



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

12/16/2020

MiTek USA, Inc.

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

Re: 2547158
Summit/14 Woodside

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: I43817556 thru I43817618

My license renewal date for the state of Missouri is December 31, 2022.

Missouri COA: Engineering 001193



December 1, 2020

Vance, Jeff ,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: 2547158

Truss: A1

Truss Type: ROOF SPECIAL

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/16/2020

Ply: 1

Summit/14 Woodside

Job Reference (optional)

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:48:53 2020 Page 1

0-10-8 3-3-8 6-7-8 9-0-12 13-8-0 14-6-6 20-0-0 26-7-14 33-3-13 40-0-0 40-10-8

0-10-8 3-3-8 3-4-0 2-5-4 4-7-4 0-10-6 5-5-10 6-7-14 6-7-14 6-8-3 0-10-8

10x10 =

Scale = 1:89.5

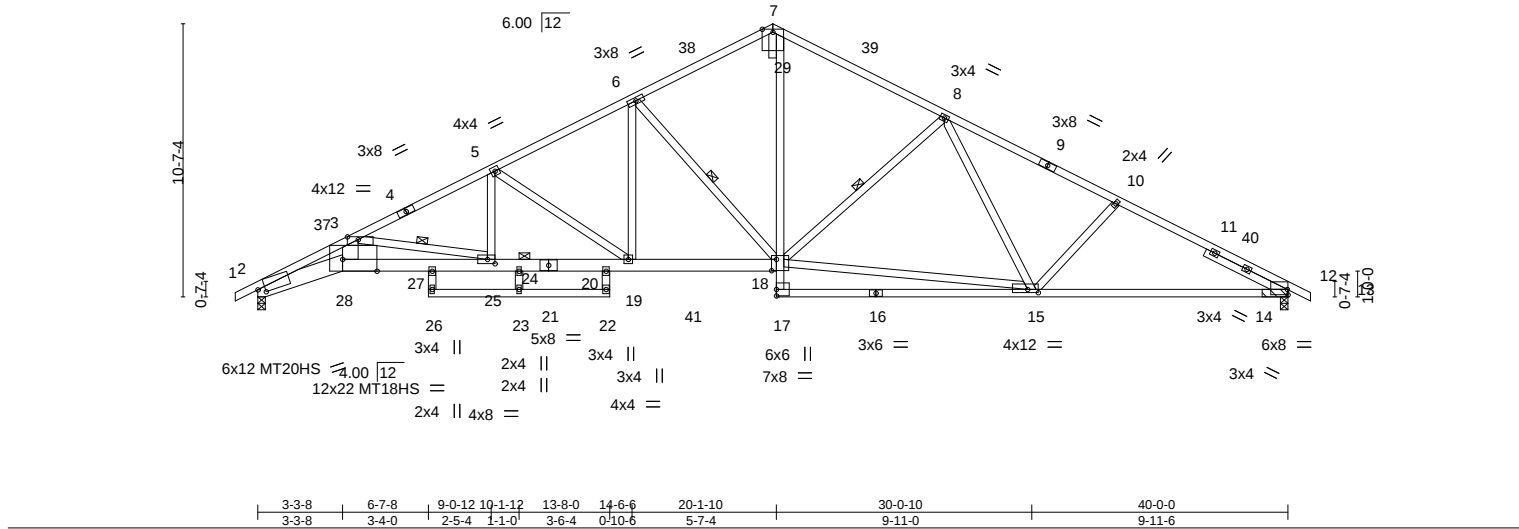


Plate Offsets (X,Y)--		[2:0-3-7,0-2-1], [3:0-5-1,0-1-5], [12:Edge,0-2-8], [15:0-4-15,0-1-8], [18:0-2-4,0-5-4], [25:0-3-8,0-2-0], [28:1-4-0,Edge]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.89	in (loc) l/defl L/d
TCDL 20.0	Plate Grip DOL 1.15	BC 0.87	Vert(LL) -0.40 15-17 >999 240
BCLL 0.0 *	Lumber DOL 1.15	WB 1.00	Vert(CT) -0.86 15-17 >555 180
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.33 12 n/a n/a
	Code IRC2018/TPI2014		
PLATES	GRIP		
MT20	197/144		
MT20HS	148/108		
MT18HS	244/190		
Weight: 220 lb	FT = 20%		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied.
2-28: 2x8 SP 2400F 2.0E, 21-28: 2x6 SP 2400F 2.0E	WEBS 1 Row at midpt 8-18, 6-18, 3-25
18-21: 2x6 SPF No.2, 12-16: 2x4 SPF 1650F 1.5E	JOINTS 1 Brace at Jt(s): 24
WEBS 2x4 SPF No.2 *Except*	
3-28: 2x8 SP 2400F 2.0E	
SLIDER Right 2x4 SPF No.2 3-6-0	

REACTIONS.	(size) 2=0-3-8, 12=(0-3-8 + bearing block) (req. 0-3-11)
Max Horz 2=167(LC 12)	
Max Uplift 2=171(LC 12), 12=170(LC 13)	
Max Grav 2=2406(LC 2), 12=2361(LC 2)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-8067/631, 3-5=-5067/354, 5-6=-3875/278, 6-7=-2860/280, 7-8=-2949/280, 8-10=-3704/271, 10-12=-3916/287
BOT CHORD	2-28=-691/7334, 27-28=-653/6705, 25-27=-649/6567, 24-25=-339/4347, 20-24=-339/4347, 19-20=-344/4484, 18-19=-173/3374, 7-18=-117/2087, 15-17=0/377, 12-15=-162/3438
WEBS	3-28=-81/1624, 15-18=-120/2729, 8-18=-863/245, 8-15=-13/365, 10-15=-417/192, 6-18=-1346/216, 6-19=-41/1063, 5-19=-1345/207, 5-25=-10/826, 3-25=-2265/315

- NOTES-**
- 2x4 SPF 1650F 1.5E bearing block 12" long at jt. 12 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-1-9, Exterior(2R) 20-1-9 to 23-1-9, Interior(1) 23-1-9 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 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) except (jt=lb) 2=171, 12=170.
 - 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.



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Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Summit/14 Woodside
2547158	A2	Roof Special			1	I43817557
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			
12/16/2020			ID:clow4Ylgf7iox0?ly?58Ccz33zm-YgUAn72whYikLJ96dNdkLZB9TlboYCCrPOD_dPyDJbN			
0-10-8 3-3-8 6-7-8 9-0-3 13-8-0 14-6-1 20-0-0 25-5-15 25-5-15 25-5-15 30-11-14 36-8-8 40-0-0 40-10-8			Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:48:54 2020 Page 1			
0-10-8 3-3-8 3-4-0 2-4-11 4-7-13 0-10-1 5-5-15 5-5-15 0-0-14 5-5-1			18.240 s			
			5-8-10 3-3-8 0-10-8			

Scale = 1:83.6

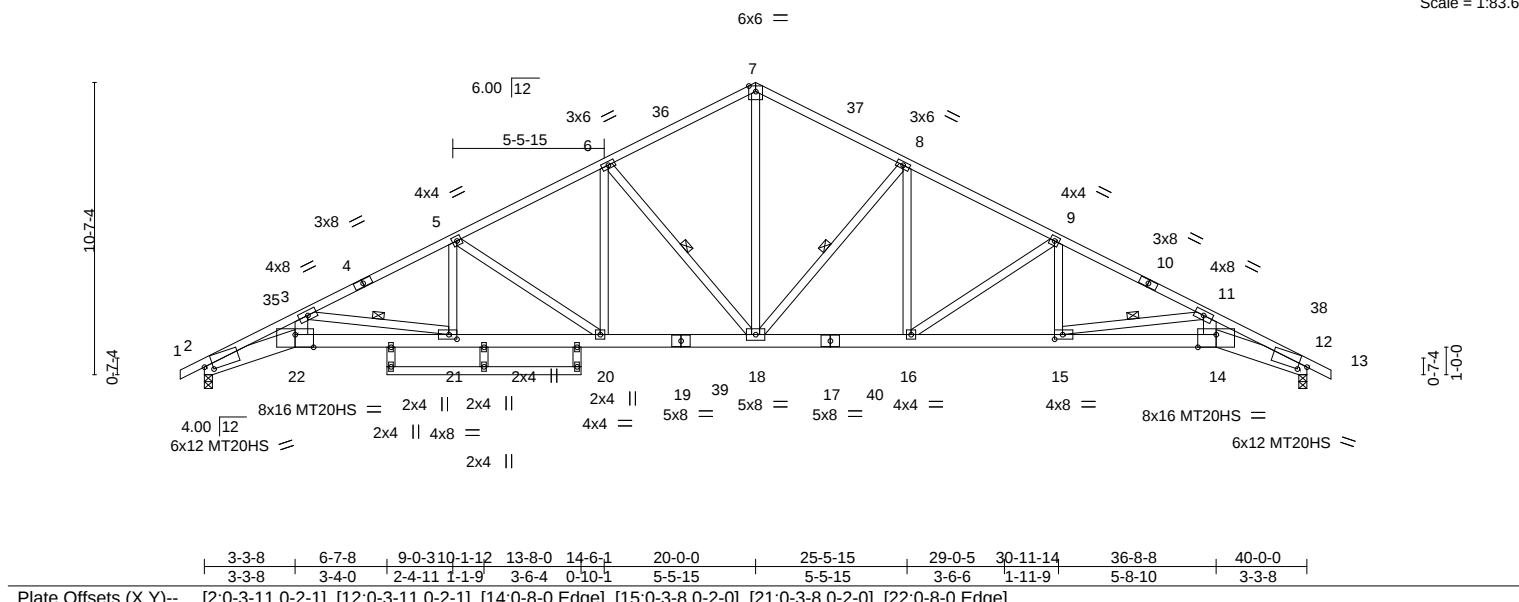


Plate Offsets (X,Y)--		[2:0-3-11,0-2-1], [12:0-3-11,0-2-1], [14:0-8-0,Edge], [15:0-3-8,0-2-0], [21:0-3-8,0-2-0], [22:0-8-0,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.36 18-20 >999	240	MT20	197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.77 18-20 >627	180	MT20HS	148/108	
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.42 12 n/a	n/a	Weight: 225 lb FT = 20%		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SPF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied.
	2-22,12-14: 2x8 SP 2400F 2.0E, 19-22,14-17: 2x6 SPF 2100F 1.8E	WEBS	1 Row at midpt 6-18, 3-21, 8-18, 11-15
	17-19: 2x6 SPF No.2		
WEBS	2x4 SPF No.2 *Except*		
	3-22,11-14: 2x6 SPF No.2		

REACTIONS.	
(size)	2=0-3-8, 12=0-3-8
Max Horz	2=165(LC 16)
Max Uplift	2=-170(LC 12), 12=-170(LC 13)
Max Grav	2=2351(LC 2), 12=2351(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-7917/642, 3-5=-4991/353, 5-6=-3803/277, 6-7=-2922/282, 7-8=-2923/281, 8-9=-3803/274, 9-11=-4992/302, 11-12=-7916/468
BOT CHORD	2-22=-7017/200, 21-22=-666/6673, 20-21=-343/4417, 18-20=-171/3312, 16-18=-45/3312, 15-16=-131/4418, 14-15=-364/6672, 12-14=-372/7200
WEBS	3-22=-86/1567, 7-18=-119/2107, 11-14=-9/1562, 6-18=-1211/220, 6-20=-45/898, 5-20=-1335/208, 5-21=-9/811, 3-21=-2298/328, 8-16=-32/898, 8-18=-1211/210, 9-15=0/811, 9-16=-1335/182, 11-15=-2290/237

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=170, 12=170.
 - 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.



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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		Ply	Summit/14 Woodside	143817558
2547158	A3	HIP			1	Job Reference (optional)	

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

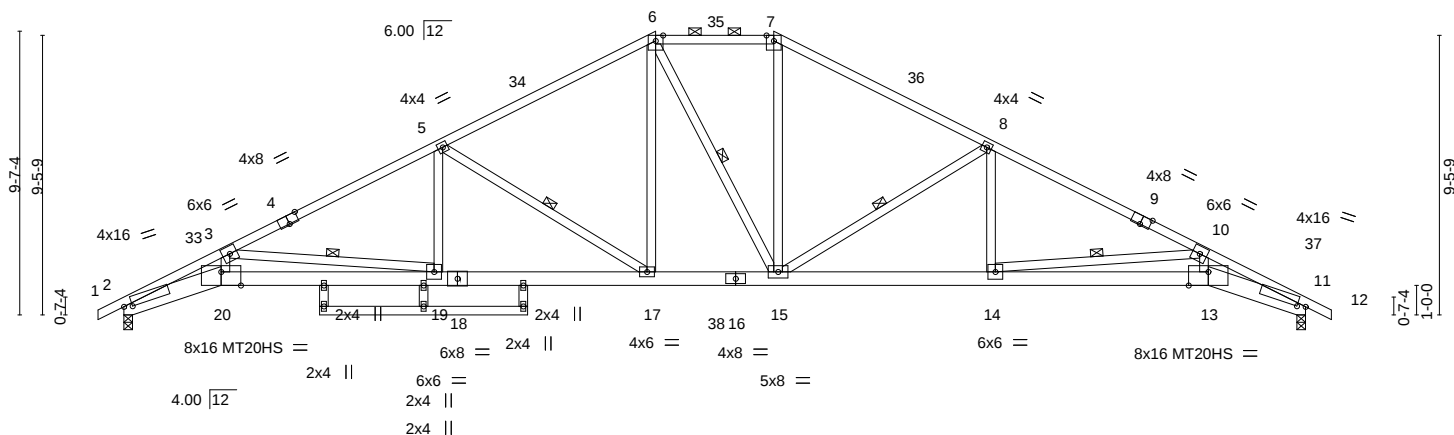
18,240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:48:56 2020 Page 1
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0-10-8 3-3-8 6-7-8 10-7-12 13-8-0 14-3-0 18-0-0 22-0-0 29-4-4 36-8-8 40-0-0 40-10-8
0-10-8 3-3-8 3-4-0 4-0-4 3-0-4 0-7-0 3-9-0 4-0-0 7-4-4 7-4-4 3-3-8 0-10-8

6x6 =

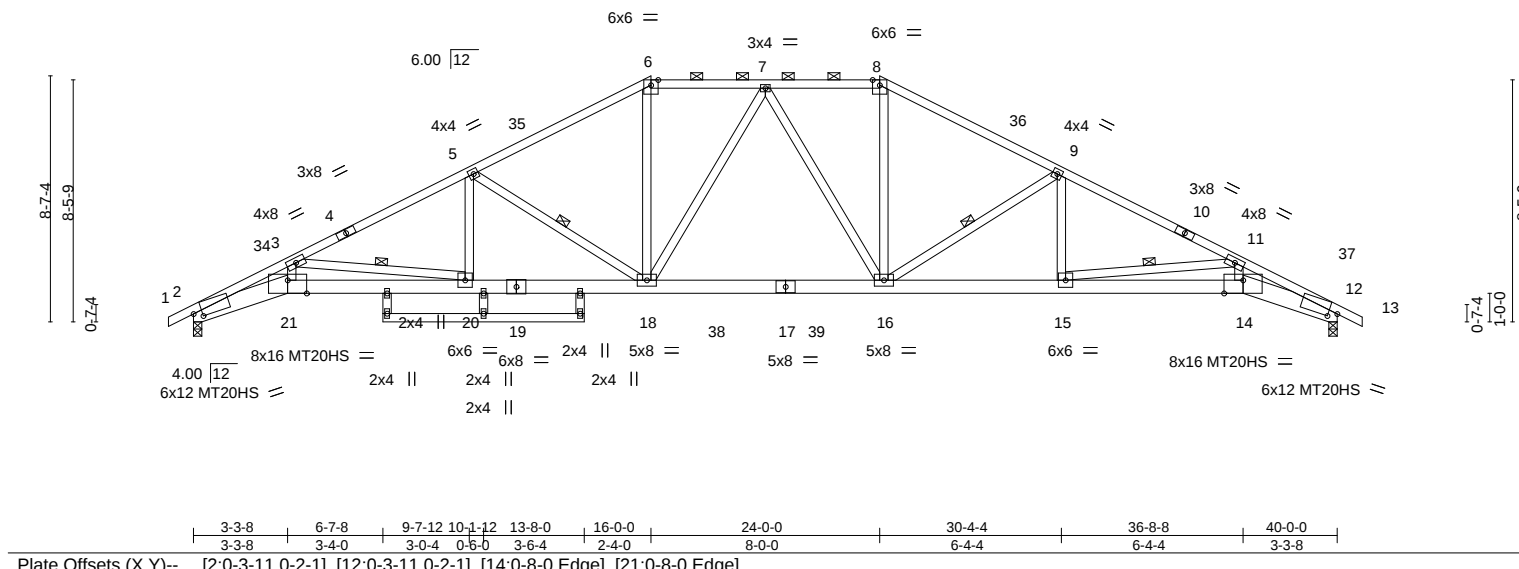
6x6 =

Scale = 1:78.0



Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Summit/14 Woodside	143817559
2547158	A4	Hip	12/16/2020		1	Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:clow4Ylgf7iox0?ly?5BCcz33zm-QRjhdU5QknCApwStsDigVPMqTwxyU6MRK0BBmAyDjBj				
-0-10-8 3-3-8 6-7-8 9-7-12 13-8-0 16-0-0 20-0-0 24-0-0 30-4-4 36-8-8 40-0-0 40-10-8		0-10-8 3-3-8 3-4-0 3-0-4 4-0-4 2-4-0 4-0-0 4-0-0 6-4-4 6-4-4 3-3-8 0-10-8	Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:48:58 2020 Page 1				

Scale = 1:80.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.97	Vert(LL)	-0.40 16-18	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.82 16-18	>584	180	MT20HS	148/108
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.44 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 218 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 *Except*	2-0-0 oc purlins (3-1-6 max.): 6-8.
2-21,12-14: 2x8 SP 2400F 2.0E, 19-21,14-17: 2x6 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied.
17-19: 2x6 SPF No.2	WEBS 1 Row at midpt 9-16, 11-15, 5-18, 3-20
WEBS 2x4 SPF No.2	

REACTIONS.	(size) 2=0-3-8, 12=0-3-8
	Max Horz 2=132(LC 12)
	Max Uplift 2=-178(LC 12), 12=-178(LC 13)
	Max Grav 2=2344(LC 2), 12=2344(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-7918/635, 3-5=-4835/356, 5-6=-3615/278, 6-7=-3116/282, 7-8=-3117/282, 8-9=-3616/277, 9-11=-4837/318, 11-12=-7915/498
BOT CHORD	2-21=-662/7204, 20-21=-640/6791, 18-20=-306/4272, 16-18=-78/3219, 15-16=-153/4274, 14-15=-397/6789, 12-14=-401/7201
WEBS	3-21=-63/1572, 6-18=-26/1188, 8-16=-35/1189, 9-16=-1354/221, 9-15=0/761, 11-15=-2543/259, 11-14=-2/1569, 5-18=-1352/238, 5-20=0/760, 3-20=-2547/338, 7-18=-431/125, 7-16=-431/127

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 20-0-0, Interior(1) 20-0-0 to 24-0-0, Exterior(2R) 24-0-0 to 28-2-15, Interior(1) 28-2-15 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=178, 12=178.
 - 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.



December 1,2020

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

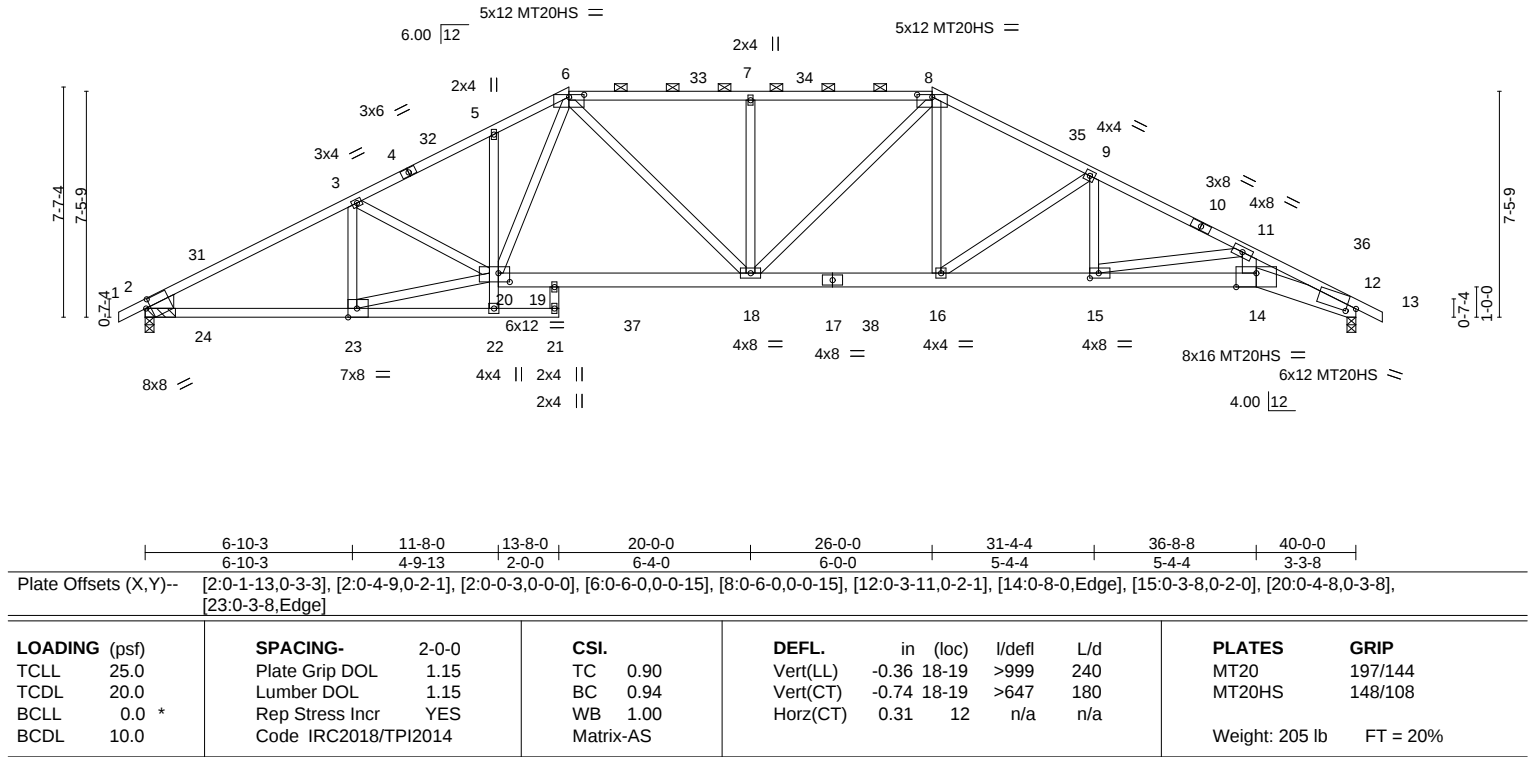
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



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Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			Ply	Summit/14 Woodside	I43817560
2547158	A5	Hip				1	Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:00 2020 Page 1					
-0-10-8 6-10-3 11-8-0 14-0-0 20-0-0 26-0-0 31-4-4 36-8-8 40-0-0 40-10-8			ID:clow4Ylgf7iox07ly75BCcz33zm-MqrS2A7gGOS13EcFzek8bqRB7jcCyvcjnKglr3yDJbH					
0-10-8 6-10-3 4-9-13 2-4-0 6-0-0 6-0-0 5-4-4 5-4-4 3-3-8 0-10-8			12/16/2020					

Scale = 1:76.1



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except
BOT CHORD	2x4 SPF 1650F 1.5E *Except*		2-0-0 oc purlins (2-2-0 max.); 6-8.
	5-22: 2x4 SPF No.2, 17-20: 2x6 SPF No.2, 12-14: 2x8 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied.
	14-17: 2x6 SPF 2100F 1.8E		
WEBS	2x4 SPF No.2 *Except*		
	11-14: 2x6 SPF No.2		
WEDGE			
Left: 2x6 SPF No.2			
REACTIONS.	(size) 2=(0-3-8 + bearing block) (req. 0-3-12), 12=0-3-8		
	Max Horz 2=116(LC 12)		
	Max Uplift 2=-181(LC 12), 12=-181(LC 13)		
	Max Grav 2=2375(LC 2), 12=2362(LC 2)		
FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		
TOP CHORD	2-3=-4101/296, 3-5=-4384/318, 5-6=-4292/362, 6-7=-3890/302, 7-8=-3890/302, 8-9=-3961/287, 9-11=-5107/338, 11-12=-7929/505		
BOT CHORD	2-23=-284/3550, 19-20=-157/3433, 18-19=-157/3433, 16-18=-66/3453, 15-16=-168/4527, 14-15=-390/6680, 12-14=-404/7206		
WEBS	3-23=-707/114, 20-23=-234/3459, 3-20=-24/435, 6-20=-107/1135, 6-18=-104/770, 7-18=-657/171, 8-18=-115/752, 8-16=-39/874, 9-16=-1273/182, 9-15=0/809, 11-15=-2191/226, 11-14=-24/1552		

- NOTES-**
- 2x4 SPF 1650F 1.5E bearing block 12" long at jt. 2 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 18-2-15, Interior(1) 18-2-15 to 26-0-0, Exterior(2R) 26-0-0 to 30-2-15, Interior(1) 30-2-15 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Continued on page 2



December 1, 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	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020		Ply	Summit/14 Woodside
2547158	A5	Hip			1	I43817560
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:00 2020 Page 2 ID:clow4Ylgf7iox0?ly?5BCcz33zm-MqrS2A7gGOst3EcFzek8bqRB7jcCyvcjnKglr3yDJbH			
NOTES- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=181, 12=181. 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.						

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Summit/14 Woodside
2547158	A6	Hip			1	I43817561
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			
0-10-8 1-7-8 2-3-8 7-1-12 12-0-0 17-3-7 20-0-0 23-9-8 28-0-0 32-4-4 36-8-8 40-0-0 40-10-8			ID:clow4Ylgf7iox0?ly?5B Ccz33zm-q0PqFW7J1akhOBSXLFN72_Oz7_YhMrt0_QrNVyDJbG			
0-10-8 1-7-8 0-8-0 4-10-4 4-10-4 5-3-7 5-3-7 2-6-9 2-6-9 5-3-7 4-4-4 4-4-4 3-3-8 0-10-8			12/16/2020			

Scale = 1:71.1

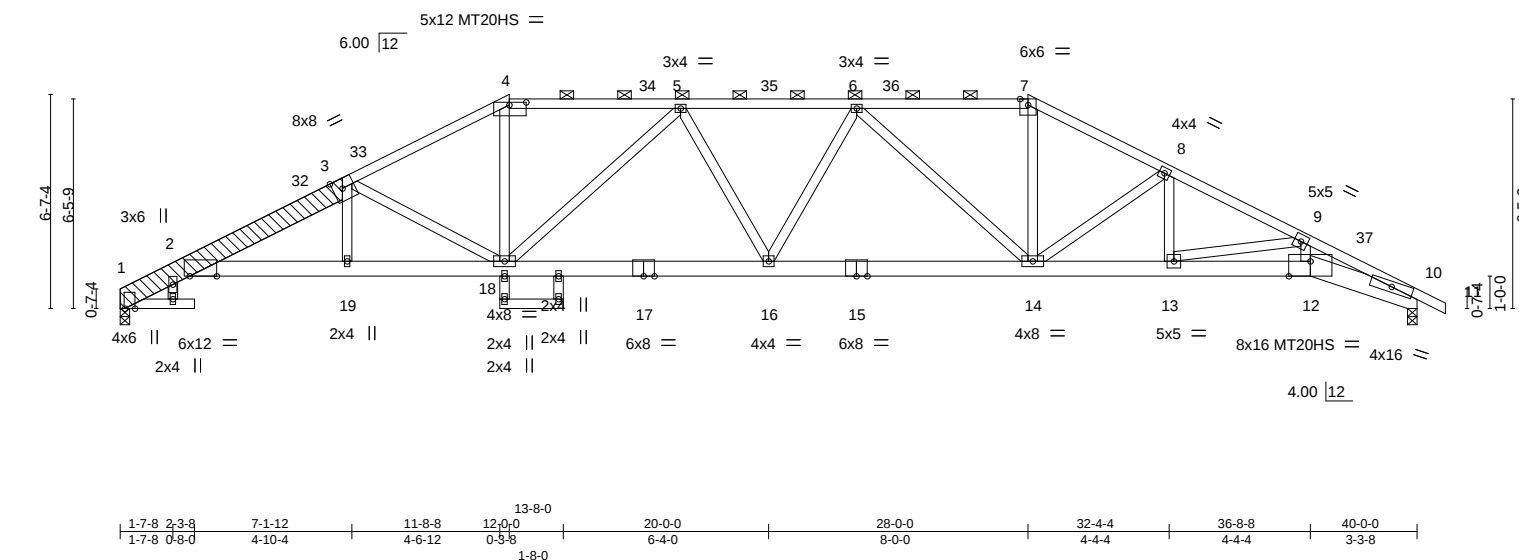


Plate Offsets (X,Y)--		[2:0-10-0,0-0-0], [3:0-3-8,Edge], [4:0-6-4,0-1-0], [12:0-8-0,Edge]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.83	in (loc) l/defl L/d
TCDL 20.0	Lumber DOL 1.15	BC 0.81	Vert(LL) -0.33 16 >999 240
BCLL 0.0 *	Rep Stress Incr YES	WB 1.00	Vert(CT) -0.74 14-16 >645 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) 0.37 10 n/a n/a
		PLATES	
		GRIP	
		Weight: 232 lb FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x8 SP 2400F 2.0E

BOT CHORD 2x4 SPF No.2 *Except*
2-17,12-15: 2x6 SPF 2100F 1.8E, 10-12: 2x8 SP 2400F 2.0E
15-17: 2x6 SPF No.2

WEBS 2x4 SPF No.2

OTHERS 2x8 SP 2400F 2.0E

LBR SCAB 1-3 2x8 SP 2400F 2.0E one side

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (2-3-15 max.): 4-7.

BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-8, 10=0-3-8
Max Horz 1=-106(LC 17)
Max Uplift 1=-151(LC 12), 10=-183(LC 13)
Max Grav 1=2215(LC 1), 10=2273(LC 1)

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

TOP CHORD 1-2=-981/120, 2-3=-5127/391, 3-4=-4121/311, 4-5=-3573/310, 5-6=-4286/298,
6-7=-3587/296, 7-8=-4114/300, 8-9=-5119/365, 9-10=-7453/508

BOT CHORD 2-19=-365/4746, 18-19=-363/4761, 16-18=-202/4236, 14-16=-176/4243, 13-14=-205/4542,
12-13=-390/6395, 10-12=-405/6754

WEBS 4-18=-21/1350, 7-14=-33/1382, 9-12=-31/1323, 3-19=0/292, 3-18=-1303/208,
9-13=-1898/190, 8-13=-16/726, 8-14=-1133/171, 6-14=-1033/167, 5-18=-1044/170

- NOTES-**
- Attached 7-11-3 scab 1 to 3, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 3-2-15 from end at joint 3, nail 2 row(s) at 2" o.c. for 3-0-5; starting at 0-0-15 from end at joint 3, nail 2 row(s) at 7" o.c. for 2-0-0.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-0-11, Interior(1) 3-0-11 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 28-0-0, Exterior(2R) 28-0-0 to 32-4-4, Interior(1) 32-4-4 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 1, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=151, 10=183.

Continued on page 2



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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 12/16/2020		Ply	Summit/14 Woodside
2547158	A6	Hip			1	I43817561
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18.240 s Mar 9 2020 MITek Industries, Inc. Tue Dec 1 13:49:01 2020 Page 2			
NOTES-			Job Reference (optional) 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.			

Job: 2547158

Truss: A7

Truss Type: Hip

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

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/16/2020

Ply: 1

Summit/14 Woodside

Job Reference (optional)

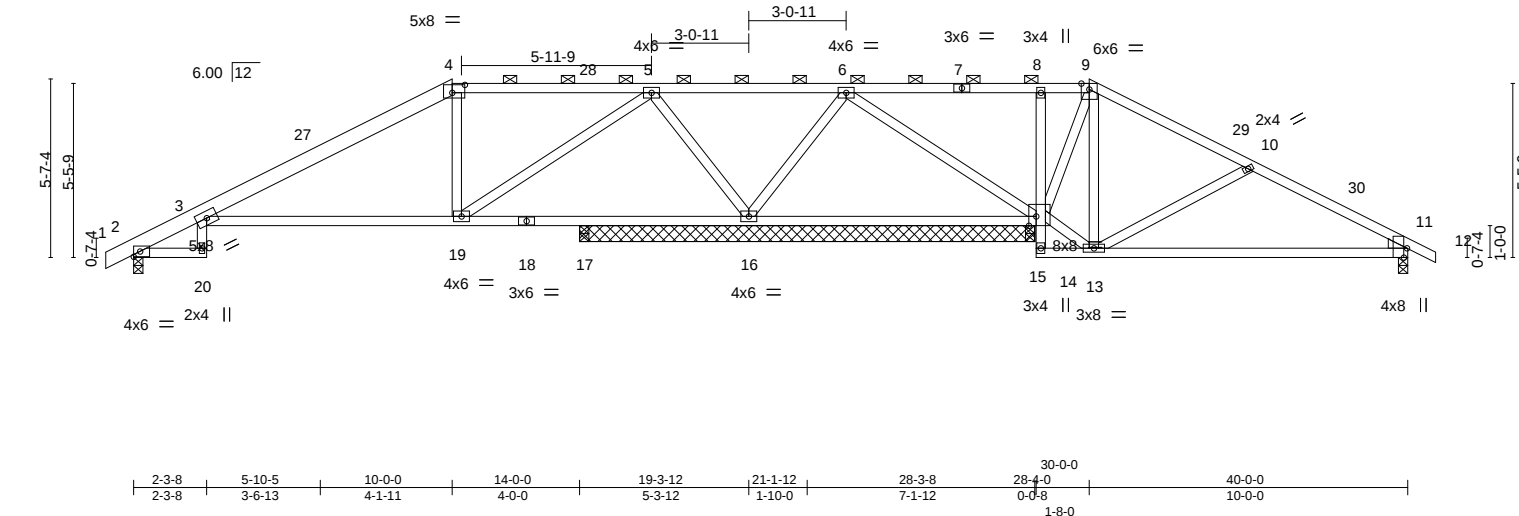
8,240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:03 2020 Page 1

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-0-10-8 2-3-8 5-10-5 10-0-0 16-3-1 22-4-7 28-4-0 30-0-0 34-11-13 40-0-0 40-10-8

0-10-8 2-3-8 3-6-13 4-1-11 6-3-1 6-1-5 5-11-9 1-8-0 4-11-13 5-0-3 0-10-8

Scale = 1:72.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.25 3-19 >668 240	MT20		197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.60 3-19 >282 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.22 17 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							
								Weight: 162 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

1-4: 2x6 SPF No.2, 4-7: 2x4 SPF 1650F 1.5E

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

WEDGE

Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except

2-0-0 oc purlins (6-0-0 max.): 4-9.

BOT CHORD Rigid ceiling directly applied.

REACTIONS. All bearings 0-3-8 except (jt=length) 16=14-3-8, 15=14-3-8, 15=14-3-8.

(lb) - Max Horz 2=88(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 2, 11 except 16=223(LC 9), 15=179(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 17 except 2=586(LC 25), 11=590(LC 26), 16=3008(LC 25), 15=674(LC 26), 15=375(LC 1)

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

TOP CHORD 3-22=-269/98, 3-4=-159/283, 5-6=-276/2500, 6-8=-46/381, 8-9=-43/400, 10-11=-569/129

BOT CHORD 17-19=-1413/275, 16-17=-1413/275, 15-16=-1515/279, 8-15=-407/120, 13-14=-258/0, 11-13=-40/476

WEBS 4-19=-772/173, 5-19=-185/1669, 5-16=-1839/229, 6-16=-1706/178, 6-15=-151/1429, 13-15=-10/345, 9-15=-830/141, 9-13=-61/499, 10-13=-578/170

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 30-0-0, Exterior(2R) 30-0-0 to 34-2-15, Interior(1) 34-2-15 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11 except (jt=lb) 16=223, 15=179.
 - 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.



December 1,2020

The diagram illustrates a roof truss system with various members and plate offsets. The truss is supported by a central vertical column and two side columns. The roof slope is indicated by a 4:5:9 ratio. The truss members are labeled with numbers 1 through 37. The plate offsets are listed below the truss members, and the dimensions are provided on the left and right sides.

Plate Offsets (X, Y) --

Member	Offset 1	Offset 2	Offset 3	Offset 4	Offset 5	Offset 6	Offset 7	Offset 8	Offset 9	Offset 10	Offset 11	Offset 12	Offset 13	Offset 14	Offset 15	Offset 16	Offset 17	Offset 18	Offset 19	Offset 20	Offset 21	Offset 22	Offset 23	Offset 24	Offset 25	Offset 26	Offset 27	Offset 28	Offset 29	Offset 30	Offset 31	Offset 32	Offset 33	Offset 34	Offset 35	Offset 36	Offset 37	
1	2-3-8	2-3-8	8-0-0	5-8-8	11-8-8	3-8-8	13-10-4	2-1-12	21-0-0	7-1-12	28-1-12	7-1-12	30-3-8	2-1-12	32-0-0	1-8-8	37-8-8	5-8-8	40-0-0	2-3-8																		

Dimensions:

- Left side: 4-7-4, 4-5-9, 6.00, 12
- Right side: 4-5-9, 12, 0-7-4, 1-0-0

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2 *Except* 4-7,7-9: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 4-9.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 5-20
WEDGE			
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2			

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

TOP CHORD 3-28=-415/79, 3-4=-692/97, 4-5=-591/120, 5-6=-444/180, 6-8=-444/180, 9-10=-334/95,
10-11=-319/85

BOT CHORD 3-24=-39/292, 3-23=-38/609, 22-23=-426/68, 18-20=-324/52, 17-18=-311/48,
14-15=-409/63, 10-14=0/268

WEBS 4-23=-387/124, 5-23=-114/1161, 20-22=-1646/218, 5-22=-1614/247, 5-18=-109/886,
6-18=-659/183, 8-18=-106/869, 15-17=-1533/197, 8-15=-1529/215, 8-14=-37/864,
9-14=-390/75

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 32-0-0, Exterior(2R) 32-0-0 to 36-2-15, Interior(1) 36-2-15 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11 except (jt=lb) 20=155, 17=134.
- 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.
- 9) 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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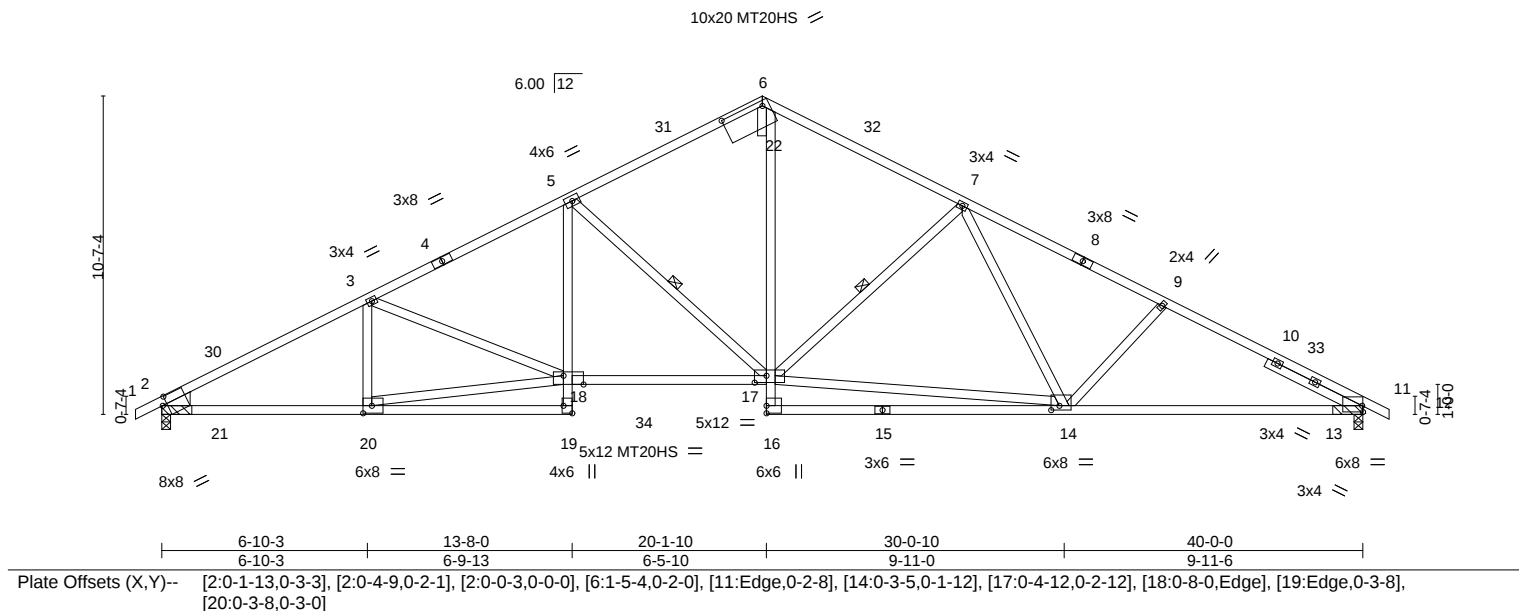
Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020		Summit/14 Woodside
2547158	A9	Hip Girder		1	I43817564
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:08 2020 Page 2 ID:clow4Ylgfiox0?ly?5BCcz33zm-7NKTkVdiOrSI0TDoRJt0vWmZ4yNcqaGvdZcj7byDJb9		

- NOTES-**
- 12) Fill all nail holes where hanger is in contact with lumber.
 - 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 143 lb down and 107 lb up at 12-0-12, 143 lb down and 107 lb up at 14-0-12, 143 lb down and 107 lb up at 16-0-12, 143 lb down and 107 lb up at 18-0-12, 143 lb down and 99 lb up at 20-0-0, 143 lb down and 107 lb up at 21-11-4, 143 lb down and 107 lb up at 23-11-4, 143 lb down and 107 lb up at 25-11-4, and 143 lb down and 107 lb up at 27-11-4, and 143 lb down and 107 lb up at 29-11-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
 - 15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

- LOAD CASE(S)** Standard
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-90, 3-4=-90, 4-11=-90, 11-12=-90, 12-14=-90, 26-27=-20, 3-24=-20, 18-23=-20, 12-17=-20, 15-30=-20
 - Concentrated Loads (lb)
 - Vert: 4=-123(F) 7=-143(F) 5=-143(F) 21=-67(F) 18=-67(F) 10=-143(F) 25=-798(F) 22=-67(F) 24=-67(F) 6=-143(F) 19=-67(F) 9=-143(F) 16=-798(F) 11=-123(F) 33=-123(F) 34=-123(F) 35=-143(F) 36=-143(F) 37=-143(F) 38=-143(F) 39=-143(F) 40=-123(F) 41=-89(F) 42=-89(F) 43=-67(F) 44=-67(F) 45=-67(F) 46=-67(F) 47=-67(F) 48=-89(F)

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Summit/14 Woodside	I43817565
2547158	B1	Roof Special			1	Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:09 2020 Page 1				
-0-10-8 6-10-3 13-8-0 20-0-0 26-7-14 33-3-13 40-0-0 40-10-8		0-10-8 6-10-3 6-9-13 6-4-0 6-7-14 6-7-14 6-7-14 6-8-3 0-10-8	ID:clow4Ylgf7iox0?iy5BCCz33zm-bZurxFEK99bcdo_?1OGSkJmELhXZ1j2rDMGf2yDjb8				
			12/16/2020				

Scale = 1:76.7



LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.74	Vert(LL) -0.35 14-16 >999 240	MT20	197/144
TCDL	20.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.78 14-16 >615 180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr YES	WB 0.82	Horz(CT) 0.23 11 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 191 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-4,8-12: 2x4 SPF 1650F 1.5E	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF 1650F 1.5E *Except* 5-19,6-16,15-16: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 5-17, 7-17
WEDGE	
Left: 2x6 SPF No.2	
SLIDER Right 2x4 SPF No.2 3-6-0	

REACTIONS.	(size) 2=(0-3-8 + bearing block) (req. 0-3-11), 11=(0-3-8 + bearing block) (req. 0-3-11)
	Max Horz 2=-167(LC 17)
	Max Uplift 2=-170(LC 12), 11=-170(LC 13)
	Max Grav 2=2333(LC 2), 11=2335(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-4045/274, 3-5=-3913/286, 5-6=-2833/277, 6-7=-2885/279, 7-9=-3652/271, 9-11=-3864/287
BOT CHORD	2-20=-318/3503, 5-18=-12/841, 17-18=-207/3422, 6-17=-102/2015, 11-14=-162/3393
WEBS	3-20=-427/124, 18-20=-302/3335, 5-17=-1330/239, 14-17=-108/2820, 7-17=-866/245, 7-14=-15/380, 9-14=-417/192

- NOTES-**
- 2x4 SPF 1650F 1.5E bearing block 12" long at jt. 2 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
 - 2x4 SPF 1650F 1.5E bearing block 12" long at jt. 11 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-1-9, Exterior(2R) 20-1-9 to 23-1-9, Interior(1) 23-1-9 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 170 lb uplift at joint 2 and 170 lb uplift at joint 11.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2



December 1,2020

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	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020			Summit/14 Woodside
2547158	B1	Roof Special	8	1		I43817565
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			
NOTES-			18,240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:09 2020 Page 2			
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.			ID:clow4Ylgf7iox0?ly?5BCcz33zm-bZurxFEK99bcedo_?1OGSkJmELhXZ1j2rDMGf2yDJb8			

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

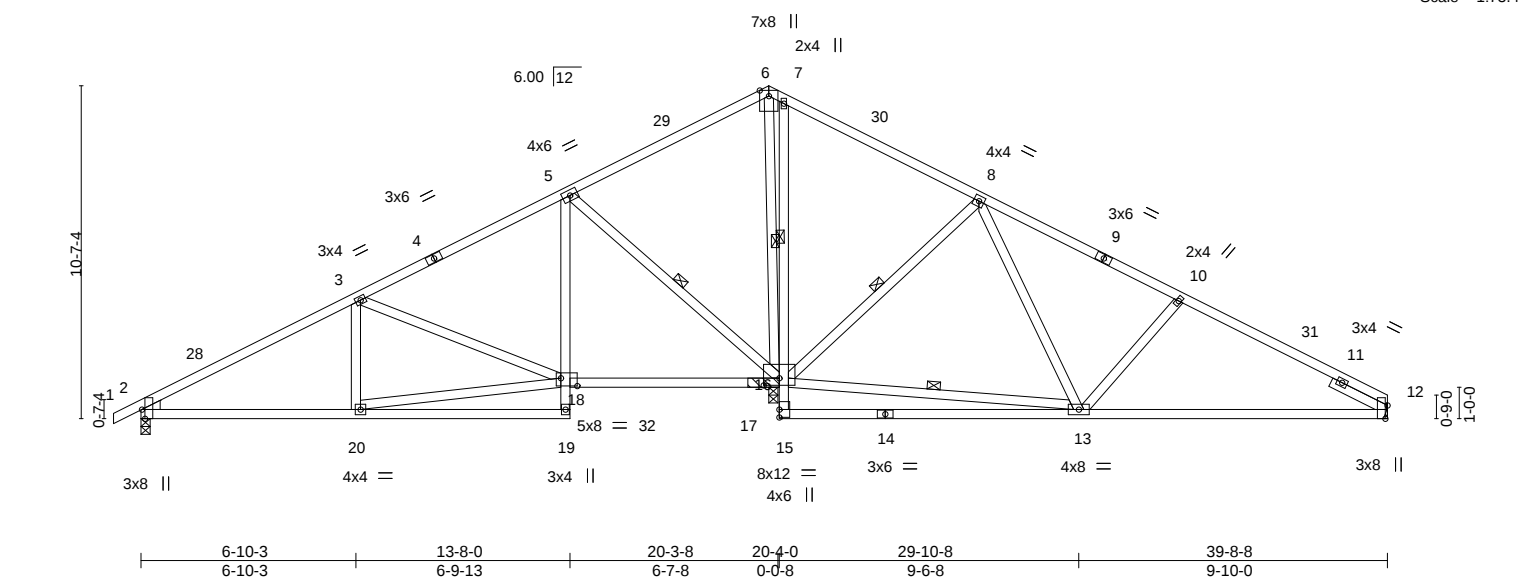
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



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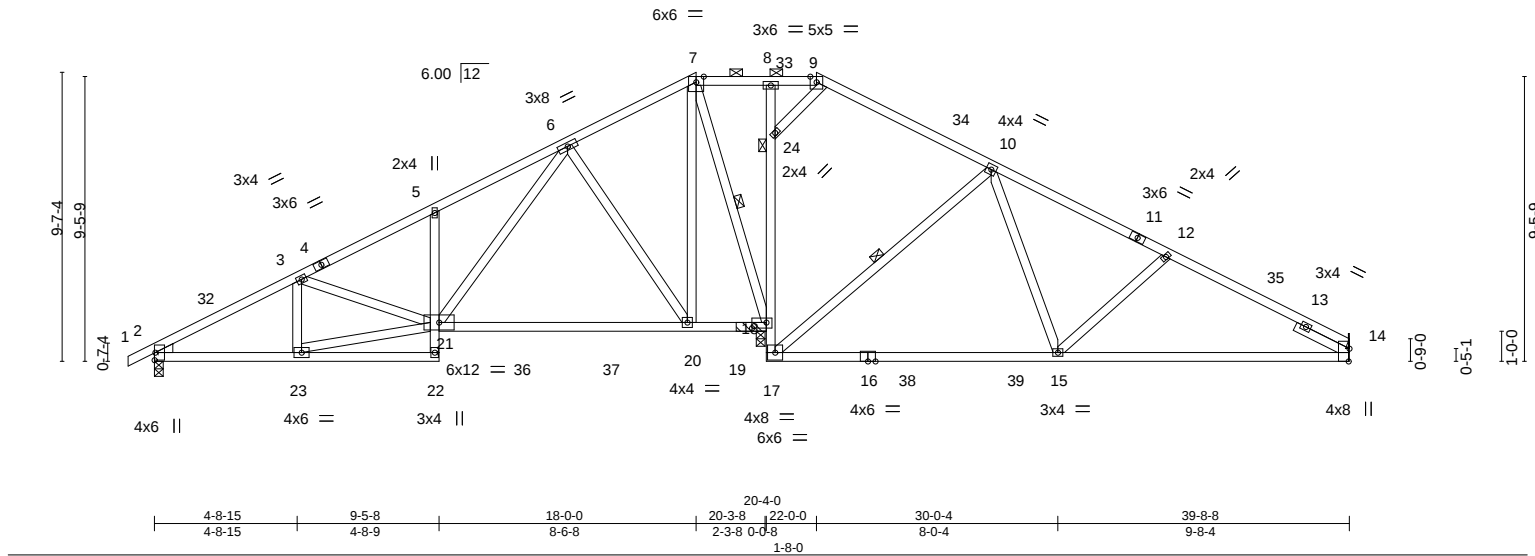
Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Summit/14 Woodside	I43817566
2547158	B2	Roof Special			1	Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:clow4Ylgf7iox0?ly?5BCcz33zm-Yx?cMxFagmrJtwyN6RRkX9O8S9Pi1zHLJXrNjwyDJb6				
0-10-8	6-10-3	13-8-0	20-0-0	20-4-0	26-8-5	33-0-11	39-8-8
0-10-8	6-10-3	6-9-13	6-4-0	0-4-0	6-4-5	6-4-5	6-7-13

Scale = 1:73.4



Job	Truss	Truss Type	Ply		Summit/14 Woodside
2547158	B3	Hip	1		I43817567
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)		
-0-10-8 4-8-15 9-5-8 13-8-12 18-0-0 20-4-0 22-0-0 27-9-11 33-7-5 39-8-8			ID:clow4Ylgf7iox0?ly75B Ccz33zm-UK7MncHqCO517E6lEsTCaTUcz3HVqxemrKUopyDjB4		
0-10-8 4-8-15 4-8-9 4-3-4 4-3-4 2-4-0 1-8-0 5-9-11 5-9-11 6-1-3			12/16/2020		

Scale = 1:76.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.30 15-17 >767 240	MT20		197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.49 15-17 >468 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.04 18 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							
								Weight: 191 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 (10-0-0 max.): 7-9.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEDGE		WEBS	1 Row at midpt 7-18, 10-17
Left: 2x4 SPF No.2		JOINTS	1 Brace at Jt(s): 24
SLIDER	Right 2x4 SPF No.2 2-0-0		

REACTIONS.	
(size)	2=0-3-8, 18=(0-3-8 + bearing block) (req. 0-3-15), 14=Mechanical
Max Horz	2=157(LC 12)
Max Uplift	2=-104(LC 12), 18=-144(LC 12), 14=-136(LC 13)
Max Grav	2=1142(LC 27), 18=2523(LC 2), 14=1023(LC 28)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1715/145, 3-5=-1578/161, 5-6=-1597/244, 6-7=-255/160, 7-8=-16/318, 8-9=0/463, 9-10=-36/332, 10-12=-1132/230, 12-14=-1379/259
BOT CHORD	2-23=-218/1469, 5-21=-408/146, 20-21=-44/656, 17-18=-81/851, 18-24=-658/75, 8-24=-339/52, 15-17=-31/692, 14-15=-157/1225
WEBS	21-23=-185/1526, 6-21=-168/1212, 6-20=-904/221, 7-20=-75/1011, 7-18=-1166/126, 10-17=-1045/205, 10-15=0/726, 12-15=-473/173, 9-24=-407/49

- NOTES-**
- 2x4 SPF No.2 bearing block 12" long at jt. 18 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 26-2-15, Interior(1) 26-2-15 to 39-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 2, 144 lb uplift at joint 18 and 136 lb uplift at joint 14.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.
 - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

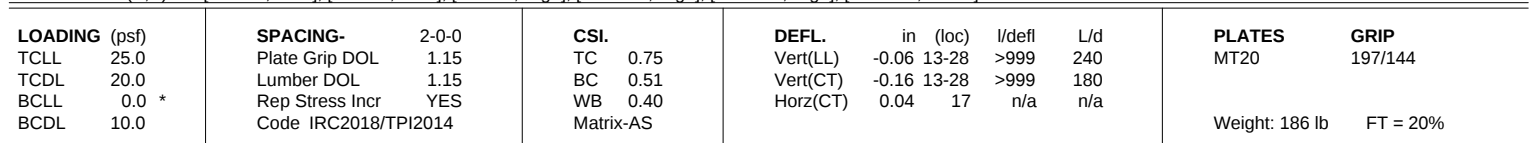


December 1,2020

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Chesterfield, MO 63017

Scale = 1:74.4



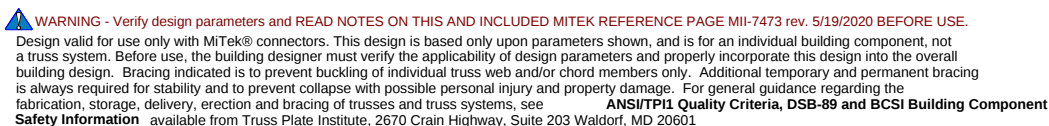
REACTIONS. (size) 2=0-3-8, 17=(0-3-8 + bearing block) (req. 0-3-12), 12=Mechanical
 Max Horz 2=142(LC 12)
 Max Uplift 2=-136(LC 12), 17=-82(LC 12), 12=-165(LC 13)
 Max Grav 2=1103(LC 25), 17=2409(LC 1), 12=979(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1627/205, 3-5=-1480/248, 5-6=-543/193, 6-7=0/359, 7-8=-271/281, 8-10=-466/263,
10-12=-1284/295
BOT CHORD 2-22=-253/1372, 5-20=-2/474, 19-20=-224/1299, 17-19=-28/347, 7-17=-1358/119,
15-16=-271/40, 13-15=-172/1115, 12-13=-172/1115
WEBS 20-22=-224/1305, 5-19=-1096/228, 6-19=-37/664, 6-17=-1172/130, 8-15=-392/41,
10-15=-995/204, 10-13=0/328, 7-15=-69/1143

- 1) 2x4 SPF No.2 bearing block 12" long at jt. 1/ attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 20-5-12, Interior(1) 20-5-12 to 24-0-0, Exterior(2R) 24-0-0 to 28-2-15, Interior(1) 28-2-15 to 39-8-8 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
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 136 lb uplift at joint 2, 82 lb uplift at joint 17 and 165 lb uplift at joint 12.
- 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.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



December 1, 2020



Job

2547158

Truss

B6

Truss Type

Hip

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/16/2020

Ply

1

Summit/14 Woodside

143817570

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

18,240 s Mar 9 2020 MiTek Industries, Inc.

Tue Dec 1 13:49:17 2020 Page 1

0-10-8

3-11-6

6-11-6

12-0-0

16-2-0

20-4-0

28-0-0

33-8-8

39-8-8

0-10-8

3-11-6

3-0-0

5-0-10

4-2-0

4-2-0

7-8-0

5-8-8

6-0-0

Scale = 1:73.2

Plate Offsets (X, Y)--		[2:0-3-8,Edge], [2:0-0-3,0-5-0], [2:0-0-1,0-0-3], [8:1-6-4,0-2-0], [11:0-5-1,Edge], [16:0-4-4,Edge], [19:0-5-12,0-2-12], [21:0-3-8,0-1-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.88	in (loc) l/defl L/d
TCDL 20.0	Lumber DOL 1.15	BC 0.74	Vert(LL) -0.13 13-15 >999 240
BCLL 0.0 *	Rep Stress Incr YES	WB 0.93	Vert(CT) -0.25 13-15 >926 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) 0.05 16 n/a n/a
		PLATES GRIP	
		MT20 197/144	
		MT18HS 197/144	
		Weight: 173 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	BOT CHORD	2-0-0 oc purlins (5-3-13 max.): 5-8.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.
WEDGE			
Left: 2x4 SPF No.2			
SLIDER	Right 2x4 SPF No.2 2-0-0		

REACTIONS. (size) 11=Mechanical, 2=0-3-8, 16=(0-3-8 + bearing block) (req. 0-3-14)
Max Horz 2=110(LC 12)
Max Uplift 11=-140(LC 13), 2=-138(LC 12), 16=-118(LC 9)
Max Grav 11=993(LC 28), 2=1126(LC 27), 16=2484(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1674/209, 3-4=-1959/300, 4-5=-1143/201, 5-6=-945/212, 6-7=0/364, 7-8=-723/246,
8-9=-888/230, 9-11=-1363/249
BOT CHORD 2-21=-232/1427, 4-19=-37/492, 18-19=-278/1776, 16-18=-68/454, 7-16=-1348/190,
13-15=-274/38, 12-13=-151/1206, 11-12=-151/1206
WEBS 4-18=-942/211, 6-18=-37/778, 6-16=-1164/171, 7-13=-80/1212, 8-13=-259/93,
9-13=-597/141, 3-21=-471/120, 19-21=-224/1384, 3-19=-34/330

NOTES-

- 2x4 SPF No.2 bearing block 12" long at jt. 16 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-0, Interior(1) 16-2-0 to 28-0-0, Exterior(2R) 28-0-0 to 32-2-15, Interior(1) 32-2-15 to 39-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 11, 138 lb uplift at joint 2 and 118 lb uplift at joint 16.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

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December 1,2020

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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 12/16/2020		Summit/14 Woodside
2547158	B6	Hip	1		I43817570
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:17 2020 Page 2 ID:clow4Ylgf7iox0?ly?5BCcz33zm-M5Mtc_KLGcbTbrPXTiX8nQe63aSMRc0EhTlhxayDJb0		
NOTES- 13) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.					

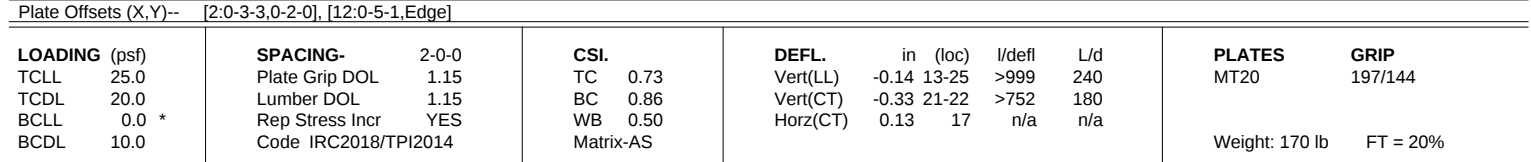
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Scale = 1:74.6



REACTIONS. (size) 12=Mechanical, 2=0-3-8, 17=(0-3-8 + bearing block) (req. 0-3-13)
 Max Horz 2=94(LC 12)
 Max Uplift 12=-133(LC 13), 2=-129(LC 12), 17=-169(LC 9)
 Max Grav 12=952(LC 26), 2=1088(LC 25), 17=2442(LC 1)

FORCES. (lb)	- Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3263/446, 3-4=-1428/197, 4-5=-677/158, 5-6=0/526, 6-8=-485/218, 8-9=-831/224, 9-10=-1017/214, 10-12=-1318/264
BOT CHORD	2-22=-458/2942, 21-22=-443/2768, 19-21=-120/1158, 17-19=-58/674, 6-17=-1417/174, 15-16=-465/71, 13-15=-45/485, 12-13=-170/1179
WEBS	3-22=-287/12, 3-21=-1616/328, 4-21=0/464, 4-19=-637/79, 5-19=0/463, 5-17=-1493/173, 6-15=-112/1277, 8-15=-811/125, 8-13=-14/542, 10-13=-418/141

- 1) 2x4 SPF No.2 bearing block 12" long at jt. 17 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 30-0-0, Exterior(2R) 30-0-0 to 34-2-15, Interior(1) 34-2-15 to 39-8-8 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
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 133 lb uplift at joint 12, 129 lb uplift at joint 2 and 169 lb uplift at joint 17.
- 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.



December 1, 2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020			Summit/14 Woodside
2547158	B7	Hip		1		I43817571
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			
NOTES- 13) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.			ID:clow4Ylgf7iox0?ly?5BCcz33zm-JUUd1gLboErBr9Zva7acsrjUzN6?vdEW9nno0TyDjb_			

 **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	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Summit/14 Woodside	I43817572
2547158	B8	Roof Special			1	Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:20 2020 Page 1		ID:clow4Ylgf7iox0?ly?5BCcz33zm-ng20F0MDZXz2SJ858q5rO2GjGnzFe_ygNRWMXvyDJaz	
0-10-8	3-3-8	8-0-0	12-1-13		16-6-0	20-0-0	
0-10-8	3-3-8	4-8-8	5-4-12		3-1-4	3-6-0	

Scale = 1:38.8

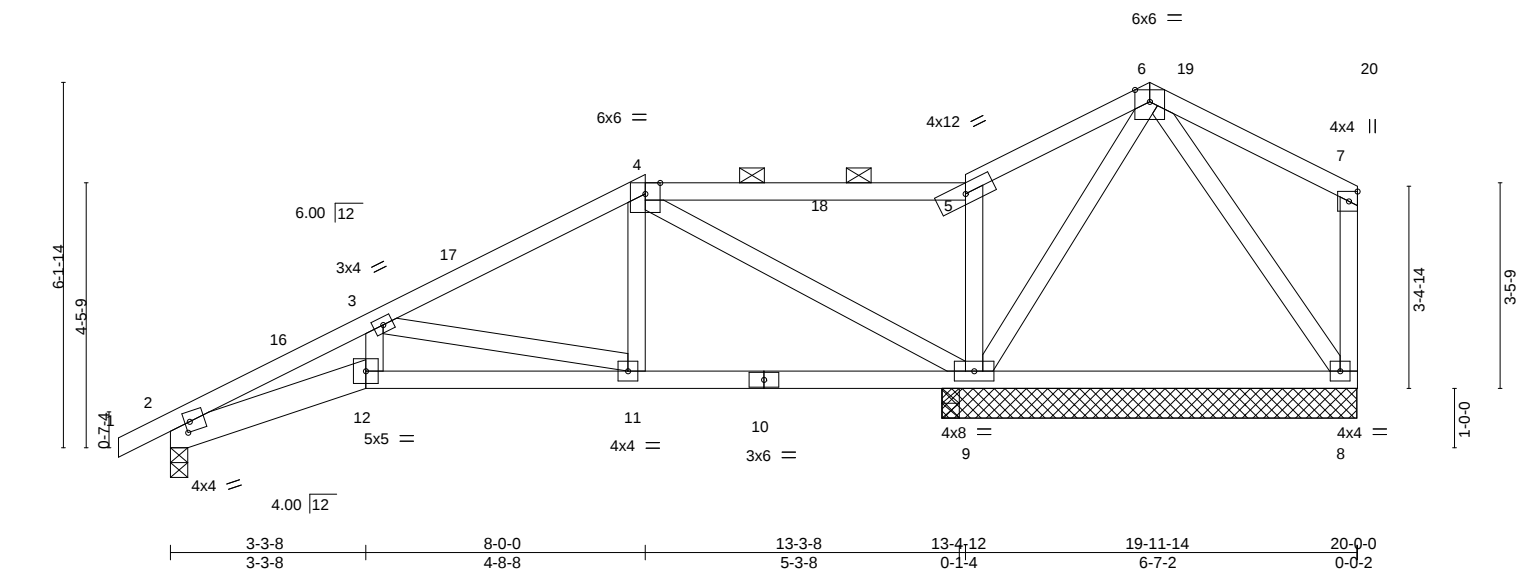


Plate Offsets (X, Y)-- [2:0-1-0,0-2-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.05 11-12	>999	240
TCDL 20.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.11 11-12	>999	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.85	Horz(CT)	0.04 9	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 87 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 *Except*	2-0-0 oc purlins (10-0-0 max.): 4-5.
2-12: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	

REACTIONS. All bearings 6-11-14 except (jt=length) 2=0-3-8.
 (lb) - Max Horz 2=161(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 7, 2 except 9=203(LC 12), 8=199(LC 25)
 Max Grav All reactions 250 lb or less at joint(s) 7, 8 except 2=664(LC 1), 9=1598(LC 1), 9=1598(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1583/233, 3-4=-557/84, 4-5=-154/601, 5-6=-145/728
 BOT CHORD 2-12=-397/1407, 11-12=-372/1307, 9-11=-124/416
 WEBS 3-12=-54/383, 3-11=-899/255, 4-11=-0/360, 4-9=-1171/250, 6-9=-909/206, 6-8=-67/308

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 16-6-0, Exterior(2R) 16-6-0 to 19-6-0, Interior(1) 19-6-0 to 19-10-4 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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 7, 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) 7, 2 except (jt=lb) 9=203, 8=199.
 - 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.



December 1, 2020

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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
 ID: clow4Ylgf7iox0?ly?5BCcz33zm-FtcOSLNrKr5v4TjliYc4xGpsKBp0NXWpc5Gv3LyDJay

Job 2547158	Truss B9	Truss Type Half Hip Girder	Ply 1	Summit/14 Woodside Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18,240 sq ft 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:21 2020 Page 1 13-0-0 3-3-8	

-0-10-8
0-10-8

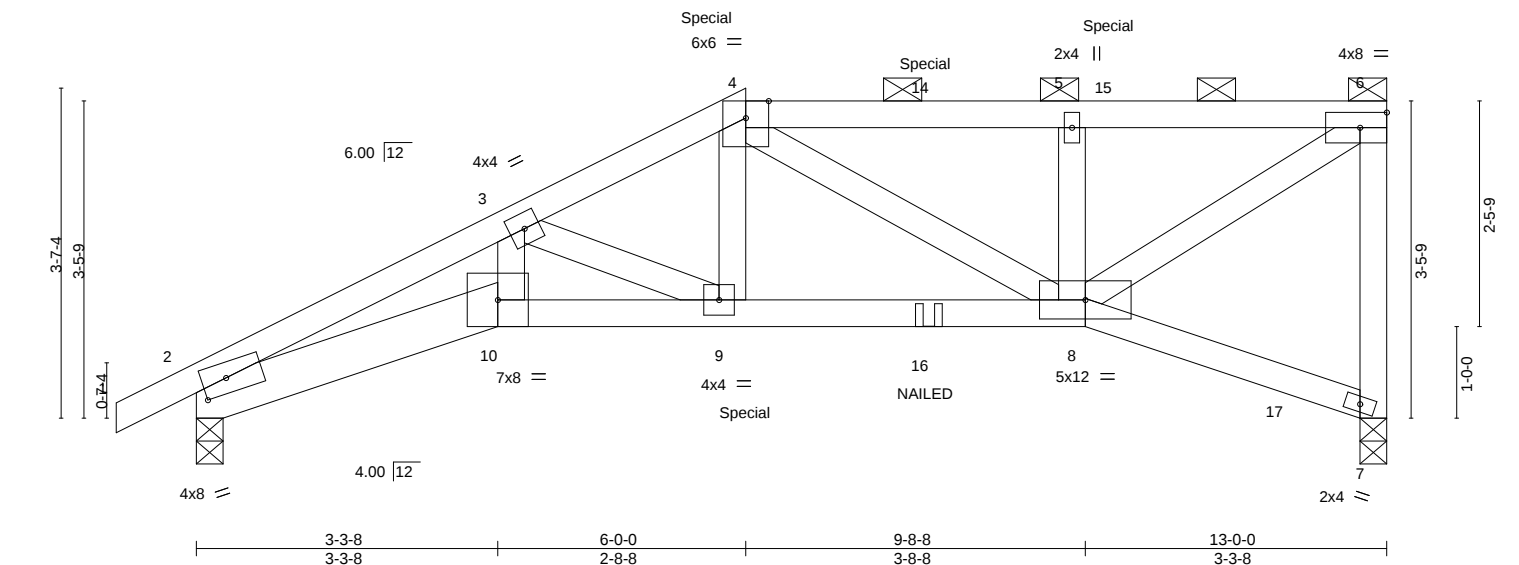
3-3-8
3-3-8

6-0-0
2-8-8

9-8-8
3-8-8

12/16/2020

Scale = 1:25.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.08	MT20		197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.19	Weight: 54 lb FT = 20%			
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.12				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*

2-10: 2x6 SPF 2100F 1.8E, 8-10: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 7=0-3-8

Max Horz 2=123(LC 7)

Max Uplift 2=-194(LC 8), 7=-214(LC 5)

Max Grav 2=1313(LC 1), 7=1363(LC 1)

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-6 oc purlins, except end verticals, and 2-0-0 oc purlins (3-9-4 max.): 4-6.

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

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

TOP CHORD 2-3=-3854/615, 3-4=-2773/462, 4-5=-1776/307, 5-6=-1724/292, 6-7=-1307/249

BOT CHORD 2-10=-608/3443, 9-10=-572/3247, 8-9=-460/2434

WEBS 3-10=-106/755, 3-9=-812/171, 4-9=-129/996, 4-8=-773/154, 5-8=-707/205, 6-8=-383/2075

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 2, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=194, 7=214.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 228 lb down and 115 lb up at 6-0-0, and 204 lb down and 115 lb up at 8-0-0, and 202 lb down and 116 lb up at 10-0-0 on top chord, and 527 lb down and 113 lb up at 6-0-0 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

December 1,2020



Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020			Ply	Summit/14 Woodside
2547158	B9	Half Hip Girder				1	I43817573
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:21 2020 Page 2 ID:clow4YlGf7iox0?ly?5BCcz33zm-FtcOSLNrKr5v4TjliYc4xGpsKBp0NXWpc5Gv3LyDJay				

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-4=-90, 4-6=-90, 10-11=-20, 8-10=-20, 7-8=-20
- Concentrated Loads (lb)
 - Vert: 4=-204(B) 8=-9 9=-527(B) 14=-204(B) 15=-202(B) 16=-6(B) 17=-30

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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	Ply	Summit/14 Woodside
2547158	C1	Roof Special Girder		2	I43817574
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)		
2-0-4 3-3-8 6-7-14 10-0-4 10-9-4 14-1-10 17-6-0 18-9-4 20-9-8			ID:clow4Ylgf7iox0?ly?5BCcz33zm-fSIW4NPkcmTTxwRtNgAnZuRkOo7arzFI3UZggyDJav		
2-0-4 1-3-4 3-4-6 3-4-6 0-9-0 3-4-6 3-4-6 1-3-4 2-0-4			Scale = 1:44.7		

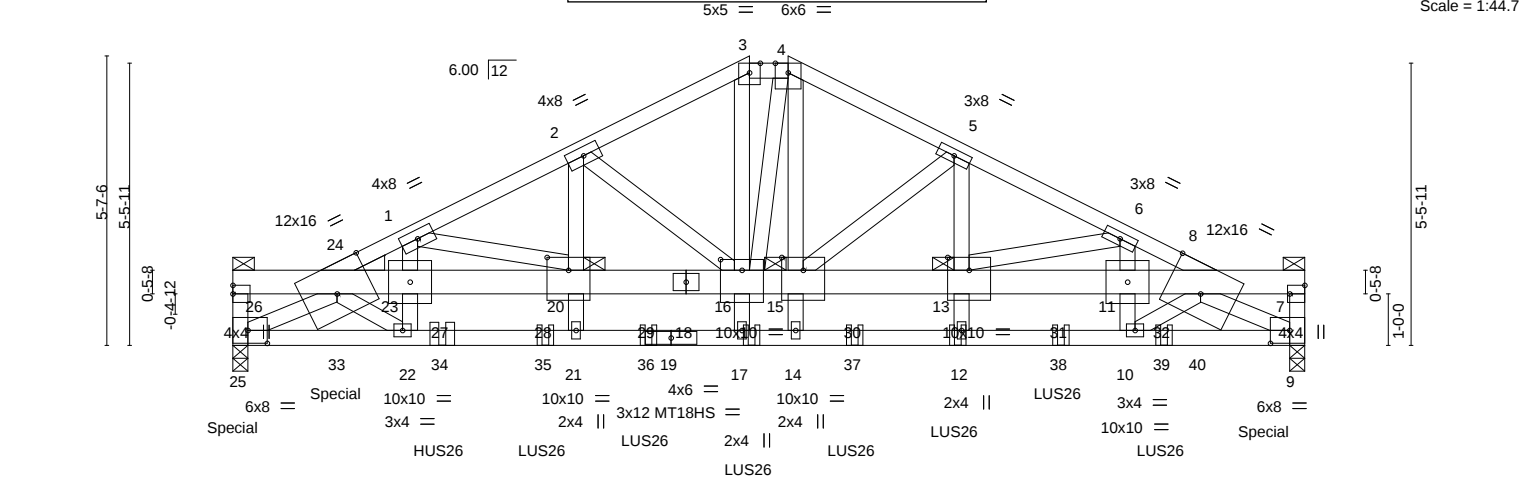


Plate Offsets (X,Y)--		[7:Edge,0-3-8], [8:0-8-0,Edge], [9:0-4-8,0-3-0], [13:0-5-0,0-3-0], [15:0-5-0,0-3-0], [16:0-5-0,0-2-8], [20:0-5-0,0-3-0], [24:0-8-4,Edge], [25:0-4-8,0-3-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.92
TCDL 20.0	Lumber DOL	1.15	BC 0.92
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.66
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.14 13-15 >999 240
			Vert(CT) -0.29 13-15 >845 180
			Horz(CT) 0.14 9 n/a n/a
			PLATES GRIP
			MT20 197/144
			MT18HS 197/144
			Weight: 288 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-11-10 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-5 max.): 3-4.
BOT CHORD 2x6 SP 2400F 2.0E *Except* 19-25,9-19: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 24-26, 7-8
WEBS 2x4 SPF No.2	JOINTS 1 Brace at Jt(s): 26, 7, 20, 16, 13
WEDGE	
Left: 2x4 SP No.3	

REACTIONS.	(size) 25=0-3-8, 9=0-3-8
	Max Horz 25=78(LC 28)
	Max Uplift 25=-736(LC 8), 9=-803(LC 9)
	Max Grav 25=6483(LC 1), 9=6585(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	25-26=-1317/137, 1-24=-12184/1591, 1-2=-9187/1194, 2-3=-6603/906, 3-4=-5824/828, 4-5=-6424/899, 5-6=-8517/1248, 6-8=-10527/1539, 7-9=-1301/144
BOT CHORD	24-26=-461/46, 23-24=-183/1501, 20-23=-183/1501, 16-20=-1017/258, 15-16=-3398/489, 13-15=-1563/189, 11-13=-582/338, 8-11=-582/338, 7-8=-456/50, 22-25=-1146/8869, 21-22=-1189/9063, 17-21=-1189/9063, 14-17=-1189/9061, 12-14=-1189/9061, 10-12=-1189/9061, 9-10=-1211/9090
WEBS	1-23=-364/2968, 1-20=-2235/335, 2-20=-298/2799, 2-16=-2971/399, 3-16=-367/2562, 4-16=-94/889, 4-15=-335/1881, 5-15=-2419/477, 5-13=-376/2233, 6-13=-1446/244, 6-11=-280/2089, 22-23=-367/370, 10-11=-155/380, 8-10=-478/265, 8-9=-9954/1341, 22-24=-219/614, 24-25=-9694/1219

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 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, Except member 8-9 2x4 - 1 row at 0-7-0 oc, member 24-25 2x4 - 1 row at 0-7-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



December 1,2020

Job		Truss	Truss Type	Ply		Summit/14 Woodside
2547158		C1	Roof Special	Girder	2	I43817574

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

18.240 s Mar 9 2020 MiTek Industries, Inc.
Tue Dec 1 13:49:24 2020
Page 2
ID:clow4Ylgf7iox0?ly?5BCcz33zm-fSIW4NPkcmTTxwRtNgAnZuRlkOo7arzFI3UZggyDJav

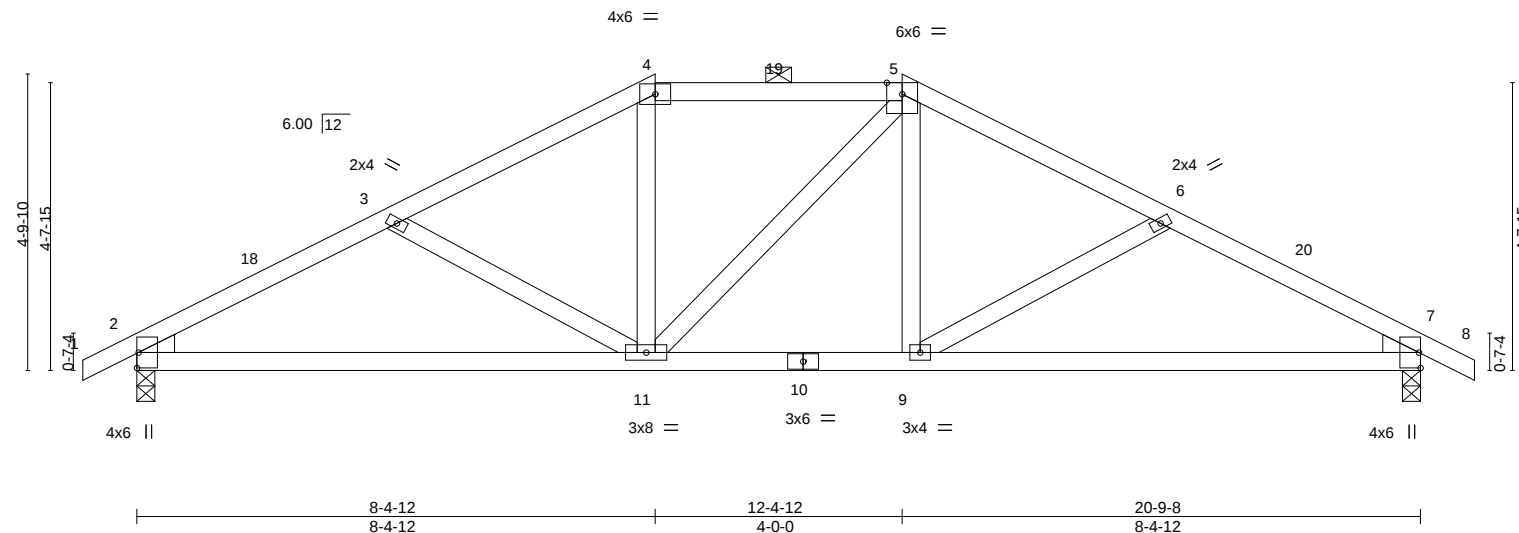
- NOTES-**
- Bearing at joint(s) 25, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 25=736, 9=803.
 - 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 HUS26 (14-16d Girder, 6-16d Truss) or equivalent at 4-0-12 from the left end to connect truss(es) to front face of bottom chord.
 - Use Simpson Strong-Tie LUS26 (4-SD9112 Girder, 4-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 6-0-12 from the left end to 8-0-12 to connect truss(es) to front face of bottom chord.
 - Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 6-0-0 oc max. starting at 10-0-12 from the left end to 16-0-12 to connect truss(es) to front face of bottom chord.
 - Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 4-0-0 oc max. starting at 12-0-12 from the left end to 18-0-12 to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 79 lb down and 2 lb up at 0-0-12, and 829 lb down and 103 lb up at 20-0-12 on top chord, and 128 lb down and 52 lb up at 2-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

- LOAD CASE(S)** Standard
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 3-24=-90, 3-4=-90, 4-8=-90, 24-26=-160, 7-8=-160, 25-33=-160, 22-33=-110, 10-22=-20, 10-40=-110, 9-40=-160
 - Concentrated Loads (lb)
 - Vert: 16=-892(F) 13=-927(F) 8=-825(F) 24=-133(F) 27=-2253(F) 28=-1024(F) 29=-1024(F) 30=-904(F) 31=-919(F) 32=-864(F)

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

Job 2547158	Truss C2	Truss Type Hip	Ply 1	Summit/14 Woodside 143817575
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)	
0-10-8 0-10-8 4-2-9 4-2-9 8-4-12 4-2-3 12-4-12 4-0-0 16-6-15 4-2-3 20-9-8 4-2-9 21-8-0 0-10-8				

Scale = 1:37.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.08	MT20		197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.18				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.05				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							
								Weight: 80 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	BOT CHORD	2-0-0 oc purlins (4-11-8 max.): 4-5.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.
WEDGE			
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2			

REACTIONS.	
(size)	2=0-3-8, 7=0-3-8
Max Horz	2=-72(LC 17)
Max Uplift	2=-100(LC 12), 7=-100(LC 13)
Max Grav	2=1222(LC 1), 7=1222(LC 1)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1874/217, 3-4=-1556/181, 4-5=-1319/195, 5-6=-1555/181, 6-7=-1874/217
BOT CHORD	2-11=-155/1602, 9-11=-47/1319, 7-9=-136/1602
WEBS	3-11=-328/130, 4-11=0/310, 5-9=0/310, 6-9=-328/130

- 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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-4-12, Exterior(2E) 8-4-12 to 12-4-12, Exterior(2R) 12-4-12 to 16-8-14, Interior(1) 16-8-14 to 21-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=100, 7=100.
 - 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.



December 1,2020

Job

2547158

Truss

C3

Truss Type

Hip Girder

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/16/2020

Summit/14 Woodside

143817576

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:27 2020 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

0-10-8

3-2-9

6-4-12

10-4-12

14-4-12

17-6-15

20-9-8

21-8-0

0-10-8

3-2-9

3-2-3

4-0-0

4-0-0

3-2-3

3-2-9

0-10-8

Scale = 1:37.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.13	12	>999	240	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.53	Vert(CT)	-0.27	12	>909	180	148/108
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.26	Horz(CT)	0.06	8	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 99 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x4 SPF 1650F 1.5E

BOT CHORD 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-3-1 oc purlins, except 2-0-0 oc purlins (2-9-4 max.): 4-6.

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

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

Max Horz 2=-56(LC 34)

Max Uplift 2=-456(LC 8), 8=-456(LC 9)

Max Grav 2=2614(LC 1), 8=2614(LC 1)

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

TOP CHORD 2-3=-4462/799, 3-4=-4709/891, 4-5=-4795/893, 5-6=-4795/893, 6-7=-4709/892, 7-8=-4462/800

BOT CHORD 2-15=-714/3917, 13-15=-714/3917, 12-13=-745/4168, 11-12=-690/4168, 10-11=-659/3917, 8-10=-659/3917

WEBS 3-15=-420/116, 3-13=-243/487, 4-13=-199/1067, 4-12=-172/881, 5-12=-770/201, 6-12=-172/881, 6-11=-199/1067, 7-11=-244/487, 7-10=-420/115

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=456, 8=456.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 929 lb down and 243 lb up at 6-4-12, and 929 lb down and 243 lb up at 14-4-0 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).

Continued on page 2

LOAD CASE(S) Standard

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

STATE OF MISSOURI

JEFF VANCE

PROFESSIONAL ENGINEER

PE-2018003146

December 1,2020

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 12/16/2020			Summit/14 Woodside
2547158	C3	Hip Girder		1		I43817576
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18.240 s Mar 9 2020 MiTek Industries, Inc. ID:clow4Ylgf7iox0?ly?5BCcz33zm-40zfjPScvhs2oOAS2pjUBX3sfcwxnlti_0jDH?yDJas			Job Reference (optional)

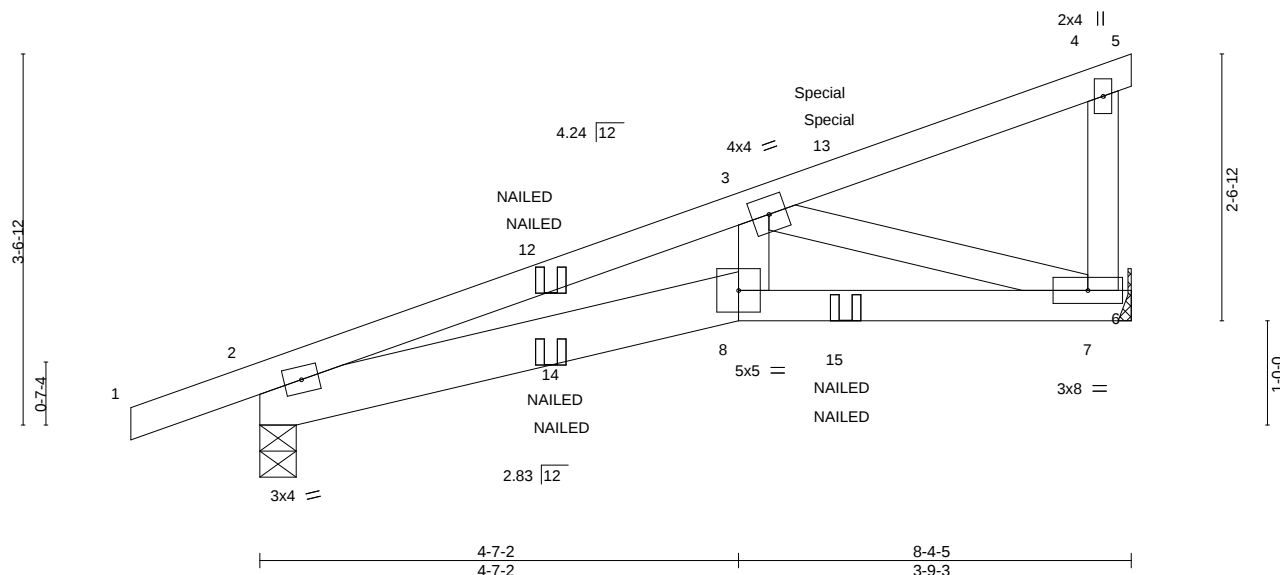
LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-4=-90, 4-6=-90, 6-9=-90, 16-19=-20
- Concentrated Loads (lb)
 - Vert: 4=-114(B) 6=-114(B) 13=-929(B) 12=-119(B) 5=-114(B) 11=-929(B) 22=-114(B) 23=-114(B) 24=-119(B) 25=-119(B)



Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			Ply	Summit/14 Woodside	I43817577
2547158	CJ1	Diagonal Hip	Girder			1		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:28 2020 Page 1			ID:clow4YlGf7iox0?ly? 5BCcz33zm-YDX1wSFg?_vQXlecWEjjkb760JwWlsrDgSnpRyDJar		
1-2-14 1-2-14			4-7-2 4-7-2			8-4-5 3-9-3		

Scale = 1:22.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	-0.03	8	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.06	8	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.28	Horz(CT)	0.03	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 31 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-8: 2x6 SPF No.2
 WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-4-3, 7=Mechanical
 Max Horz 2=116(LC 5)
 Max Uplift 2=-96(LC 4), 7=-85(LC 8)
 Max Grav 2=606(LC 1), 7=549(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1349/187
 BOT CHORD 2-8=-213/1245, 7-8=-202/1168
 WEBS 3-8=-4/335, 3-7=-1217/231

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 110 lb down and 83 lb up at 5-7-7, and 110 lb down and 83 lb up at 5-7-7 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-90, 4-5=-40, 8-9=-20, 6-8=-20
 Concentrated Loads (lb)
 Vert: 13=-140(F=-70, B=-70) 14=2(F=1, B=1)



December 1, 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			Ply	Summit/14 Woodside	I43817578
2547158	CJ2	Diagonal Hip	Girder			1		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,								
ID:clow4Ylgf7iox0?ly?5B Ccz33zm-0P5P85TtRI6m2hKqADlyGy8B9PX4EGf?SKCKLtyDJaq								
1-2-14 1-2-14 3-2-2 3-2-2 5-7-2 2-5-0 8-2-13 2-7-11 8-4-5 0-1-8								

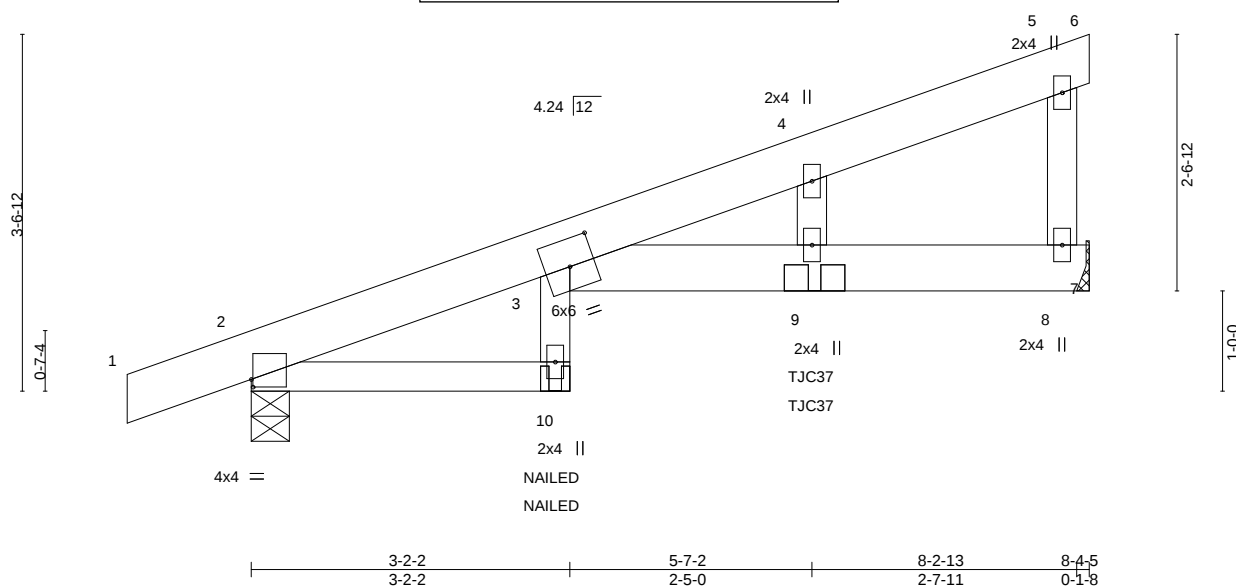


Plate Offsets (X,Y)--	[2:0-0-3,0-0-15], [3:0-3-0,0-3-4]				
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.75	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.16 10 >613 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) -0.34 10 >288 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MP	Horz(CT) 0.15 8 n/a n/a		
	Code IRC2018/TPI2014			Weight: 35 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF 2100F 1.8E
 BOT CHORD 2x4 SPF No.2 *Except*
 3-7: 2x6 SPF No.2
 WEBS 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 9-0-12 oc bracing.

REACTIONS.

(size) 2=0-4-9, 8=Mechanical
 Max Horz 2=129(LC 4)
 Max Uplift 2=-153(LC 4), 8=-175(LC 8)
 Max Grav 2=734(LC 1), 8=738(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 5-8=-374/103

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=153, 8=175.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie TJC37 (4 nail, 30-90) or equivalent at 5-7-7 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
- Use Simpson Strong-Tie TJC37 (4 nail 90-150) or equivalent at 5-7-7 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (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
- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-3=-90, 3-5=-90, 5-6=-40, 10-11=-20, 3-7=-20
- Concentrated Loads (lb)
- Vert: 10=-93(F=-46, B=-46) 9=-361(F=-181, B=-181)



December 1,2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2547158	Truss CJ3	Truss Type Diagonal Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	Summit/14 Woodside I43817579
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:30 2020 Page 1 ID:clow4Ylgf7ioX0?ly?5BCcz33zm-UbfnLQUVCcEdfrv0kxGBo9gS2ptFzcg8g_xutKyDJap			
-1-2-14 1-2-14			4-5-8 4-5-8 12/16/2020		8-11-1 4-5-8	

Scale = 1:22.5

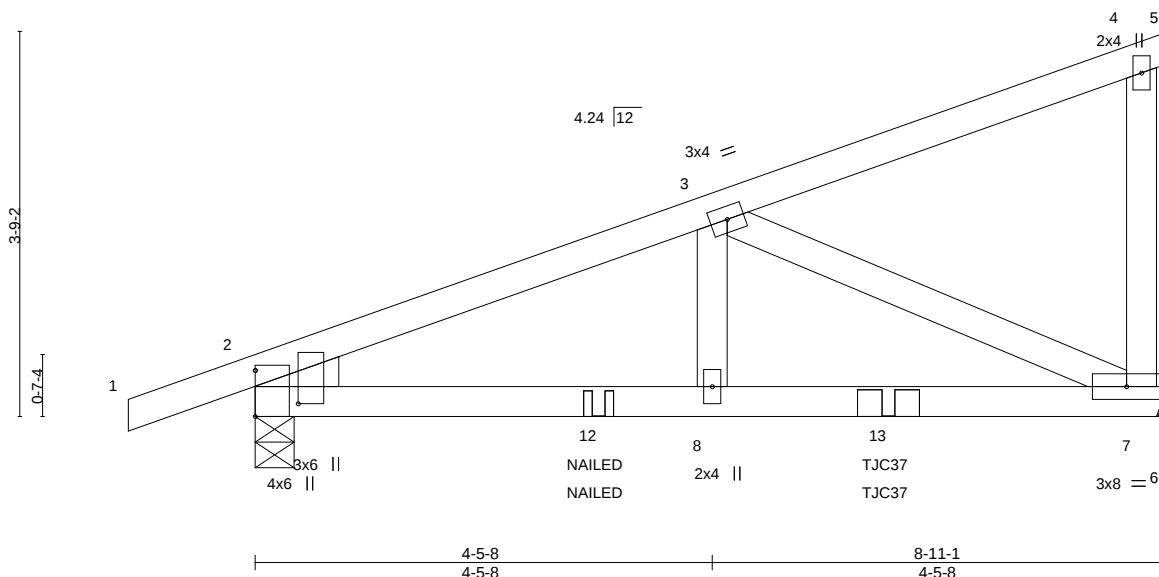


Plate Offsets (X,Y)-- [2:0-3-14,0-5-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.05	7-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.12	7-8	>887	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 34 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF 1650F 1.5E
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=Mechanical, 2=0-4-9
 Max Horz 2=128(LC 7)
 Max Uplift 7=-180(LC 8), 2=-170(LC 4)
 Max Grav 7=838(LC 1), 2=813(LC 1)

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

TOP CHORD 2-3=-1242/242
 BOT CHORD 2-8=-256/1118, 7-8=-256/1118
 WEBS 3-8=-96/523, 3-7=-1226/306

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 7=180, 2=170.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Use Simpson Strong-Tie TJC37 (4 nail, 30-90) or equivalent at 6-2-3 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
- 8) Use Simpson Strong-Tie TJC37 (4 nail 90-150) or equivalent at 6-2-3 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
- 9) Fill all nail holes where hanger is in contact with lumber.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



December 1,2020

Continued on page 2

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION		
2547158	CJ3	Diagonal Hip	AS NOTED ON PLANS REVIEW	1	Summit/14 Woodside
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Lee's Summit, Missouri		
LOAD CASE(S) Standard			12/16/2020		
Uniform Loads (plf)			18.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:30 2020 Page 2		
Vert: 1-4=-90, 4-5=-40, 6-9=-20			ID:clow4Ylgf7iox0?ly25BCcz33zm-UbfnLQUVCcEdfrv0kxGBo9gS2ptFzcg8g_xutKyDJap		
Concentrated Loads (lb)					
Vert: 12=-168(F=-84, B=-84) 13=-404(F=-202, B=-202)					

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:clow4Ylgf7iox0?ly?5BCcz33zm-yoDAYmV7zwMUH?UDHeoQLNDeXDCAi5kHvehRQmyDJao			Summit/14 Woodside	143817580
2547158	CJ4	Diagonal Hip Girder	Ply	1		Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:31 2020 Page 1							
1-2-14 1-2-14		4-2-3 4-2-3		12/16/2020		8-4-5 4-2-3	

Scale = 1:21.0

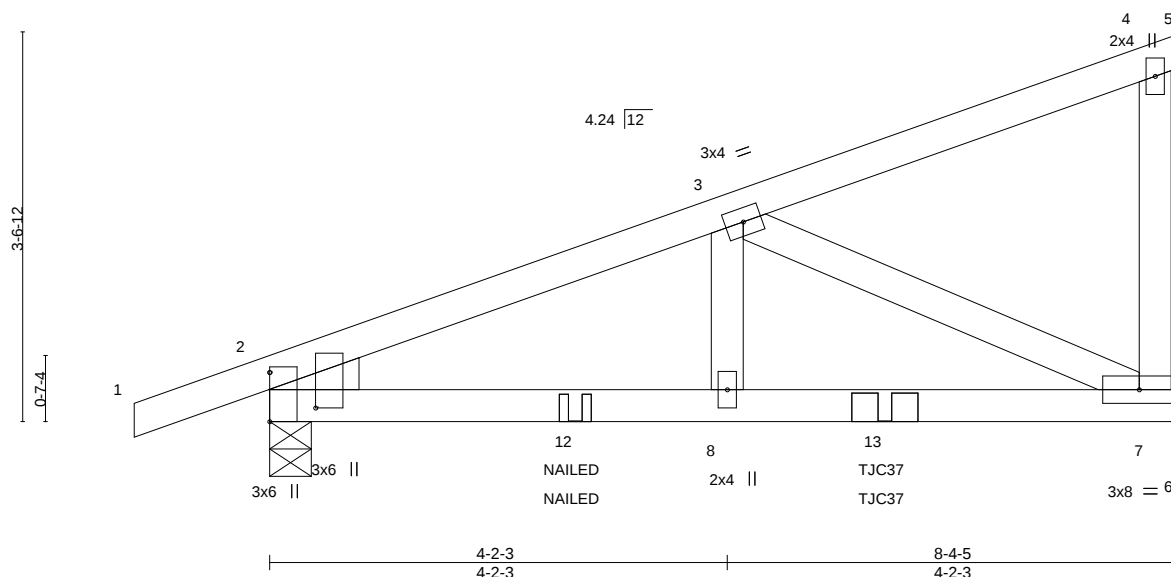


Plate Offsets (X,Y)--	[2:0-3-14,0-5-0]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl
TCLL 25.0	Plate Grip DOL	1.15	TC 0.31	Vert(LL)	-0.04	7-8 >999
TCDL 20.0	Lumber DOL	1.15	BC 0.83	Vert(CT)	-0.09	7-8 >999
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.33	Horz(CT)	0.01	7 n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP			n/a
					PLATES	GRIP
					MT20	197/144
					Weight: 32 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=Mechanical, 2=0-4-9
Max Horz 2=134(LC 7)
Max Uplift 7=-161(LC 8), 2=-163(LC 4)
Max Grav 7=722(LC 1), 2=727(LC 1)

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

TOP CHORD 2-3=-1046/219
BOT CHORD 2-8=-220/937, 7-8=-220/937
WEBS 3-8=-82/412, 3-7=-1030/273

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 7=161, 2=163.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie TJC37 (4 nail, 30-90) or equivalent at 5-7-7 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
- Use Simpson Strong-Tie TJC37 (4 nail 90-150) or equivalent at 5-7-7 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (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

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



December 1,2020

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.

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	12/16/2020		
2547158	CJ4	Diagonal Hip	Girder	Ply	Summit/14 Woodside
				1	I43817580
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)		
			ID:clow4Ylgf7iox0?ly?5BCcz33zm-yoDAYmV7zwMUH?UDHeoQLNDeXDCAi5kHvehRQmyDJao		
			12/16/2020		

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-90, 4-5=-40, 6-9=-20

Concentrated Loads (lb)

Vert: 12=-87(F=-46, B=-41) 13=-344(F=-179, B=-165)



Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020		Ply	Summit/14 Woodside
2547158	CJ5	Diagonal Hip	Girder		1	I43817581
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		Job Reference (optional) ID: clow4Ylgf7iox0?ly?58Ccz33zm-Q_nYm6VlkDULv93PrMjfuamdddfzRdBR8IQ_yCyDJan 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:32 2020 Page 1		

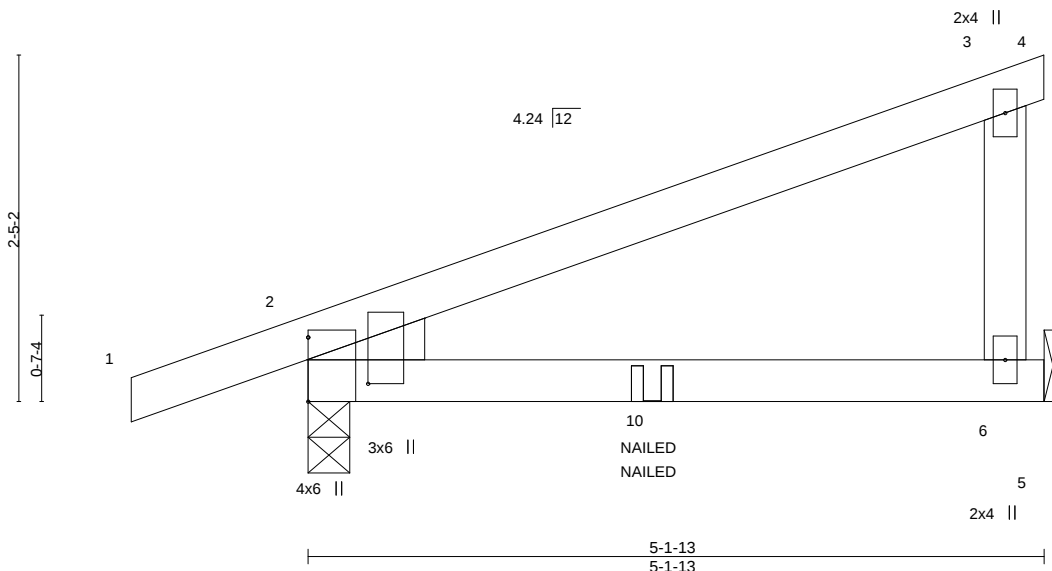


Plate Offsets (X,Y)--		[2:0-3-14,0-5-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	0.05	6-9	>999	240	MT20
TCDL 20.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.09	6-9	>642	180	
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.02	2	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						
				Weight: 17 lb		FT = 20%			

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-13 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
 Max Horz 6=88(LC 7)
 Max Uplift 6=-68(LC 8), 2=-103(LC 4)
 Max Grav 6=299(LC 1), 2=422(LC 1)

FORCES.

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=103.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)

- Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-90, 3-4=-40, 5-7=-20
 Concentrated Loads (lb)
 Vert: 10=-57(F=-29, B=-29)



December 1,2020

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 2547158	Truss D1	Truss Type Common	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside Job Reference (optional) 143817582
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:33 2020 Page 1 ID:clow4Ylgf7iox0?ly?5BCoz33zm-uAKwzSWNVxcCWJdbP3quQol_x0wDA0paNyAYUfyDJam		

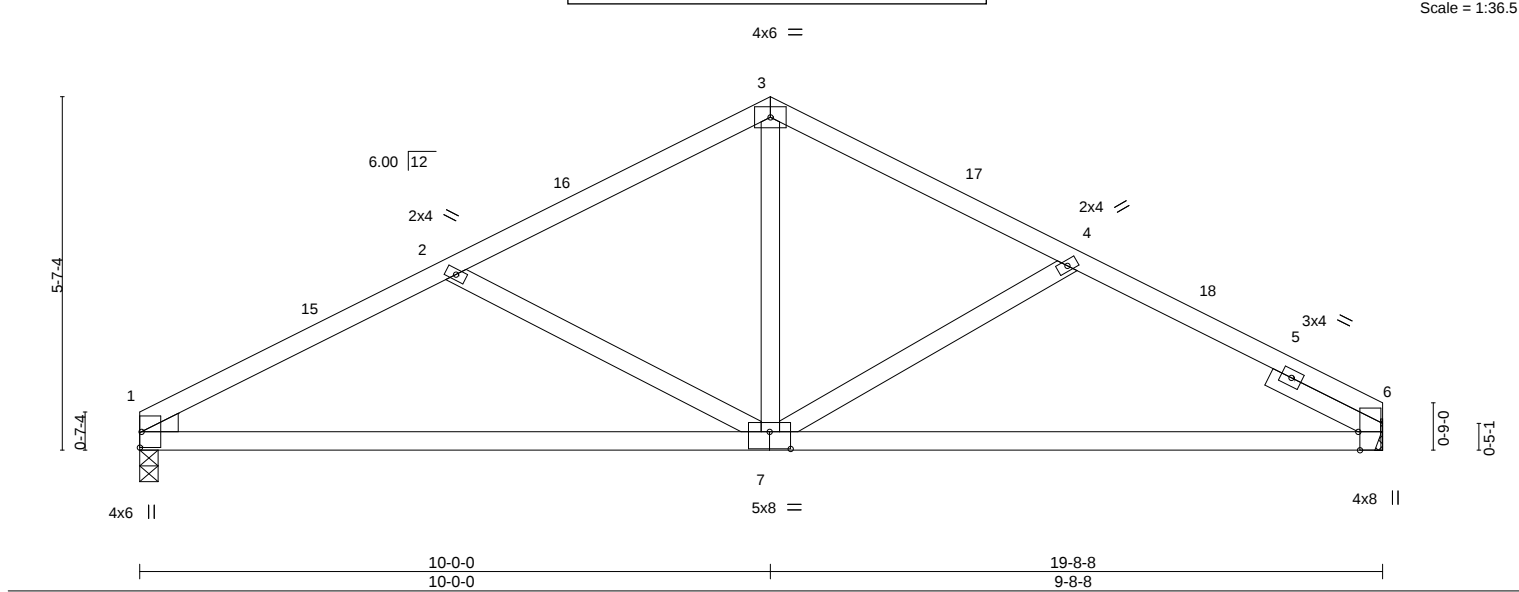


Plate Offsets (X,Y)--		[1:0-0-3,0-5-0], [1:0-0-1,0-0-3], [6:0-3-8,Edge], [7:0-4-0,0-3-4]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.31
TCDL 20.0	Lumber DOL	1.15	BC 0.73
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.30
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.13 7-14 >999 240
			Vert(CT) -0.29 7-14 >829 180
			Horz(CT) 0.04 6 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 69 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			
SLIDER	Right 2x4 SPF No.2 2-0-0		

REACTIONS.	(size) 6=Mechanical, 1=0-3-8
	Max Horz 1=82(LC 12)
	Max Uplift 6=-73(LC 13), 1=-75(LC 12)
	Max Grav 6=1084(LC 1), 1=1084(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1742/260, 2-3=-1293/198, 3-4=-1280/200, 4-6=-1625/249
BOT CHORD	1-7=-177/1486, 6-7=-156/1396
WEBS	2-7=-509/174, 3-7=-26/614, 4-7=-428/163

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 19-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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) 6, 1.
 - 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.
 - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



December 1,2020

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 12/16/2020

Job 2547158	Truss D2	Truss Type Hip	Ply 1	Summit/14 Woodside Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:34 2020 Page 1 ID:clow4Ylgf7iox0?ly?5BCcz33zm-NNuIBoX?Grk38SCoznL7z?r0gQI2vUWkbcv505yDJaI
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Builders FirstSource (Valley Center),
 Valley Center, KS - 67147,

Scale = 1:35.8

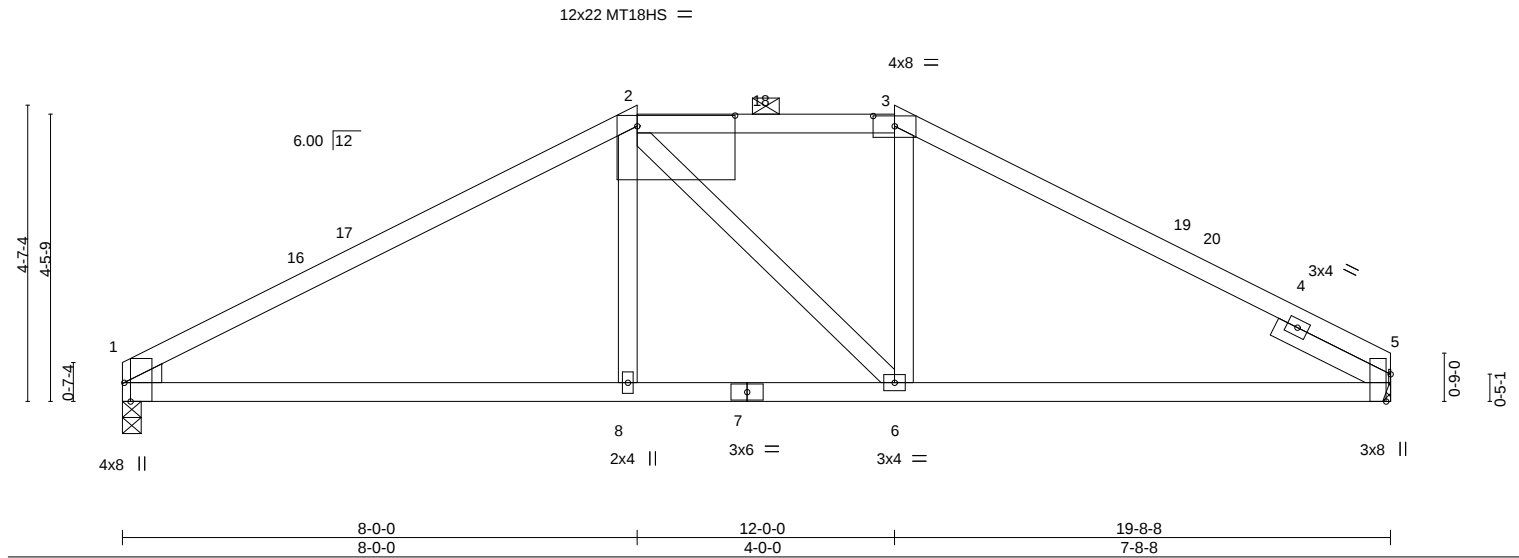


Plate Offsets (X,Y)--		[1:0-3-8,Edge], [1:0-0-3,0-5-0], [1:0-0-1,0-0-3], [2:1-6-4,0-2-0], [3:0-4-0,0-1-15], [5:0-5-1,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.89
TCDL 20.0	Lumber DOL	1.15	BC 0.63
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.09 8-15 >999 240
			Vert(CT) -0.22 8-15 >999 180
			Horz(CT) 0.03 1 n/a n/a
			PLATES GRIP
			MT20 197/144
			MT18HS 197/144
			Weight: 66 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 (4-8-4 max.): 2-3.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEDGE			
Left: 2x4 SPF No.2			
SLIDER	Right 2x4 SPF No.2 2-0-0		

REACTIONS.	(size) 5=Mechanical, 1=0-3-8
	Max Horz 1=65(LC 12)
	Max Uplift 5=-77(LC 13), 1=-80(LC 12)
	Max Grav 5=1084(LC 1), 1=1084(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1605/186, 2-3=-1265/214, 3-5=-1471/184
BOT CHORD	1-8=-92/1308, 6-8=-94/1303, 5-6=-82/1271
WEBS	2-8=0/254, 3-6=0/250

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-0-0, Exterior(2E) 8-0-0 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 19-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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, 1.
 - 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.
 - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



December 1,2020

Job

2547158

Truss

D3

Truss Type

Hip Girder

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/16/2020

18.240 s

Mar 9 2020

MITek Industries, Inc.

Tue Dec 1 13:49:35 2020

Page 1

Summit/14 Woodside

I43817584

Job Reference (optional)

18.240 s Mar 9 2020 MITek Industries, Inc. Tue Dec 1 13:49:35 2020 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

3-0-3

3-0-3

6-0-0

2-11-13

10-0-0

4-0-0

14-0-0

4-0-0

16-8-8

2-8-8

19-8-8

3-0-0

Scale = 1:33.5

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.11	MT20	197/144		
TCDL	20.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.23				
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.05				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							
								Weight: 90 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

3-5: 2x4 SPF 1650F 1.5E

BOT CHORD 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2

WEDGE

Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-10 oc purlins, except

2-0-0 oc purlins (2-11-4 max.): 3-5.

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

REACTIONS. (size) 1=0-3-8, 7=Mechanical

Max Horz 1=49(LC 8)

Max Uplift 1=-357(LC 8), 7=-363(LC 9)

Max Grav 1=2287(LC 1), 7=3223(LC 1)

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

TOP CHORD 1-2=-3987/646, 2-3=-4218/716, 3-4=-4323/706, 4-5=-4323/706, 5-6=-4105/698, 6-7=-3707/607

BOT CHORD 1-13=-586/3496, 12-13=-586/3496, 10-12=-603/3738, 9-10=-545/3654, 8-9=-499/3238, 7-8=-499/3238

WEBS 2-13=-390/93, 2-12=-209/464, 3-12=-114/877, 3-10=-128/805, 4-10=-829/260, 5-10=-140/904, 5-9=-97/760, 6-9=-196/667, 6-8=-551/110

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=357, 7=363.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 167 lb down and 107 lb up at 6-0-0, 143 lb down and 107 lb up at 8-0-12, 143 lb down and 99 lb up at 10-0-0, and 143 lb down and 107 lb up at 11-11-4, and 167 lb down and 107 lb up at 14-0-0 on top chord, and 761 lb down and 174 lb up at 6-0-0, and 761 lb down and 174 lb up at 13-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continue to Page 2

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

December 1, 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

			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020					
Job	Truss	Truss Type	1			Summit/14 Woodside		
2547158	D3	Hip Girder	1			I43817584		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18,240 S Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:35 2020 Page 2			Job Reference (optional)		
			ID:clow4YlGf7iox0?ly?5BC6z33zm-rZSgO8Ye18swmcn_WUsMVDOEGggFewUtqGfeZxyDJak					
LOAD CASE(S) Standard								
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15								

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-3=-90, 3-5=-90, 5-7=-90, 14-17=-20
- Concentrated Loads (lb)
- Vert: 3=-143(B) 5=-143(B) 12=-761(B) 4=-143(B) 10=-67(B) 9=-761(B) 20=-143(B) 21=-143(B) 22=-67(B) 23=-67(B)

 **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
2547158

Truss
E1

Truss Type
Hip Girder

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

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

12/16/2020

Ply
1

Summit/14 Woodside

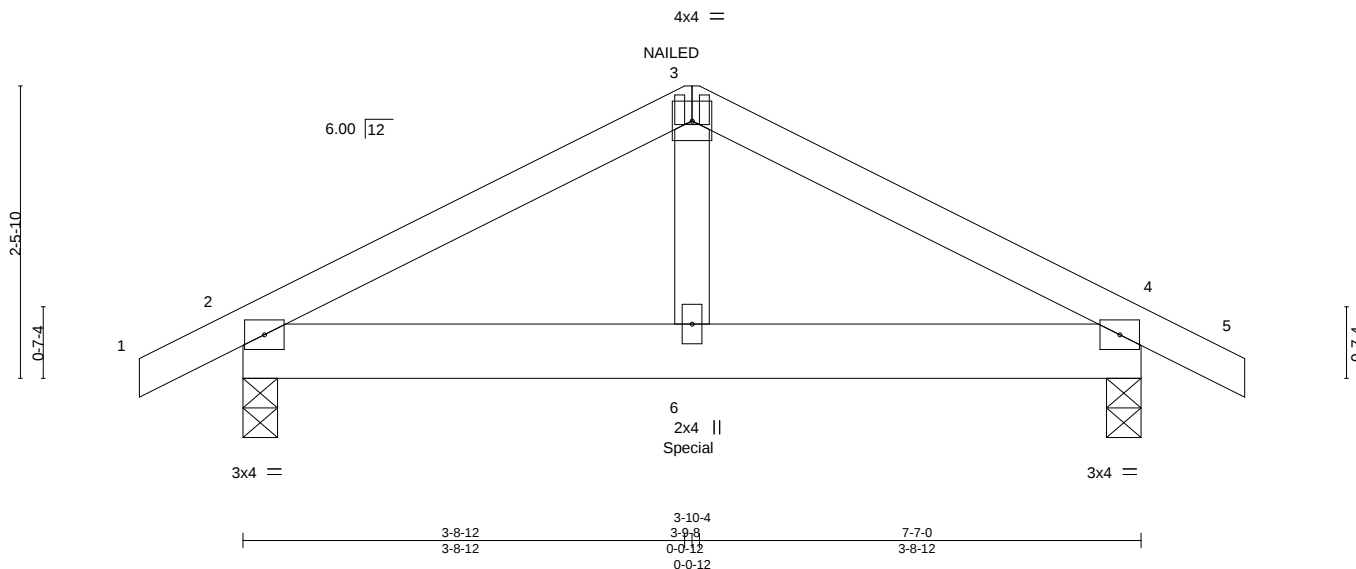
Job Reference (optional)

143817585

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18.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:36 2020 Page 1

Scale = 1:19.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.01	6	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	-0.02	6	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.15	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 28 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 4=0-3-8
 Max Horz 2=-37(LC 13)
 Max Uplift 2=-142(LC 8), 4=-142(LC 9)
 Max Grav 2=808(LC 1), 4=808(LC 1)

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

TOP CHORD 2-3=-1089/219, 3-4=-1089/218
 BOT CHORD 2-6=-158/901, 4-6=-158/901
 WEBS 3-6=-108/606

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=142, 4=142.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 579 lb down and 191 lb up at 3-8-12 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 Vert: 1-3=-90, 3-5=-90, 7-10=-20
- Concentrated Loads (lb)
 Vert: 3=-45(B) 6=-579(B)



December 1, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2547158	Truss E2	Truss Type Common	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020	Ply 1	Summit/14 Woodside I43817586
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18,240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:37 2020 Page 1 ID:clow4Ylgf7iox0?ly?5BCcz33zm-nyaRpqZuZm6d?wxNevuqbeTi3eQ06trAHa8ldQyDJai		
-0-10-8 0-10-8 3-9-8 3-9-8			7-7-0 3-9-8 8-5-8 0-10-8		

Scale = 1:17.7

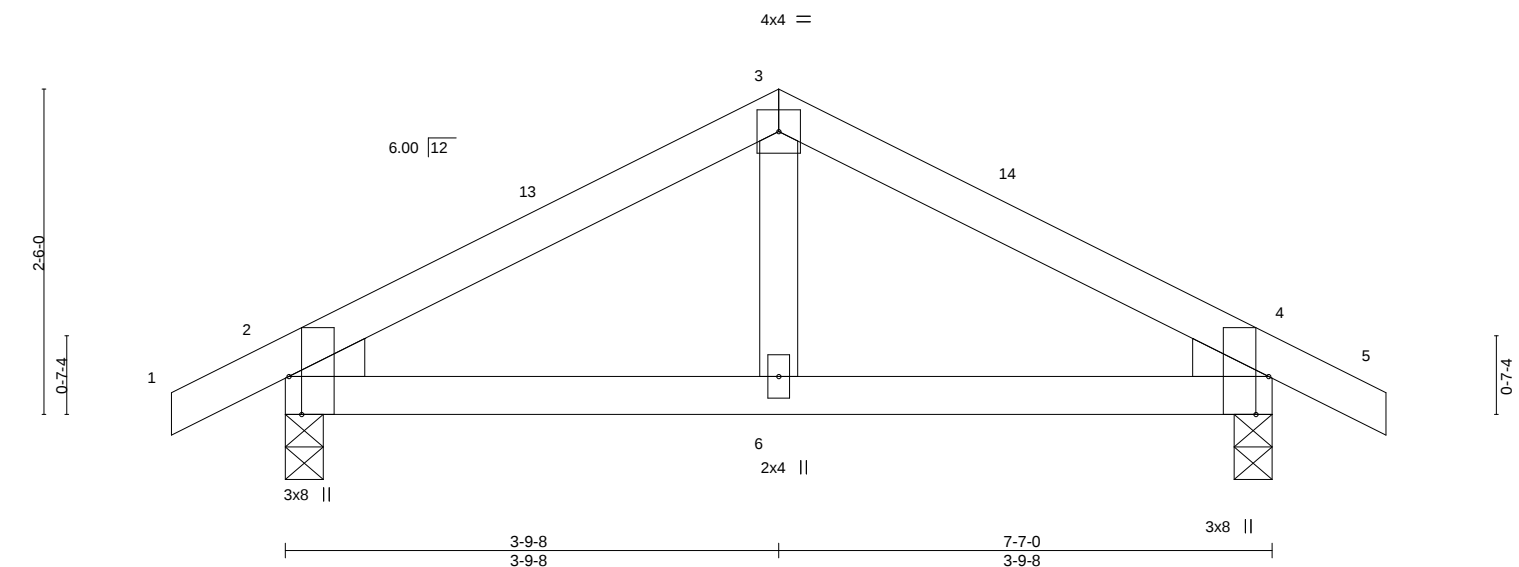


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [4:0-0-1,0-0-3], [4:0-0-3,0-5-0], [4:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	6-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.01	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 24 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 4=0-3-8
 Max Horz 2=37(LC 12)
 Max Uplift 2=-46(LC 12), 4=-46(LC 13)
 Max Grav 2=496(LC 1), 4=496(LC 1)

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

TOP CHORD 2-3=-484/176, 3-4=-484/176
 BOT CHORD 2-6=-54/368, 4-6=-54/368

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-8, Exterior(2R) 3-9-8 to 6-11-11, Interior(1) 6-11-11 to 8-5-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.
- 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.



December 1, 2020

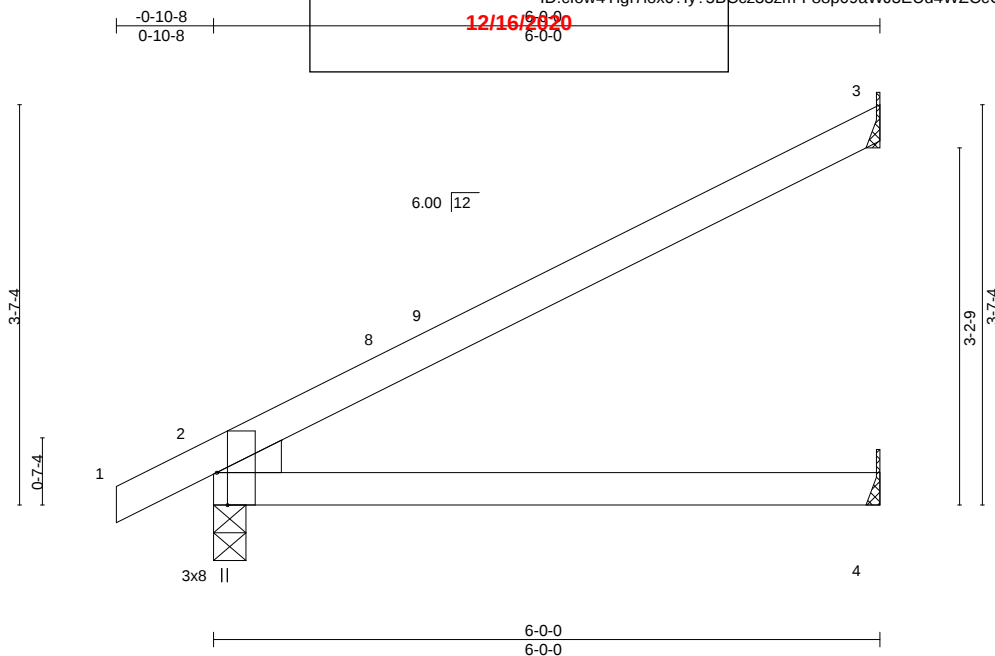
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2547158	Truss J1	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020		Summit/14 Woodside I43817587 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:38 2020 Page 1 ID:clow4Ylgr7iox0?ly?5B Ccz33zm-F88p09aWJ3EUd4WZCcQ37r0mN1i?rKgJWEtJAsyDJah
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,			



Scale = 1:20.7

Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	0.07 4-7 >956 240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.16 4-7 >454 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03 2 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 16 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=0-3-8, 4=Mechanical
Max Horz 2=123(LC 12)
Max Uplift 3=-82(LC 12), 2=-23(LC 12)
Max Grav 3=233(LC 1), 2=411(LC 1), 4=116(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) 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.



December 1,2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2547158	Truss J2	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside 143817588
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID:clow4Ylgf7iox0?ly75BCcz33zm-UtBDvEh9CqNDCSiID?4A_luGgqkeSPveb8ZH_ryDJaY 12/16/2020		

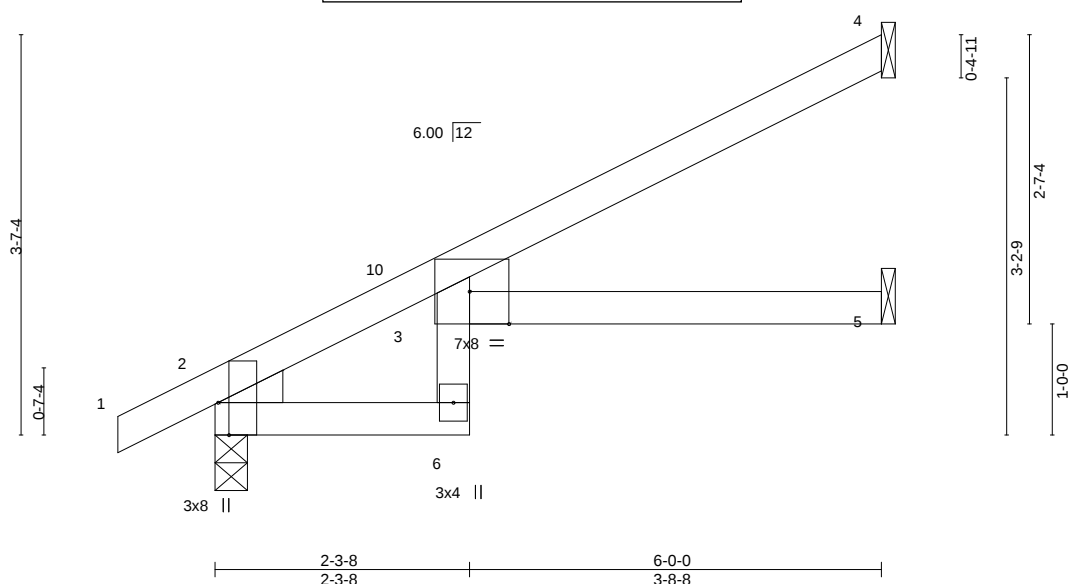


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [3:0-4-4,Edge]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 20.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code	IRC2018/TPI2014
	CSI.	
	TC	0.73
	BC	0.60
	WB	0.00
	Matrix-AS	
	DEFL.	
	in (loc)	l/defl
	Vert(LL)	0.11 3-5 >645 240
	Vert(CT)	-0.21 3-5 >333 180
	Horz(CT)	0.15 5 n/a n/a
	PLATES	GRIP
	MT20	197/144
	Weight: 18 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) 4=Mechanical, 2=0-3-8, 5=Mechanical
 Max Horz 2=123(LC 12)
 Max Uplift 4=-68(LC 12), 2=-22(LC 12), 5=-1(LC 12)
 Max Grav 4=213(LC 1), 2=413(LC 1), 5=118(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) 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.



December 1, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2547158	Truss J3	Truss Type Jack-Closed	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	Summit/14 Woodside I43817589
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18,240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:48 2020 Page 1 ID:clow4Ylgt7iox0?ly25BCcz33zm-y3kb7ainz8V3pcHUnjbPXyQYO395Bs9opolqWHyDJaX		

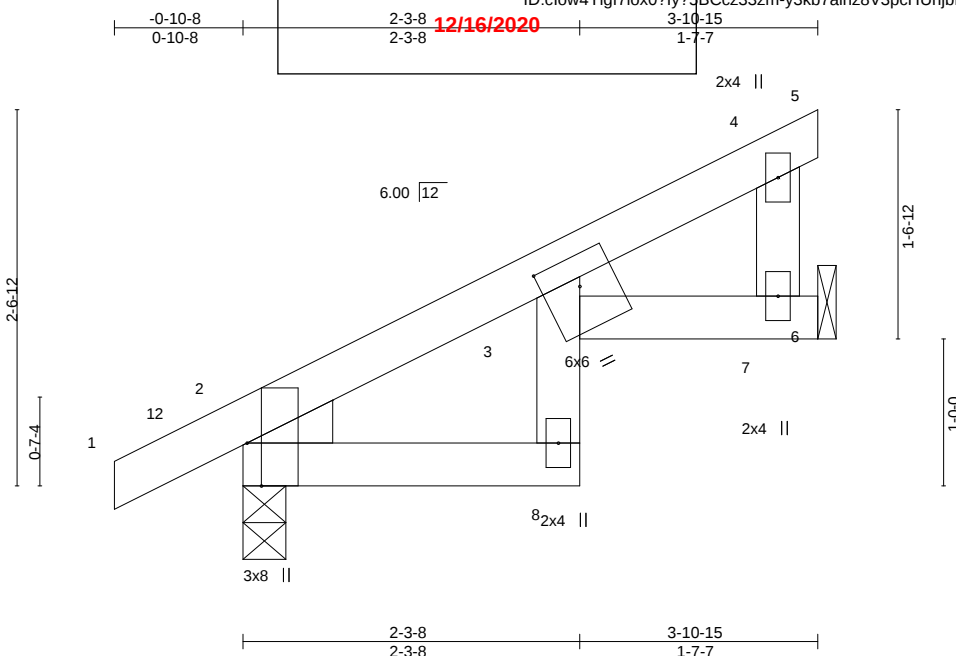


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [3:0-3-0,0-2-7]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.30
TCDL 20.0	Lumber DOL	1.15	BC 0.20
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.02 8 >999 240
			Vert(CT) -0.03 8 >999 180
			Horz(CT) 0.03 7 n/a n/a
			PLATES MT20 GRIP 197/144
			Weight: 14 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-15 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	
WEDGE	
Left: 2x4 SPF No.2	

REACTIONS. (size) 7=Mechanical, 2=0-3-8
 Max Horz 2=67(LC 9)
 Max Uplift 7=-39(LC 12), 2=-25(LC 12)
 Max Grav 7=209(LC 1), 2=289(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 to 3-10-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 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.



December 1,2020

Job 2547158	Truss J4	Truss Type Jack-Closed	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside Job Reference (optional) 18,240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:49 2020 Page 1 ID:clow4Ylgt7iox0?ly?5B Ccz33zm-RFizKwjQkSdwRmsgLQ6e4AzmjTYrwJOx2R2O2jyDJaW
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	-0-10-8 0-10-8 1-10-15 1-10-15 12/16/2020		

Scale = 1:10.7

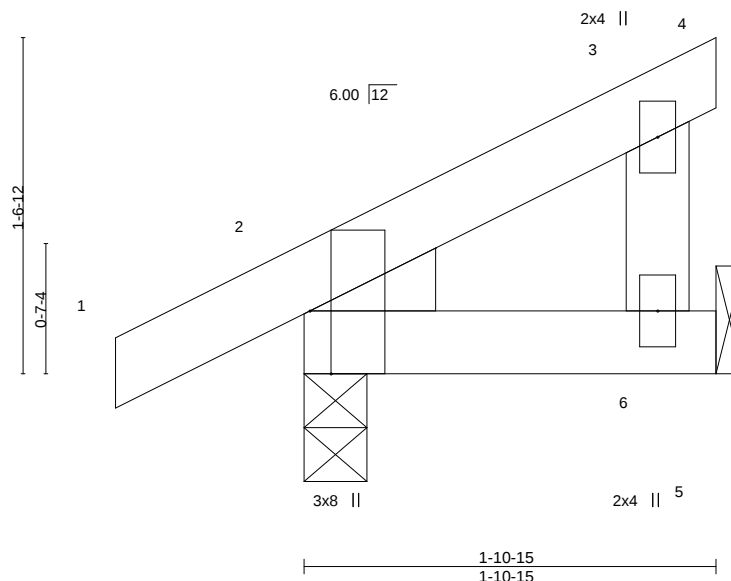


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00 9 >999 240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00 9 >999 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00 2 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP				Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 5=Mechanical
Max Horz 2=48(LC 11)
Max Uplift 2=-24(LC 12), 5=-16(LC 12)
Max Grav 2=200(LC 1), 5=75(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 1,2020

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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		Ply	Summit/14 Woodside
2547158	J5	Jack-Closed			1	I43817591
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:clow4Ylgf7iox0?ly?5BCcz33zm-vSsLYGj2Vlln3wRsv8dtcNVxTtu3fme4H5nxbAyDJaV 12/16/2020			

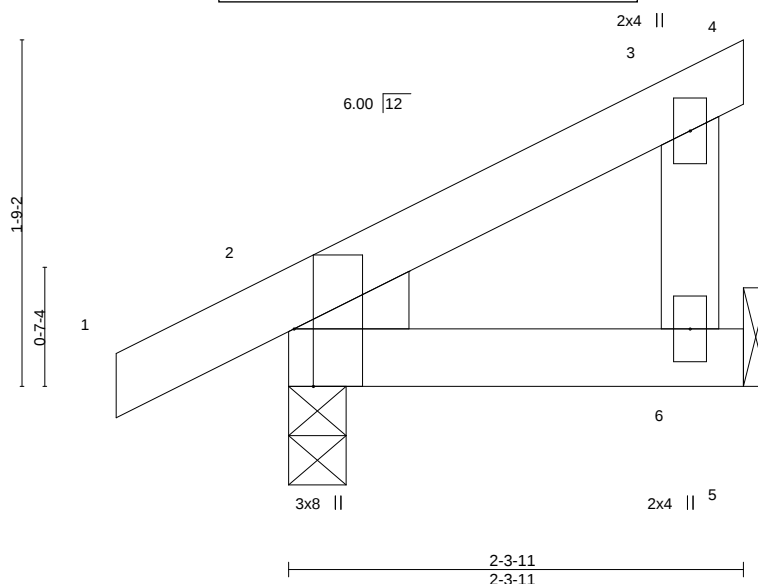


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 20.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code IRC2018/TPI2014	
	CSI.	
	TC 0.07	
	BC 0.04	
	WB 0.00	
	Matrix-MP	
	DEFL.	
	in (loc)	l/defl L/d
	Vert(LL) -0.00	9 >999 240
	Vert(CT) -0.00	9 >999 180
	Horz(CT) 0.00	2 n/a n/a
	PLATES	GRIP
	MT20	197/144
	Weight: 9 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-3-11 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
 Max Horz 2=55(LC 11)
 Max Uplift 6=22(LC 12), 2=23(LC 12)
 Max Grav 6=112(LC 1), 2=207(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.



December 1,2020

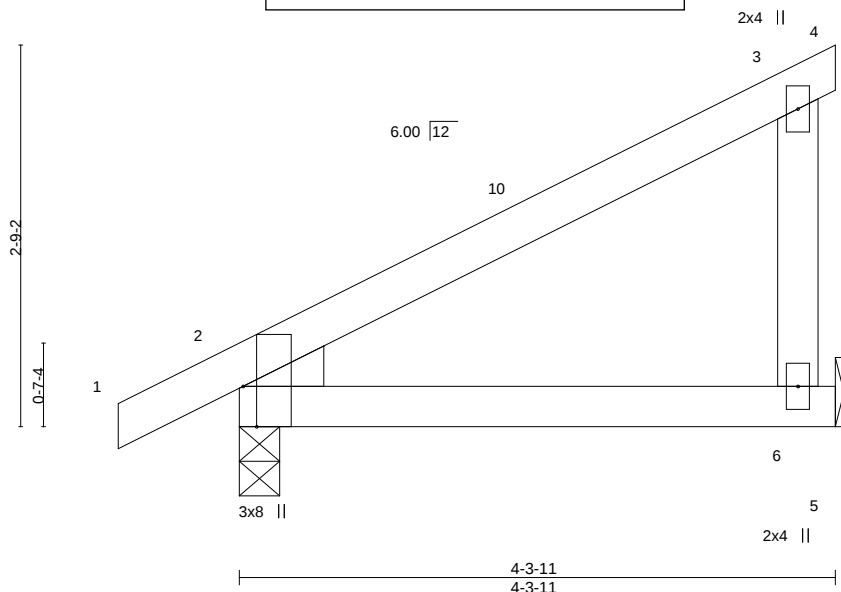
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2547158	Truss J6	Truss Type Jack-Closed	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	Summit/14 Woodside I43817592
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID:clow4Ylgf7iox0?ly?5B8Ccz33zm-NeQkckgG3teg403Sr969b24PHBnODuEWIXV7cyDJJaU 12/16/2020		



Scale = 1:16.7

Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25
TCDL 20.0	Lumber DOL	1.15	BC 0.20
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.02 6-9 >999 240
			Vert(CT) -0.03 6-9 >999 180
			Horz(CT) 0.01 2 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 15 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
 Max Horz 2=93(LC 11)
 Max Uplift 6=-41(LC 12), 2=-29(LC 12)
 Max Grav 6=230(LC 1), 2=309(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-3-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) 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.



December 1,2020

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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			Ply	Summit/14 Woodside	I43817593
2547158	J7	Jack-Open				1	Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18,240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:51 2020 Page 1 ID:clow4Ylgf7iox0?ly75BCcz33zm-NeQklckgG3teg403Sr969b20JH50ODZEWIXV7cyDJJaU					
-0-10-8 0-10-8			3-8-11 3-8-11			6-4-12 2-8-1		

Scale = 1:21.7

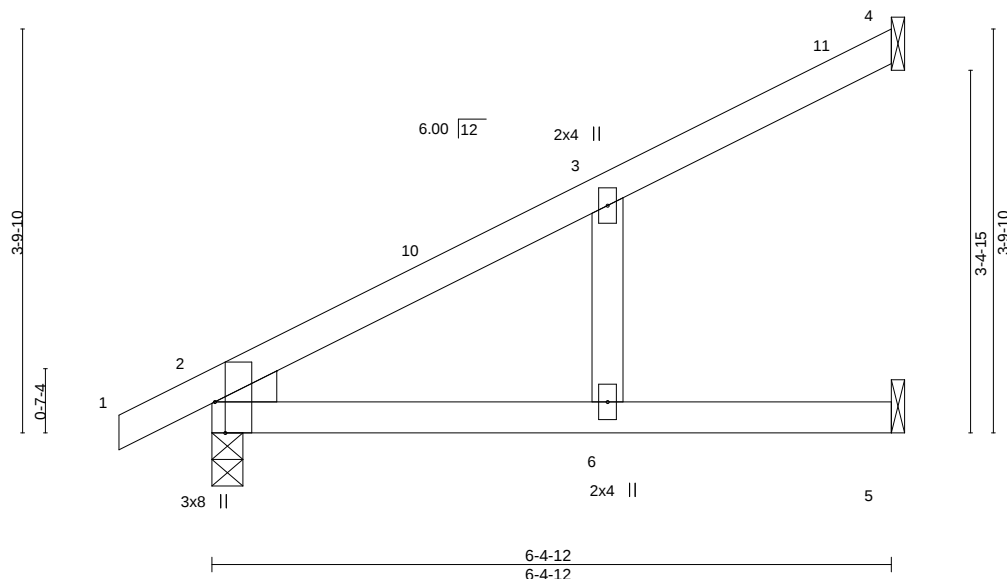


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.51
TCDL 20.0	Lumber DOL	1.15	BC 0.63
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.13 6-9 >592 240
			Vert(CT) -0.26 6-9 >294 180
			Horz(CT) 0.04 2 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 20 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 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) 4=Mechanical, 2=0-3-8, 5=Mechanical
 Max Horz 2=128(LC 12)
 Max Uplift 4=-54(LC 12), 2=-24(LC 12), 5=-15(LC 12)
 Max Grav 4=204(LC 1), 2=433(LC 1), 5=139(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-4-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) 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.



December 1, 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		Ply	Summit/14 Woodside	I43817594
2547158	J8	Jack-Closed			1	Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:52 2020 Page 1			
		-0-10-8 0-10-8		ID:clow4Ylgf7iox0?l?5BCcz33zm-rq_6zylION?VIDaF0ZgLhobFshYX7f8NkPG2f2yDJaT			
		12/16/2020					

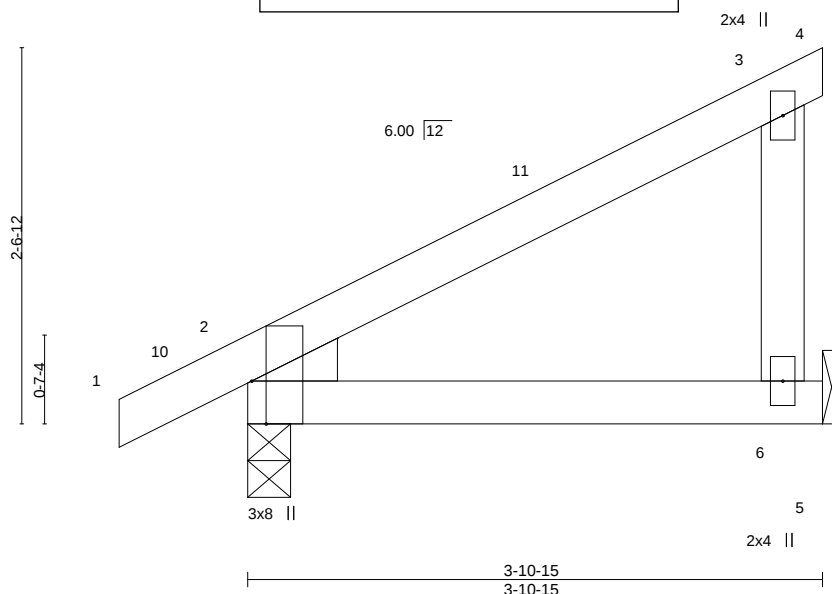


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	6-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
 Max Horz 2=85(LC 11)
 Max Uplift 6=-37(LC 12), 2=-28(LC 12)
 Max Grav 6=208(LC 1), 2=288(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.



December 1,2020

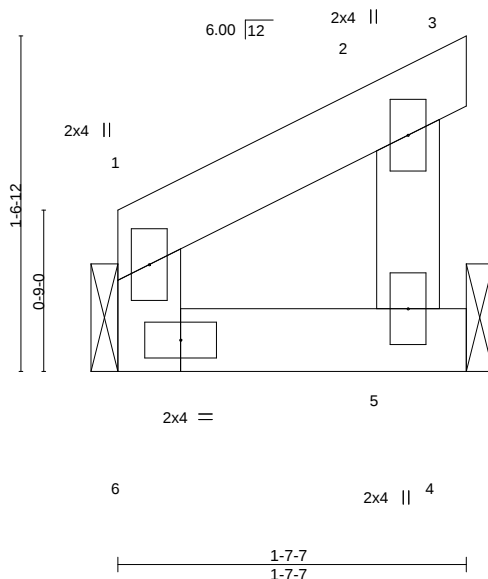
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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020	Ply	Summit/14 Woodside
2547158	J9	Jack-Closed		1	I43817595
Builders FirstSource (Valley Center), Valley Center, KS - 67147,		Job Reference (optional)			
ID:clow4Ylgf7iox0?ly?5BCdz33zm-J1YUAlmwng7MwN9RaGBaE07TE4wss6OXz30bBUYDJaS					



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	-0.00 6	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00 6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00 4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR					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 1-7-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 6=Mechanical
Max Horz 6=42(LC 9)
Max Uplift 4=-15(LC 12), 6=-2(LC 12)
Max Grav 4=69(LC 1), 6=79(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 1, 2020

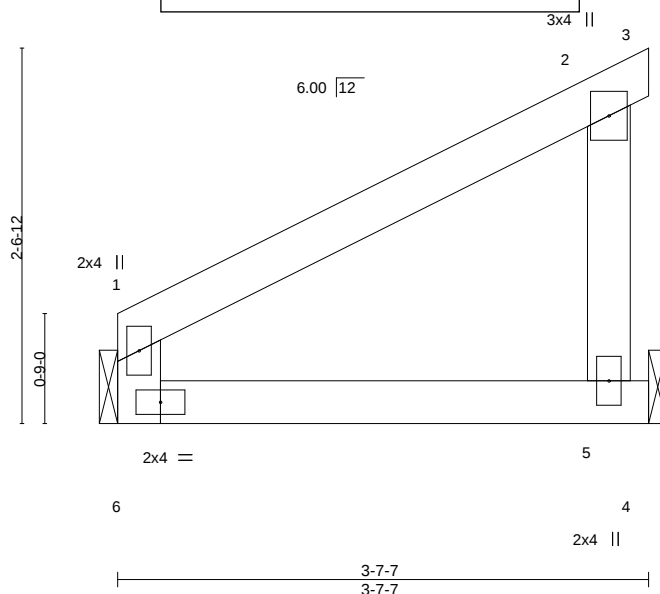
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside
2547158	J10	Jack-Closed			I43817596
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID:clow4Ylgf7iox0?ly?5BCcz33zm-jKiBEVb84NMLEE5llKxlg3Y2yR7sanwTludsilyDJag 12/18/2020		



Scale = 1:15.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.00 5-6	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.01 5-6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00 5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR					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 or 3-7-7 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 6=Mechanical
 Max Horz 6=80(LC 9)
 Max Uplift 5=-36(LC 12), 6=-6(LC 12)
 Max Grav 5=193(LC 1), 6=175(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 1, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2547158	Truss J11	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS, REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	Summit/14 Woodside 143817597
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID: clow4Ylgf7iox0?ly?5B Ccz33zm-BXFZRrcmrhUCsNgxJ1SXCG5E_rUpJEAc_YMPElyDJaf 12/16/2020		

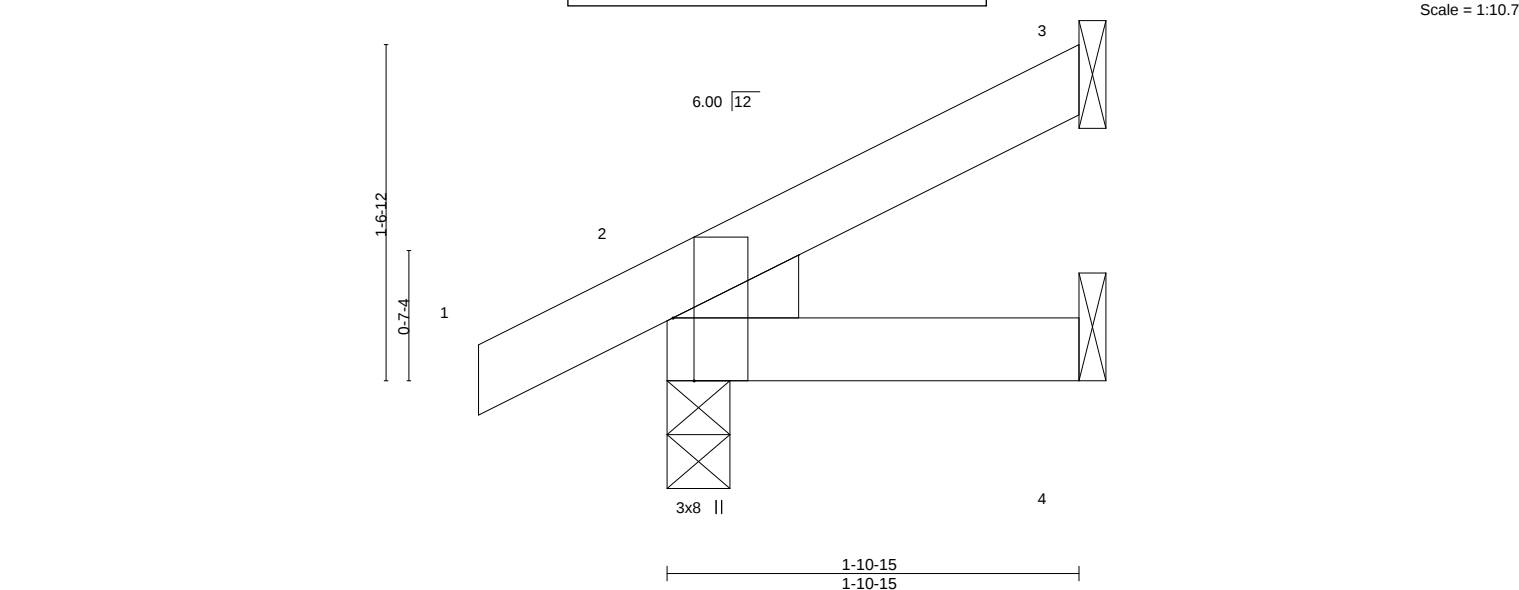


Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 20.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MP
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.00 7 >999 240
			Vert(CT) -0.00 7 >999 180
			Horz(CT) 0.00 3 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 7 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SPF No.2	

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
 Max Horz 2=49(LC 12)
 Max Uplift 3=23(LC 12), 2=18(LC 12)
 Max Grav 3=60(LC 1), 2=201(LC 1), 4=35(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



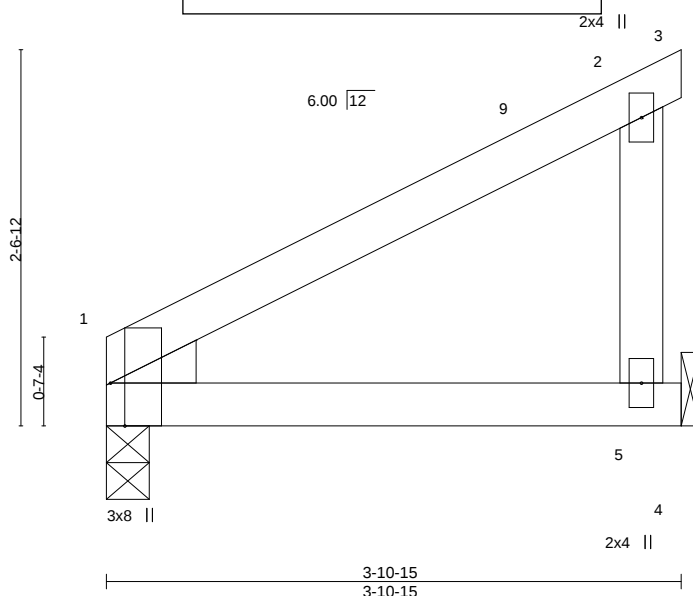
December 1,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside
2547158	J12	Jack-Closed			I43817598

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:40 2020 Page 1
ID:c1ow4Ylgf7iox0?ly?5B Ccz33zm-BXFZRrcmrhUCsNgxJ1SXCg5CfrREJEAc_YMPElyDJaf

12/18/2020
2-10-15
3-10-15



Scale = 1:15.7

Plate Offsets (X,Y)-- [1:0-0-1,0-0-3], [1:0-0-3,0-5-0], [1:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.22	Vert(LL)	0.02	5-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL 1.15		BC	0.20	Vert(CT)	-0.03	5-8	>999	180		
BCLL	0.0 *	Rep Stress Incr YES		WB	0.00	Horz(CT)	0.01	1	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 12 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 1=0-3-8
Max Horz 1=78(LC 11)
Max Uplift 5=-39(LC 12), 1=-9(LC 12)
Max Grav 5=217(LC 1), 1=200(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 3-10-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 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.



December 1, 2020

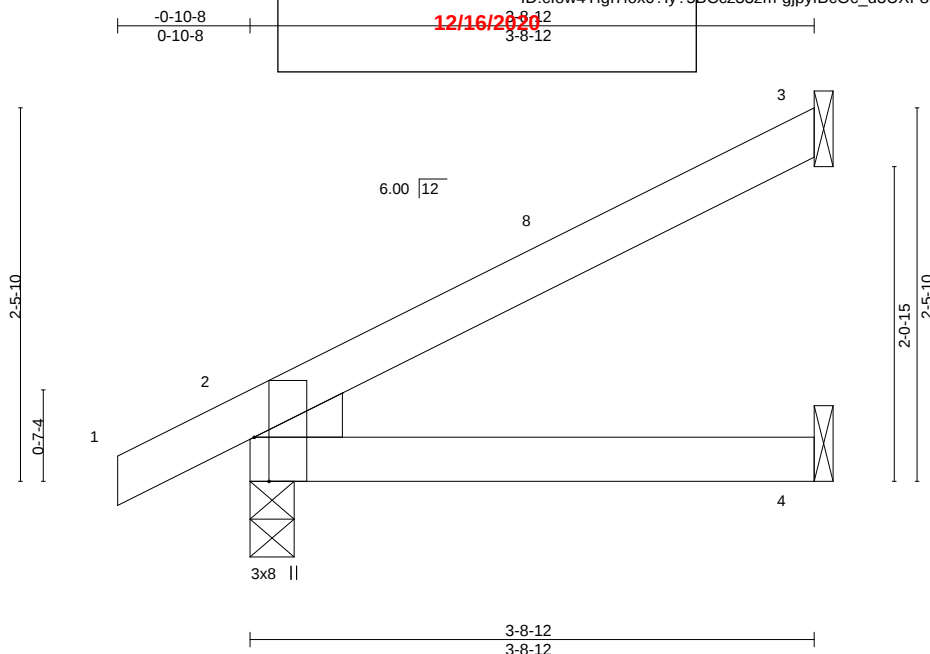
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2547158	Truss J13	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS, REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020			Summit/14 Woodside I43817599
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID:clow4Ylgf7iox0?ly75B Ccz33zm-gjpyfBcOc_d3UXF8tlzmlUeMYFov2hQmCC6zmByDJae			Job Reference (optional)



Scale = 1:15.2

Plate Offsets (X,Y)--	[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]		
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.21	in (loc) l/defl L/d
TCDL 20.0	Lumber DOL 1.15	BC 0.17	Vert(LL) -0.01 4-7 >999 240
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.02 4-7 >999 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	Horz(CT) 0.01 2 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 11 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 3-8-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=81(LC 12)
Max Uplift 3=-48(LC 12), 2=-20(LC 12)
Max Grav 3=135(LC 1), 2=290(LC 1), 4=73(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-8-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 1,2020

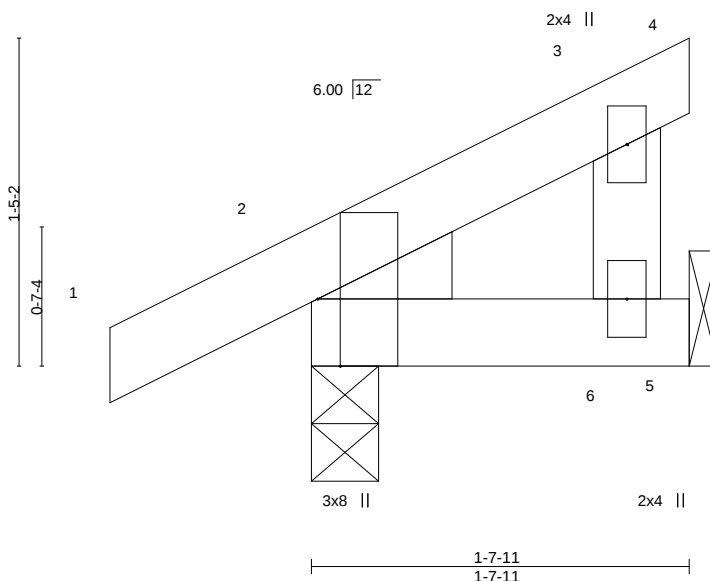
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2547158	Truss J15	Truss Type Jack-Closed	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside Job Reference (optional) 143817601
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:clow4Ylgf7iox0?l?5BCcz33zm-c5xi4tef8ctnrOW_A?EqvjkE2VTWbv2gWb4r4yDJac 12/16/2020		



Scale = 1:10.0

Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]
LOADING (psf)	SPACING-	2-0-0
TCLL 25.0	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	0.07
	BC	0.03
	WB	0.00
	Matrix-MP	
	DEFL.	
	in (loc)	l/defl
	Vert(LL)	-0.00 9 >999 240
	Vert(CT)	-0.00 9 >999 180
	Horz(CT)	-0.00 2 n/a n/a
	PLATES	GRIP
	MT20	197/144
	Weight: 7 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 5=Mechanical
Max Horz 5=43(LC 11)
Max Uplift 2=-24(LC 12), 5=-13(LC 12)
Max Grav 2=188(LC 1), 5=57(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 1,2020

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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		Ply	Summit/14 Woodside
2547158	J16	Jack-Open			1	I43817602
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:clow4Ylgf7iox0?y?5BCcz33zm-c5xi4tef8ctnrOW_A?EqvjZo2S8WaE2gWb4r4yDJac			
-0-10-8		1-0-12	12/16/2020			
0-10-8		1-0-12	6-0-0			
			4-11-4			

Scale = 1:21.4

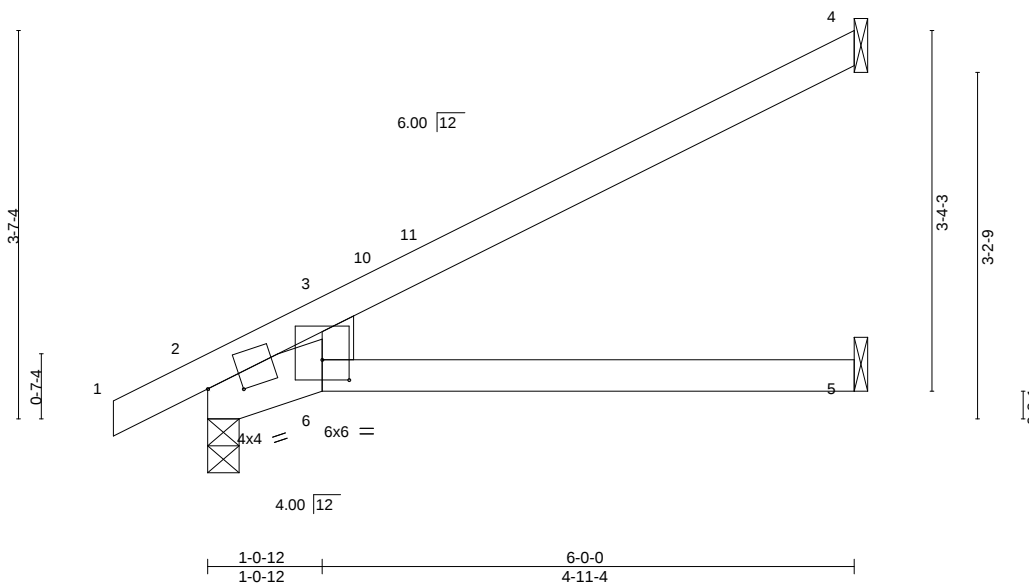


Plate Offsets (X,Y)-- [2:0-3-13,0-1-5], [3:0-1-12,0-0-14], [6:0-3-0,0-2-4]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	0.10	6	>725	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.17	6	>422	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.05	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 17 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-6: 2x6 SPF No.2
 WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
 Max Horz 2=123(LC 12)
 Max Uplift 4=-98(LC 12), 2=-23(LC 12)
 Max Grav 4=272(LC 1), 2=411(LC 1), 5=98(LC 3)

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

TOP CHORD 2-3=-370/44
 WEBS 3-6=-243/449

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.



December 1, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2547158	Truss J17	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside 143817603
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:clow4Ylgf7iox0?ly?5BCCcz33zm-4IV4HDfHvw?eL?zjYtWTN6GjFSnVF2OCuAKdNWYDJab 12/16/2020		
-0-10-8 0-10-8		3-0-12 3-0-12	6-0-0 2-11-4	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:44 2020 Page 1 Ccz33zm-4IV4HDfHvw?eL?zjYtWTN6GjFSnVF2OCuAKdNWYDJab	

Scale = 1:20.9

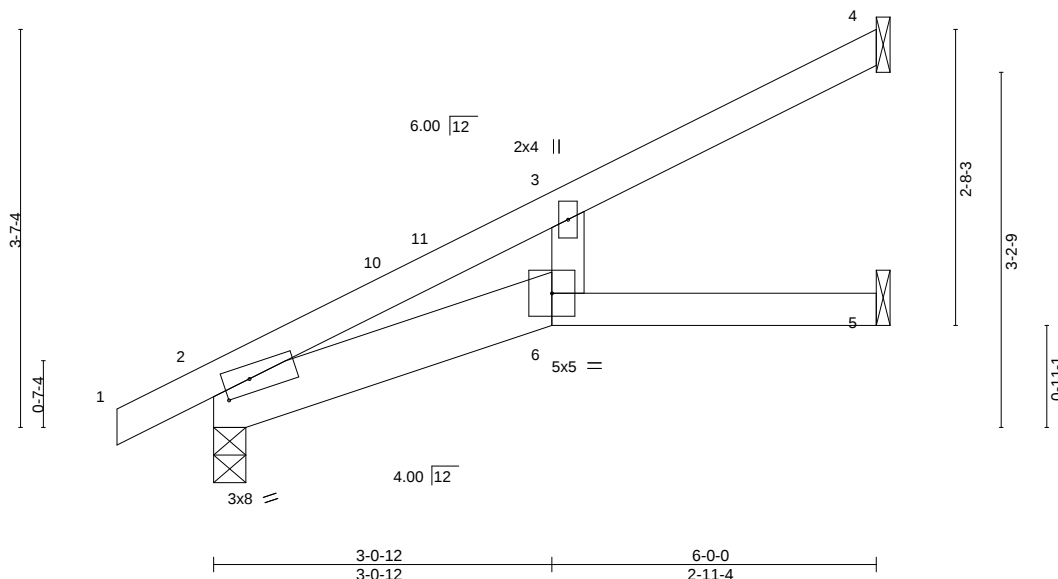


Plate Offsets (X,Y)-- [2-0-2-13,0-1-8]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.88	Vert(LL)	0.16	6 >444	MT20
TCDL 20.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.30	6 >235	GRIP 197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.09	5 n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 19 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-6: 2x6 SPF No.2
 WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
 Max Horz 2=123(LC 12)
 Max Uplift 4=-86(LC 12), 2=-23(LC 12)
 Max Grav 4=292(LC 1), 2=411(LC 1), 5=58(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.



December 1, 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		Ply	Summit/14 Woodside
2547158	J18	Jack-Open			1	I43817604
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:clow4Ylgf7iox0?ly25BCcz33zm-YU3SUZgvgD7Vy9Yv6a2ivKouFs7Z_VgL7q4AvvyDJaa			
-0-10-8 0-10-8		3-3-8 3-3-8	12/16/2020		6-0-0 2-8-8	

Scale = 1:21.2

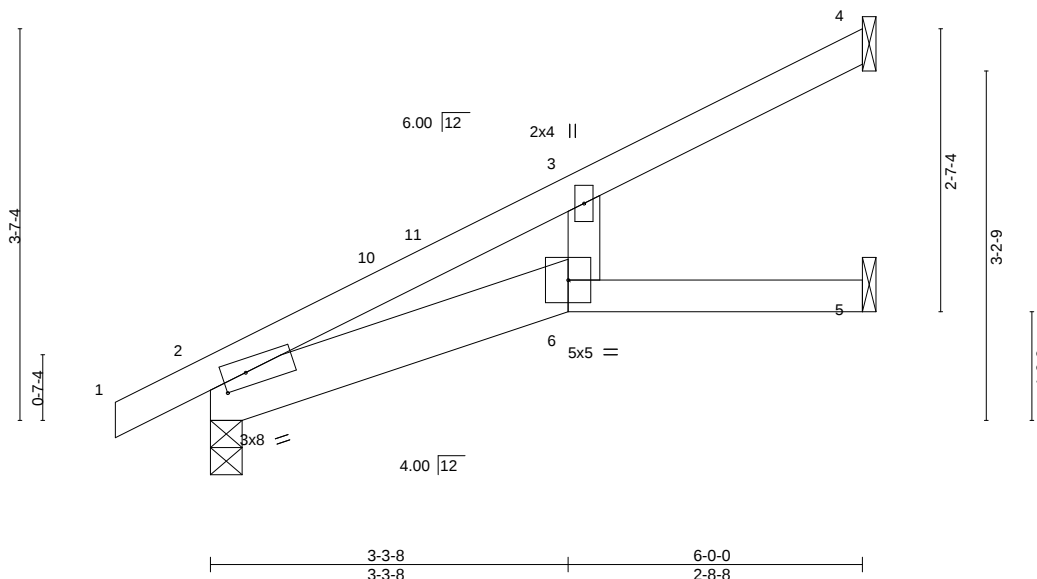


Plate Offsets (X,Y)--	[2:0-2-9,0-1-8]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.87	Vert(LL)	0.15	6	>464
TCDL 20.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.29	6	>245
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.09	5	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				PLATES		GRIP	
				MT20		197/144	
				Weight: 19 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-6: 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=123(LC 12)
Max Uplift 4=-85(LC 12), 2=-23(LC 12)
Max Grav 4=294(LC 1), 2=411(LC 1), 5=53(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.



December 1,2020

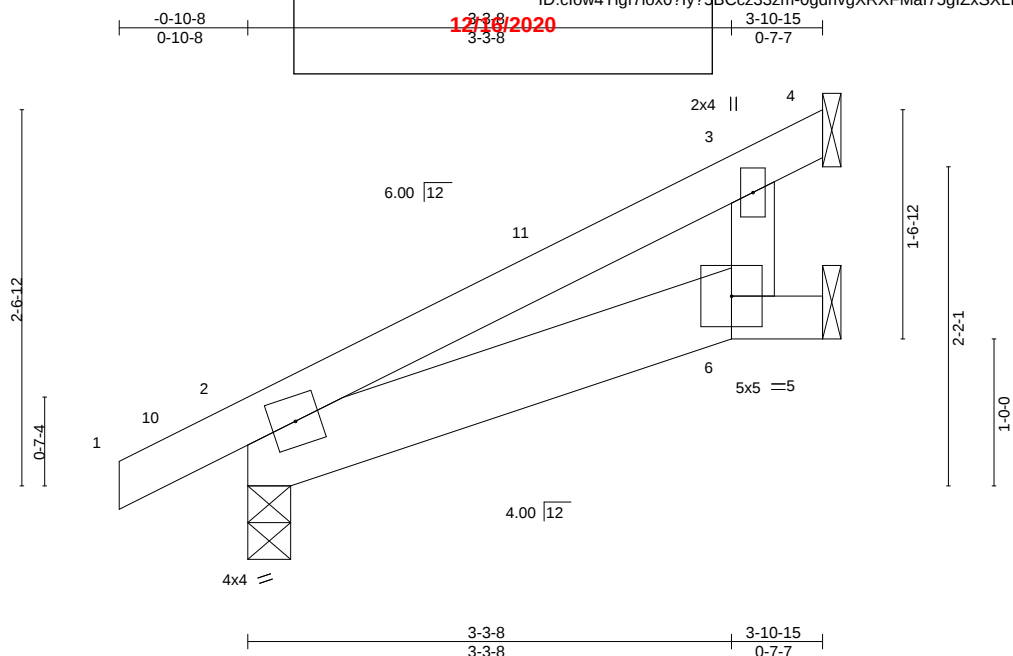
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2547158	Truss J19	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	Summit/14 Woodside 143817605
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18,240 sq ft ID: clow4Ylgt7iox0?ly?5B Ccz33zm-0gdrivgXRXFMa175glZxSXLJDJGVWjyIVMUpkSOyDJaZ 12/16/2020		



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	-0.01	6	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.01	6-9	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP							
									Weight: 14 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
2-6: 2x6 SPF No.2	
WEBS 2x4 SPF No.2	

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
 Max Horz 2=84(LC 12)
 Max Uplift 4=49(LC 12), 2=20(LC 12)
 Max Grav 4=197(LC 1), 2=299(LC 1), 5=11(LC 3)

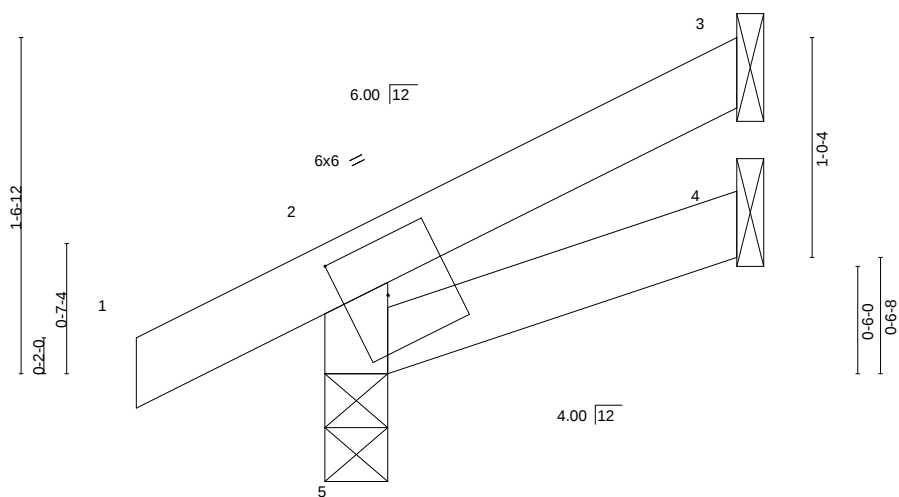
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-3 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
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) 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.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.



December 1, 2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside
2547158	J20	Jack-Open			I43817606
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:clow4Ylgf7iox0?ly?5BCcz33zm-UtBDvEh9CqNDCSiID74A_luQsgtXSPveb8ZH_ryDJaY 12/16/2020		



Scale = 1:10.7

Plate Offsets (X,Y)--		[2:0-1-15,0-0-0], [2:0-2-7,0-3-0], [5:0-0-13,0-1-10]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09
TCDL 20.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MR
			DEFL. in (loc) l/defl L/d
			Vert(LL) -0.00 5 >999 240
			Vert(CT) -0.00 5 >999 180
			Horz(CT) -0.00 3 n/a n/a
			PLATES GRIP
			MT20 197/144
			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 Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
 Max Horz 5=43(LC 12)
 Max Uplift 3=-26(LC 12), 5=-20(LC 12)
 Max Grav 3=57(LC 1), 4=31(LC 3), 5=215(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 5 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) 3, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 1,2020

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 2547158	Truss LG1	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020		Summit/14 Woodside I43817607 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:54 2020 Page 1 ID:clow4Ylgf7iox0?iy?5BCcz33zm-nD6sNenYY_FDXk8zpnDgdUUGAbXXgCjI9kxyDJaR
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,			

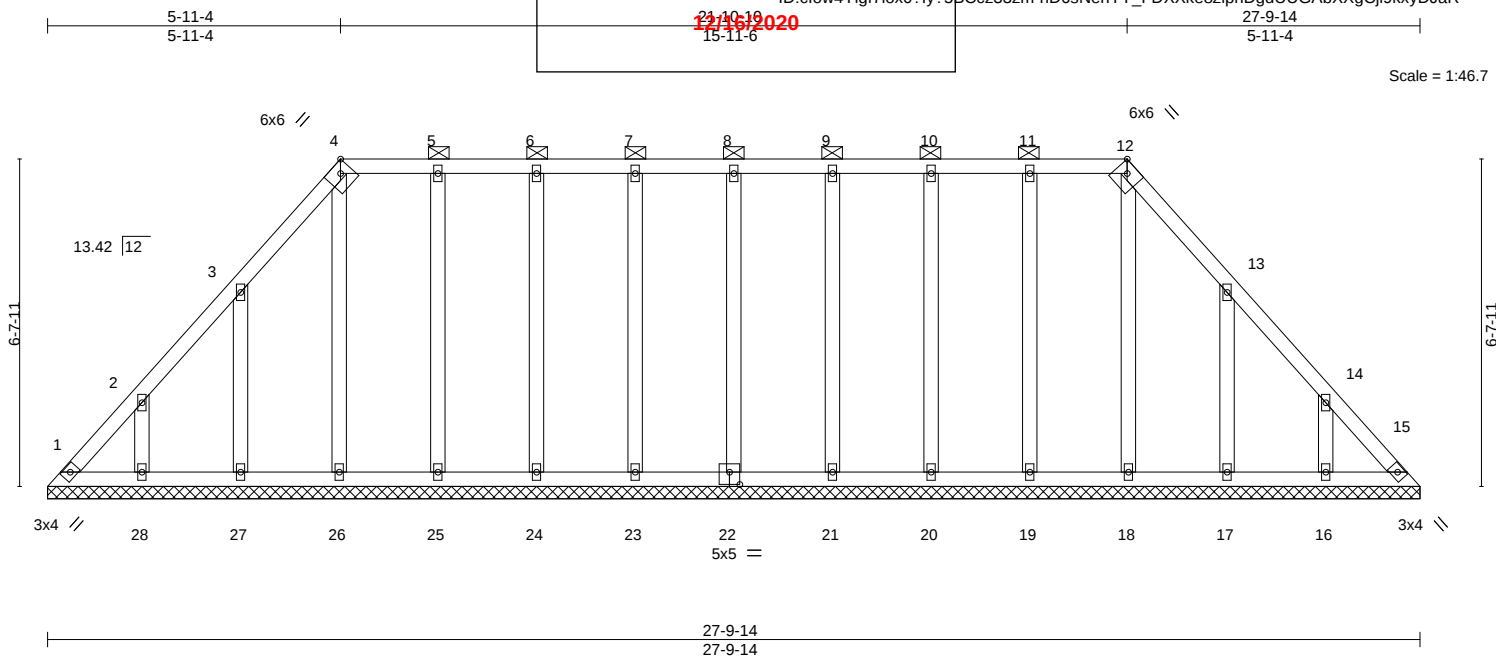


Plate Offsets (X,Y)--		[4:0-2-10,Edge], [12:0-2-10,Edge], [22:0-2-8,0-3-0]													
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL		1.15		TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144	
TCDL	20.0	Lumber DOL		1.15		BC	0.03	Vert(CT)	n/a	-	n/a	999			
BCLL	0.0 *	Rep Stress Incr		YES		WB	0.14	Horz(CT)	0.01	15	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014				Matrix-S									
												Weight: 144 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, except 2-0-0 oc purlins (6-0-0 max.): 4-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 27-9-14.
(lb) - Max Horz 1=-153(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 21, 20, 19 except 27=-128(LC 12), 28=-115(LC 12), 17=-127(LC 13), 16=-115(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 28, 21, 20, 19, 18, 16 except 27=259(LC 19), 17=258(LC 20)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 5-11-4, Exterior(2R) 5-11-4 to 9-10-15, Interior(1) 9-10-15 to 21-10-10, Exterior(2R) 21-10-10 to 25-10-15, Interior(1) 25-10-15 to 27-5-15 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
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 22, 23, 24, 25, 26, 21, 20, 19 except (jt=lb) 27=128, 28=115, 17=127, 16=115.
- 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.



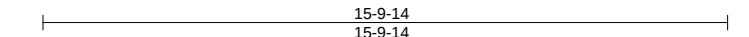
December 1,2020

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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



BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 80 lb	FT = 20%
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BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-13

Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 15, 16, 11, 10 except 14=255(LC 19), 12=253(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All 1
TOP CHORD 1-2=-281/183, 8-9=-252/178

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

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb)
14=119, 15=119, 16=116, 12=117, 11=120, 10=116.
- 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.



December 1, 2020

Job 2547158	Truss LG3	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside 143817609 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:57 2020 Page 1 ID:clow4Ylgf7iox0?ly?5B Ccz33zm-Con?0fpRrveoO?TDp6FWOsl7XiHYouA6uh_pKGyDJaO		
9-10-15 9-10-15			12/16/2020 19-9-14 9-10-15		
4x4 =			Scale = 1:67.2		

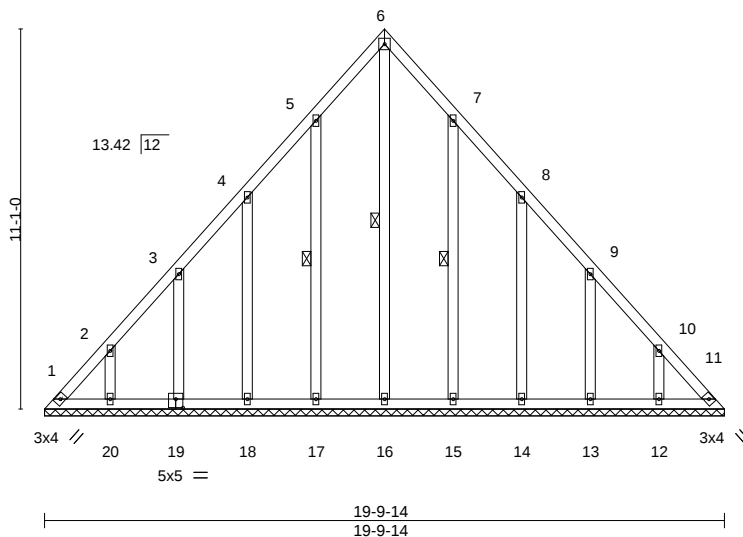


Plate Offsets (X,Y)--		[19:0-2-8,0-3-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08
TCDL 20.0	Lumber DOL	1.15	BC 0.05
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) 0.01 11 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 112 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.
 WEBS 1 Row at midpt 6-16, 5-17, 7-15

REACTIONS.

All bearings 19-9-14.
 (lb) - Max Horz 1=-260(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 11 except 1=-113(LC 10), 17=-115(LC 12), 18=-120(LC 12), 19=-119(LC 12), 20=-118(LC 12), 15=-112(LC 13), 14=-121(LC 13), 13=-116(LC 13), 12=-116(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 11, 16, 18, 19, 20, 14, 13, 12 except 1=270(LC 12), 17=254(LC 19), 15=251(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-374/238, 2-3=-259/194, 10-11=-333/231

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 9-10-15, Exterior(2R) 9-10-15 to 12-10-15, Interior(1) 12-10-15 to 19-5-15 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
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 1=113, 17=115, 18=120, 19=119, 20=118, 15=112, 14=121, 13=116, 12=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.



December 1, 2020

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job
2547158

Truss
LG5

Truss Type
GABLE

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

12/16/2020

Ply
1

Summit/14 Woodside
I43817611

Job Reference (optional)

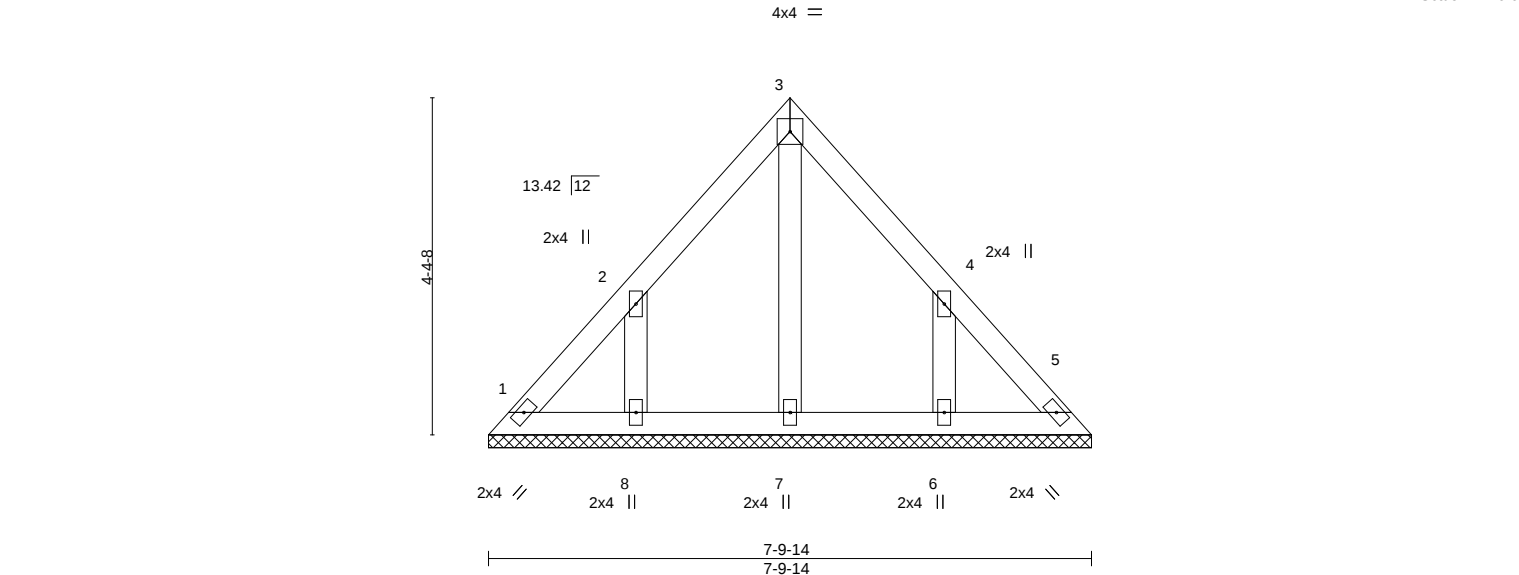
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8,240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:49:59 2020 Page 1
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3-10-15
3-10-15

7-9-14
3-10-15

Scale = 1:29.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 29 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 7-9-14.
 (lb) - Max Horz 1=97(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-133(LC 12), 6=-133(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=267(LC 19), 6=267(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-256/157, 4-6=-256/157

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-10-15, Exterior(2R) 3-10-15 to 6-10-15, Interior(1) 6-10-15 to 7-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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=133, 6=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.



December 1,2020

Job
2547158

Truss
LG6

Truss Type
GABLE

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

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

12/16/2020

Ply
1

Summit/14 Woodside
I43817612

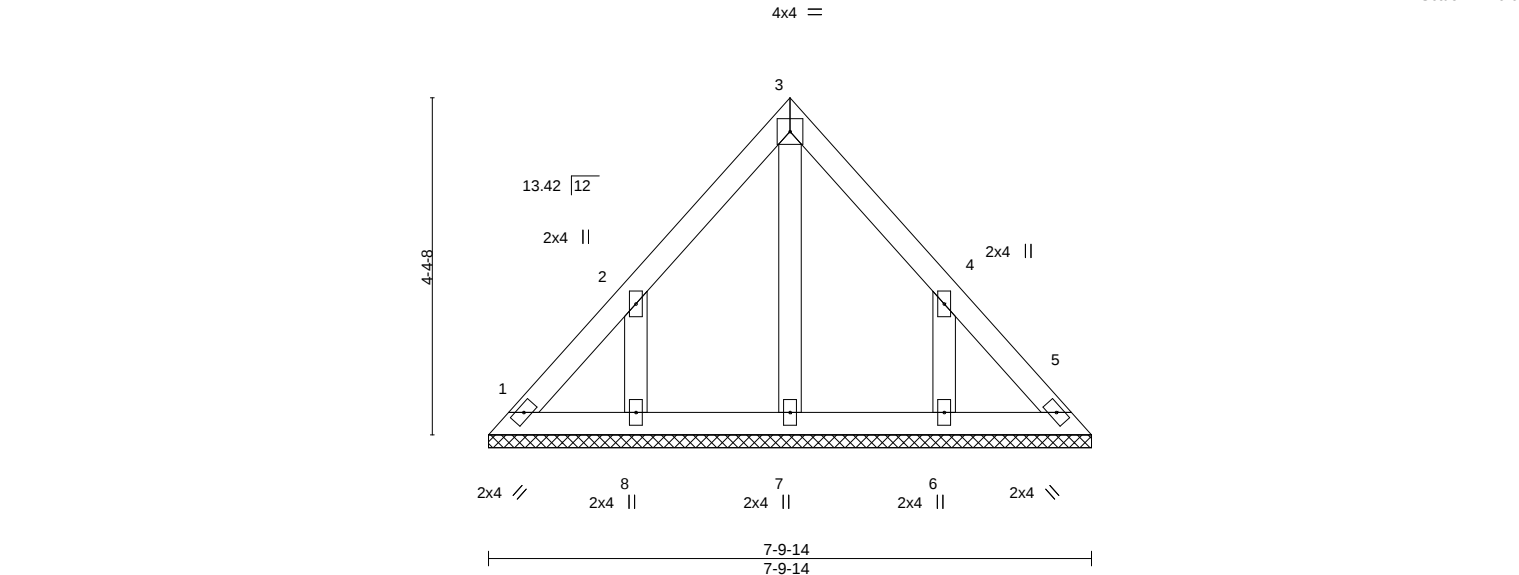
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8,240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:50:00 2020 Page 1
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3-10-15
3-10-15

7-9-14
3-10-15

Scale = 1:29.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 29 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 7-9-14.
 (lb) - Max Horz 1=97(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-133(LC 12), 6=-133(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=267(LC 19), 6=267(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-256/157, 4-6=-256/157

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-10-15, Exterior(2R) 3-10-15 to 6-10-15, Interior(1) 6-10-15 to 7-5-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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=133, 6=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.



December 1,2020

Job
2547158

Truss
V1

Truss Type
GABLE

**RELEASE FOR
CONSTRUCTION**
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/16/2020

Ply
1

Summit/14 Woodside
I43817613

Job Reference (optional)

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

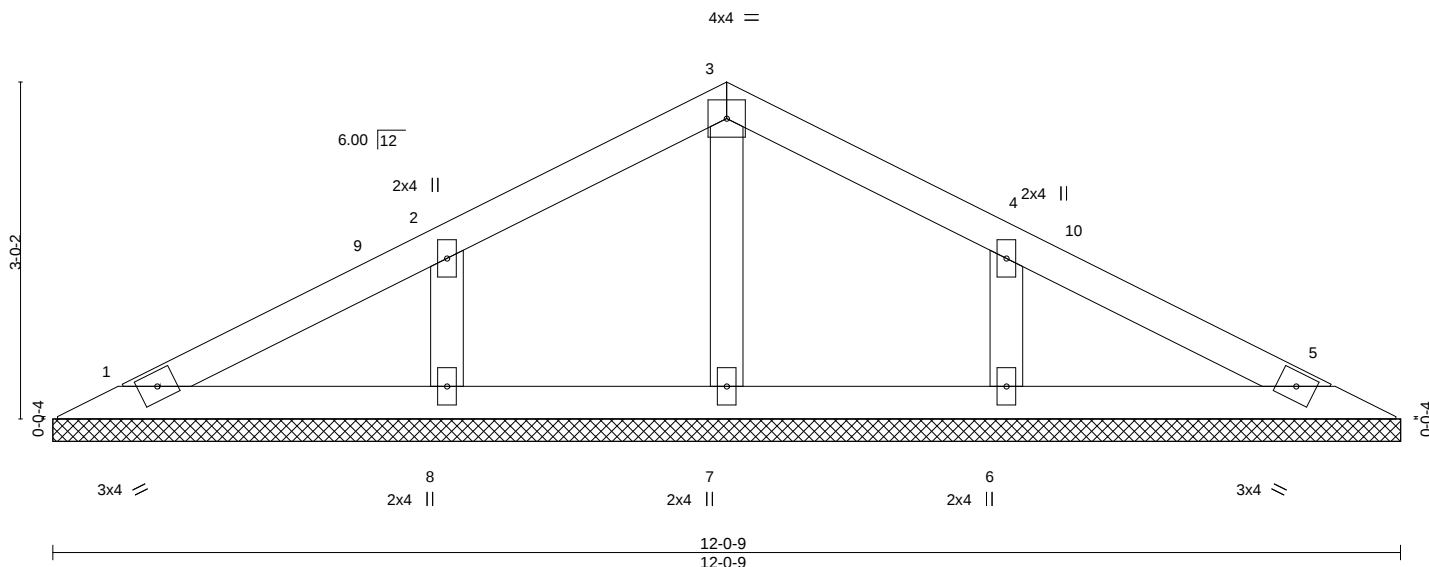
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:50:01 2020 Page 1

6-0-4
6-0-4

ID:clow4Ylgf7iox0?ly25BCcz33zm-4Z1Wr1sxv88Dtcn_2yKSZiToWJeJkkoipJy1U1yDJak

12-0-9
6-0-4

Scale = 1:20.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 33 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. All bearings 12-0-9.

(lb) - Max Horz 1=-43(LC 17)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=361(LC 25), 6=361(LC 26)

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

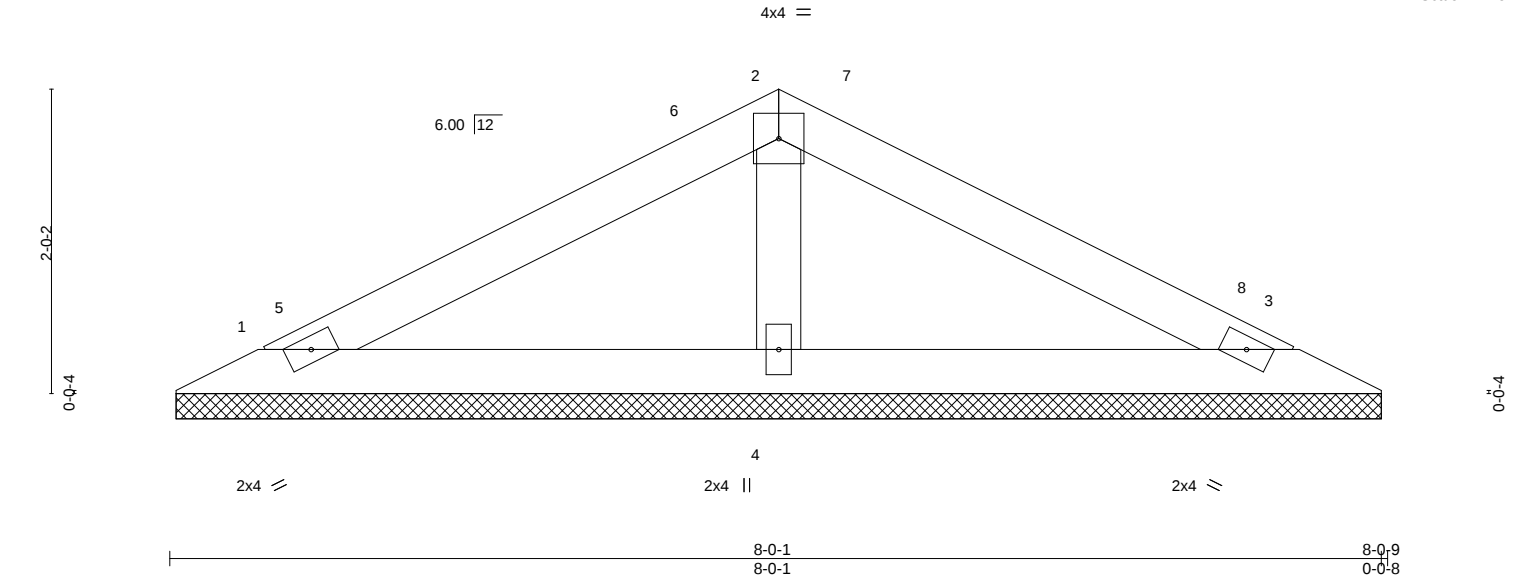
WEBS 2-8=-288/162, 4-6=-288/162

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCdL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-6-4, Interior(1) 3-6-4 to 6-0-4, Exterior(2R) 6-0-4 to 9-0-4, Interior(1) 9-0-4 to 11-5-0 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
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 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.



December 1,2020

Job 2547158	Truss V2	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020		Summit/14 Woodside Job Reference (optional) 143817614
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:50:02 2020 Page 1 ID:clow4Ylgf7iox0?ly?5BCcz33zm-Ylbu3NtZgRG4VmLAcfrh5v?xljzwTB1r1zha0TyDJaJ		



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	MT20		197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							
								Weight: 19 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. (size) 1=7-11-9, 3=7-11-9, 4=7-11-9
 Max Horz 1=-27(LC 17)
 Max Uplift 1=-28(LC 12), 3=-33(LC 13)
 Max Grav 1=193(LC 1), 3=193(LC 1), 4=361(LC 1)

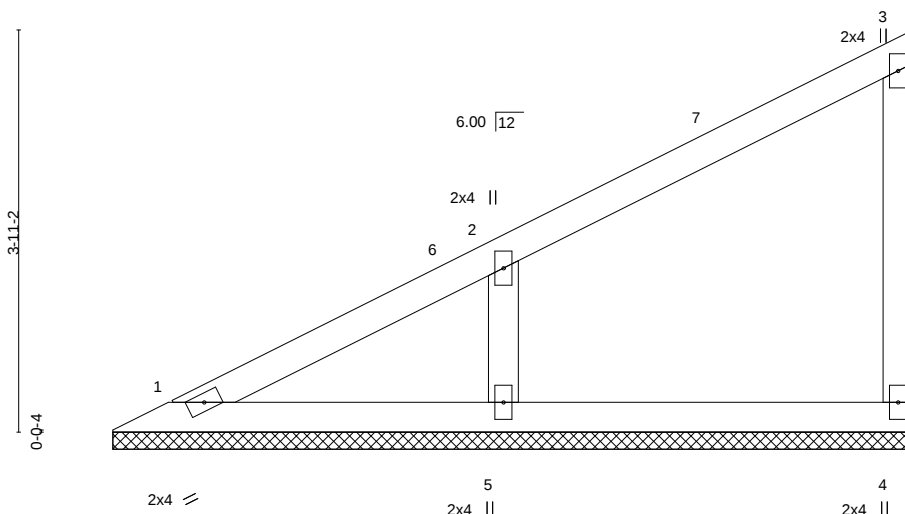
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-276/135

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-0-4, Exterior(2R) 4-0-4 to 7-0-4, Interior(1) 7-0-4 to 7-5-0 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
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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.



December 1, 2020

Job 2547158	Truss V3	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside Job Reference (optional) 12/18/2020
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			18,240 sq ft 12/18/2020 7-10-4		



Scale = 1:22.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 23 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) 1=7-9-12, 4=7-9-12, 5=7-9-12
 Max Horz 1=133(LC 9)
 Max Uplift 4=-19(LC 9), 5=-89(LC 12)
 Max Grav 1=129(LC 20), 4=166(LC 1), 5=489(LC 1)

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

WEBS 2-5=-400/232

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-10-4, Interior(1) 3-10-4 to 7-8-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 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.



December 1, 2020

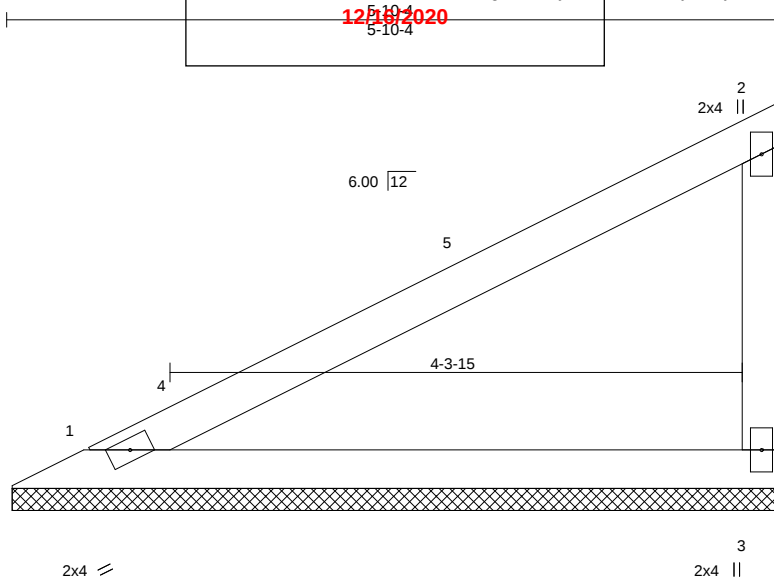
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2547158	Truss V4	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Summit/14 Woodside 143817616 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:50:03 2020 Page 1 ID:clow4Ylgf7iox0?ly?5BCcz33zm-0y8GGjtCRIOx7wwM9MMwe7Y0A6GTCes?GdR7YvyDJal		



Scale = 1:17.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.64	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 16 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 5-10-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-9-12, 3=5-9-12
 Max Horz 1=95(LC 9)
 Max Uplift 1=-20(LC 12), 3=-44(LC 12)
 Max Grav 1=279(LC 1), 3=279(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 1,2020

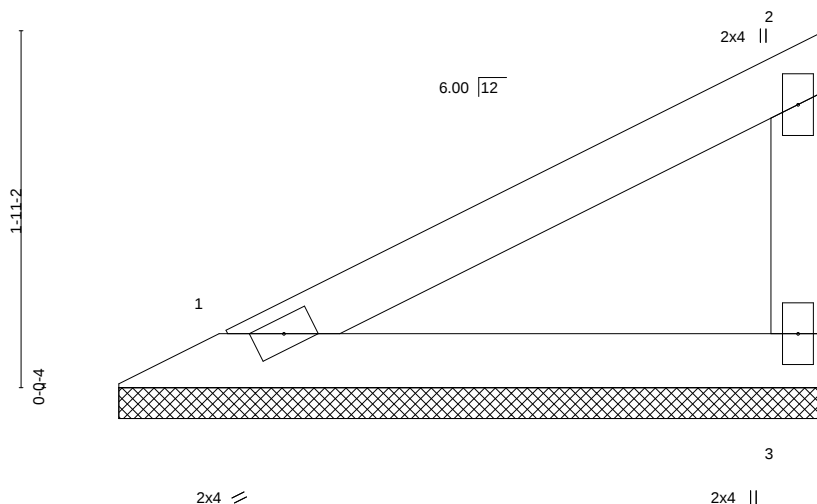
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



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 Chesterfield, MO 63017

Job 2547158	Truss V5	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			Summit/14 Woodside 143817617
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			12/18/2020 2-10-4 3-10-4			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:50:04 2020 Page 1 ID:clow4Ylgf7iox0?ly?58Ccz33zm-U8ieU2uqC3Wok3VZj4t9BK5lbWfVx568VHAh4MyDJaH



Scale = 1:12.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 10 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 3-10-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-9-12, 3=3-9-12
Max Horz 1=58(LC 9)
Max Uplift 1=-12(LC 12), 3=-27(LC 12)
Max Grav 1=169(LC 1), 3=169(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 1, 2020

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Chesterfield, MO 63017

Job 2547158	Truss V6	Truss Type Valley	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/16/2020		Ply 1 Summit/14 Woodside I43817618 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Dec 1 13:50:05 2020 Page 1 ID:clow4Ylgf7iox0?ly?5BCcz33zm-zKG0hOvSzMefMD4IHnPOjYdWzw?YgYMIkxwEdoyDJaG
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,			
2-2-0		2-2-0		4-4-1	
				2-2-0	

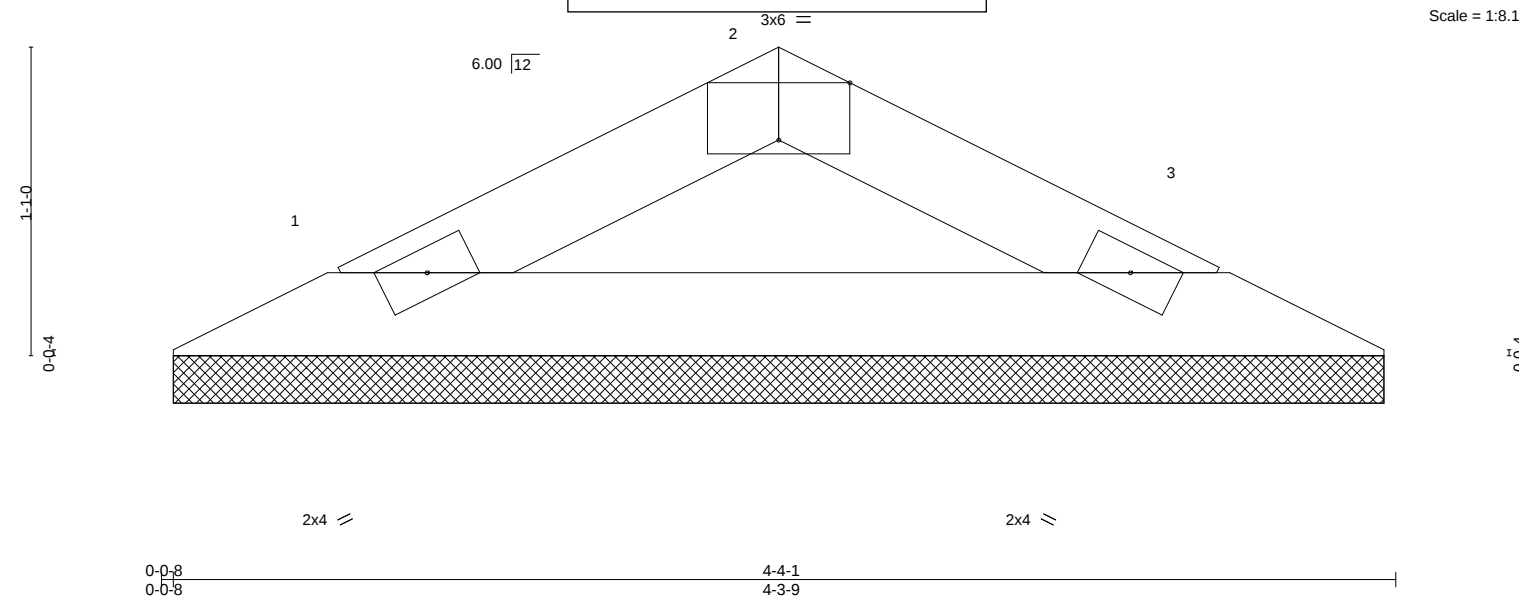


Plate Offsets (X,Y)--		[2:0-3-0,Edge]									
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		PLATES	
TCLL	25.0	Plate Grip DOL	1.15	TC		0.05		in (loc)		MT20	
TCDL	20.0	Lumber DOL	1.15	BC		0.10		n/a		197/144	
BCLL	0.0 *	Rep Stress Incr	YES	WB		0.00		n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P				0.00		Weight: 9 lb	
								3		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 4-4-1 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-3-1, 3=4-3-1
Max Horz 1=-12(LC 13)
Max Uplift 1=-12(LC 12), 3=-12(LC 13)
Max Grav 1=169(LC 1), 3=169(LC 1)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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.



December 1,2020

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

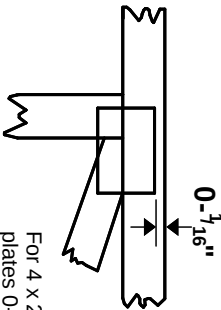
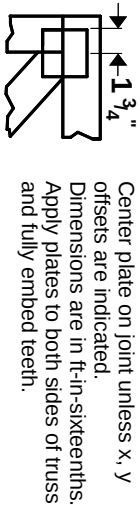
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

Symbols

PLATE LOCATION AND ORIENTATION



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

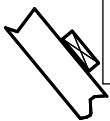
This symbol indicates the required direction of slots in connector plates.

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

PLATE SIZE

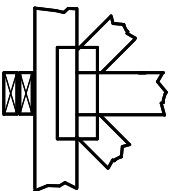
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

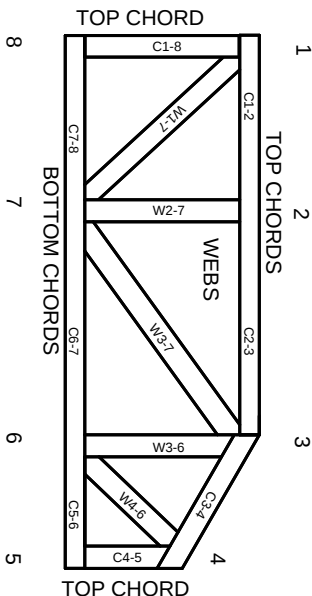


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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



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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.