, Interior(1) 14-5-5 to 15-6-2 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
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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, 10, 14, 15, 17, 18, 13, 12 except (jt=lb) 16=146, 11=153.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 17, 18.
 - 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.



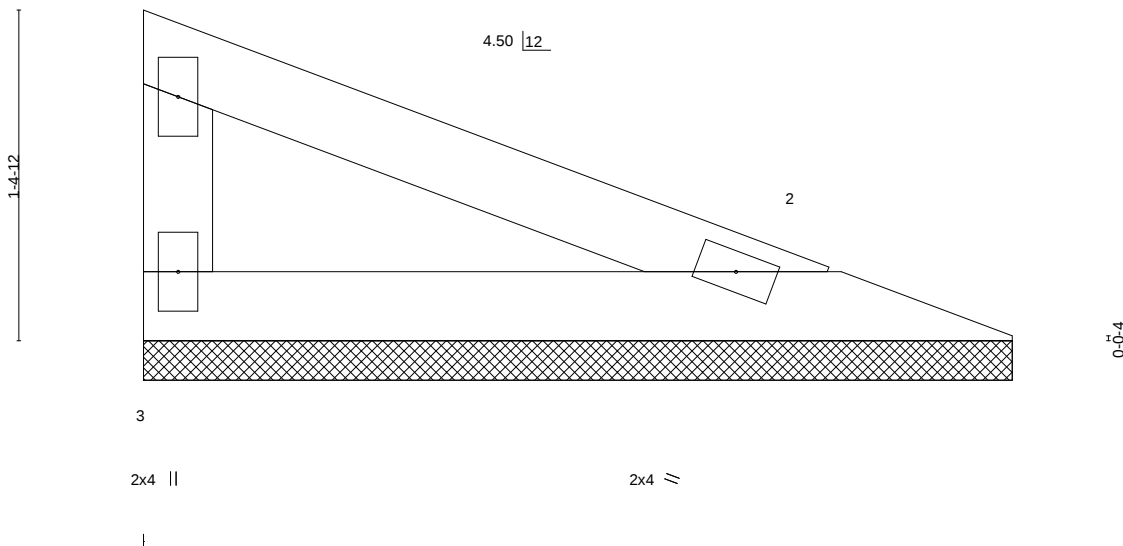
November 17, 2020

Weight: 20 lb FT = 20%

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



Job 2523907	Truss V03	Truss Type VALLEY	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS, REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	I43654658
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) ID: wH4RYhEstNeUP2dXvOfi1syQY8e-1a76RyTXWDOqMAU_CWPF7tDpiZeZkZ6PRCM1yJGz 11/30/2020		



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.17	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.07	Vert(CT)	n/a	-	n/a		
TCDL 20.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	2	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 9 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-11 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=3-8-0, 2=3-8-0
 Max Horz 3=-36(LC 14)
 Max Uplift 3=-11(LC 16), 2=-9(LC 16)
 Max Grav 3=151(LC 2), 2=151(LC 2)

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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) 3, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 17, 2020

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

Job 2523907	Truss V04	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply 1 Job Reference (optional) ID:wH4RYhEstNeUP2dXvOfi1syQY8e-mnhUeiU9HXWhzJTBIewUg5myQz_6Nw9iL3BluTyIJGy
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:21 2020 Page 1 6-4-11 6-4-11		

Scale = 1:15.4

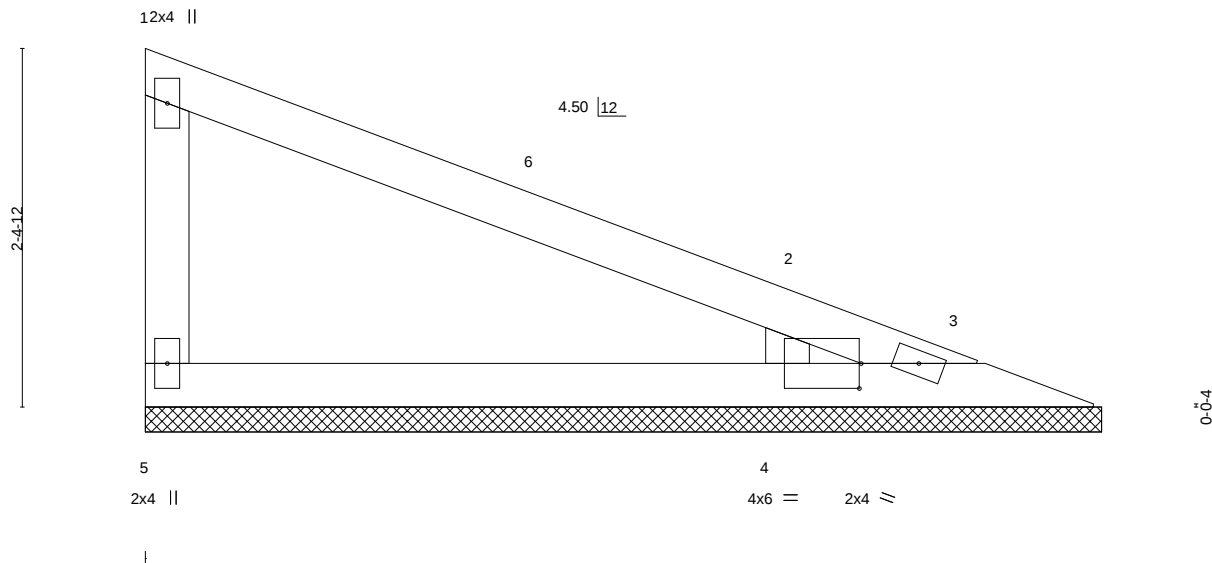


Plate Offsets (X,Y)-- [2:0-1-12,0-0-10], [4:0-0-2,0-2-0], [4:0-1-12,0-0-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999		
TCDL 20.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-P							
BCDL 10.0									Weight: 16 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 5=6-4-11, 3=6-4-11, 4=6-4-11
 Max Horz 5=-71(LC 12)
 Max Uplift 5=-10(LC 12), 3=-82(LC 21), 4=-50(LC 16)
 Max Grav 5=193(LC 21), 3=23(LC 12), 4=515(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-4=-426/244

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 4-3-8, Interior(1) 4-3-8 to 5-6-10 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - 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) 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.



November 17, 2020

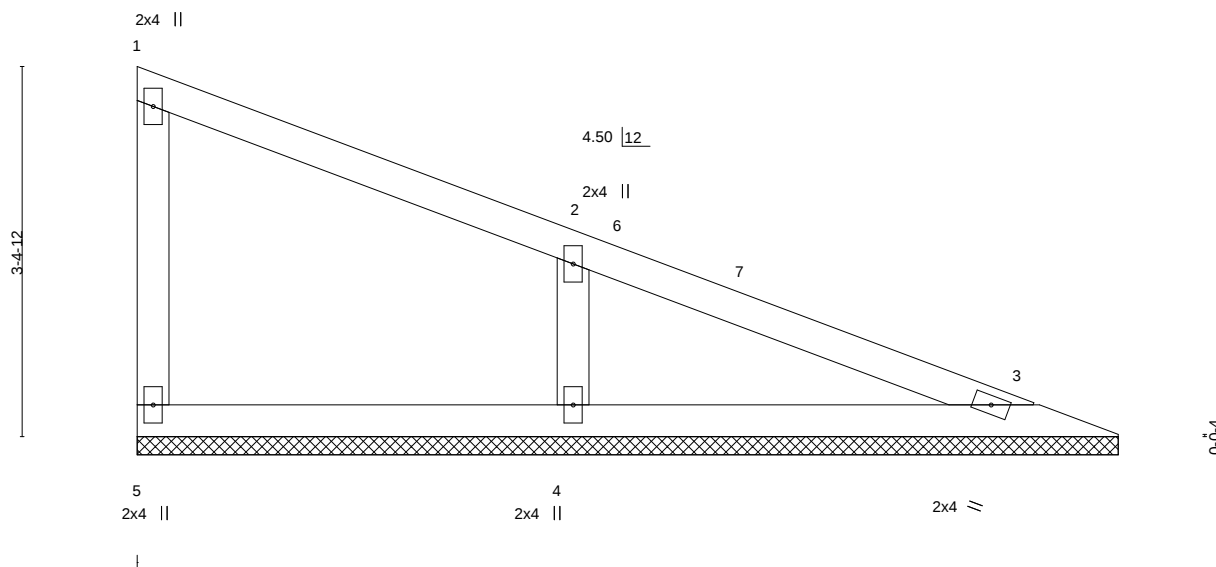
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

Job 2523907	Truss V05	Truss Type VALLEY	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1 143654660
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:22 2020 Page 1 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-EzFsseVn2reYbT2NJxRjC1J7_NJ25NLsajwJQwyIJGx 11/30/2020		



Scale = 1:21.1

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.31	in	(loc)	I/defl	L/d	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.13	n/a	-	n/a	999		
TCDL	20.0	Lumber DOL	1.15	WB	0.06	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-S		0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=9-0-0, 3=9-0-0, 4=9-0-0
 Max Horz 5=-106(LC 14)
 Max Uplift 5=-13(LC 12), 4=-55(LC 16)
 Max Grav 5=175(LC 21), 3=185(LC 2), 4=542(LC 2)

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

WEBS 2-4=-434/201

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 8-2-10 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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) 5, 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.



November 17, 2020

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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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job

2523907

Truss

V06

Truss Type

VALLEY

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/30/2020

Ply

1

Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 17 10:05:23 2020

Page 1

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2-7-15

2-7-15

5-3-14

2-7-15

3x6

=

Scale = 1:11.1

Plate Offsets (X,Y)--	[2-0-3-0,Edge]	5-3-6	5-3-6	5-3-14	0-0-8
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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							Weight: 11 lb	FT = 20%
BCDL	10.0											

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 5-3-14 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-2-14, 3=5-2-14
 Max Horz 1=19(LC 15)
 Max Uplift 1=-15(LC 16), 3=-15(LC 16)
 Max Grav 1=223(LC 2), 3=223(LC 2)

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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.

November 17,2020

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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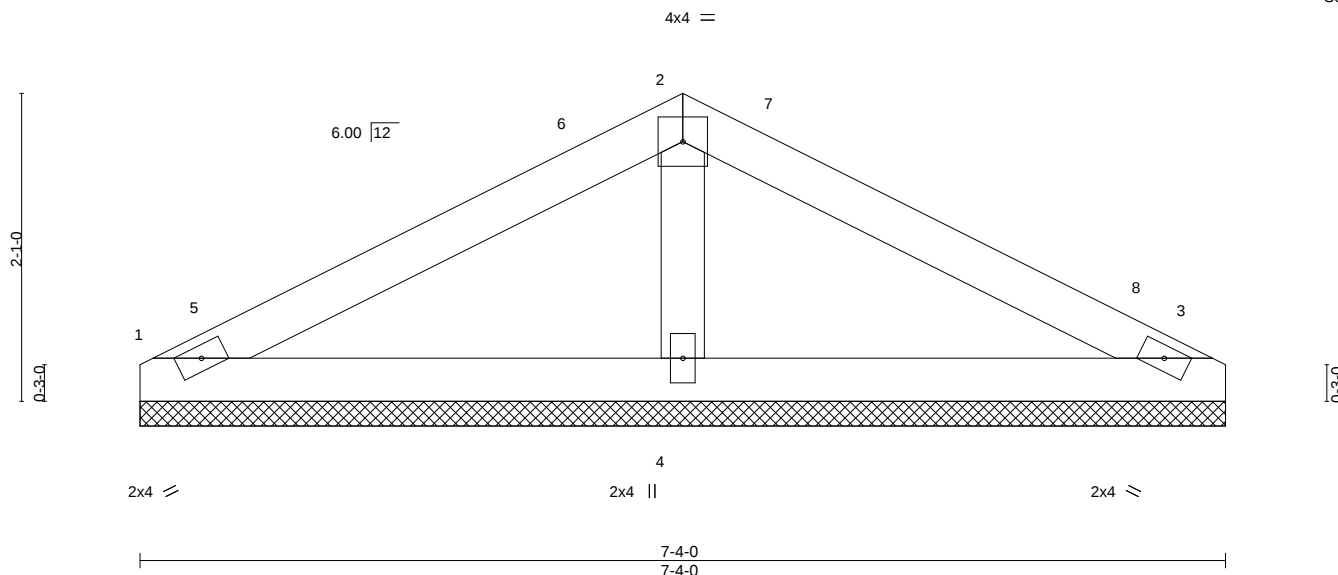
MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job 2523907	Truss V07	Truss Type VALLEY	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS, REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/30/2020		Ply 1 Job Reference (optional) 143654662
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:23 2020 Page 1 ID:wH4RYhEstNeUP2dXvOfi1syQY8e-i9pE3_WPp8mODddZtfyylWrlmmgjqqt?oNgszMyIJGw		
3-8-0 3-8-0			7-4-0 3-8-0		

Scale = 1:15.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0		2-0-0	TC	0.31	in (loc)	l/defl	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.11	n/a	n/a				
TCDL	20.0	Lumber DOL	1.15	WB	0.04	n/a	n/a				
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		0.00	3				
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 19 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-4-0, 3=7-4-0, 4=7-4-0
 Max Horz 1=34(LC 15)
 Max Uplift 1=24(LC 16), 3=24(LC 16), 4=4(LC 16)
 Max Grav 1=206(LC 20), 3=206(LC 21), 4=375(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-4=-286/145

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=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-8-0, Exterior(2R) 3-8-0 to 6-8-0, Interior(1) 6-8-0 to 7-2-4 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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.



November 17, 2020

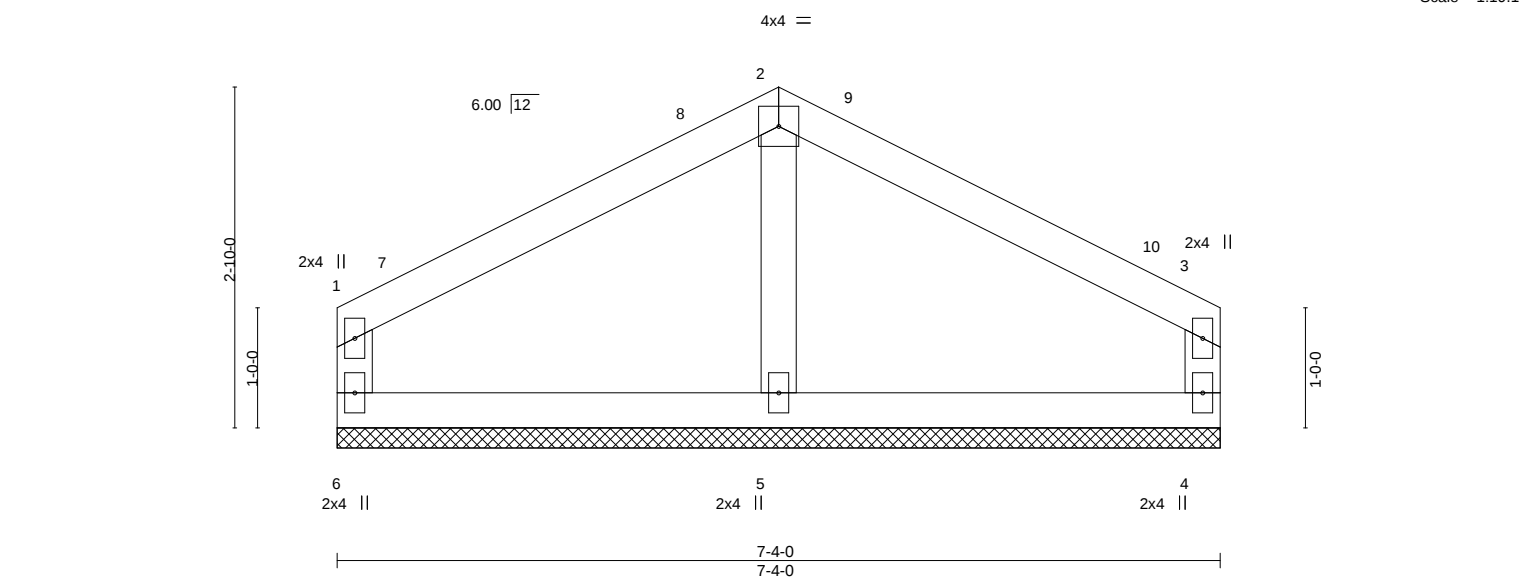
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2523907	Truss V08	Truss Type VALLEY	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	I43654663
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 17 10:05:24 2020 Page 1 ID: wH4RYhEsTNeUP2dXvOfi1syQY8e-ALNcGKX1aSuFqnCIRMTBijOU8A02ZH6811PQVoyIJGv		



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP	
TCLL (roof)	25.0		2-0-0	TC	0.20	Vert(LL)	n/a	(loc) -	l/defl n/a	L/d 999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Lumber DOL	1.15	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Rep Stress Incr	YES	Matrix-R						Weight: 22 lb		FT = 20%
BCDL	10.0	Code IRC2018/TPI2014										

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		
OTHERS	2x4 SPF No.2		

REACTIONS. (size) 6=7-4-0, 4=7-4-0, 5=7-4-0
 Max Horz 6=-58(LC 14)
 Max Uplift 6=-35(LC 16), 4=-35(LC 16)
 Max Grav 6=227(LC 20), 4=227(LC 21), 5=327(LC 2)

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

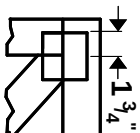
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-8-0, Exterior(2R) 3-8-0 to 6-8-0, Interior(1) 6-8-0 to 7-2-4 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - 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) 6, 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.



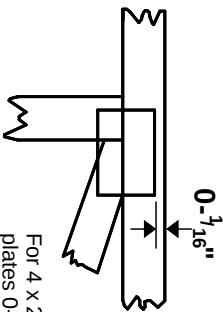
November 17,2020

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- $\frac{1}{16}$ " from outside edge of truss.

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

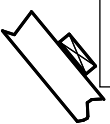
Plate location details available in **MiTek 20120** software or upon request.

PLATE SIZE

4 X 4

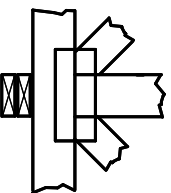
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



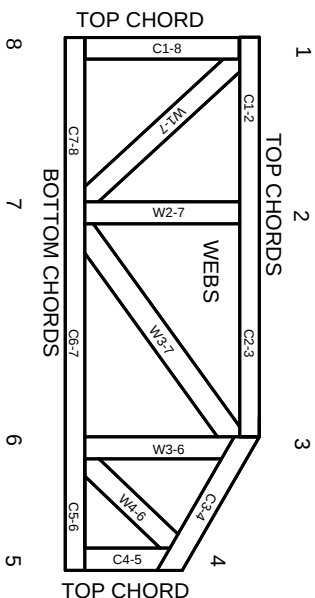
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: 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/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-7473 rev. 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 Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.