



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

12/21/2020

MiTek USA, Inc.

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

Re: 2525051

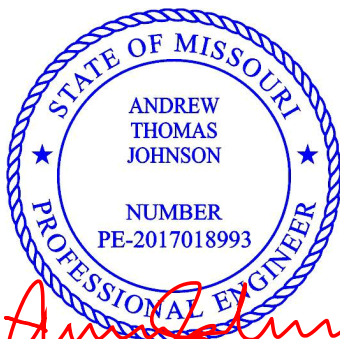
Roeser/1464 Winterset

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: I43577233 thru I43577354

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

Missouri COA: Engineering 001193



November 11, 2020

Johnson, Andrew ,Engineer

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

Job

2525051

Truss

A1

Truss Type

Hip Girder

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Release for Construction

As noted on plans

Development Services

Lee's Summit, Missouri

12/21/2020

Ply

1

Roeser/1464 Winterset

I43577233

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:26 2020 Page 1

ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-nT_pPhDOIFUt0eL6io6KMIL2jyzBvVrxoae5EBYKUTx

Plate Offsets (X,Y)-- [11:0-4-0,0-4-4], [12:0-3-8,0-4-4]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.50	in (loc)	l/defl	L/d	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.53	Vert(LL)	-0.07 11-12	>999	240
TCDL	10.0	Lumber DOL	1.15	WB	0.47	Vert(CT)	-0.12 11-12	>999	180
BCLL	0.0	Rep Stress Incr	NO	Matrix-MS		Horz(CT)	0.11 8	n/a	n/a
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 65 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-9-3 oc purlins, except end verticals, and 2-0-0 oc purlins (3-8-7 max.): 4-5.
BOT CHORD	2x4 SPF No.2 *Except* 10-13: 2x6 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 15=0-3-8, 8=0-3-8
Max Horz 15=71(LC 11)
Max Uplift 15=-196(LC 12), 8=-123(LC 12)
Max Grav 15=1151(LC 35), 8=938(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2065/296, 3-4=-2136/316, 4-5=-1984/309, 5-6=-2109/317, 6-7=-2230/299,
2-15=-1012/187, 7-8=-835/117
BOT CHORD 12-13=-304/2080, 11-12=-284/1937, 10-11=-263/2213
WEBS 4-12=-46/443, 5-11=-40/456, 6-11=-294/70, 13-15=-251/48, 2-13=-232/1839,
7-10=-239/1930

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 196 lb uplift at joint 15 and 123 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "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) 273 lb down and 84 lb up at 4-6-0, and 273 lb down and 84 lb up at 8-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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 the design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI 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

ANDREW THOMAS JOHNSON

NUMBER PE-2017018993

PROFESSIONAL ENGINEER

November 11,2020

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020					
Job 2525051	Truss A1	Truss Type Hip Girder	Ply 1			Roeser/1464 Winterset I43577233		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:26 2020 Page 2 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-nT_pPhDOIFUt0eL6io6KMil2jyzBvVrxoe5EBYKUTx			Job Reference (optional)		
LOAD CASE(S) Standard 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15								

LOAD CASE(S) Standard

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

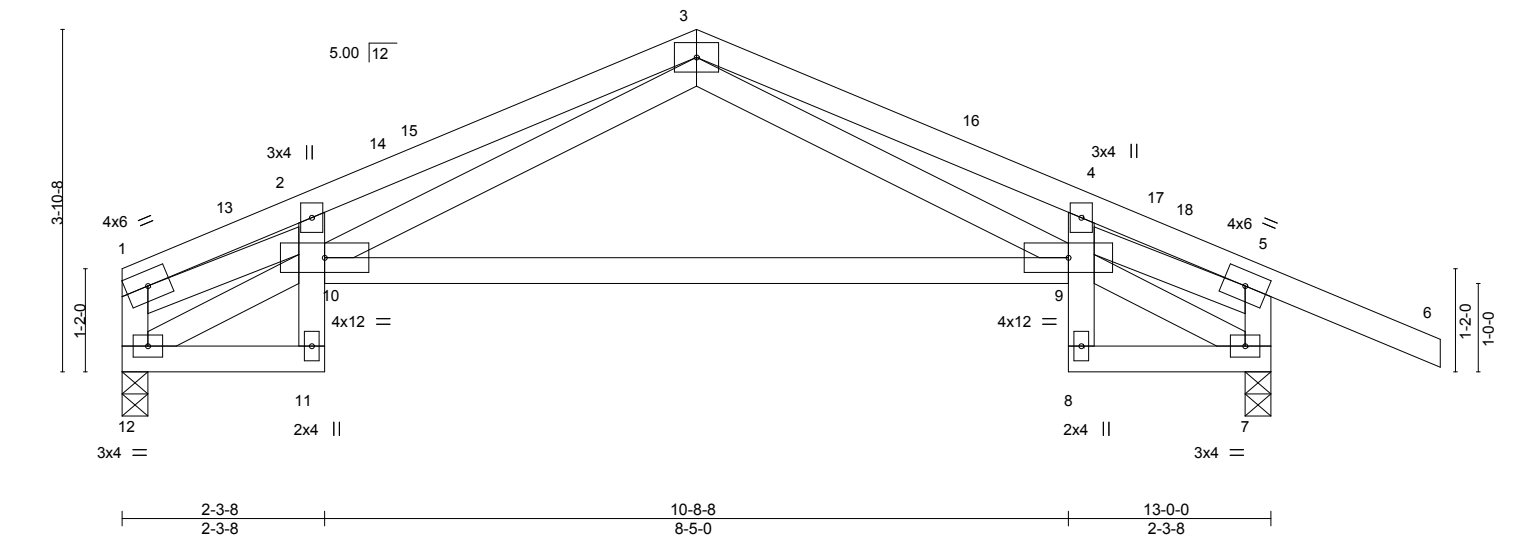
Uniform Loads (plf)

Vert: 1-2=-51, 2-4=-51, 4-5=-61, 5-7=-51, 14-15=-20, 10-13=-20, 8-9=-20

Concentrated Loads (lb)

Vert: 4=-65(B) 5=-65(B) 12=-273(B) 11=-273(B) 18=-61(B) 20=-40(B)

Job 2525051	Truss A4	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu 12/21/2020		Ply 1 Roeser/1464 Winterset 143577234 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:28 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu xyyPFt9-ks6ZqNFeqskbFyVUqD8oR7QRdmfsNTIEGu7CJ3yKUTv		
2-3-8 2-3-8		6-6-0 4-2-8	10-8-8 4-2-8		13-0-0 2-3-8
					14-11-0 1-11-0
			4x6 =		Scale = 1:26.1



LOADING (psf)		SPACING-		CSI.		DEFL.		I/defl		L/d		PLATES	GRIP
TCLL (roof)	25.0	2-0-0		TC	0.29	Vert(LL)	-0.16	9-10	>963	240		MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.52	Vert(CT)	-0.34	9-10	>448	180			
TCDL	10.0	Lumber DOL	1.15	WB	0.25	Horz(CT)	0.08	7	n/a	n/a			
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS								Weight: 58 lb	FT = 20%
BCDL	10.0	Code IRC2018/TP12014											

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

REACTIONS.	
(size)	12=0-3-8, 7=0-3-8
Max Horz	12=-86(LC 14)
Max Uplift	12=-43(LC 16), 7=-113(LC 16)
Max Grav	12=560(LC 2), 7=728(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-1238/305, 2-3=-1514/413, 3-4=-1397/350, 4-5=-1091/236, 1-12=-532/132, 5-7=-660/231
BOT CHORD	2-10=-280/145, 9-10=-121/682, 4-9=-257/132
WEBS	3-9=-107/750, 3-10=-176/851, 1-10=-236/1038, 5-9=-181/981

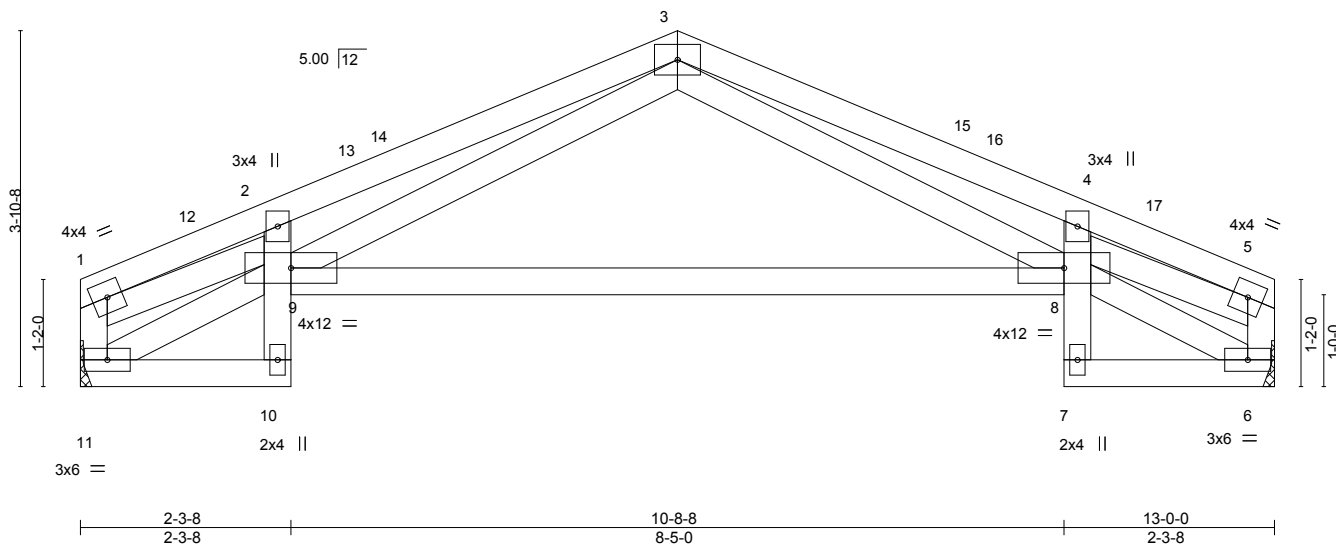
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 14-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 43 lb uplift at joint 12 and 113 lb uplift at joint 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/TP1 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

Job 2525051	Truss A5	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1 Roeser/1464 Winterset 143577235 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:29 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPF19-C2gx2jGHbAsSt63hOwf1zLzcaA_26vvNVYtrWyKUTu		

Scale = 1:25.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.27	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.52	Vert(LL)	-0.16 8-9 >962	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.26	Vert(CT)	-0.34 8-9 >445	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.08 6 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 56 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 11=Mechanical, 6=Mechanical
 Max Horz 11=73(LC 15)
 Max Uplift 11=-46(LC 16), 6=-46(LC 16)
 Max Grav 11=572(LC 2), 6=572(LC 2)

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

TOP CHORD 1-2=-1267/385, 2-3=-1547/503, 3-4=-1547/456, 4-5=-1267/366, 1-11=-543/163,
 5-6=-543/163
 BOT CHORD 2-9=-280/142, 8-9=-215/711, 4-8=-280/145
 WEBS 3-8=-170/852, 3-9=-223/852, 1-9=-308/1062, 5-8=-307/1062

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 12-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 11 and 46 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 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: 2525051

Truss: B1

Truss Type: ROOF SPECIAL GIRDER

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/21/2020

Ply: 2

Job Reference (optional): Roeser/1464 Winterset

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:36 2020 Page 1

5-4-3 9-10-5 14-4-7 15-2-7 17-2-7 21-8-0 23-8-7 27-2-7 30-8-7 32-10-15 35-2-7 37-1-7

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

Scale: 3/16"=1'

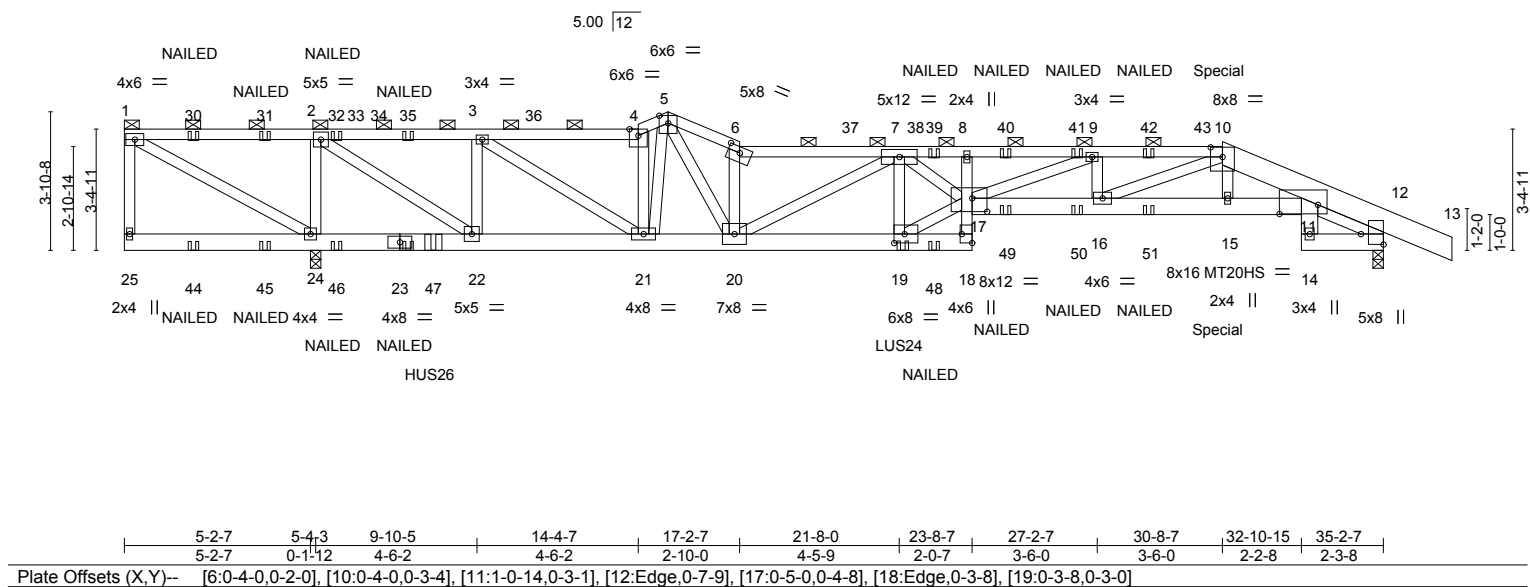


Plate Offsets (X,Y)--		[6:0-4-0,0-2-0], [10:0-4-0,0-3-4], [11:1-0-14,0-3-1], [12:Edge,0-7-9], [17:0-5-0,0-4-8], [18:Edge,0-3-8], [19:0-3-8,0-3-0]															
5-2-7		5-4-3		9-10-5		14-4-7		17-2-7		21-8-0		23-8-7		27-2-7		30-8-7	
5-2-7		0-1-12		4-6-2		4-6-2		2-10-0		4-5-9		2-0-7		3-6-0		3-6-0	
32-10-15		2-2-8		2-3-8													
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES	
TCLL (roof) 25.0		Plate Grip DOL 1.15		TC 0.80		Vert(LL) -0.43		18 >835		240		MT20		197/144		GRIP	
Snow (Pf/Pg) 20.4/20.0		Lumber DOL 1.15		BC 0.80		Vert(CT) -0.73		18 >490		180		MT20HS		148/108			
TCDL 10.0		Rep Stress Incr NO		WB 0.84		Horz(CT) 0.15		12 n/a		n/a							
BCLL 0.0		Code IRC2018/TPI2014		Matrix-MS													
BCDL 10.0																Weight: 381 lb	

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2 *Except* 10-13: 2x8 SP 2400F 2.0E		TOP CHORD Structural wood sheathing directly applied or 4-10-1 oc purlins, except end verticals, and 2-0-0 oc purlins (2-11-0 max.): 1-4, 6-10.	
BOT CHORD 2x6 SPF No.2 *Except* 8-18: 2x4 SPF No.2, 11-17: 2x6 SPF 2100F 1.8E		BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 22-24.	
WEBS 2x4 SPF No.2			
SLIDER Right 2x4 SPF No.2 2-0-1			

REACTIONS.	
(size) 12=0-3-8, 24=0-3-8	
Max Horz 24=-119(LC 10)	
Max Uplift 12=-484(LC 12), 24=-522(LC 12)	
Max Grav 12=2418(LC 2), 24=3690(LC 39)	

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 1-2=-138/448, 2-3=-2775/300, 3-4=-4296/522, 4-5=-4627/570, 5-6=-6266/794, 6-7=-5877/730, 7-8=-10554/1438, 8-9=-10768/1469, 9-10=-9089/1373, 10-11=-6601/1189, 11-12=-1926/356	
BOT CHORD 22-24=-448/201, 21-22=-206/2775, 20-21=-389/3973, 19-20=-866/7106, 18-19=-137/1057, 16-17=-1286/9089, 15-16=-1089/6503, 11-15=-1095/6508, 11-14=-74/511	
WEBS 1-24=-557/145, 2-24=-2895/431, 2-22=-458/3877, 3-22=-1478/240, 3-21=-263/1808, 4-21=-2060/268, 5-21=-99/1145, 5-20=-496/3733, 6-20=-2624/355, 7-20=-1405/256, 7-19=-2710/373, 17-19=-825/6842, 7-17=-624/4436, 9-17=-104/1822, 9-16=-1097/122, 10-16=-215/2822	

- 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 0-7-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Confirmed adequate drainage to prevent water ponding.



November 11,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply	Roeser/1464 Winterset
2525051	B1	ROOF SPECIAL GIRDER			2	143577236
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:36 2020 Page 2
ID:WV5xOZ45cNK4PQ2HmSu_kyyPFt9-VObbW6LgxJkSCB61luHgmpHw_JMFxbP683dbcyKUTn

NOTES-

9) All plates are MT20 plates unless otherwise indicated.

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

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 484 lb uplift at joint 12 and 522 lb uplift at joint 24.

12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.

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

14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 8-7-11 from the left end to connect truss(es) to front face of bottom chord.

15) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 21-9-3 from the left end to connect truss(es) to front face of bottom chord.

16) Fill all nail holes where hanger is in contact with lumber.

17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

18) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 151 lb down and 304 lb up at 30-8-7 on top chord, and 503 lb down and 184 lb up at 30-7-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

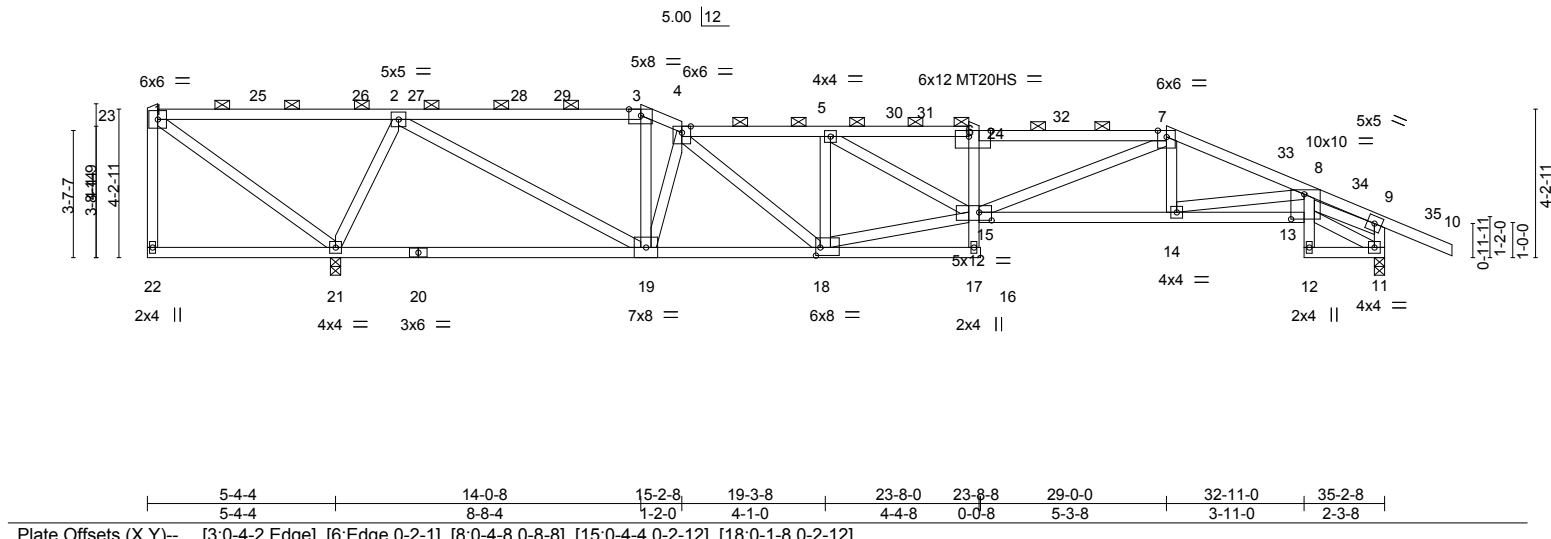
Vert: 1-4=-61, 4-5=-51, 5-6=-51, 6-10=-61, 10-11=-51, 11-13=-51, 18-25=-20, 11-17=-20, 14-26=-20

Concentrated Loads (lb)

Vert: 10=-34(F) 23=-41(F) 19=-542(F) 15=-503(F) 30=-123(F) 31=-123(F) 32=-123(F) 35=-123(F) 39=-90(F) 40=-61(F) 41=-61(F) 42=-61(F) 44=-41(F) 45=-41(F) 46=-41(F) 47=-744(F) 48=-34(F) 49=-40(F) 50=-40(F) 51=-40(F)

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION		Ply	Roeser/1464 Winterset
2525051	B2	Roof Special	AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES		1	I43577237
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			
0-3-0 7-1-12 14-0-8 15-2-8 19-3-8 23-4-8 23-8-0 29-0-0 32-11-0 35-2-8 37-1-8			ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-1TZetaYiAEIB7eK6EFZQPBBQORRo47DtmndxT9gyKUTX			
0-3-0 6-10-12 6-10-12 1-2-0 4-1-0 4-1-0 0-3-8 5-4-0 3-11-0 2-3-8 1-11-0			12/23/2020			

Scale = 1:65.6



Job

2525051

Truss

B3

Truss Type

Roof Special

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

Ply

1

Roeser/1464 Winterset

I43577238

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional)

9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:56 2020 Page 1

ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-vEo9ixbCETfCcFetT5eMZ1a6q26cx2LiFvhlRyKUTT

12/21/2020

Plate Offsets (X,Y)-- [6:0-4-2,Edge], [11:0-6-0,0-2-0], [12:0-4-2,Edge], [18:0-7-12,0-3-0]	
LOADING (psf)	SPACING- 2-0-0
TCLL (roof) 25.0	Plate Grip DOL 1.15
Snow (Pf/Pg) 20.4/20.0	Lumber DOL 1.15
TCDL 10.0	Rep Stress Incr YES
BCLL 0.0	Code IRC2018/TPI2014
BCDL 10.0	
CSL	DEFL. in (loc) l/defl L/d
TC 0.72	Vert(LL) -0.37 20 >974 240
BC 0.96	Vert(CT) -0.67 19-20 >534 180
WB 0.60	Horz(CT) 0.25 16 n/a n/a
Matrix-AS	
	PLATES MT20
	GRIP 197/144
	Weight: 173 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-5-12 max.): 2-3, 4-6, 7-9, 11-12.
BOT CHORD 2x4 SPF No.2 *Except* 18-20: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 6-25, 11-19
	JOINTS 1 Brace at Jt(s): 28, 29
REACTIONS. (size) 16=0-3-8, 25=0-3-8	
Max Horz 25=-164(LC 14)	
Max Uplift 16=-159(LC 16), 25=-262(LC 16)	
Max Grav 16=1467(LC 82), 25=1854(LC 51)	

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 6-7=-1745/208, 7-8=-1680/202, 8-9=-2234/306, 9-10=-3824/461, 10-11=-4031/455, 11-12=-2974/330, 12-13=-3244/336, 13-14=-2799/287, 14-16=-1336/239	
BOT CHORD 23-25=-44/1381, 22-23=-166/2137, 10-20=-9/284, 19-20=-551/5308, 18-19=-229/2758, 16-17=-17/265	
WEBS 6-25=-1804/254, 7-23=-655/68, 8-23=-693/159, 8-22=-46/254, 9-22=-861/118, 20-22=-133/2260, 9-20=-240/2382, 11-20=-2063/302, 11-19=-2425/318, 12-19=-16/765, 13-19=-59/382, 6-23=-98/1326, 14-18=-213/2443, 25-29=-531/168, 5-29=-568/159, 27-28=-259/147, 25-28=-255/150	

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-8, Interior(1) 3-1-8 to 4-3-0, Exterior(2R) 4-3-0 to 7-3-0, Interior(1) 7-3-0 to 12-0-8, Exterior(2E) 12-0-8 to 13-2-8, Interior(1) 13-2-8 to 21-4-8, Exterior(2R) 21-4-8 to 24-4-8, Interior(1) 24-4-8 to 31-0-0, Exterior(2R) 31-0-0 to 34-0-0, Interior(1) 34-0-0 to 37-1-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 16 and 262 lb uplift at joint 25.
- 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 sheathing be applied directly to the bottom chord.

November 11,2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION		
2525051	B3	Roof Special	AS NOTED ON PLANS REVIEW		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			DEVELOPMENT SERVICES		
			LEE'S SUMMIT, MISSOURI		
			12/21/2020		
NOTES-			ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-vEo9ixbCETFcFetT5eMZ1a6q26cx2ILiFvhlRyKUTT		
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.			Roeser/1464 Winterset I43577238		
			Job Reference (optional)		
			9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:56 2020 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

2525051

Truss

B4

Truss Type

Roof Special

Release for Construction

As noted on plans review

Development Services

Lee's Summit, Missouri

12/21/2020

Ply

1

Roeser/1464 Winterset

143577239

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:01 2020 Page 1

ID:WV5xOZ45cNK4PQ2HhSu_xyyPFt9-GCc2lffL3?uvi0WqGeEXG5lzp3rrcDc4sXdSzfYKUTO

3-3-8

6-3-8

10-0-0

11-2-0

15-3-0

19-4-0

23-6-4

27-8-8

31-1-8

33-0-8

35-2-8

37-1-8

3-3-8

3-0-0

3-8-8

1-2-0

4-1-0

4-1-0

4-2-4

4-2-4

3-5-0

1-11-0

2-2-0

1-11-0

Scale = 1:65.7

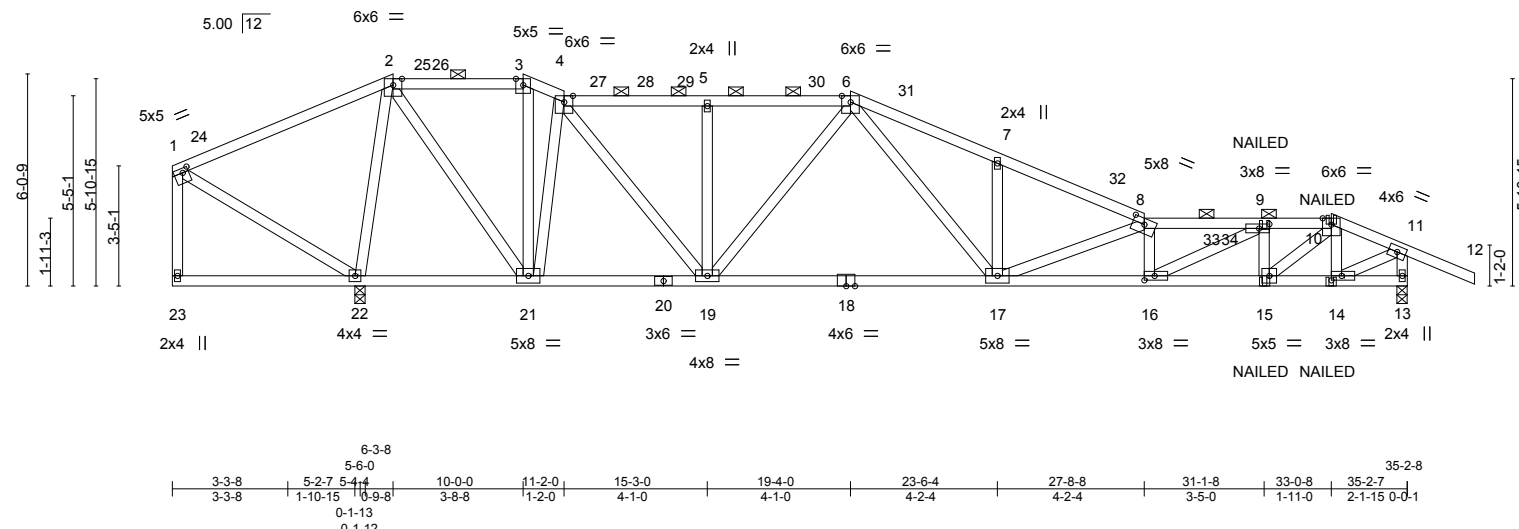


Plate Offsets (X,Y)-- [1:0-2-0,0-1-8], [8:0-4-0,0-2-0], [9:0-3-8,0-1-8], [14:0-3-8,0-1-8], [16:0-3-8,0-1-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	Plate Grip DOL	2-0-0	TC	0.76	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.82	Vert(LL)	-0.23 16-17 >999		197/144
TCDL	10.0	Rep Stress Incr	NO	WB	0.91	Vert(CT)	-0.44 17-19 >818		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS		Horz(CT)	0.08 13 n/a n/a		
BCDL	10.0							Weight: 170 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-1-11 oc purlins, except end verticals, and 2-0-0 oc purlins (2-6-11 max.): 2-3, 4-6, 8-10.
BOT CHORD	2x4 SPF No.2 *Except* 13-18: 2x4 SPF 1650F 1.5E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 21-22,13-14.
WEBS	2x4 SPF No.2		
REACTIONS.			
(size)	22=0-3-8, 13=0-3-8		
Max Horz	22=-162(LC 10)		
Max Uplift	22=-264(LC 12), 13=-177(LC 12)		
Max Grav	22=1840(LC 2), 13=1458(LC 70)		

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-55/387, 2-3=-878/97, 3-4=-964/101, 4-5=-1681/161, 5-6=-1681/161, 6-7=-2924/281, 7-8=-2934/228, 8-9=-4114/329, 9-10=-2685/236, 10-11=-1440/125, 11-13=-1422/186
BOT CHORD	19-21=0/1119, 17-19=-23/1833, 16-17=-257/4172, 15-16=-157/2681, 14-15=-42/1359
WEBS	1-22=-372/129, 2-22=-1580/182, 2-21=-102/1324, 4-21=-1222/141, 4-19=-81/932, 5-19=-438/76, 7-17=-339/93, 10-14=-658/58, 11-14=-101/1477, 6-19=-386/60, 6-17=-120/1315, 9-15=-1080/118, 8-16=-707/90, 8-17=-1632/171, 10-15=-155/1766, 9-16=-146/1602

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 264 lb uplift at joint 22 and 177 lb uplift at joint 13.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.
 - 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

ANDREW THOMAS JOHNSON

NUMBER PE-2017018993

PROFESSIONAL ENGINEER

November 11,2020

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION		
2525051	B4	Roof Special	AS NOTED ON PLANS REVIEW		
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	LEE'S SUMMIT, MISSOURI		
12/21/2020					
LOAD CASE(S) Standard					
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15					
Uniform Loads (plf)					
Vert: 1-2=-51, 2-3=-61, 3-4=-51, 4-6=-61, 6-8=-51, 8-10=-61, 10-11=-51, 11-12=-51, 13-23=-20					
Concentrated Loads (lb)					
Vert: 14=3(B) 15=-4(B) 9=-2(B)					

Job 2525051	Truss B5	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-kOAQz?fqz0mKA51pMlmlqC?TijLmPE4BM?W5yKUTN 12/21/2020		Ply 1 Roeser/1464 Winterset I43577240 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:02 2020 Page 1 ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-kOAQz?fqz0mKA51pMlmlqC?TijLmPE4BM?W5yKUTN		

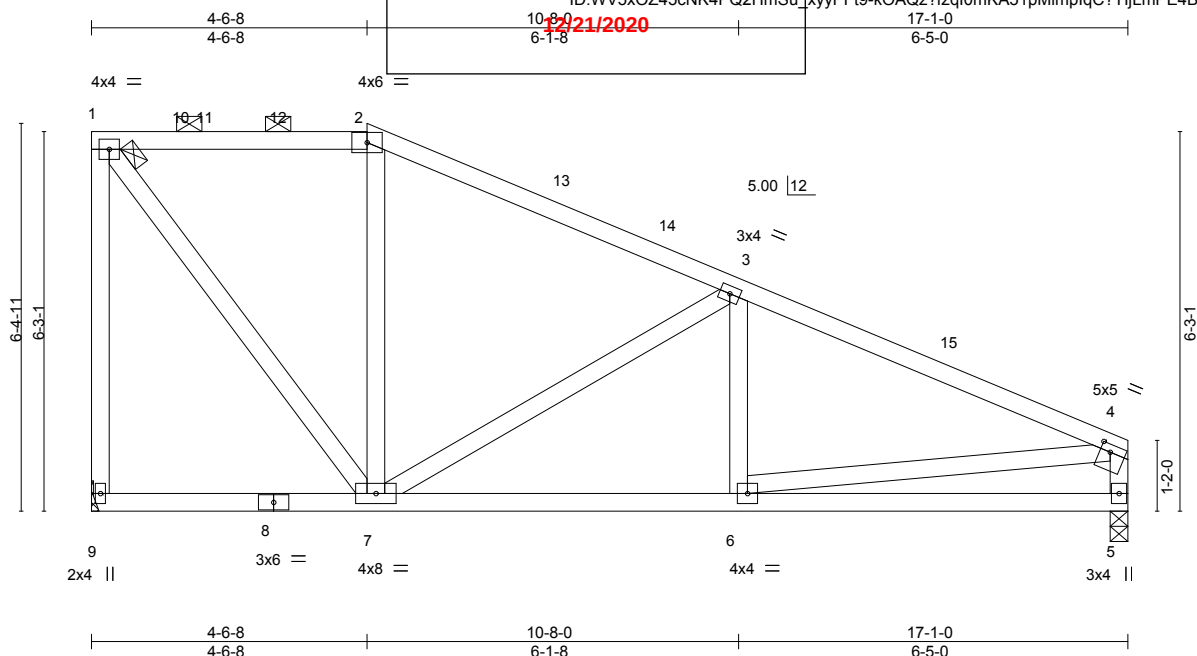


Plate Offsets (X,Y)-- [4:0-2-0,0-1-8]							
LOADING (psf)		SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.48	5-6	>999
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.33	5-6	>999
TCDL	10.0	Rep Stress Incr	YES	WB	0.56	5	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS			
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						Weight: 80 lb	FT = 20%

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

REACTIONS. (size) 9=Mechanical, 5=0-3-8
Max Horz 9=-206(LC 14)
Max Uplift 9=-73(LC 12), 5=-56(LC 16)
Max Grav 9=756(LC 2), 5=844(LC 35)

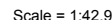
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-9=-716/240, 1-2=-451/197, 2-3=-588/180, 3-4=-1199/226, 4-5=-779/177
BOT CHORD 7-9=-158/283, 6-7=-164/1022, 5-6=-67/251
WEBS 1-7=-244/731, 3-7=-672/198, 4-6=-98/779

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-6-8, Exterior(2R) 4-6-8 to 7-6-8, Interior(1) 7-6-8 to 16-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 9 and 56 lb uplift at joint 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

ID:WV5xOZ45cNK4PQ2HmSu xlvvPFt9-CakoALgbac8dyKqDN3G?MWNNytcG48eNjr6Z2XvKUTM



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

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

TOP CHORD	14-16=729/167, 2-4=471/124, 4-5=1305/215, 5-6=1160/182, 6-8=878/266
BOT CHORD	15-16=187/260, 13-14=0/322, 12-13=70/376, 11-12=80/1219, 4-11=0/330
WEBS	2-12=65/550, 2-14=836/154, 4-12=992/234, 5-9=405/84, 9-11=46/937, 6-9=144/957

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-6-8, Exterior(2E) 2-6-8 to 5-6-8, Interior(1) 5-6-8 to 19-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 16 and 120 lb uplift at joint 8.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020



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 BCS1 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
2525051

Truss
B7

Truss Type
Roof Special

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

Ply
1

Job Reference (optional)
Roeser/1464 Winterset

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

0-6-8 2-0-8 4-7-8 8-11-8 12-10-8 17-1-0 19-0-0
0-6-8 1-6-0 2-7-0 4-4-0 3-11-0 4-2-8 1-11-0

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:04 2020 Page 1

ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-gnHAOhhELwGUZUFpXnnEujwYPHtZtpfQXYVr6a_yKUTL

Scale = 1:45.2

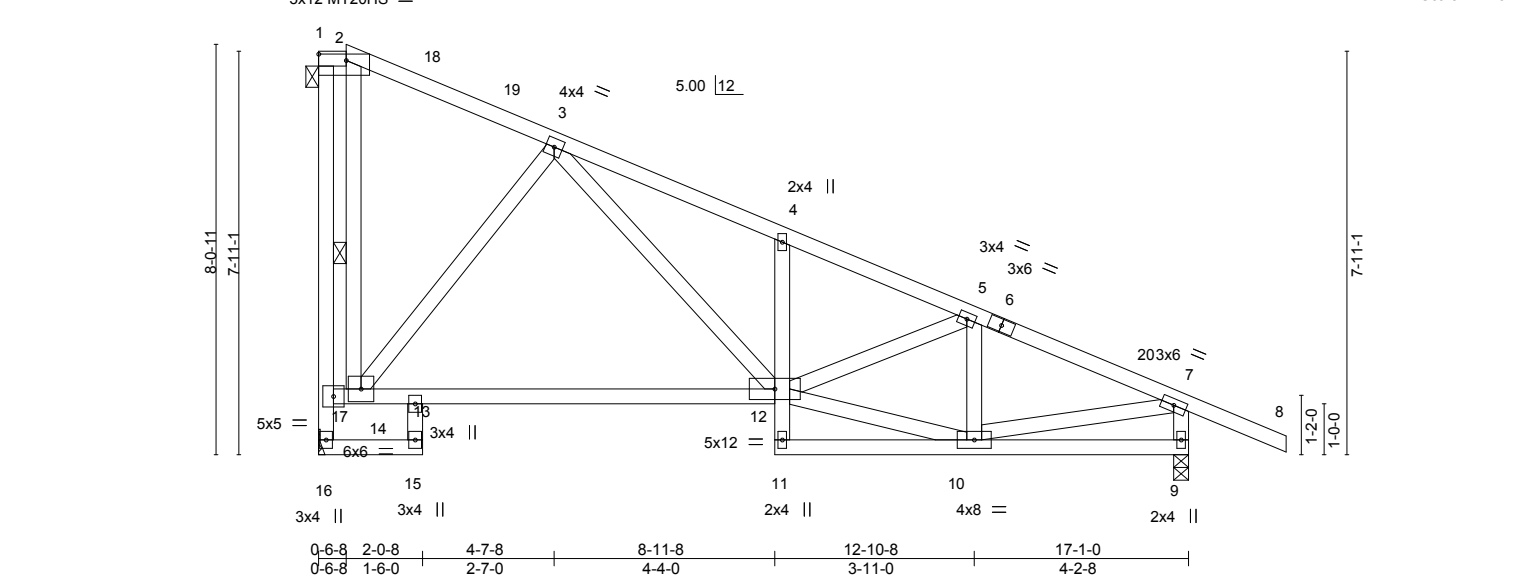


Plate Offsets (X,Y)-- [1:0-1-12,0-0-0], [1:Edge,0-1-8]							
LOADING (psf)		SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.49		L/d
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.42	-0.12 12-13	>999
TCDL	10.0	Rep Stress Incr	YES	WB	0.59	-0.27 12-13	>755
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS		0.08 9	n/a
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						MT20HS	148/108
						Weight: 97 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 1-16
REACTIONS.	(size) 16=Mechanical, 9=0-3-8		
	Max Horz 16=-277(LC 14)		
	Max Uplift 16=-67(LC 16), 9=-118(LC 16)		
	Max Grav 16=835(LC 36), 9=909(LC 2)		

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	16-17=-795/178, 1-17=-719/144, 3-4=-1318/268, 4-5=-1290/200, 5-7=-1113/179, 7-9=-859/263
BOT CHORD	14-17=-66/251, 13-14=0/587, 12-13=-6/578, 4-12=-345/131
WEBS	10-12=-50/990, 5-10=-409/84, 7-10=-146/965, 3-12=-154/889, 2-14=-135/690, 3-14=-824/207

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 0-6-8, Exterior(2R) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 19-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 16 and 118 lb uplift at joint 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Roeser/1464 Winterset
2525051	B8	Roof Special	ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-c9PxpMiUtXWCpoPo2Cqiz8?r_4dMHYfq?pKDfsyKUTJ		1	I43577243
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		Job Reference (optional)		
1-9-0 2-0-8		8-11-8		9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:06 2020 Page 1		
1-9-0 0-3-8		6-11-0		12/21/2020		
				12-10-8		
				3-11-0		
				17-1-0		
				4-2-8		
				19-0-0		
				1-11-0		

Scale = 1:46.2

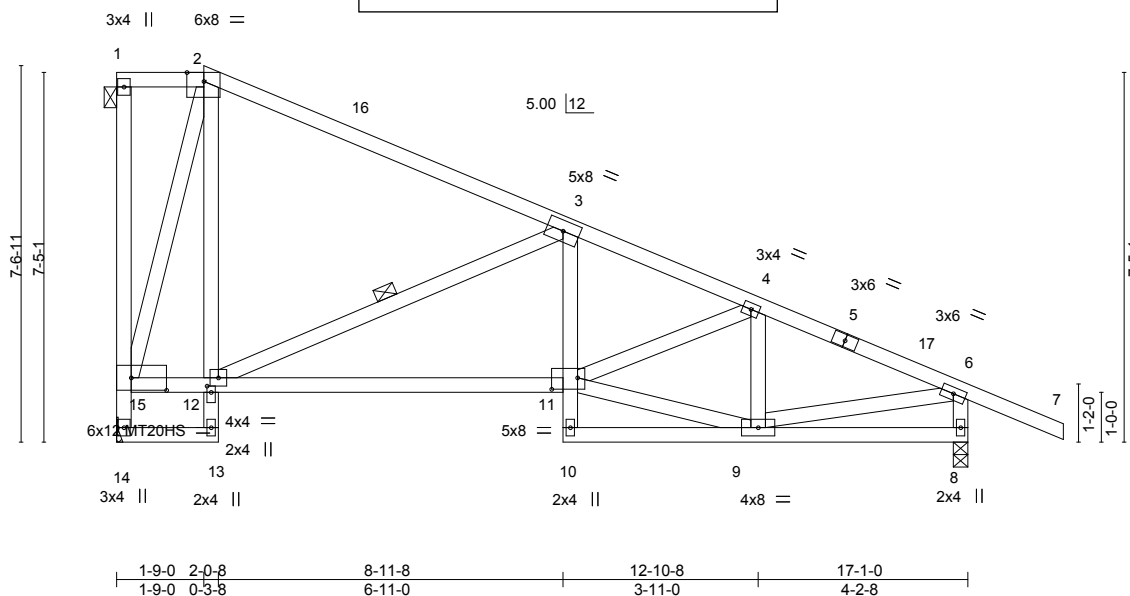


Plate Offsets (X,Y)-- [2:0-4-2,Edge], [11:0-6-4,0-2-12], [12:0-1-8,0-1-0], [15:0-8-8,0-3-0]															
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES		GRIP	
TCLL (roof) 25.0		Plate Grip DOL		1.15		TC 0.67		Vert(LL)		-0.14 13 >999 240		MT20		197/144	
Snow (Pf/Pg) 20.4/20.0		Lumber DOL		1.15		BC 0.55		Vert(CT)		-0.17 13 >999 180		MT20HS		148/108	
TCDL 10.0		Rep Stress Incr		YES		WB 0.67		Horz(CT)		0.08 8 n/a n/a					
BCLL 0.0		Code IRC2018/TPI2014				Matrix-AS									
BCDL 10.0															
												Weight: 96 lb		FT = 20%	

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

REACTIONS.	(size) 14=Mechanical, 8=0-3-8
	Max Horz 14=-260(LC 14)
	Max Uplift 14=-51(LC 12), 8=-118(LC 16)
	Max Grav 14=815(LC 36), 8=912(LC 36)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	14-15=-777/258, 2-3=-417/105, 3-4=-1319/209, 4-6=-1144/176, 6-8=-861/264
BOT CHORD	12-15=-114/355, 11-12=-81/1253, 3-11=0/342
WEBS	3-12=-1089/263, 9-11=-32/924, 4-9=-399/78, 6-9=-137/957, 2-15=-954/154, 2-12=-60/599

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 1-9-0, Exterior(2R) 1-9-0 to 4-9-0, Interior(1) 4-9-0 to 19-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 51 lb uplift at joint 14 and 118 lb uplift at joint 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

Job 2525051	Truss B9	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1	Roeser/1464 Winterset I43577244
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-5MzJ0ij6ere2Qxz_cvLxWMY4LU0_014zET4mBJyKUT1 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:07 2020 Page 1			
1-9-0 3-9-0 8-11-8 12-10-8 17-1-0 19-0-0 1-9-0 2-0-0 5-2-8 3-11-0 4-2-8 1-11-0			Scale = 1:44.1			

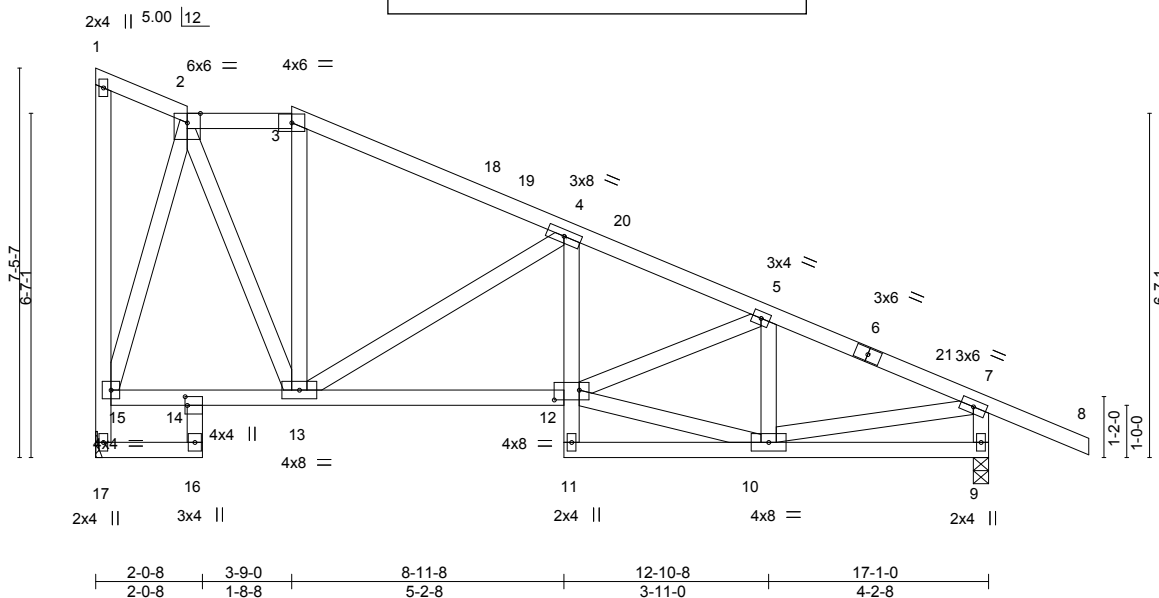


Plate Offsets (X,Y)-- [12:0-5-12,0-2-4], [14:0-2-0,0-0-8]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.04 12 >999 240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.08 12-13 >999 180
TCDL	10.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.03 9 n/a n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS			
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						Weight: 99 lb	FT = 20%

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

REACTIONS. (size) 17=Mechanical, 9=0-3-8
Max Horz 17=-258(LC 14)
Max Uplift 17=-68(LC 12), 9=-119(LC 16)
Max Grav 17=776(LC 37), 9=969(LC 37)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 15-17=-754/129, 2-3=-461/136, 3-4=-585/125, 4-5=-1278/140, 5-7=-1181/112, 7-9=-918/219
BOT CHORD 16-17=-192/269, 13-14=-109/301, 12-13=-14/1166, 4-12=0/301
WEBS 4-13=-830/161, 10-12=-3/942, 5-10=-403/59, 7-10=-98/949, 2-15=-698/106, 2-13=-89/689

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 1-9-0, Interior(1) 1-9-0 to 3-9-0, Exterior(2R) 3-9-0 to 7-11-15, Interior(1) 7-11-15 to 19-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 17 and 119 lb uplift at joint 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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 the design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, 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

2525051

Truss

B10

Truss Type

Roof Special

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/21/2020

8.240 s Mar

ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-RnjLwoNwTx_ASUGPPJJ8rEr8Eo7CjzMZSYkfUyKUTI

Ply

1

Roeser/1464 Winterset

I43577245

Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:38 2020 Page 1

ASUGPPJJ8rEr8Eo7CjzMZSYkfUyKUTI

2-1-0

3-9-0

5-9-0

8-11-8

12-10-8

17-1-0

19-0-0

2-1-0

1-8-0

2-0-0

3-2-8

3-11-0

4-2-8

1-11-0

2x4 ||

6x6 = 5.00

12

Scale = 1:39.8

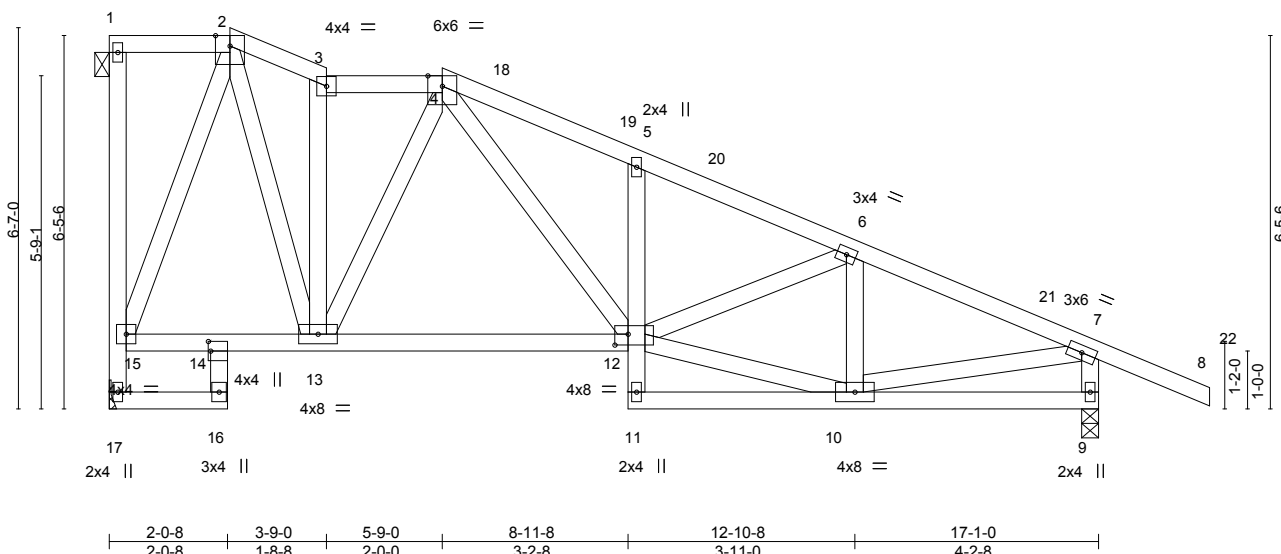


Plate Offsets (X,Y)-- [12:0-2-12,0-2-4], [14:0-2-0,0-0-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.28	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.26	Vert(LL)	-0.04 12 >999		197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.37	Vert(CT)	-0.08 12-13 >999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.03 9 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 101 lb	FT = 20%

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

REACTIONS.	
(size)	17=Mechanical, 9=0-3-8
Max Horz	17=-226(LC 14)
Max Uplift	17=-70(LC 12), 9=-121(LC 16)
Max Grav	17=747(LC 2), 9=1010(LC 42)

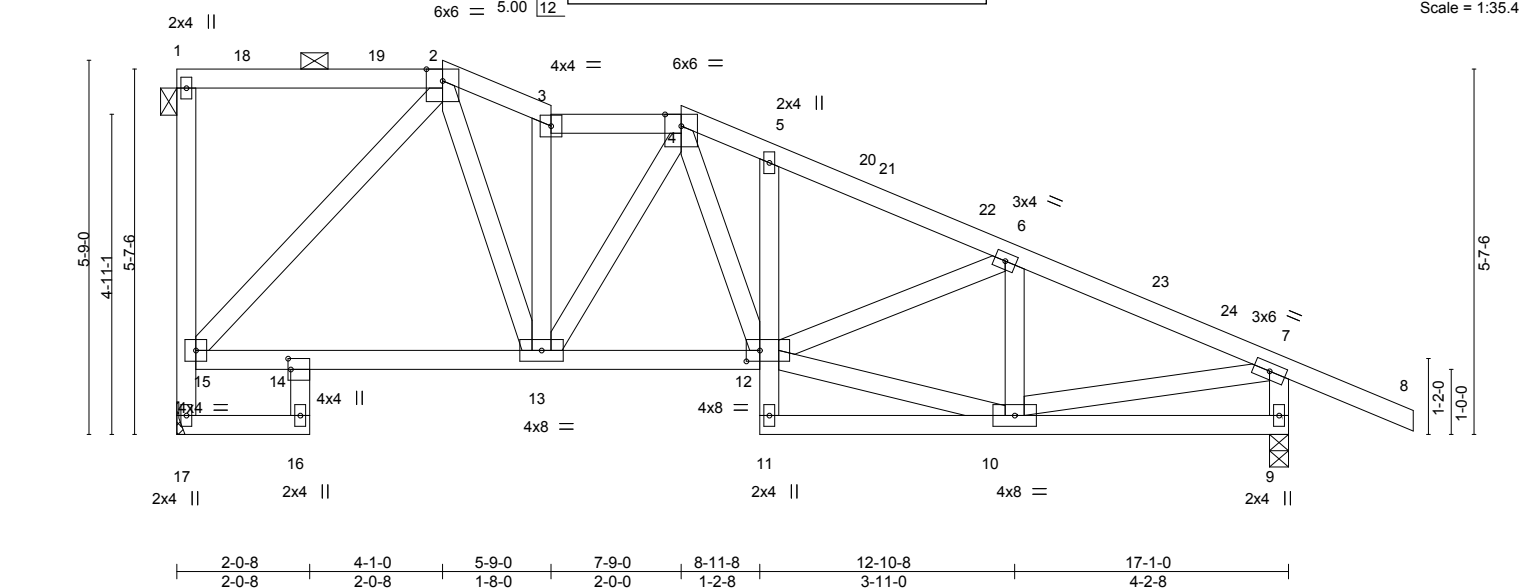
FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	15-17=-726/175, 2-3=-501/182, 3-4=-462/156, 4-5=-1199/279, 5-6=-1203/226, 6-7=-1139/195, 7-9=-959/272
BOT CHORD	13-14=-64/309, 12-13=0/623, 5-12=-292/129
WEBS	3-13=-271/113, 4-13=-397/197, 4-12=-178/734, 10-12=-75/927, 6-10=-392/95, 7-10=-162/957, 2-15=-705/141, 2-13=-173/730

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-9-0, Interior(1) 3-9-0 to 5-9-0, Exterior(2R) 5-9-0 to 8-9-0, Interior(1) 8-9-0 to 19-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 17 and 121 lb uplift at joint 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

Job 2525051	Truss B11	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: WV5xOZ45cNK4PQ2HmSu_xyyPf9-N9r5LTOA?YEuhPoXkMcwfwThcpBBrg?1m1rkNyKUTj 12/21/2020		Ply 1 Roeser/1464 Winterset 143577246 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:40 2020 Page 1 ID: WV5xOZ45cNK4PQ2HmSu_xyyPf9-N9r5LTOA?YEuhPoXkMcwfwThcpBBrg?1m1rkNyKUTj		



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	Plate Grip DOL	2-0-0	TC	0.34	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(LL)	-0.04 13-14		197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.45	Vert(CT)	-0.06 12-13		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS		Horz(CT)	0.04 9		
BCDL	10.0							Weight: 96 lb	FT = 20%

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

REACTIONS.	
(size)	17=Mechanical, 9=0-3-8
Max Horz	17=-197(LC 14)
Max Uplift	17=-74(LC 12), 9=-123(LC 16)
Max Grav	17=747(LC 2), 9=991(LC 42)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	15-17=-720/179, 2-3=-799/231, 3-4=-752/208, 4-5=-1054/273, 5-6=-1106/245, 6-7=-1079/207, 7-9=-941/279
BOT CHORD	14-15=-27/526, 13-14=0/524, 12-13=-54/835
WEBS	3-13=-367/122, 4-12=-157/472, 10-12=-98/857, 6-10=-364/103, 7-10=-173/923, 2-13=-127/660, 2-15=-751/183

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-1-0, Exterior(2E) 4-1-0 to 5-9-0, Interior(1) 5-9-0 to 7-9-0, Exterior(2R) 7-9-0 to 10-9-0, Interior(1) 10-9-0 to 19-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 17 and 123 lb uplift at joint 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

Job

2525051

Truss

B12

Truss Type

Roof Special

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

ID:WV5xOZ45cNK4PQ2HmSu

12/21/2020

Ply

1

Roeser/1464 Winterset

I43577247

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 10 19:42:42 2020

Page 1

Job Reference (optional)

xyyPFt9-JYysm9QQX9Vbw6ZBe9O4?4?nrPSXfgKIU4WxoFyKUTH

2-0-8

6-1-0

7-9-0

8-11-8

13-3-4

17-1-0

19-0-0

2-0-8

4-0-8

1-8-0

1-2-8

0-9-8

3-6-4

3-9-12

1-11-0

5.00

12

Scale = 1:33.3

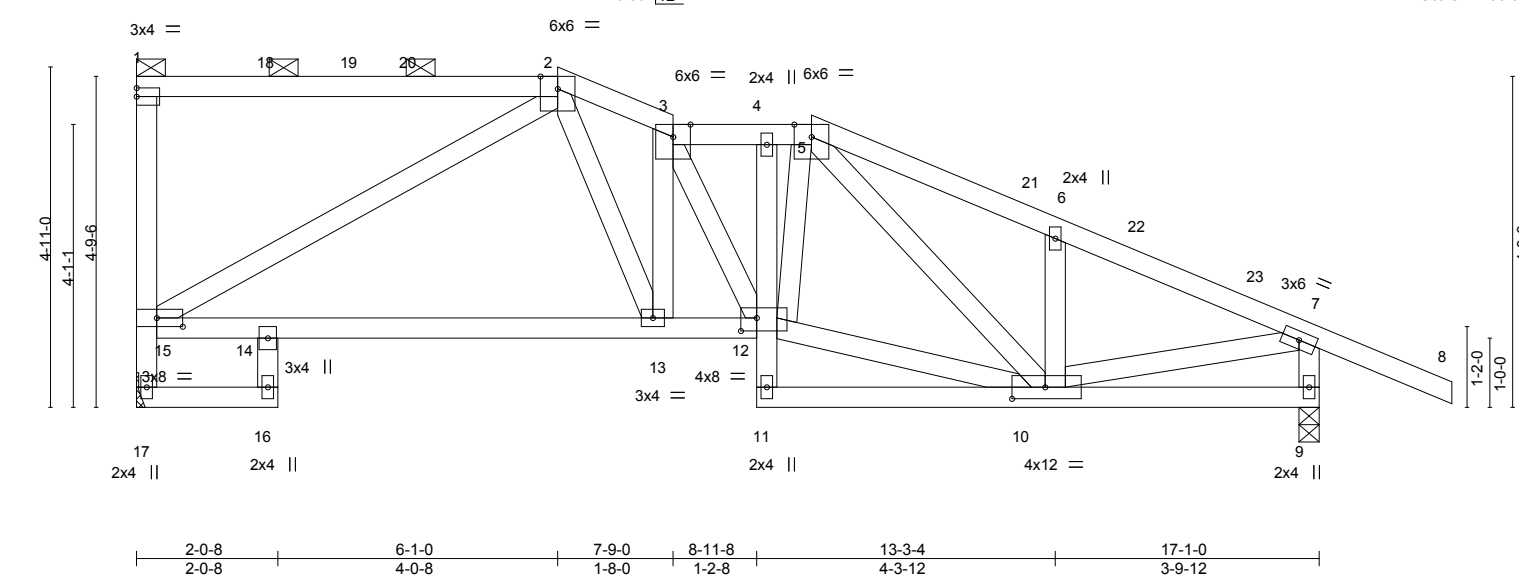


Plate Offsets (X,Y)--		[10:0-5-12,0-2-0], [12:0-2-12,0-2-4], [15:0-4-8,0-1-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.49	in (loc)	l/defl	L/d		MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.43	Vert(LL)	-0.07 13-14	>999	240		197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.76	Vert(CT)	-0.14 13-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.06 9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 92 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (5-7-3 max.): 1-2, 3-5.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.

REACTIONS.	
(size)	17=Mechanical, 9=0-3-8
Max Horz	17=-168(LC 14)
Max Uplift	17=-74(LC 12), 9=-124(LC 16)
Max Grav	17=747(LC 2), 9=946(LC 42)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	15-17=-714/173, 2-3=-1137/272, 3-4=-1081/278, 4-5=-1054/270, 5-6=-967/248, 6-7=-1022/213, 7-9=-899/283
BOT CHORD	14-15=-82/873, 13-14=-78/841, 12-13=-111/1086
WEBS	3-13=-392/184, 10-12=-122/900, 5-12=-32/366, 6-10=-254/117, 7-10=-186/898, 2-15=-901/236, 2-13=-67/619

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-1-0, Exterior(2E) 6-1-0 to 7-9-0, Interior(1) 7-9-0 to 9-9-0, Exterior(2R) 9-9-0 to 12-9-0, Interior(1) 12-9-0 to 19-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 17 and 124 lb uplift at joint 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

Job 2525051	Truss B13	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-okWE_VR3lTdSYF8NCsvJYlYuPpp6OFbRjkGVLIyKUTg 12/21/2020		Ply 1 Roeser/1464 Winterset I43577248 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:43 2020 Page 1 7-1-0 7-7-0 9-9-0 11-9-0 17-1-0 19-0-0 7-1-0 0-6-0 2-2-0 2-0-0 5-4-0 1-11-0 5.00 12 8x16 MT20HS		

Scale = 1:32.7

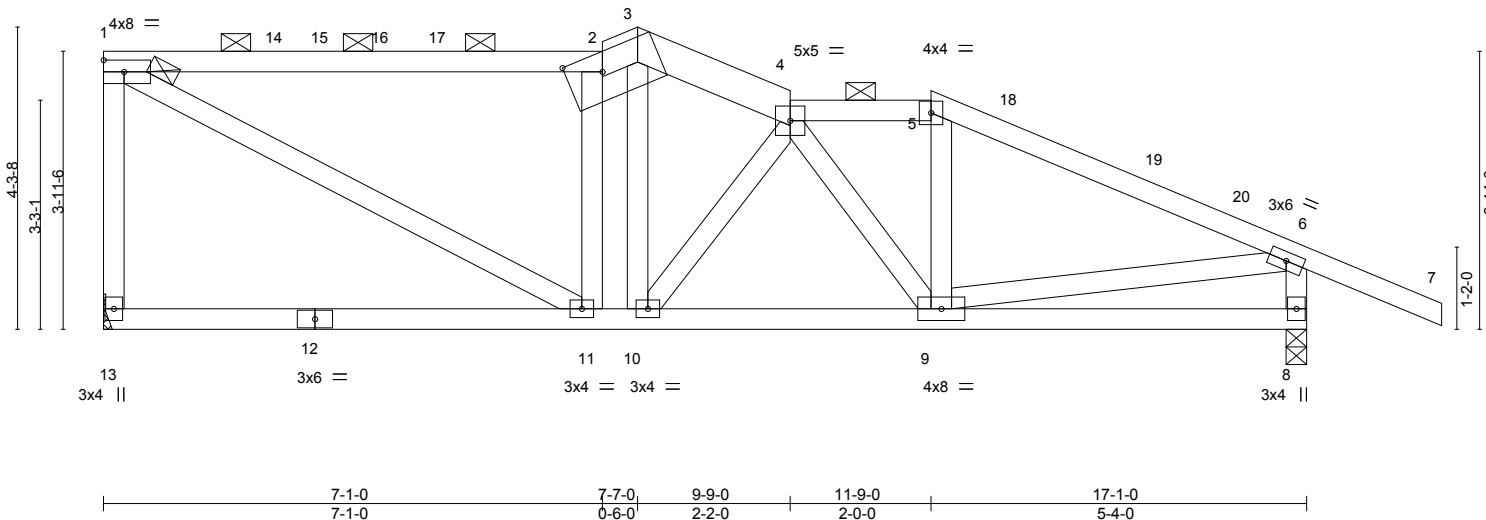


Plate Offsets (X,Y)-- [2-0-6-1,0-3-4]									
LOADING (psf)		SPACING		CSI		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.76	in (loc)	l/def	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.34	Vert(LL)	-0.06 11-13 >999	MT20HS	197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.25	Vert(CT)	-0.12 11-13 >999		148/108
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.01 8 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 82 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 2-3,3-4: 2x6 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-1-9 max.): 1-2, 4-5.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 13=Mechanical, 8=0-3-8
 Max Horz 13=-143(LC 14)
 Max Uplift 13=-71(LC 12), 8=-125(LC 16)
 Max Grav 13=753(LC 43), 8=911(LC 44)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-13=-676/208, 1-2=-874/230, 2-3=-865/258, 3-4=-927/239, 4-5=-891/224,
 5-6=-1040/217, 6-8=-856/286
 BOT CHORD 10-11=-101/890, 9-10=-142/1002
 WEBS 6-9=-142/791, 4-10=-293/89, 2-11=-397/227, 1-11=-242/916

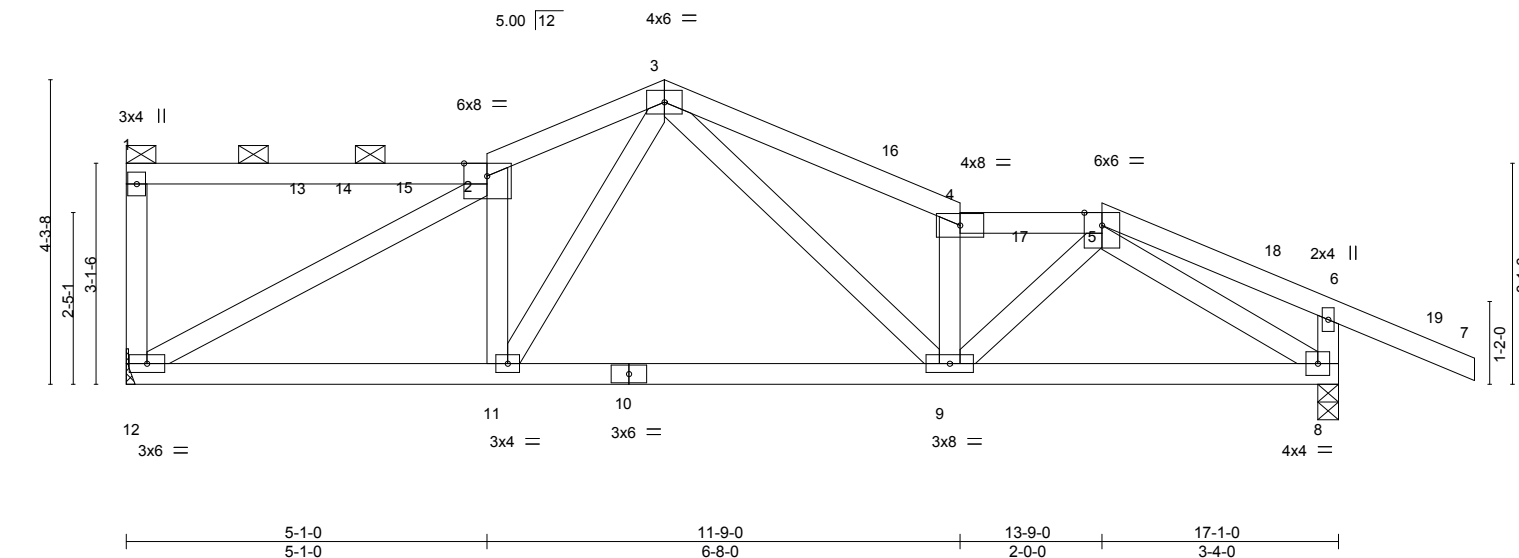
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-7-0, Exterior(2E) 7-7-0 to 9-9-0, Interior(1) 9-9-0 to 11-9-0, Exterior(2R) 11-9-0 to 14-9-0, Interior(1) 14-9-0 to 19-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 13 and 125 lb uplift at joint 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

Job 2525051	Truss B14	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1 Roeser/1464 Winterset 143577249 Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:44 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPF19-Gx4cBrRh3nJAPjZmaQY4V59QD9h7cMaxO?2t8yKUTf
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 13-9-0 2-0-0 17-1-0 3-4-0 19-0-0 1-11-0		

Scale = 1:32.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.04	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.10				
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.02				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL	10.0										
								Weight: 76 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (5-2-12 max.): 1-2, 4-5.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.

REACTIONS.	
(size)	12=Mechanical, 8=0-3-8
Max Horz	12=-128(LC 14)
Max Uplift	12=-60(LC 16), 8=-126(LC 16)
Max Grav	12=747(LC 2), 8=937(LC 44)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1058/292, 3-4=-1372/350, 4-5=-1259/293, 6-8=-356/164
BOT CHORD	11-12=-142/941, 9-11=-101/775, 8-9=-125/832
WEBS	2-12=-1036/255, 3-11=-70/369, 3-9=-164/611, 4-9=-749/231, 5-9=-118/609, 5-8=-984/235

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-7-0, Exterior(2R) 7-7-0 to 10-7-0, Interior(1) 10-7-0 to 13-9-0, Exterior(2R) 13-9-0 to 16-11-4, Interior(1) 16-11-4 to 19-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 12 and 126 lb uplift at joint 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

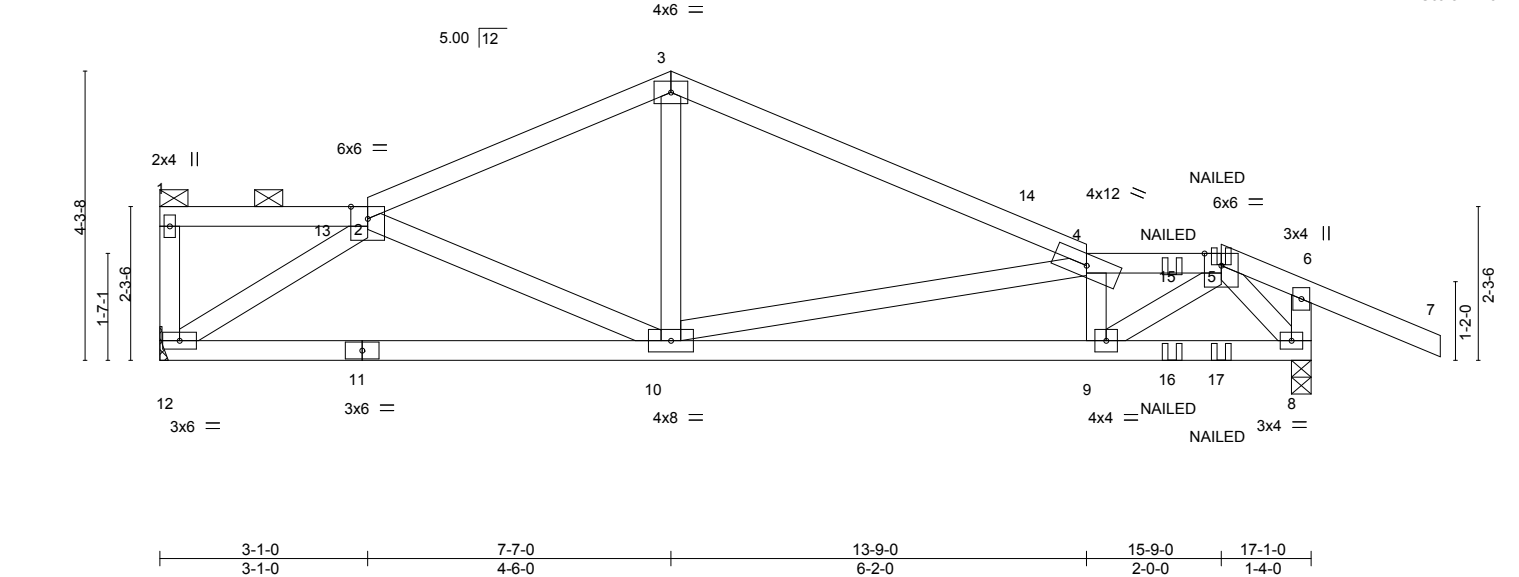


November 11, 2020

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 12/21/2020

Job 2525051	Truss B15	Truss Type Roof Special	Girder	Ply 1	Roeser/1464 Winterset 143577250
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)		

ID: WV5xOZ45cNK4PQ2HmSu_xyyPFT9-gVmlpsUZMi7u1tS8Ri_Fi8jZnQ7MK0S1eMEiUTyKUTc
9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:47 2020 Page 1



LOADING (psf)		SPACING-		CSI.		DEFL.		I/defl		L/d		PLATES	GRIP
TCLL (roof)	25.0		2-0-0	TC	0.83	Vert(LL)	-0.07	10-12	>999		240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.58	Vert(CT)	-0.15	10-12	>999		180		
TCDL	10.0	Lumber DOL	1.15	WB	0.45	Horz(CT)	0.03	8	n/a		n/a		
BCLL	0.0	Rep Stress Incr	NO	Matrix-MS								Weight: 71 lb	FT = 20%
BCDL	10.0	Code IRC2018/TP12014											

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-10-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-12 max.); 1-2, 4-5.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 12=Mechanical, 8=0-3-8
 Max Horz 12=-112(LC 10)
 Max Uplift 12=-62(LC 12), 8=-153(LC 12)
 Max Grav 12=743(LC 2), 8=912(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1038/105, 3-4=-1057/101, 4-5=-1394/136, 6-8=-336/126
 BOT CHORD 10-12=-28/892, 9-10=-77/1460, 8-9=0/462
 WEBS 3-10=0/374, 4-10=-619/105, 4-9=-626/100, 5-9=-112/1185, 2-12=-1057/120, 5-8=-742/25

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 12 and 153 lb uplift at joint 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15



November 11, 2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION		Ply	Roeser/1464 Winterset
2525051	B15	Roof Special	Girder	AS NOTED ON PLANS REVIEW	1	I43577250
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			LEE'S SUMMIT, MISSOURI		8.240 s Mar	Job Reference (optional)
			12/21/2020		9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:47 2020 Page 2	ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-gVmlpsUZMi7u1tS8Ri_Fi8jZNQ7MK0S1eMEiUTyKUTc

LOAD CASE(S) Standard

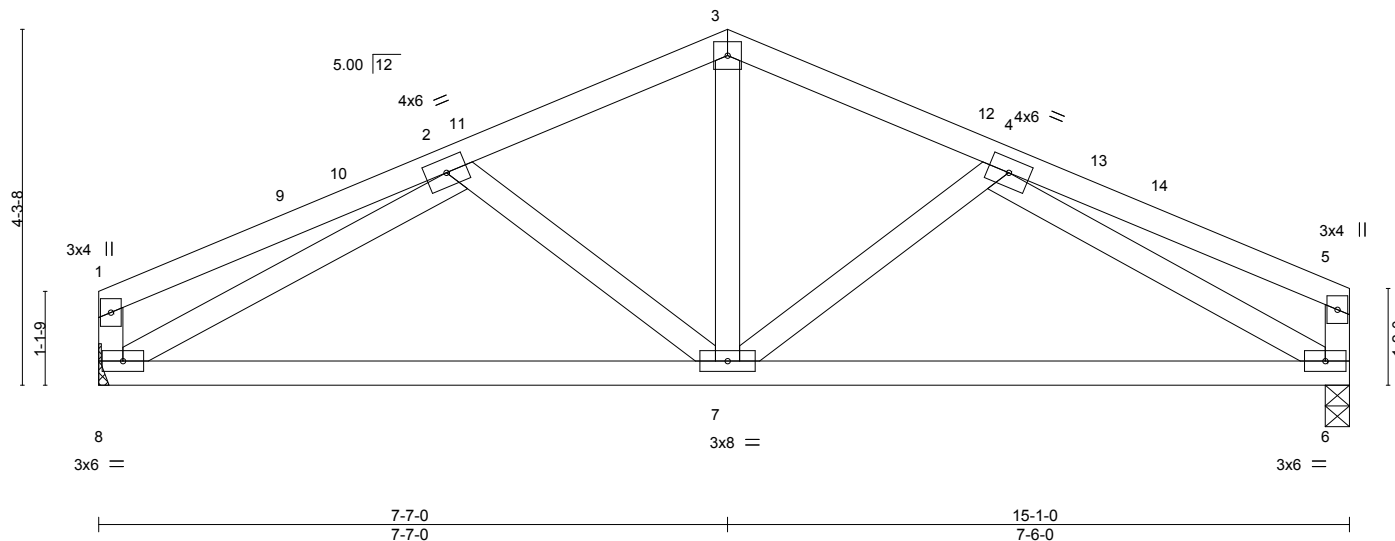
Uniform Loads (plf)

Vert: 1-2=-61, 2-3=-51, 3-4=-51, 4-5=-61, 5-6=-51, 6-7=-51, 8-12=-20

Concentrated Loads (lb)

Vert: 5=49(B) 16=-1(B)

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-gVmlpsUZMi7u1tS8Ri_Fi8jICQAZK2k1eMEiUTyKUTc		Roeser/1464 Winterset	I43577251
2525051	B16	Common			Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:47 2020 Page 1 Su_xyyPFt9-gVmlpsUZMi7u1tS8Ri_Fi8jICQAZK2k1eMEiUTyKUTc			
4-4-3		4-4-3	7-7-0	12/21/2020	10-9-13	15-1-0
			3-2-13		3-2-13	4-3-3
			4x4 =		Scale = 1:27.8	



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.20	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.44	Vert(LL)	-0.06 7-8 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.30	Vert(CT)	-0.12 7-8 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.02 6 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 61 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=Mechanical, 6=0-3-8
Max Horz 8=80(LC 15)
Max Uplift 8=-54(LC 16), 6=-54(LC 16)
Max Grav 8=666(LC 2), 6=666(LC 2)

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

TOP CHORD 2-3=-755/231, 3-4=-755/231
BOT CHORD 7-8=-222/769, 6-7=-205/759
WEBS 3-7=-73/331, 2-8=-711/210, 4-6=-719/211

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-7-0, Exterior(2R) 7-7-0 to 10-7-0, Interior(1) 10-7-0 to 14-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 8 and 54 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

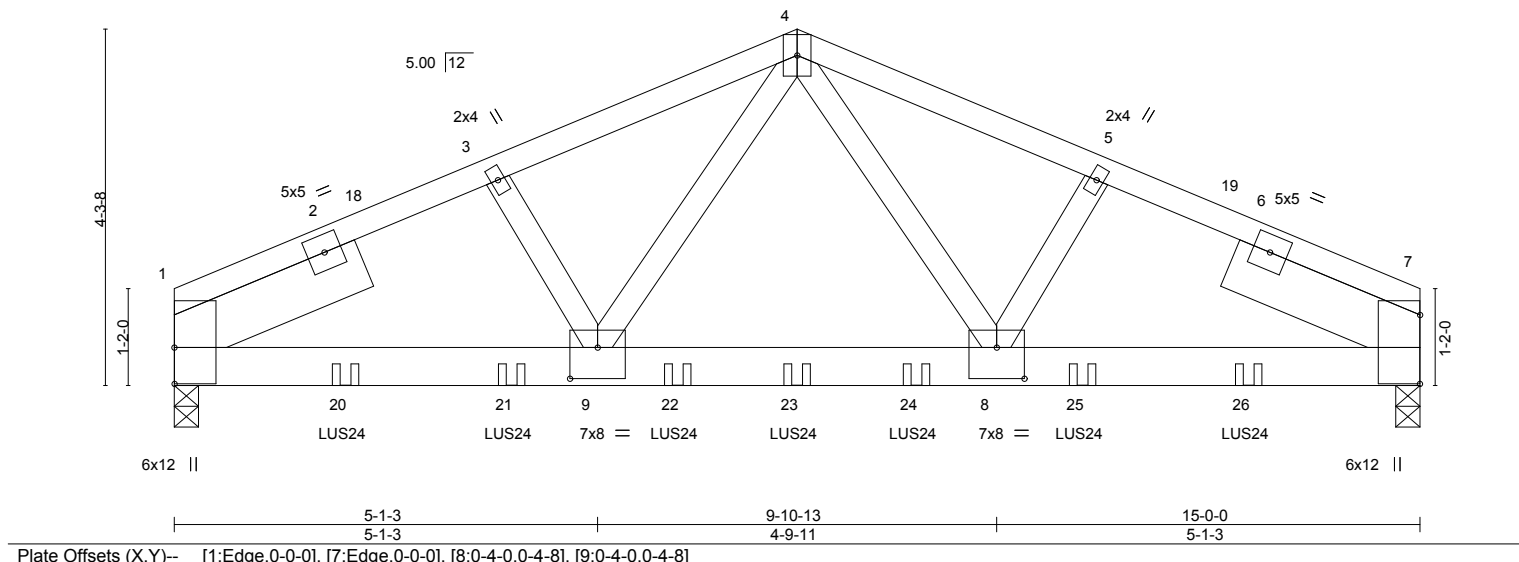
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2525051	Truss B17	Truss Type Common Girder	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPf9-cutVEYVpuNcGAbXZ70jnZovfEpwoyCJ5fjpYLyKUTa 12/21/2020		Ply 1 Roeser/1464 Winterset I43577252 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:42:49 2020 Page 1 Su_xyyPf9-cutVEYVpuNcGAbXZ70jnZovfEpwoyCJ5fjpYLyKUTa		
3-10-12 3-10-12		7-6-0 3-7-4		11-1-4 3-7-4 15-0-0 3-10-12	
			4x6		Scale = 1:27.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.11	MT20	197/144		
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.19				
TCDL	10.0	Rep Stress Incr	NO	WB	0.30	Horz(CT)	0.03				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										
								Weight: 76 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF 1650F 1.5E	TOP CHORD	Structural wood sheathing directly applied or 2-10-9 oc purlins.
BOT CHORD	2x6 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		
SLIDER	Left 2x8 SP 2400F 2.0E 2-6-0, Right 2x8 SP 2400F 2.0E 2-6-0		

REACTIONS.	
(size)	1=0-3-8, 7=0-3-8
Max Horz	1=51(LC 11)
Max Uplift	1=-285(LC 12), 7=-285(LC 12)
Max Grav	1=2166(LC 16), 7=2166(LC 17)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-3=-3166/434, 3-4=-3120/449, 4-5=-3120/449, 5-7=-3166/434
BOT CHORD	1-9=-356/2805, 8-9=-261/2256, 7-8=-356/2805
WEBS	4-8=-158/1234, 5-8=-148/275, 4-9=-158/1234, 3-9=-148/275

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 285 lb uplift at joint 1 and 285 lb uplift at joint 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.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 12-11-4 to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard	
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15	
Uniform Loads (plf)	
Vert: 1-4=-51, 4-7=-51, 10-14=-20	
Concentrated Loads (lb)	
Vert: 20=-500(B) 21=-475(B) 22=-424(B) 23=-374(B) 24=-424(B) 25=-475(B) 26=-500(B)	



November 11, 2020

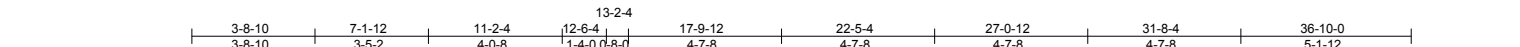
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

Scale = 1:69.6

[illegible]

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

REACTIONS. (size) 24=0-5-8, 14=0-5-8, 20=0-3-8
 Max Horz 24=88(LC 11)
 Max Uplift 24=-198(LC 69), 14=-233(LC 12), 20=-538(LC 12)
 Max Grav 24=706(LC 61), 14=1626(LC 40), 20=4650(LC 39)

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

TOP CHORD 2-3=-683/181, 3-4=-492/398, 4-5=-414/378, 5-6=-279/2878, 6-7=-778/114,
7-8=-2467/286, 8-10=-2467/286, 10-11=-3050/359, 11-12=-2408/290, 2-24=-667/194,
12-14=-1562/248

BOT CHORD 22-23=-121/580, 20-22=-1756/270, 19-20=-2384/339, 18-19=-477/75, 16-18=-249/3046,
15-16=-175/2203

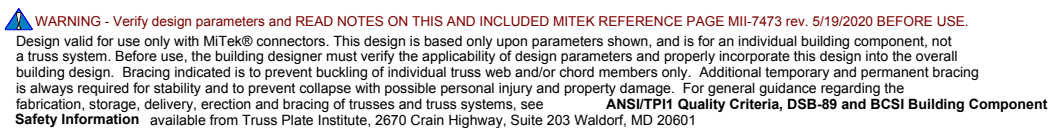
WEBS 3-23=-235/429, 3-22=-682/140, 4-22=-344/50, 5-22=-238/2027, 6-19=-401/3713,
7-19=-1594/235, 7-18=-203/1978, 8-18=-570/139, 10-18=-682/85, 10-16=-298/103,
11-16=-87/991, 2-23=-130/612, 12-15=-204/2079, 6-20=-1084/155, 5-20=-2744/327

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 8) Provide adequate drainage to prevent water ponding.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 198 lb uplift at joint 24, 233 lb uplift at joint 14 and 538 lb uplift at joint 20.



November 11, 2020

Continued on page 2



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job		Truss	Truss Type	Ply		Roeser/1464 Winterset I43577253
2525051		C1	Roof Special	Girder	2	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:12 2020 Page 2		Job Reference (optional)
				ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-RJmC3QnFTNGLXjsyPSw7DPFwAVj2hJWiNoXsWyKUTD		
				12/21/2020		
				Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.		
				orientation of the purlin along the top and/or bottom chord.		
				or equivalent spaced at 6-0-0 oc max. starting at 4-0-12 from the left end to 16-0-12 to		
				connect truss(es) to back face of bottom chord.		
				or equivalent at 31-7-0 from the left end to connect truss(es) to back face of bottom chord.		
				Fill all nail holes where hanger is in contact with lumber.		
				toe-nails per NDS guidelines.		
				at 8-0-12, and 337 lb down and 35 lb up at		
				10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.		

NOTES-

- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 6-0-0 oc max. starting at 4-0-12 from the left end to 16-0-12 to connect truss(es) to back face of bottom chord.
- 14) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 2 ply, Left Hand Hip) or equivalent at 31-7-0 from the left end to connect truss(es) to back face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber.
- 16) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 337 lb down and 35 lb up at 8-0-12, and 337 lb down and 35 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-51, 2-4=-51, 4-5=-61, 5-6=-51, 6-11=-61, 11-12=-51, 12-13=-51, 14-24=-20
- Concentrated Loads (lb)
- Vert: 9=-103(B) 21=-288(F) 19=-34(B) 7=-103(B) 11=-107(B) 29=-103(B) 31=-103(B) 34=-103(B) 35=-103(B) 37=-103(B) 39=-405(B) 40=-260(B) 41=-288(F) 42=-270(B) 43=-262(B) 44=-261(B) 45=-34(B) 46=-34(B) 47=-34(B) 48=-34(B) 49=-34(B) 50=-34(B) 51=-315(B)

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

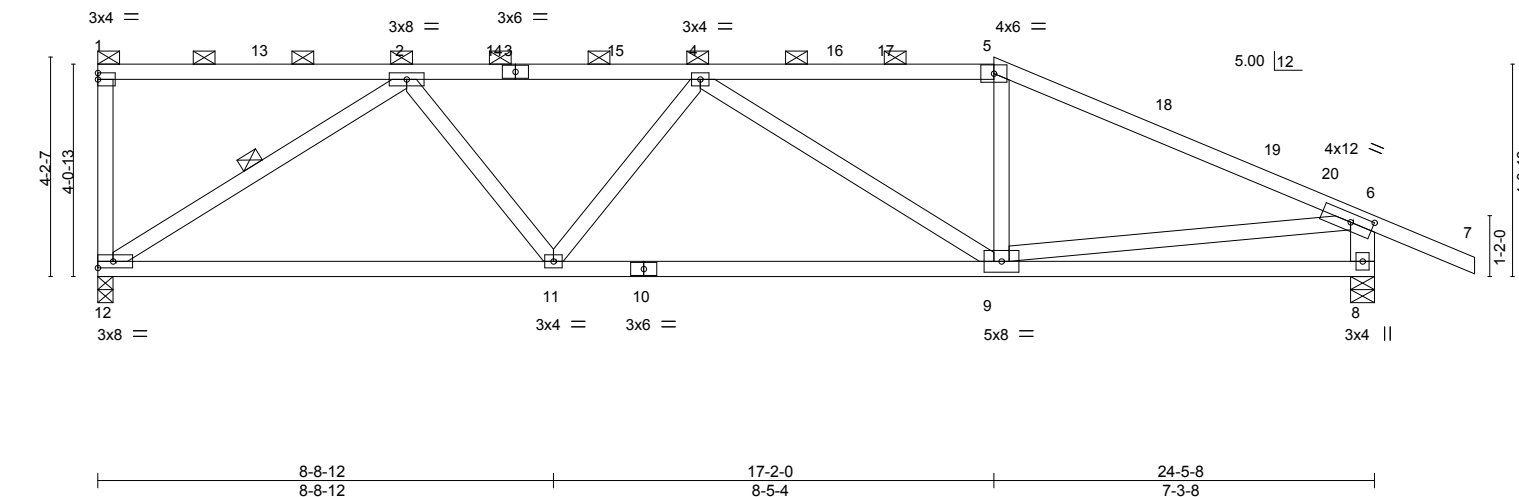
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	Ply		Roeser/1464 Winterset
2525051	C2	Roof Special	1		I43577254
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)		
11-6-8			12/21/2020		
5-11-0			5-7-8		
5-11-0			24-5-8		
			26-4-8		
			1-11-0		

Scale = 1:44.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.13 11-12	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.27 11-12	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.45	Horz(CT)	0.05 8	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL 10.0								Weight: 101 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (4-2-0 max.): 1-5.
WEBS 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied.
6-8: 2x6 SPF No.2	WEBS 1 Row at midpt 2-12

REACTIONS.	(size) 12=0-3-8, 8=0-5-8
Max Horz	12=-143(LC 14)
Max Uplift	12=-95(LC 12), 8=-154(LC 16)
Max Grav	12=1196(LC 35), 8=1241(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-1707/250, 4-5=-1446/254, 5-6=-1665/245, 6-8=-1172/286
BOT CHORD	11-12=-119/1417, 9-11=-185/1864, 8-9=-62/339
WEBS	2-12=-1629/260, 2-11=-18/491, 4-11=-263/117, 4-9=-534/70, 5-9=0/301, 6-9=-138/1264

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 17-2-0, Exterior(2R) 17-2-0 to 20-2-0, Interior(1) 20-2-0 to 26-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 12 and 154 lb uplift at joint 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

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

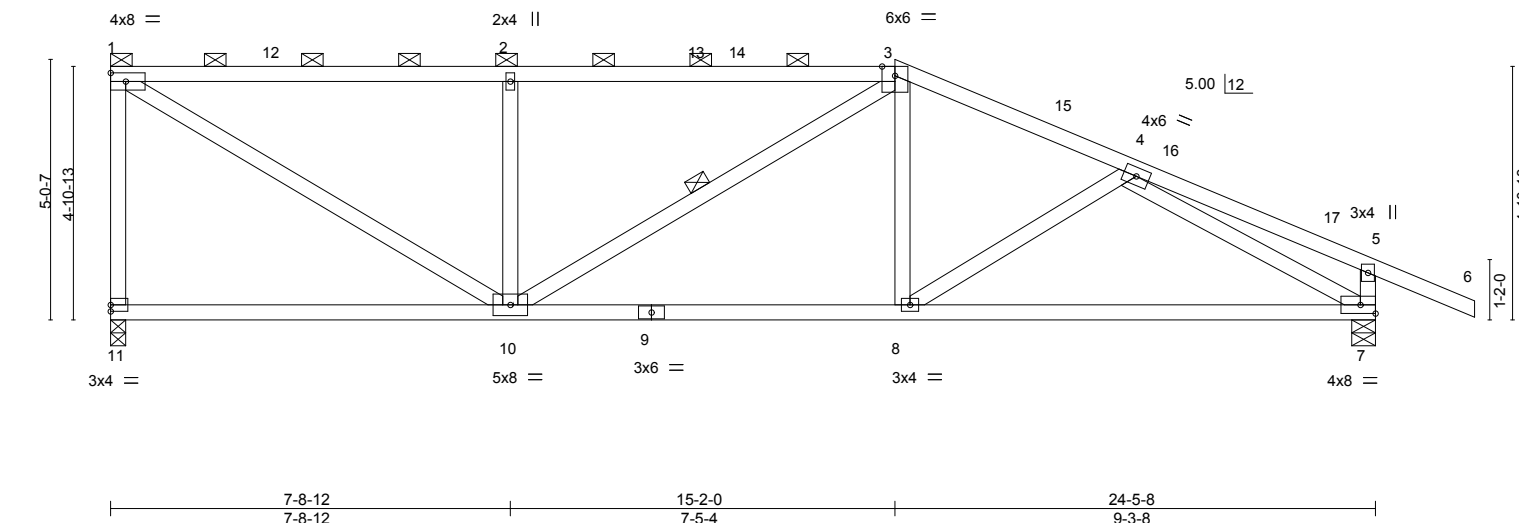
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 2525051	Truss C3	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	Roeser/1464 Winterset 143577255
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:15 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-suSKhRp7mfwOAbX4bUqr1Jmjglucx84i0BTryKUTA 15-2-0 12/21/2020 19-8-0 24-5-8 26-4-8 7-5-4 4-6-0 4-9-8 1-11-0			

Scale = 1:44.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.93	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.62	Vert(LL)	-0.15 7-8 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.73	Vert(CT)	-0.31 7-8 >945	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.04 7 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 106 lb	FT = 20%	

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

REACTIONS.	
(size)	11=0-3-8, 7=0-5-8
Max Horz	11=-172(LC 14)
Max Uplift	11=-102(LC 12), 7=-151(LC 16)
Max Grav	11=1162(LC 35), 7=1238(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-11=-1086/202, 1-2=-1385/256, 2-3=-1387/258, 3-4=-1528/255, 4-5=-292/41, 5-7=-438/144
BOT CHORD	8-10=-106/1364, 7-8=-150/1376
WEBS	1-10=-253/1553, 2-10=-725/172, 3-8=0/300, 4-7=-1431/279

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-2-0, Exterior(2R) 15-2-0 to 18-2-0, Interior(1) 18-2-0 to 26-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 11 and 151 lb uplift at joint 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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 2525051	Truss C4	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	Roeser/1464 Winterset	I43577256
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:16 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPft9-K50ivnqIXcnn?K9jel?3NFPY563vd91IIMml?HyKUT9				
6-8-12 6-8-12			13-2-0 6-5-4		18-8-0 5-6-0		24-5-8 5-9-8
			12/21/2020				

Scale = 1:44.6

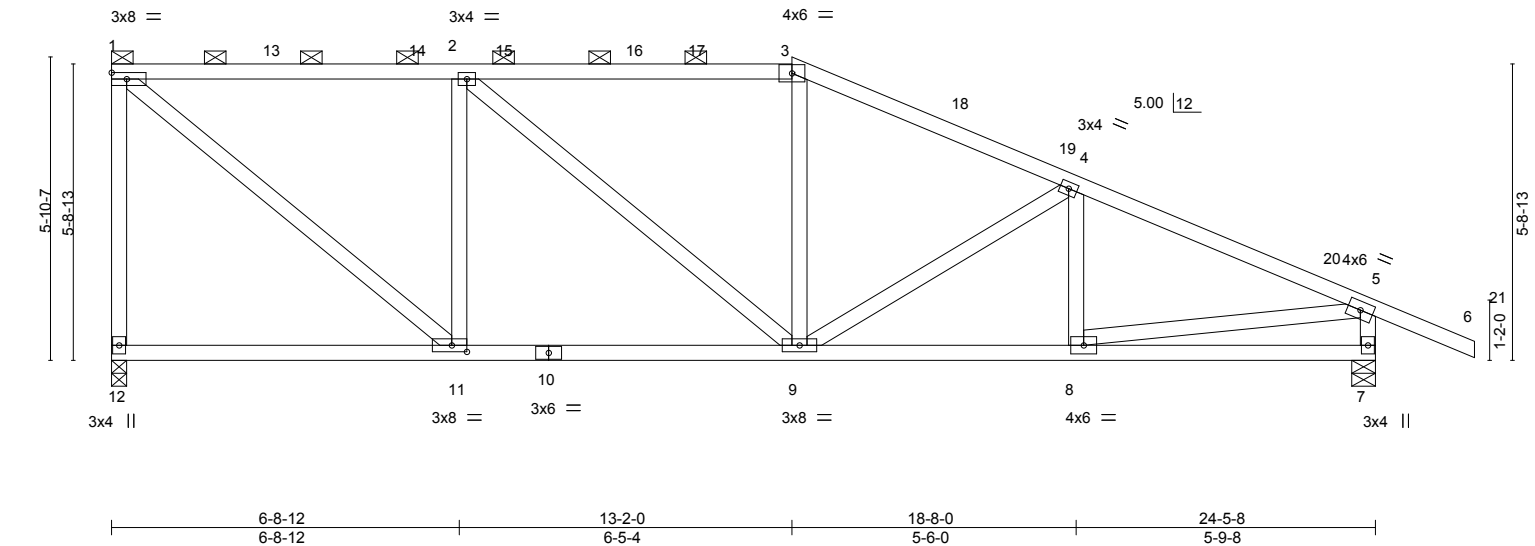


Plate Offsets (X, Y)-- [11:0-3-8,0-1-8]		6-8-12 6-8-12		13-2-0 6-5-4		18-8-0 5-6-0		24-5-8 5-9-8	
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC 0.70		in (loc) l/defl L/d		MT20 197/144	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL 1.15		BC 0.40		Vert(LL) -0.06 8-9 >999 240			
TCDL	10.0	Lumber DOL 1.15		WB 0.36		Vert(CT) -0.12 9-11 >999 180			
BCLL	0.0	Rep Stress Incr YES		Matrix-AS		Horz(CT) 0.03 7 n/a n/a			
BCDL	10.0	Code IRC2018/TPI2014						Weight: 113 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (4-9-6 max.): 1-3.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.

REACTIONS.	
(size)	12=0-3-8, 7=0-5-8
Max Horz	12=-201(LC 14)
Max Uplift	12=-102(LC 12), 7=-150(LC 16)
Max Grav	12=1116(LC 35), 7=1238(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-12=-1052/206, 1-2=-1018/228, 2-3=-1215/259, 3-4=-1385/253, 4-5=-1661/238, 5-7=-1175/274
BOT CHORD	9-11=-48/1018, 8-9=-134/1460
WEBS	1-11=-231/1282, 2-11=-680/215, 2-9=-98/366, 4-9=-428/103, 5-8=-180/1333

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-2-0, Exterior(2R) 13-2-0 to 16-2-0, Interior(1) 16-2-0 to 26-4-8 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
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 12 and 150 lb uplift at joint 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

Job 2525051	Truss C5	Truss Type Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1 Roeser/1464 Winterset 143577257 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:17 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-oHa567rNHvvedUkvC?WlwSymnWPkMW4RX0VIYkyKUT8		

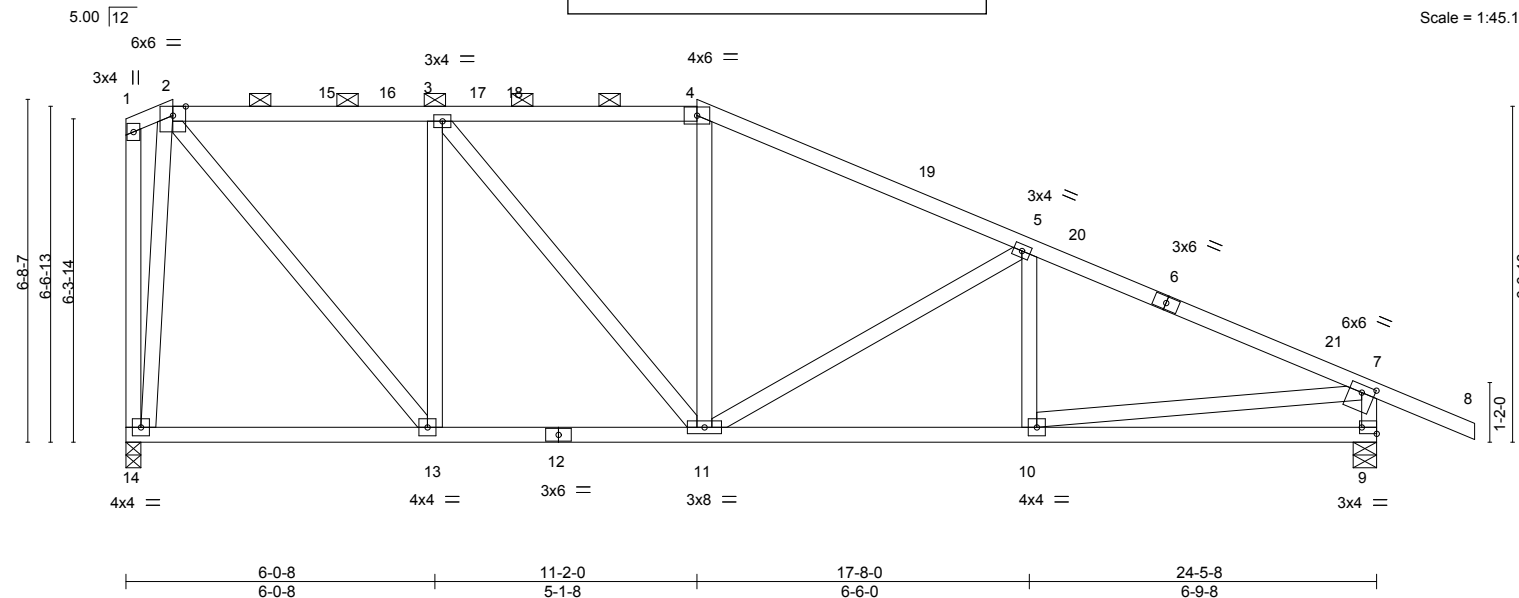


Plate Offsets (X,Y)-- [7:0-3-0,0-1-12], [9:Edge,0-1-8]							
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc) l/defl L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.06 10-11 >999 240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.13 10-11 >999 180
TCDL	10.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.03 9 n/a n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS			
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						Weight: 125 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (5-5-15 max.): 2-4.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.

REACTIONS.	(size) 14=0-3-8, 9=0-5-8
	Max Horz 14=-227(LC 14)
	Max Uplift 14=-90(LC 12), 9=-149(LC 16)
	Max Grav 14=1081(LC 2), 9=1238(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-804/185, 3-4=-1057/207, 4-5=-1233/199, 5-7=-1709/189, 7-9=-1169/243
BOT CHORD	11-13=0/801, 10-11=-83/1480, 9-10=0/281
WEBS	2-13=-155/1054, 3-13=-704/178, 3-11=-101/488, 5-11=-628/116, 7-10=-128/1278, 2-14=-1065/293

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 0-11-0, Exterior(2R) 0-11-0 to 5-1-15, Interior(1) 5-1-15 to 11-2-0, Exterior(2R) 11-2-0 to 15-4-15, Interior(1) 15-4-15 to 26-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 14 and 149 lb uplift at joint 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

Job

2525051

Truss

C6

Truss Type

Hip

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/21/2020

8.240 s Mar

ID:WV5xOZ45cNK4PQ2Hm

Ply

1

Roeser/1464 Winterset

143577258

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional)

9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:18 2020 Page 1

4-1-0

9-2-0

16-8-0

24-5-8

26-4-8

4-1-0

5-1-0

7-6-0

7-9-8

1-11-0

5.00

12

6x6 =

4x8 =

3x4 =

3x8 =

3x6 =

5x8 =

3x4 =

14

2

15

16

17

3

18

19

20

4

5

21

22

6

7

12

11

10

9

8

7-6-7

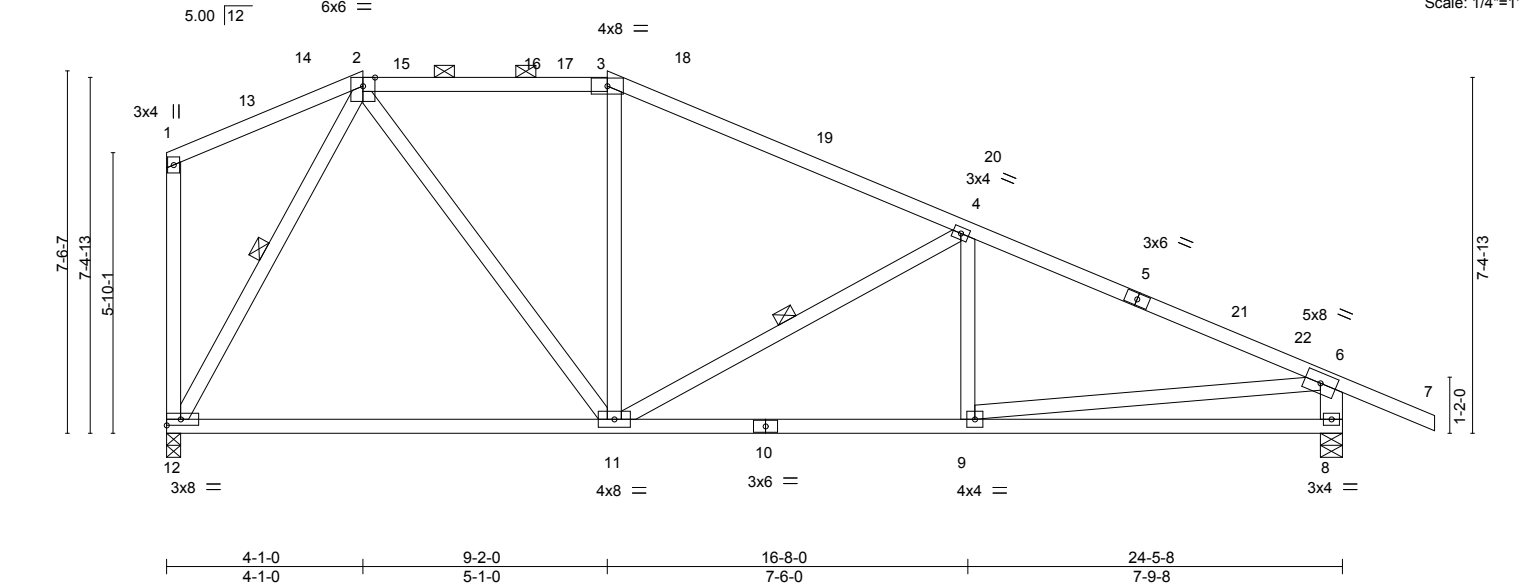
7-4-13

5-10-1

7-4-13

1-2-0

Scale: 1/4"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.66	in (loc)	I/defl	L/d			
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.64	Vert(LL)	-0.18 11-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.32	Vert(CT)	-0.37 11-12	>784	180		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.03 8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 116 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-10-9 max.). 2-3.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2 *Except*	WEBS	1 Row at midpt 4-11, 2-12
	6-8: 2x6 SPF No.2		

REACTIONS.	
(size)	12=0-3-8, 8=0-5-8
Max Horz	12=-232(LC 14)
Max Uplift	12=-89(LC 16), 8=-152(LC 16)
Max Grav	12=1077(LC 2), 8=1241(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-898/206, 3-4=-1076/194, 4-6=-1757/196, 6-8=-1161/252
BOT CHORD	11-12=0/505, 9-11=-82/1535, 8-9=-10/336
WEBS	2-11=-94/717, 4-11=-760/141, 2-12=-977/220, 6-9=-127/1209

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-1-0, Exterior(2R) 4-1-0 to 8-3-15, Interior(1) 8-3-15 to 9-2-0, Exterior(2R) 9-2-0 to 13-4-15, Interior(1) 13-4-15 to 26-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 12 and 152 lb uplift at joint 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

Job

2525051

Truss

C7

Truss Type

Roof Special

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/21/2020

Ply

1

Roeser/1464 Winterset

I43577259

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MITek Industries, Inc.

Tue Nov 10 19:43:20 2020

Page 1

ID:WV5xOZ45cNK4PQ2HmS_u_xyyPFt9-CsFDI9tGaQHCuXTUt84?Y5aDokNqZu5tD_ky82yKUT5

Truss diagram showing a roof truss system with various members labeled (1-21), plate offsets (X,Y), and dimensions. The diagram includes a scale of 1:50.8 and a date stamp of 12/21/2020.

Plate Offsets (X,Y)-- [4:0-4-2,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.71	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.60	Vert(LL)	-0.16 9-11 >999		197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.61	Vert(CT)	-0.34 9-11 >848		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.02 8 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 127 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 3-4.
WEBS	2x4 SPF No.2 *Except*	WEBS	Rigid ceiling directly applied.
	7-8: 2x6 SPF No.2		1 Row at midpt 2-12

REACTIONS. (size) 12=0-3-8, 8=0-5-8
Max Horz 12=-231(LC 14)
Max Uplift 12=-91(LC 16), 8=-85(LC 16)
Max Grav 12=1084(LC 2), 8=1096(LC 40)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-710/229, 3-4=-707/223, 4-5=-1809/376, 5-7=-1782/263, 7-8=-1020/186
BOT CHORD 11-12=-20/617, 9-11=-62/826, 8-9=-75/345
WEBS 2-11=-85/835, 4-11=-604/196, 4-9=-196/1022, 5-9=-681/220, 2-12=-1028/200,
7-9=-117/1242

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-9-8, Exterior(2E) 5-9-8 to 6-11-0, Interior(1) 6-11-0 to 8-7-0, Exterior(2R) 8-7-0 to 11-7-0, Interior(1) 11-7-0 to 24-2-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 12 and 85 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

Professional Engineer stamp for Andrew Thomas Johnson, State of Missouri, PE-2017018993.

November 11,2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2525051	Truss C8	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020	Ply 2	Roeser/1464 Winterset I43577260 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:22 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_kyyPF19-8EN_AqyW6SXwjFdt_Z6TdWfbHX3p1mTAhID3DxyKUT3
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

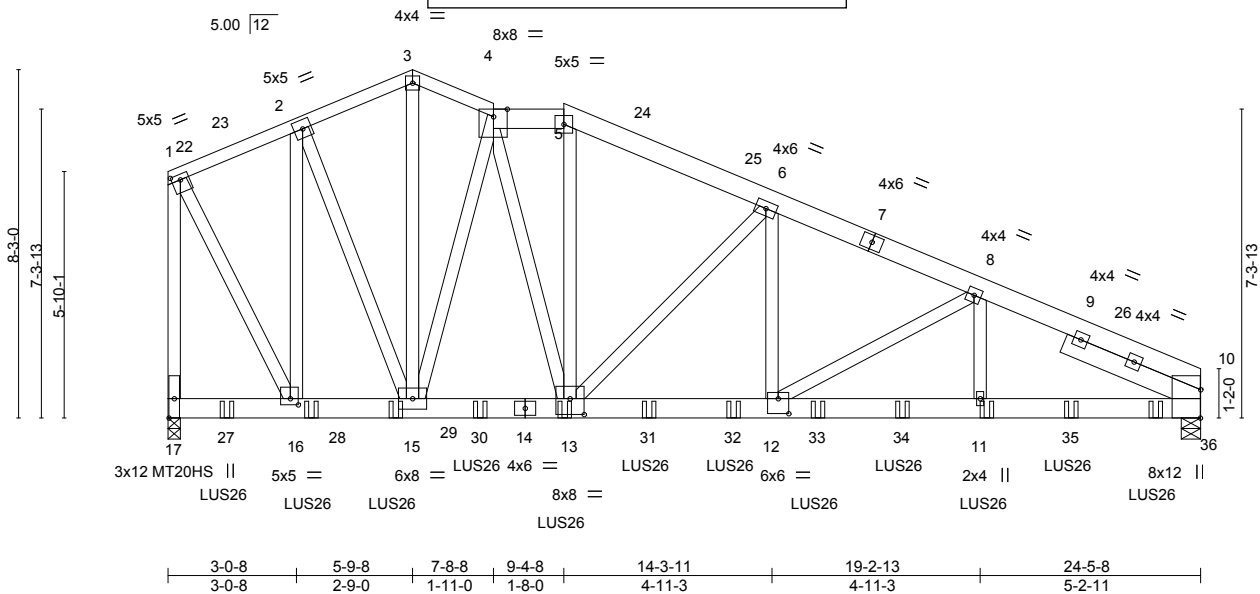


Plate Offsets (X,Y)-- [1:0-2-8,0-1-8], [4:0-3-14,Edge], [10:0-8-1,Edge], [12:0-3-0,0-4-4], [13:0-4-0,0-4-8], [16:0-2-4,0-1-12]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	-0.14 11-12 >999 240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.25 11-12 >999 180
TCDL	10.0	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.06 10 n/a n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS			
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						MT20HS	148/108
						Weight: 345 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2 *Except* 1-3,3-4: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 4-6-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD	2x6 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		
SLIDER	Right 2x6 SPF No.2 3-6-0		

REACTIONS. (size) 17=0-3-8, 10=0-5-8
Max Horz 17=-223(LC 10)
Max Uplift 17=-543(LC 12), 10=-527(LC 12)
Max Grav 17=5452(LC 2), 10=5418(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2371/311, 2-3=-3374/426, 3-4=-3388/430, 4-5=-4733/558, 5-6=-5202/585,
6-8=-7460/790, 8-10=-8610/873, 1-17=-5055/528
BOT CHORD 15-16=-136/2143, 13-15=-316/4078, 12-13=-637/6892, 11-12=-740/7709,
10-11=-740/7709
WEBS 2-16=-2870/266, 2-15=-227/2595, 3-15=-284/2383, 4-15=-3692/416, 4-13=-263/2582,
5-13=-125/1404, 6-13=-3080/361, 6-12=-243/2588, 8-12=-959/120, 8-11=-100/1386,
1-16=-428/4557

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 543 lb uplift at joint 17 and 527 lb uplift at joint 10.

Continued on page 2



November 11, 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

			RELEASE FOR CONSTRUCTION					
Job	Truss	Truss Type	AS NOTED ON PLANS REVIEW			Ply	Roeser/1464 Winterset	
2525051	C8	Roof Special	Girder	2			I43577260	
			DEVELOPMENT SERVICES			Job Reference (optional)		

NOTES-

- 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 LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 6-0-0 oc max. starting at 1-4-12 from the left end to 21-4-12 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 2-0-0 oc max. starting at 5-4-12 from the left end to 7-4-12 to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 23-4-12 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-51, 3-4=-51, 4-5=-61, 5-10=-51, 17-18=-20
 - Concentrated Loads (lb)
 - Vert: 13=-756(F) 11=-649(F) 27=-645(F) 28=-724(F) 29=-815(F) 30=-795(F) 31=-666(F) 32=-648(F) 33=-712(F) 34=-733(F) 35=-680(F) 36=-554(F)

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2525051	Truss CJ1	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS, REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Roeser/1464 Winterset Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:23 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSLu_xyyPFt9-dRxMNAw8tlfmLPC3YGdi9jCmjxWvmOLKvyyclNyKUT2
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	-2-8-8 2-8-8		

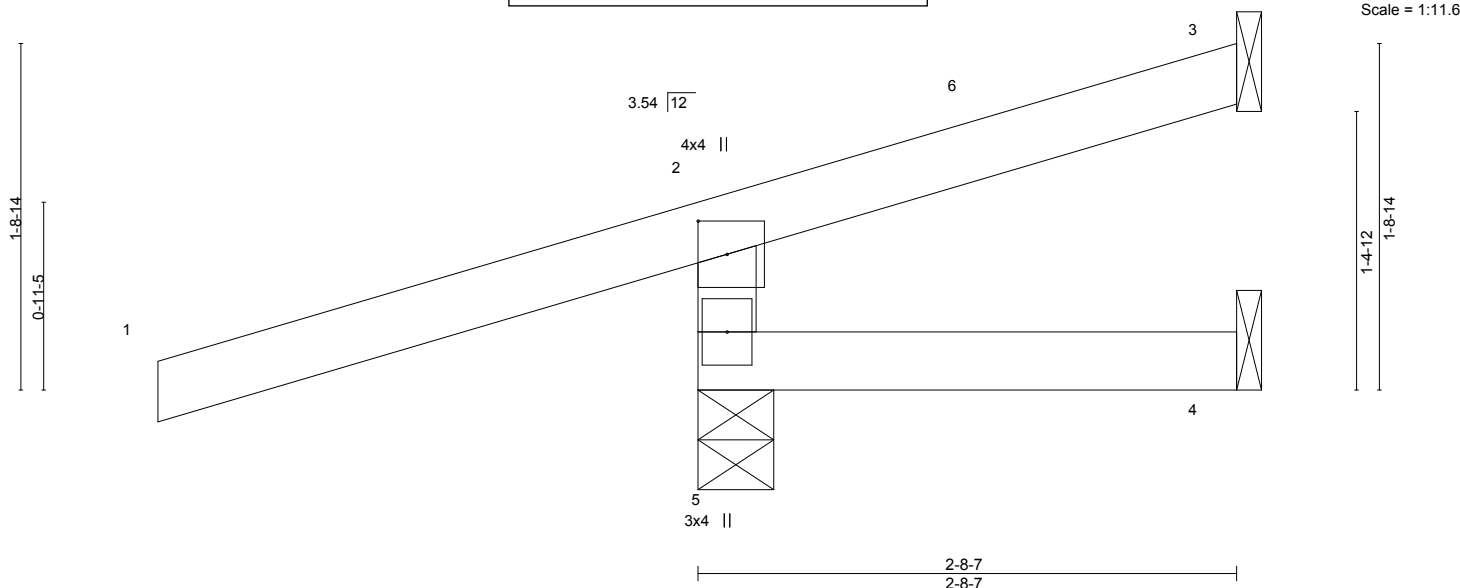


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	0.01 4-5	>999	240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	0.01 4-5	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02 3	n/a	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MR					
BCDL	10.0								
								PLATES	GRIP
								MT20	197/144
								Weight: 10 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-8-7 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		

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=72(LC 16)
Max Uplift 5=131(LC 16), 3=28(LC 20), 4=12(LC 21)
Max Grav 5=444(LC 21), 3=13(LC 28), 4=36(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-382/339

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) -2-8-8 to 1-6-6, Exterior(2R) 1-6-6 to 2-7-11 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 131 lb uplift at joint 5, 28 lb uplift at joint 3 and 12 lb uplift at joint 4.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11,2020

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 2525051	Truss CJ2	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1 Roeser/1464 Winterset I43577262 Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:27 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-VCAtdYzfx_9Dq0Vqn6ieKZNRjYtriCKvqawqu8yKUT_
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
-2-8-8 2-8-8			2-8-6 2-8-6		

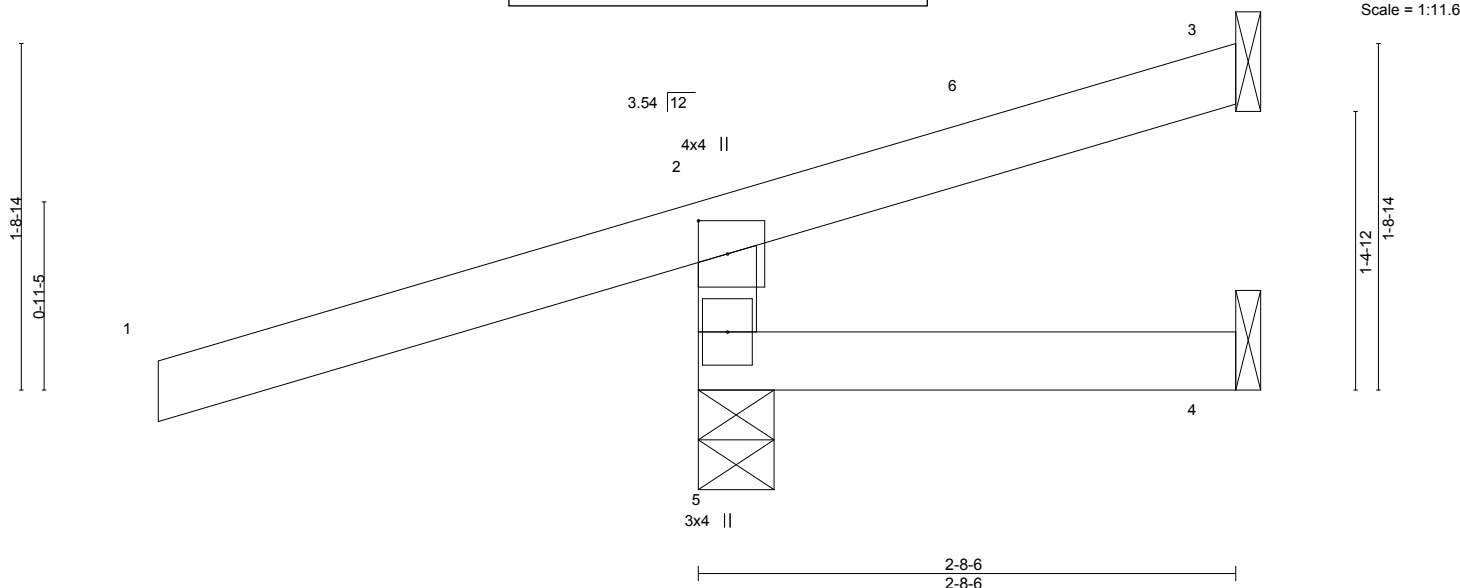


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.61	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.19	0.01 4-5	>999	240	197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.00	0.01 4-5	>999	180	
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		Horz(CT)	-0.02 3	n/a	n/a
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 10 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 2-8-6 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		

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
 Max Horz 5=72(LC 16)
 Max Uplift 5=131(LC 16), 3=28(LC 20), 4=13(LC 21)
 Max Grav 5=444(LC 21), 3=13(LC 28), 4=36(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-382/339

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) -2-8-8 to 1-6-6, Exterior(2R) 1-6-6 to 2-7-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 131 lb uplift at joint 5, 28 lb uplift at joint 3 and 13 lb uplift at joint 4.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11,2020

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 2525051	Truss CJ3	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1 Roeser/1464 Winterset Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:27 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPF19-VCAtdYzfx_9Dq0Vqn6ieKZNRjYtriCKvqawqu8yKUT_
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			2-8-8 2-8-8 2-8-7 2-8-7		

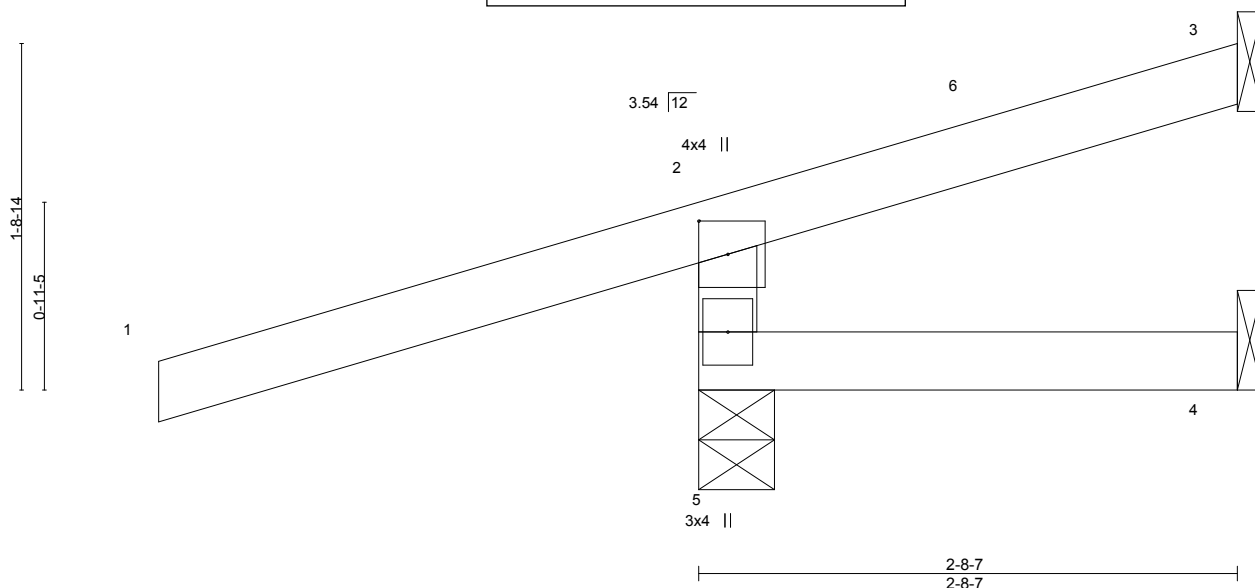


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	0.01	4-5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	0.01	4-5	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MR							
BCDL 10.0									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 2-8-7 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical
 Max Horz 5=72(LC 16)
 Max Uplift 5=131(LC 16), 3=28(LC 20), 4=12(LC 21)
 Max Grav 5=444(LC 21), 3=13(LC 28), 4=36(LC 7)

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

TOP CHORD 2-5=-382/339

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) -2-8-8 to 1-6-6, Exterior(2R) 1-6-6 to 2-7-11 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 131 lb uplift at joint 5, 28 lb uplift at joint 3 and 12 lb uplift at joint 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 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

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-zOkFQuzHilH4SA40LPDtsnvcpyDxRf833EgNPbyKUSz
 12/21/2020

Job 2525051	Truss CJ4	Truss Type Diagonal Hip	Girder	Ply 1	Roeser/1464 Winterset Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:28 2020 Page 1		

-2-8-8
2-8-8

12/21/2020

2-9-3
2-9-3

5-6-6
2-9-3

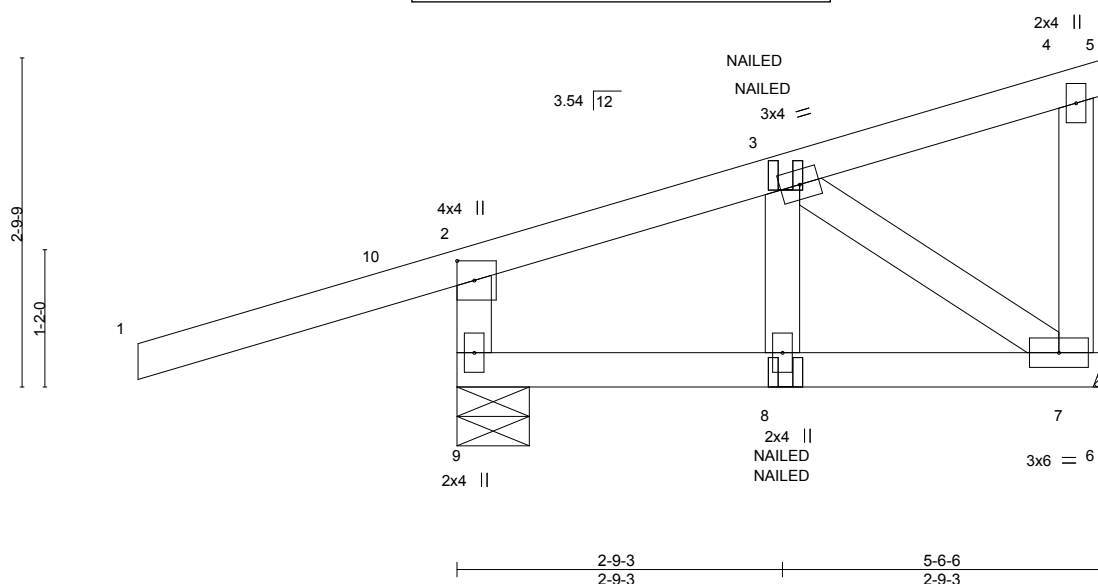


Plate Offsets (X,Y)-- [2:0-2:0,0-1-12]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.58	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.13	Vert(LL)	-0.01 8 >999		197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.03	Vert(CT)	-0.02 8 >999		
BCLL	0.0	Rep Stress Incr	NO	Matrix-MS		Horz(CT)	-0.00 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 24 lb	FT = 20%

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

REACTIONS. (size) 9=0-7-6, 7=Mechanical
 Max Horz 9=100(LC 12)
 Max Uplift 9=157(LC 12), 7=64(LC 12)
 Max Grav 9=452(LC 2), 7=186(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-9=-391/154

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 157 lb uplift at joint 9 and 64 lb uplift at joint 7.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)
 Vert: 1-2=-51, 2-5=-51, 6-9=-20

Concentrated Loads (lb)
 Vert: 3=70(F=35, B=35)



November 11, 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI					
Job	Truss	Truss Type	Girder	Ply	Roeser/1464 Winterset I43577265			
2525051	CJ5	Diagonal Hip		1	Job Reference (optional)			
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:29 2020 Page 1					
			ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-RbldeE_vTbQx3KfDvXk6P_SmGMYI96OCluPxy1yKUSy					
-2-8-8 2-8-8			6-2-14 3-1-8					
			12/21/2020					

Scale = 1:22.6

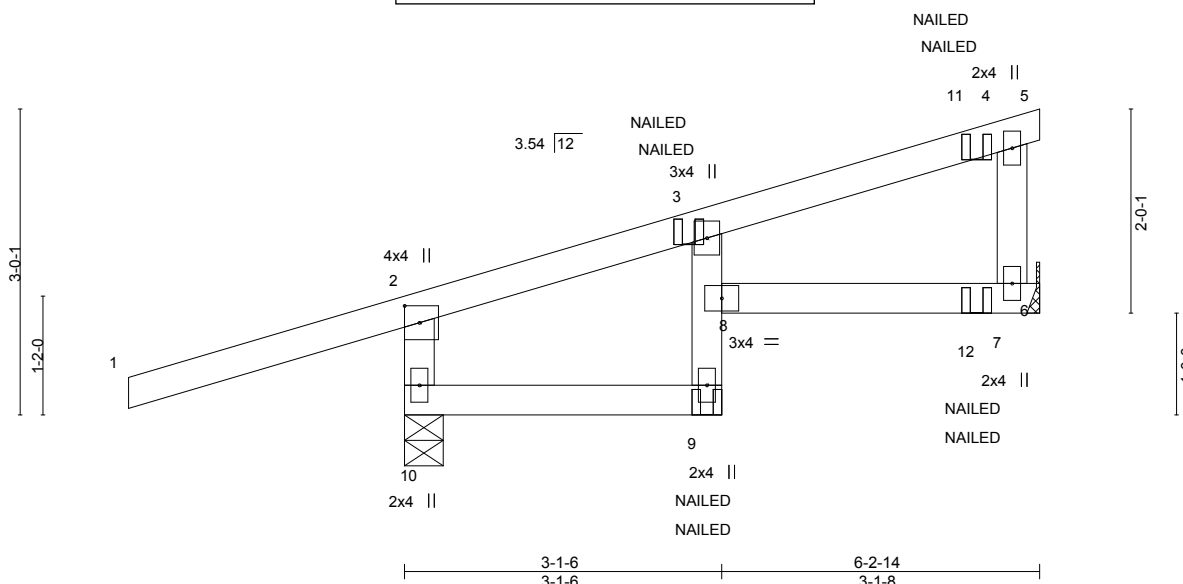


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.07	9	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.09	9	>794	180		
TCDL 10.0	Rep Stress Incr	NO	WB 0.03	Horz(CT)	0.02	7	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MS							
BCDL 10.0									Weight: 22 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10.

REACTIONS.

(size) 10=0-4-9, 7=Mechanical
Max Horz 10=106(LC 12)
Max Uplift 10=-161(LC 12), 7=-101(LC 9)
Max Grav 10=479(LC 2), 7=320(LC 17)

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

TOP CHORD 2-10=-424/170

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 161 lb uplift at joint 10 and 101 lb uplift at joint 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.
- "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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
Vert: 1-2=-51, 2-5=-51, 9-10=-20, 6-8=-20
- Concentrated Loads (lb)
Vert: 3=70(F=35, B=35) 11=-97(F=-48, B=-48) 12=-47(F=-24, B=-24)



November 11, 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/TPI 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 2525051	Truss CJ6	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1 Roeser/1464 Winterset Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:30 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-vns?rZ?XEvYohUEPSEFLyC?yymvmuZ4MWY9UUTyKUSx
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

Scale = 1:13.1

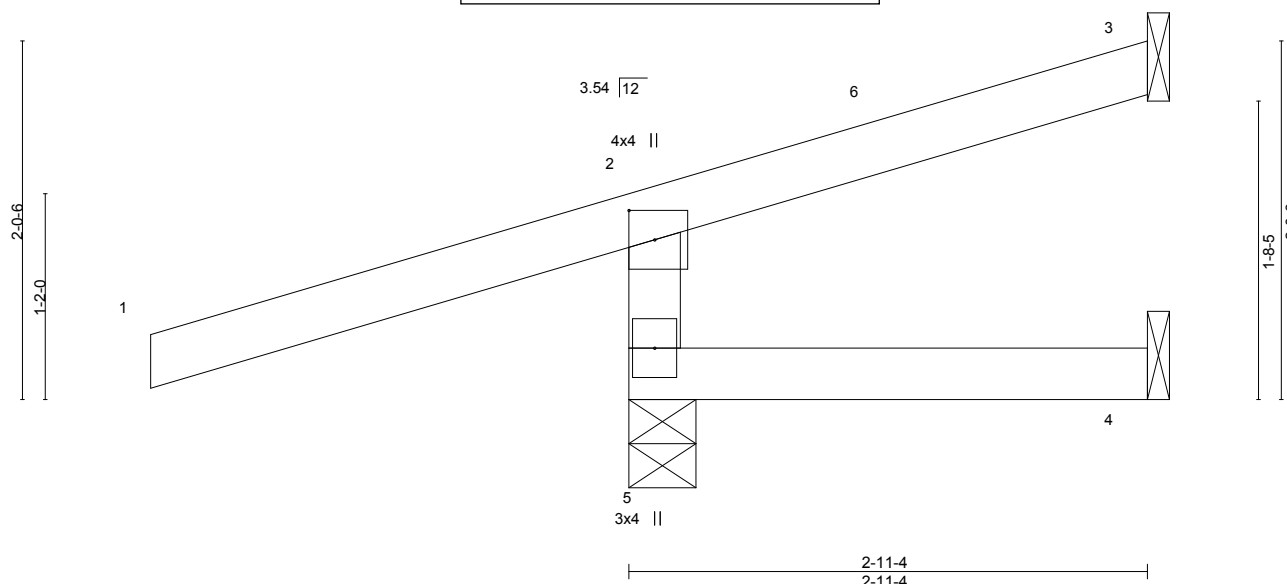


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.61	Vert(LL) 0.01	4-5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.17	Vert(CT) 0.01	4-5	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT) -0.02	3	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR						
BCDL 10.0	Code IRC2018/TPI2014						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 2-11-4 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
 Max Horz 5=79(LC 16)
 Max Uplift 5=-121(LC 16), 3=-23(LC 20), 4=-4(LC 21)
 Max Grav 5=445(LC 21), 3=23(LC 28), 4=42(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-386/337

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) -2-8-8 to 1-6-6, Exterior(2R) 1-6-6 to 2-10-8 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
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 5, 23 lb uplift at joint 3 and 4 lb uplift at joint 4.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 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 2525051	Truss CJ7	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-OzQN2v0A_DgfJepb0ymaUPX7t9FSd0KVICu10wyKUSw 12/21/2020		Ply 1 Roeser/1464 Winterset 143577267 Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:31 2020 Page 1 xyyPFt9-OzQN2v0A_DgfJepb0ymaUPX7t9FSd0KVICu10wyKUSw
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,			

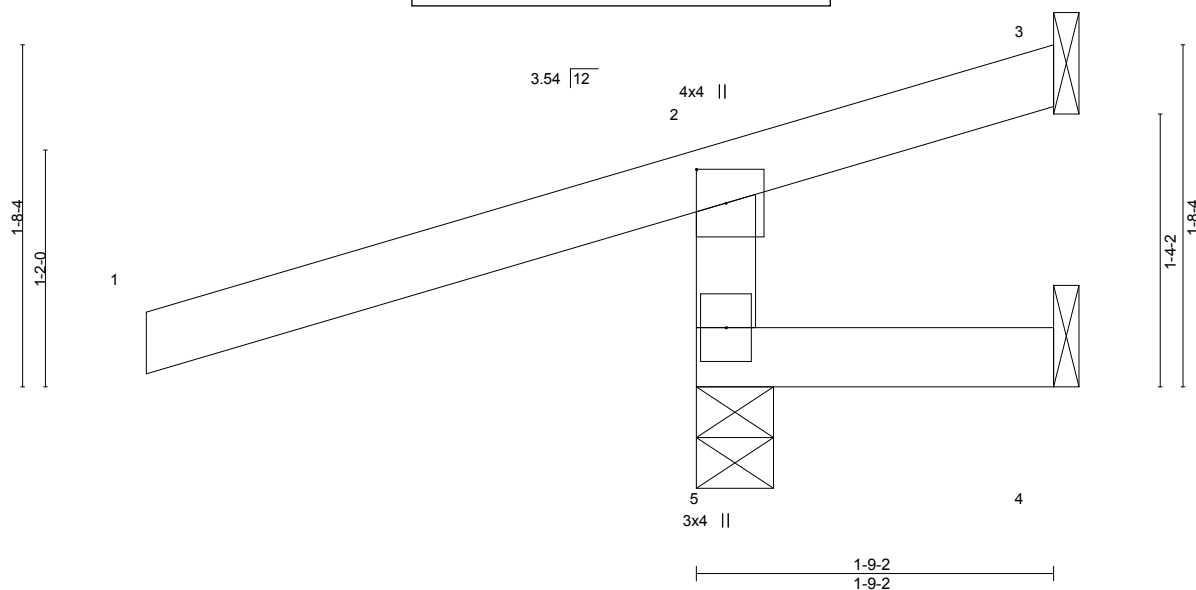


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	0.00	4-5	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 8 lb	FT = 20%
BCDL 10.0										

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 1-9-2 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
 Max Horz 5=69(LC 16)
 Max Uplift 5=144(LC 16), 3=77(LC 20), 4=32(LC 21)
 Max Grav 5=461(LC 21), 3=33(LC 16), 4=17(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-396/367

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 144 lb uplift at joint 5, 77 lb uplift at joint 3 and 32 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 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 2525051	Truss CJ8	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-OzQN2v0A_DgfJepb0ymaUPX7i9F1d0KVICu10wyKUSw 12/21/2020		Ply 1 Roeser/1464 Winterset I43577268 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:31 2020 Page 1 xyyPFt9-OzQN2v0A_DgfJepb0ymaUPX7i9F1d0KVICu10wyKUSw		
-2-8-8 2-8-8			2-8-7 2-8-7		

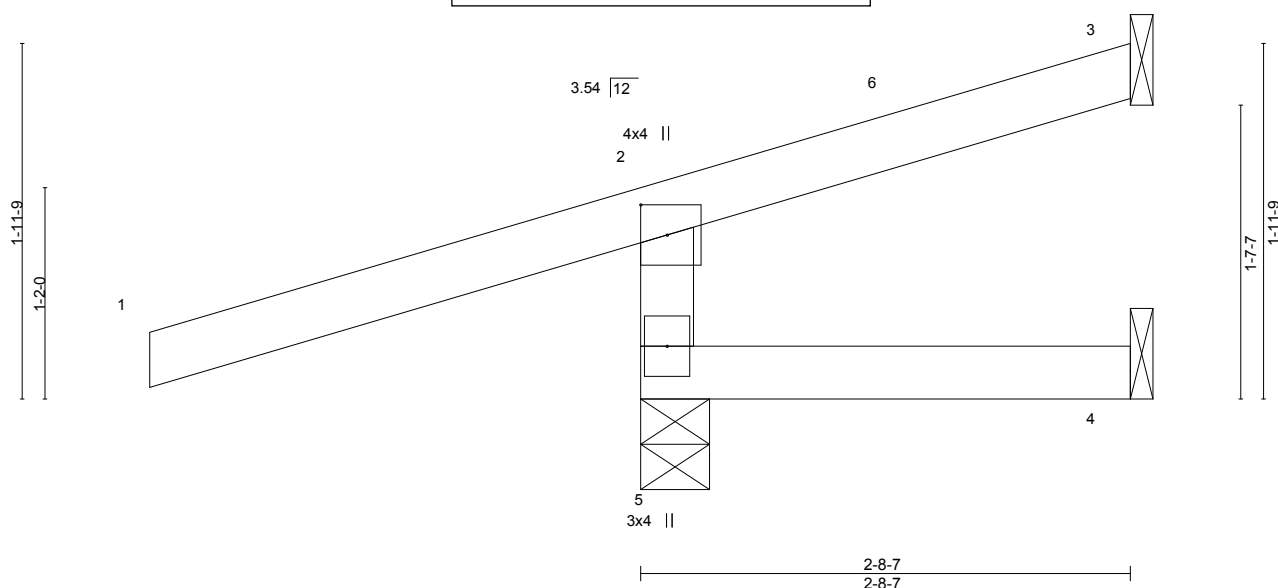


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.61	in (loc)	l/defl	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.17	0.01 4-5	>999				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	0.01 4-5	>999				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MR		-0.02 3	n/a				
BCDL	10.0										
								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 2-8-7 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical
 Max Horz 5=77(LC 16)
 Max Uplift 5=-124(LC 16), 3=-31(LC 20), 4=-9(LC 21)
 Max Grav 5=444(LC 21), 3=11(LC 28), 4=37(LC 7)

FORCES.

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

TOP CHORD 2-5=-385/337

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) -2-8-8 to 1-6-6, Exterior(2R) 1-6-6 to 2-7-11 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 124 lb uplift at joint 5, 31 lb uplift at joint 3 and 9 lb uplift at joint 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

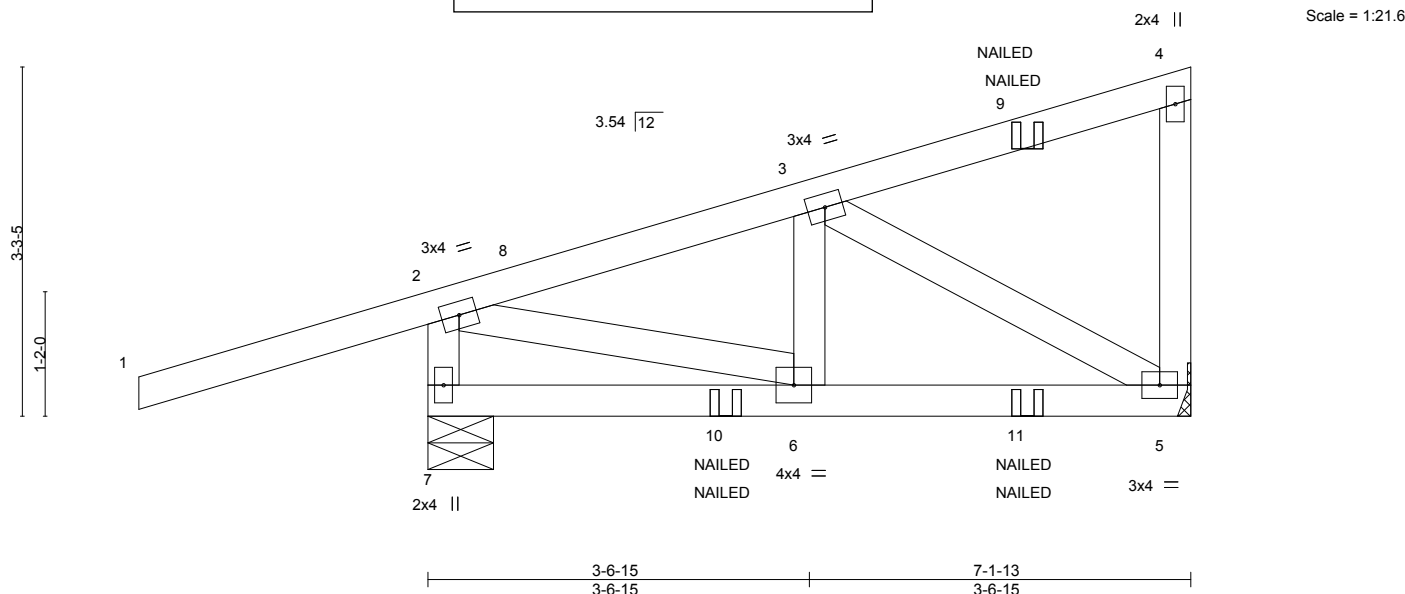
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Roeser/1464 Winterset	I43577269
2525051	CJ9	Diagonal Hip	Girder		1	Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-sA_mGF1olWoVwnOoafHp1d4HVZbVMSSf_sebZMyKUSv		9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:32 2020 Page 1	
-2-8-8		2-8-8		3-6-15		7-1-13	
				3-6-15		3-6-15	



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.67	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.16	Vert(LL)	-0.01	5-6	>999	240	
TCDL	10.0	Lumber DOL	1.15	WB	0.07	Vert(CT)	-0.02	5-6	>999	180	
BCLL	0.0	Rep Stress Incr	NO	Matrix-MP		Horz(CT)	0.00	5	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 33 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-7-6, 5=Mechanical
Max Horz 7=112(LC 12)
Max Uplift 7=-154(LC 12), 5=-63(LC 12)
Max Grav 7=512(LC 2), 5=285(LC 17)

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

TOP CHORD 2-7=-495/154, 2-3=-280/62
WEBS 3-5=-260/95

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 154 lb uplift at joint 7 and 63 lb uplift at joint 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.
- "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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-51, 2-4=-51, 5-7=-20
Concentrated Loads (lb)
Vert: 9=-78(F=-39, B=-39) 10=65(F=32, B=32) 11=-11(F=-6, B=-6)



November 11, 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 2525051	Truss CJ10	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1 Roeser/1464 Winterset Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147,
ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-5dVkaWwne3nezZnF6_8xixlwTLsLVrbT8ciAHqyKUT1			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:24 2020 Page 1		

Scale = 1:13.1

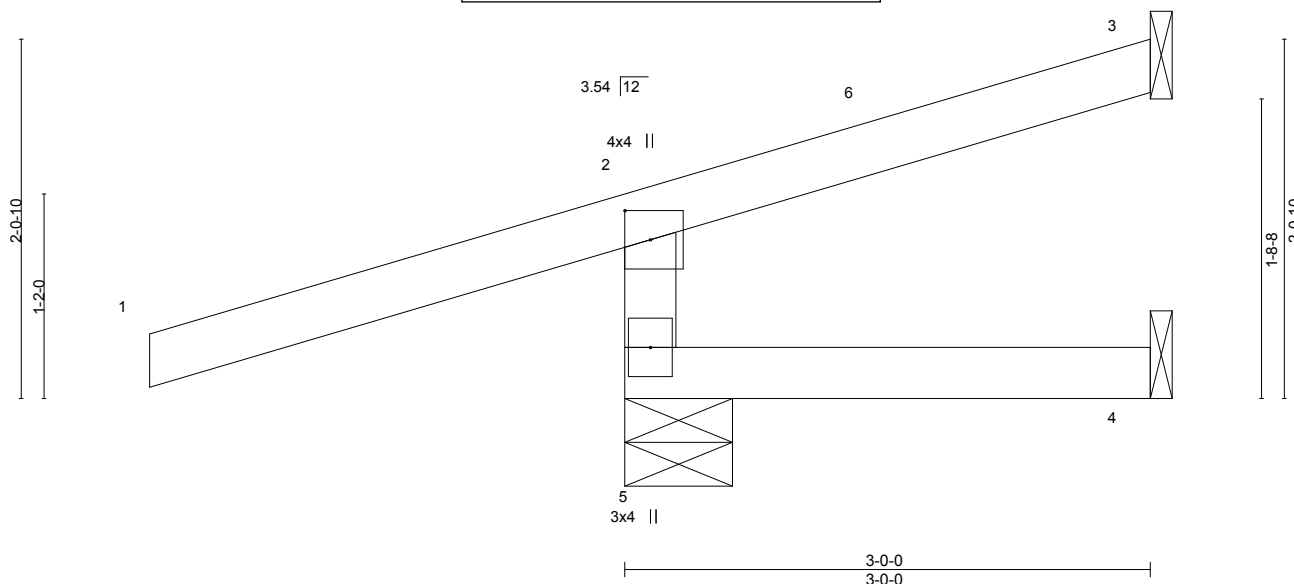


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	0.01	4-5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	0.01	4-5	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MR							
BCDL 10.0									Weight: 11 lb	FT = 20%

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

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

REACTIONS. (size) 5=0-7-6, 3=Mechanical, 4=Mechanical
 Max Horz 5=79(LC 16)
 Max Uplift 5=-121(LC 16), 3=-21(LC 20), 4=-3(LC 21)
 Max Grav 5=445(LC 21), 3=26(LC 28), 4=43(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-387/337

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) -2-8-8 to 1-6-6, Exterior(2R) 1-6-6 to 2-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 5, 21 lb uplift at joint 3 and 3 lb uplift at joint 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 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 2525051	Truss CJ11	Truss Type Diagonal Hip	Girder	Release For CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	Roeser/1464 Winterset 143577271
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:25 2020 Page 1			Job Reference (optional)
-2-8-8 2-8-8			3-1-6 3-1-6			8-4-5 5-2-15
			12/21/2020			

Scale = 1:24.6

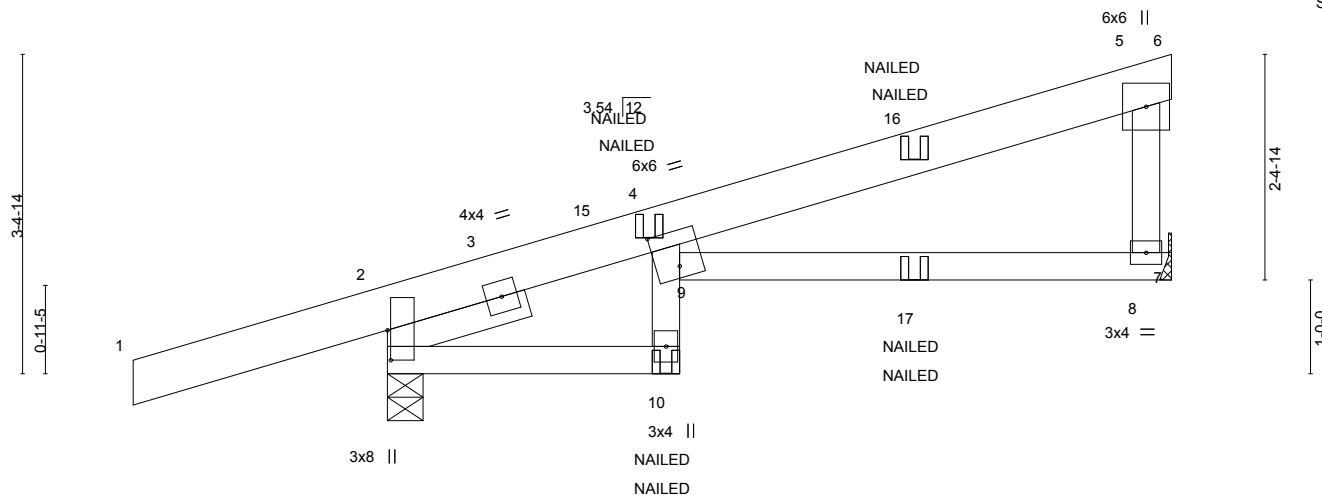


Plate Offsets (X,Y)-- [2:0-3-13,0-0-7], [4:0-1-13,0-0-0], [4:0-3-0,0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	-0.05	8-9	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.12	8-9	>835	180		
TCDL 10.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.04	8	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MR							
BCDL 10.0									Weight: 35 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-6-14

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) 8=Mechanical, 2=0-4-9
Max Horz 2=85(LC 9)
Max Uplift 8=-21(LC 9), 2=-120(LC 12)
Max Grav 8=367(LC 36), 2=568(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-262/122, 5-8=-257/42

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 8 and 120 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-51, 5-6=-51, 10-11=-20, 7-9=-20
Concentrated Loads (lb)
Vert: 10=5(F=2, B=2) 4=87(F=44, B=44) 16=-55(F=-27, B=-27) 17=-33(F=-17, B=-17)



November 11, 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 2525051	Truss CJ12	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Roeser/1464 Winterset 143577272 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:25 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-Zp36osxPPNvVbjLSghfAF8H5DICpEIrdNGRjqGyKUT0
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			-2-8-8 2-8-8 12/21/2020		

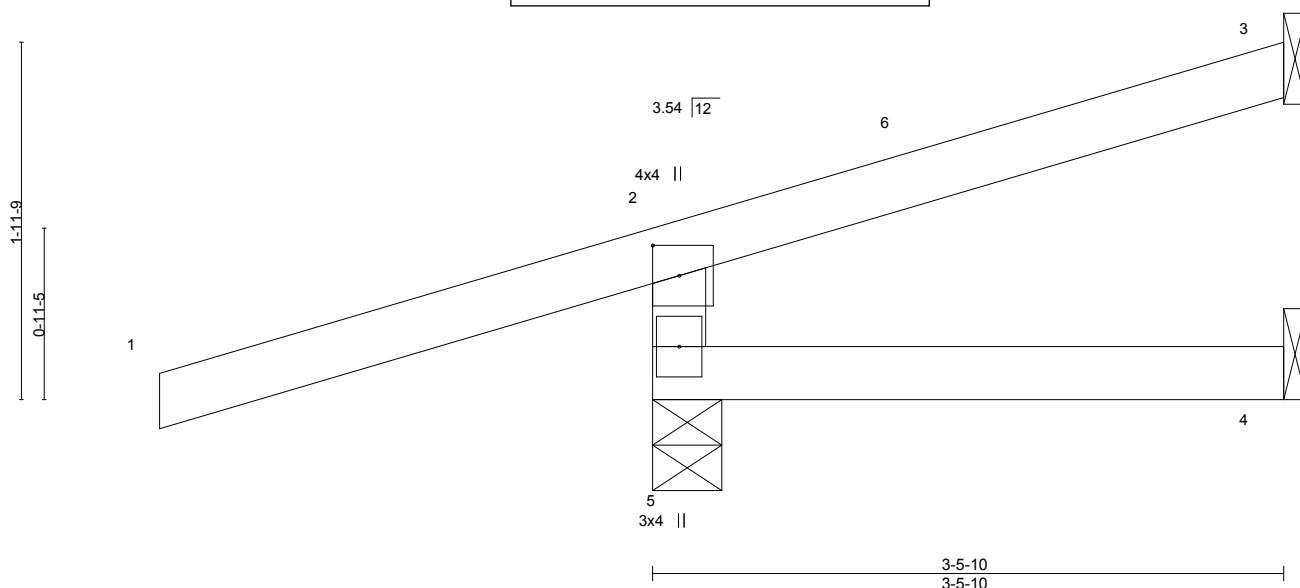


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	0.01	4-5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	0.01	4-5	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 12 lb	FT = 20%
BCDL 10.0										

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 3-5-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=78(LC 16)
Max Uplift 5=123(LC 16), 3=13(LC 13)
Max Grav 5=451(LC 21), 3=55(LC 21), 4=53(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-392/342

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) -2-8-8 to 1-6-6, Exterior(2R) 1-6-6 to 3-4-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 5 and 13 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job		Truss	Truss Type	Ply		Roeser/1464 Winterset
2525051		CJ13	Diagonal Hip	Girder	1	I43577273
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						Job Reference (optional)
-2-8-8						6-2-14
2-8-8						3-0-12

Scale = 1:19.6

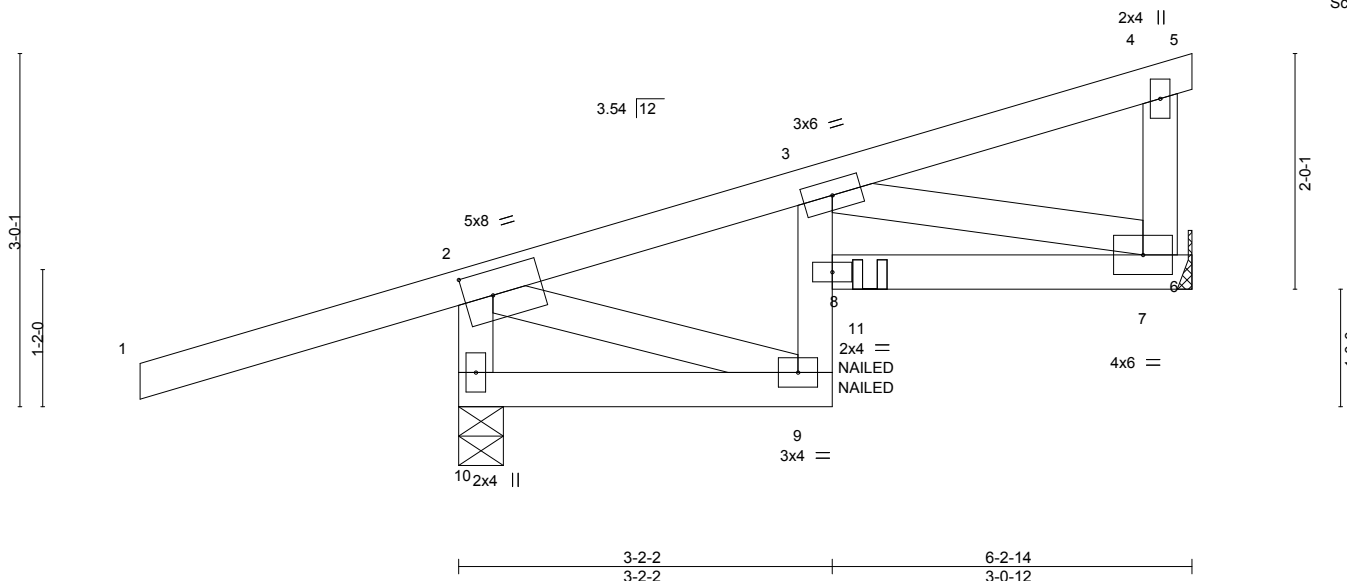


Plate Offsets (X,Y)-- [2:0-2-15,0-2-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.01 8	>999	240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.02 8	>999	180
TCDL	10.0	Rep Stress Incr	NO	WB	0.07	Horz(CT)	0.01 7	n/a	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS					
BCDL	10.0								
								PLATES	GRIP
								MT20	197/144
								Weight: 28 lb	FT = 20%

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

REACTIONS. (size) 10=0-4-9, 7=Mechanical
Max Horz 10=85(LC 40)
Max Uplift 10=-140(LC 12), 7=-39(LC 9)
Max Grav 10=511(LC 2), 7=261(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-490/155
BOT CHORD 7-8=-119/390
WEBS 2-9=-48/279, 3-7=-364/105

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 10 and 39 lb uplift at joint 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.
 - "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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-51, 2-4=-51, 4-5=-51, 9-10=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 11=0(F=0, B=0)



November 11, 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

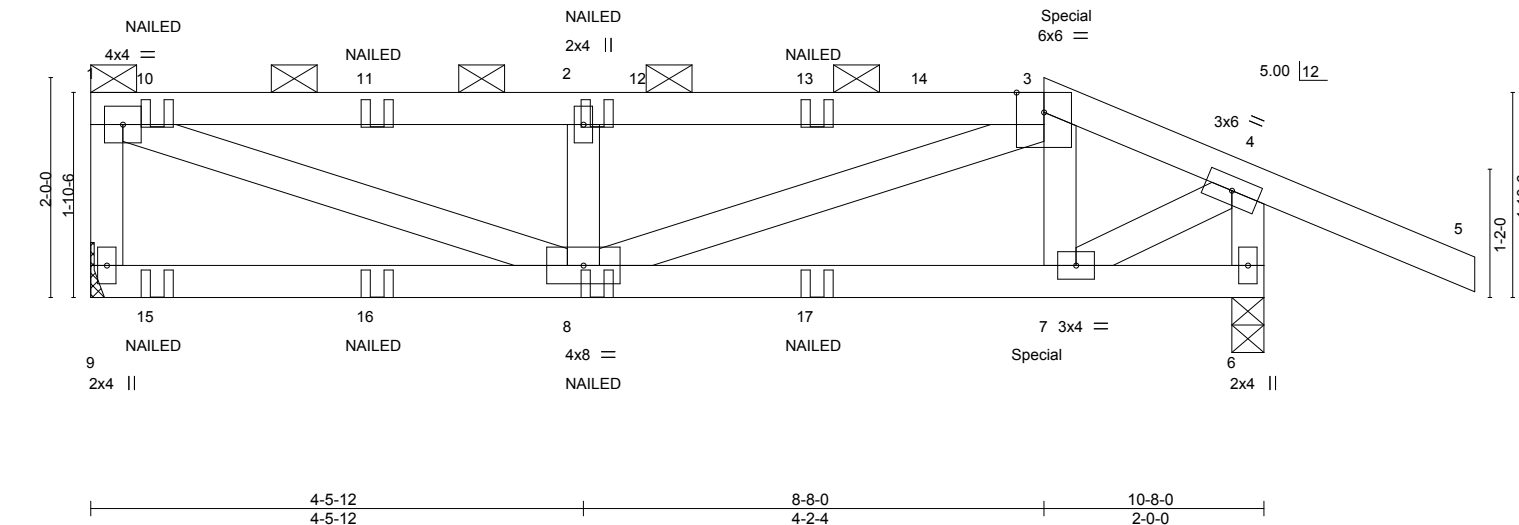


16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/21/2020

Job 2525051	Truss D1	Truss Type Roof Special	Girder	Ply 1	Roeser/1464 Winterset 143577274
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:34 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu xyyPFt9-oY5Whx22H82DA5YAh4KH629h3NGcqKaxRA7idEyKUST 10-8-0 12-7-0 2-0-0 1-11-0		

Scale = 1:20.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.03	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.04				
TCDL	10.0	Rep Stress Incr	NO	WB	0.22	Horz(CT)	0.00				
BCLL	0.0	Code IRC2018/TP12014		Matrix-MS							
BCDL	10.0										
								Weight: 44 lb		FT = 20%	

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

REACTIONS. (size) 9=Mechanical, 6=0-3-8
 Max Horz 9=-66(LC 10)
 Max Uplift 9=-72(LC 8), 6=-119(LC 12)
 Max Grav 9=520(LC 31), 6=603(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-9=-474/80, 1-2=-912/113, 2-3=-914/114, 3-4=-488/62, 4-6=-600/124
 BOT CHORD 7-8=-22/485
 WEBS 1-8=-124/910, 2-8=-414/93, 3-8=-63/487, 4-7=-45/543

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 9 and 119 lb uplift at joint 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - "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) 110 lb down and 37 lb up at 8-8-0 on top chord, and 29 lb down and 39 lb up at 8-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Continued on page 2



November 11, 2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-oY5Whx22H82DA5YAh4KH629h3NGcqKaxRA7idEyKUS 12/21/2020			Ply	1	Roeser/1464 Winterset	I43577274
2525051	D1	Roof Special	Girder					Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:34 2020 Page 2						

LOAD CASE(S) Standard

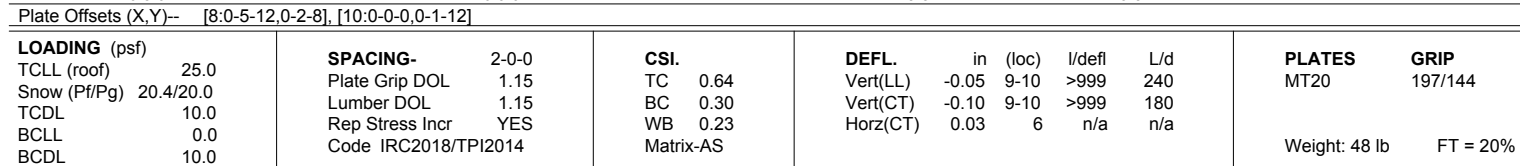
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-61, 3-4=-51, 4-5=-51, 6-9=-20

Concentrated Loads (lb)

Vert: 8=2(B) 7=5(B) 15=2(B) 16=2(B) 17=2(B)



REACTIONS. (size) 12=Mechanical, 6=0-3-8
 Max Horz 12=-95(LC 14)
 Max Uplift 12=-53(LC 12), 6=-104(LC 16)
 Max Grav 12=495(LC 35), 6=626(LC 2)

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

TOP CHORD	12-13=-435/108, 1-13=-416/183, 2-3=-880/224, 3-4=-783/194, 4-6=-550/248, 1-2=-865/279
BOT CHORD	10-13=-23/282, 9-10=-23/282, 8-9=-95/715
WEBS	1-9=-298/656, 4-8=-138/706

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-8-0, Exterior(2R) 6-8-0 to 9-8-0, Interior(1) 9-8-0 to 12-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 12 and 104 lb uplift at joint 6.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

Job

2525051

Truss

D3

Truss Type

Roof Special

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/21/2020

1

8.240 s Mar

Roeser/1464 Winterset

143577276

Job Reference (optional)

9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:36 2020 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

0-8-0

4-8-0

8-4-8

10-8-0

12-7-0

0-8-0

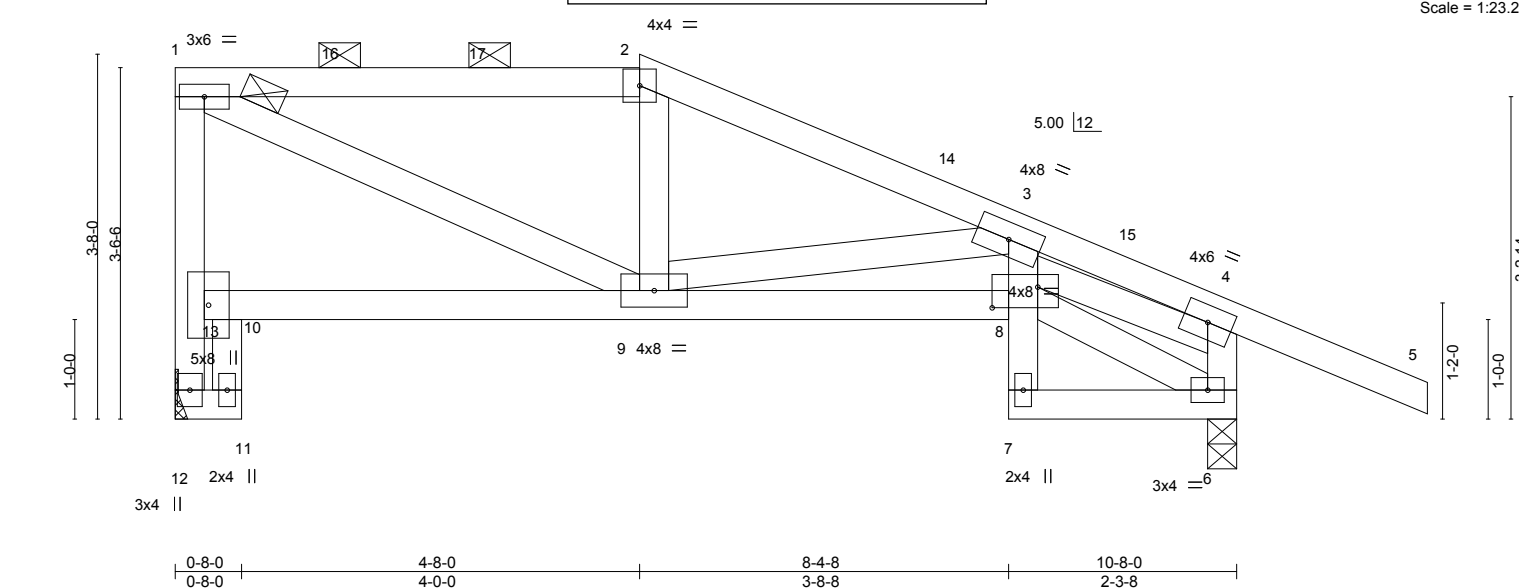
4-0-0

3-8-8

2-3-8

1-11-0

Scale = 1:23.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.34	in (loc)	l/def	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.25	Vert(LL)	>999				
TCDL	10.0	Rep Stress Incr	YES	WB	0.19	Vert(CT)	>999				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS		Horz(CT)	n/a				
BCDL	10.0										
								Weight: 51 lb		FT = 20%	

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

REACTIONS.	
(size)	12=Mechanical, 6=0-3-8
Max Horz	12=-124(LC 14)
Max Uplift	12=-52(LC 12), 6=-103(LC 16)
Max Grav	12=453(LC 2), 6=678(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	12-13=-429/105, 1-13=-405/180, 2-3=-627/179, 3-4=-807/148, 4-6=-582/228, 1-2=-542/192
BOT CHORD	10-13=-122/267, 9-10=-122/267, 8-9=-118/888
WEBS	1-9=-228/544, 3-9=-428/182, 10-11=-177/262, 4-8=-130/755

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-8-0, Exterior(2R) 4-8-0 to 7-8-0, Interior(1) 7-8-0 to 12-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 52 lb uplift at joint 12 and 103 lb uplift at joint 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Roeser/1464 Winterset
2525051	D4	Roof Special	ID:WV5xOZ45cNK4PQ2HmSu		1	143577277
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)			
0-8-0 3-2-12 8-4-8 10-8-0 12-7-0			9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:38 2020 Page 1			
0-8-0 2-6-12 5-1-12 2-3-8 1-11-0			xyyPft9-gJL1WJ5ZLMYfeirxwwODGuKO2_b8m5iXmN5vm0yKUSp			

Scale = 1:25.9

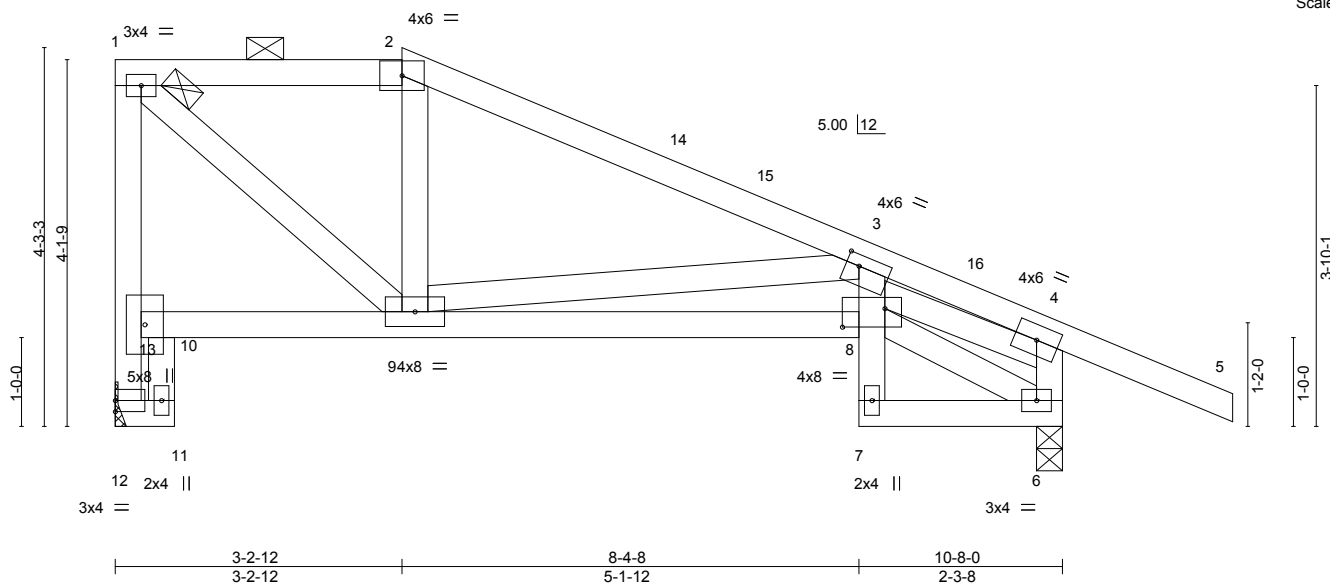


Plate Offsets (X,Y)-- [3:0-1-12,0-1-8], [8:0-5-12,0-2-8], [10:0-0-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.34	Vert(LL) -0.03	8-9	>999	240		MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.33	Vert(CT) -0.07	8-9	>999	180			
TCDL 10.0	Lumber DOL 1.15	WB 0.34	Horz(CT) 0.04	6	n/a	n/a			
BCLL 0.0	Rep Stress Incr YES	Matrix-AS							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 53 lb	FT = 20%

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

REACTIONS. (size) 12=Mechanical, 6=0-3-8
Max Horz 12=-145(LC 14)
Max Uplift 12=-50(LC 12), 6=-102(LC 16)
Max Grav 12=453(LC 2), 6=707(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 12-13=-449/109, 1-13=-433/162, 2-3=-496/127, 3-4=-892/123, 4-6=-599/211,
1-2=-391/152
BOT CHORD 10-13=-158/295, 9-10=-158/295, 8-9=-150/1096
WEBS 1-9=-196/514, 3-9=-724/280, 10-11=-204/318, 4-8=-127/850

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-2-12, Exterior(2R) 3-2-12 to 6-2-12, Interior(1) 6-2-12 to 12-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 50 lb uplift at joint 12 and 102 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job		Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply	Roeser/1464 Winterset	I43577278	
2525051		E4	Half Hip Girder	1		1	Job Reference (optional)		
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-w2OQPOCCD7hND51gyJ3K8nCtsczN8bsRhmuay_KUSg					
-1-11-0		2-3-8		6-0-0		8-9-4		11-6-8	
1-11-0		2-3-8		3-8-8		2-9-4		2-9-4	
								14-0-0	
								2-5-8	

Scale = 1:27.3

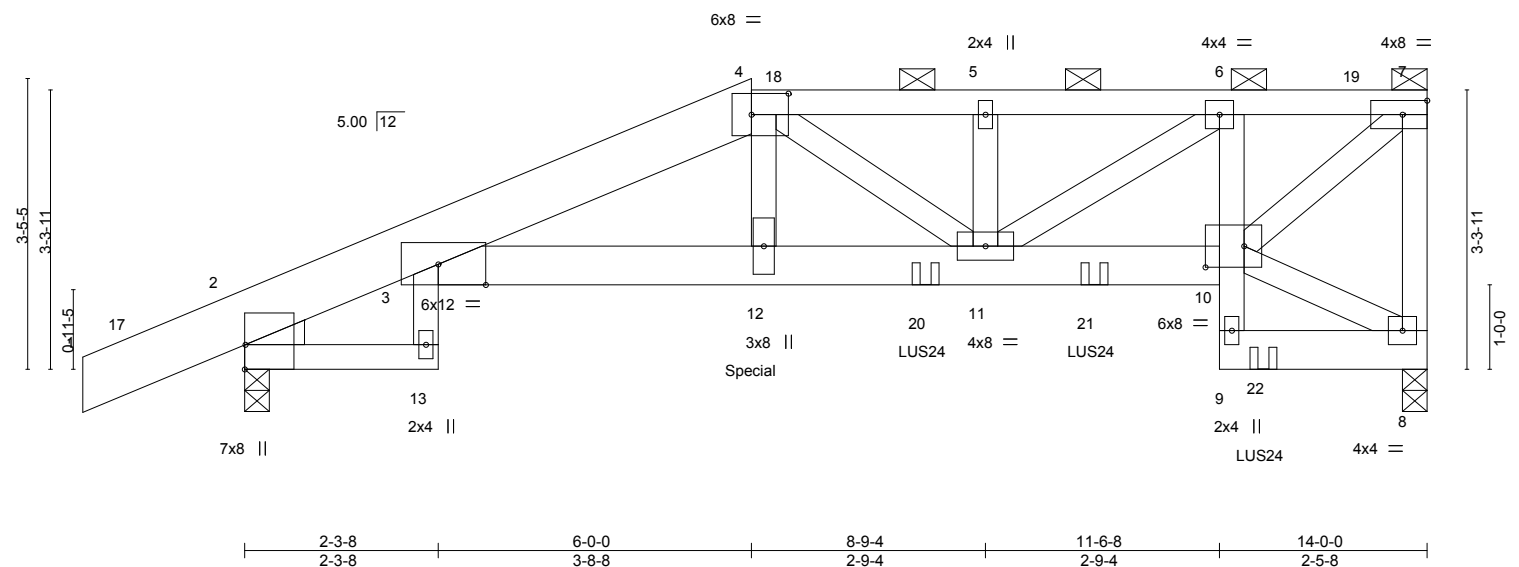


Plate Offsets (X,Y)-- [2:0-0-0,0-0-1], [2:0-0-1,0-5-11], [2:Edge,0-0-2], [3:0-6-12,Edge], [4:0-5-4,0-3-0], [10:0-5-8,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.10 3-12 >999 240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.18 3-12 >905 180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.15 8 n/a n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS				Weight: 83 lb	FT = 20%
BCDL	10.0								

LUMBER-	BRACING-
TOP CHORD 2x8 SP 2400F 2.0E *Except* 4-7: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-6-14 max.): 4-7.
BOT CHORD 2x4 SPF No.2 *Except* 3-10: 2x6 SPF 2100F 1.8E, 8-9: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS WEDGE Left: 2x4 SPF No.2	

REACTIONS.	(size) 8=0-3-8, 2=0-3-8
	Max Horz 2=110(LC 52)
	Max Uplift 8=170(LC 9), 2=176(LC 12)
	Max Grav 8=1472(LC 31), 2=1315(LC 32)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	3-15=-483/62, 3-4=-2854/309, 4-5=-2546/287, 5-6=-2546/287, 6-7=-1560/179, 7-8=-1378/177
BOT CHORD	3-12=-355/2737, 11-12=-359/2800, 10-11=-229/1647, 6-10=-826/119
WEBS	4-12=-59/809, 4-11=-509/36, 6-11=-122/1090, 7-10=-253/2009

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 170 lb uplift at joint 8 and 176 lb uplift at joint 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 12-0-12 to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.

Continued on page 2



November 11, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply	Roeser/1464 Winterset	
2525051	E4	Half Hip Girder	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:47 2020 Page 2		1	I43577278	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		Job Reference (optional)			
NOTES-		ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-w2OQPOCCD7hND51gyJ3K8nCtscczN8bsRhmua_yKUSg					
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 596 lb down and 95 lb up at 6-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.							
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).							
LOAD CASE(S) Standard							
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15							
Uniform Loads (plf)							
Vert: 1-3=-51, 3-4=-51, 4-7=-61, 13-14=-20, 3-10=-20, 8-9=-20							
Concentrated Loads (lb)							
Vert: 12=-596(F) 20=-258(F) 21=-258(F) 22=-258(F)							

Job

2525051

Truss

E5

Truss Type

Half Hip

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/21/2020

8.240 s Mar

9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:48 2020 Page 1

ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-OFypdJq_RpErFcsW0aZg?k_w0y?6f8?lLWR7RyKUSf

143577279

Job Reference (optional)

-1-11-0

2-3-8

4-10-15

8-0-0

11-6-8

14-0-0

1-11-0

2-3-8

2-7-7

3-1-1

3-6-8

2-5-8

6x6 =

3x8 =

4-3-5

4-1-11

0-4-1-5

5.00 12

2x4 =

18

4

5

9

20

6

11

4x8 =

2x4 ||

8

2x4 ||

7

2x4 ||

1-0-0

2-3-8

2-3-8

8-0-0

5-8-8

11-6-8

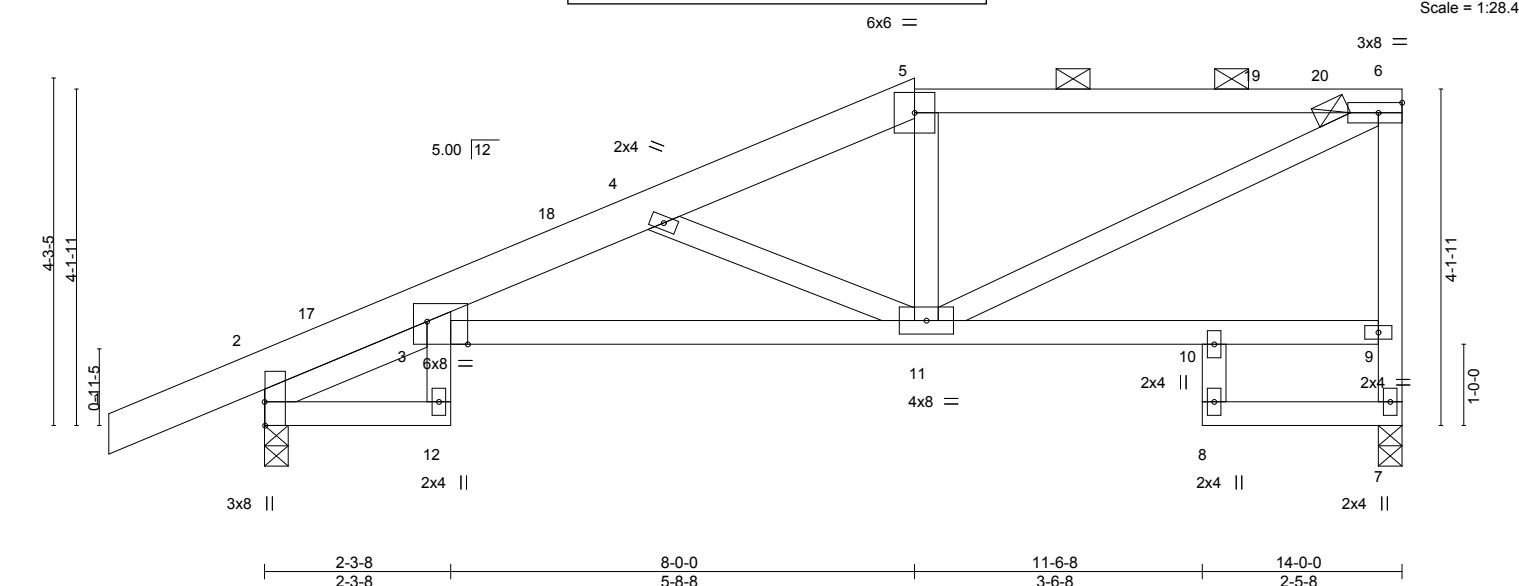
3-6-8

14-0-0

2-5-8

Plate Offsets (X,Y)--

[2:0-3-8,Edge], [3:0-6-0,Edge]



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.83	in	(loc)	I/defl	L/d	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.56	Vert(LL)	-0.13	3-11	>999		
TCDL	10.0	Lumber DOL	1.15	WB	0.22	Vert(CT)	-0.25	3-11	>663		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.18	7	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 67 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2 *Except* 5-6: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-9-0 max.): 5-6.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 2-2-11		

REACTIONS. (size) 7=0-3-8, 2=0-3-8
Max Horz 2=141(LC 15)
Max Uplift 7=63(LC 13), 2=110(LC 16)
Max Grav 7=614(LC 2), 2=827(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-14=-765/259, 3-4=-1493/400, 4-5=-887/178, 5-6=-787/187, 7-9=-584/147, 6-9=-560/156
BOT CHORD 3-11=-579/1498
WEBS 6-11=-226/807, 4-11=-882/337

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 13-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 7 and 110 lb uplift at joint 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

Job 2525051	Truss E6	Truss Type Half Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Roeser/1464 Winterset Job Reference (optional) ID:WV5xOZ45cNK4PQ2HmS_u_xyyPFt9-sRVBq3ESllx5TPB34k5oDCHHvQHbr6C9u?F_flyKUSE
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc.	Page 1	
-1-11-0 1-11-0			5-1-12 5-1-12	10-0-0 4-10-4	13-8-8 3-8-8

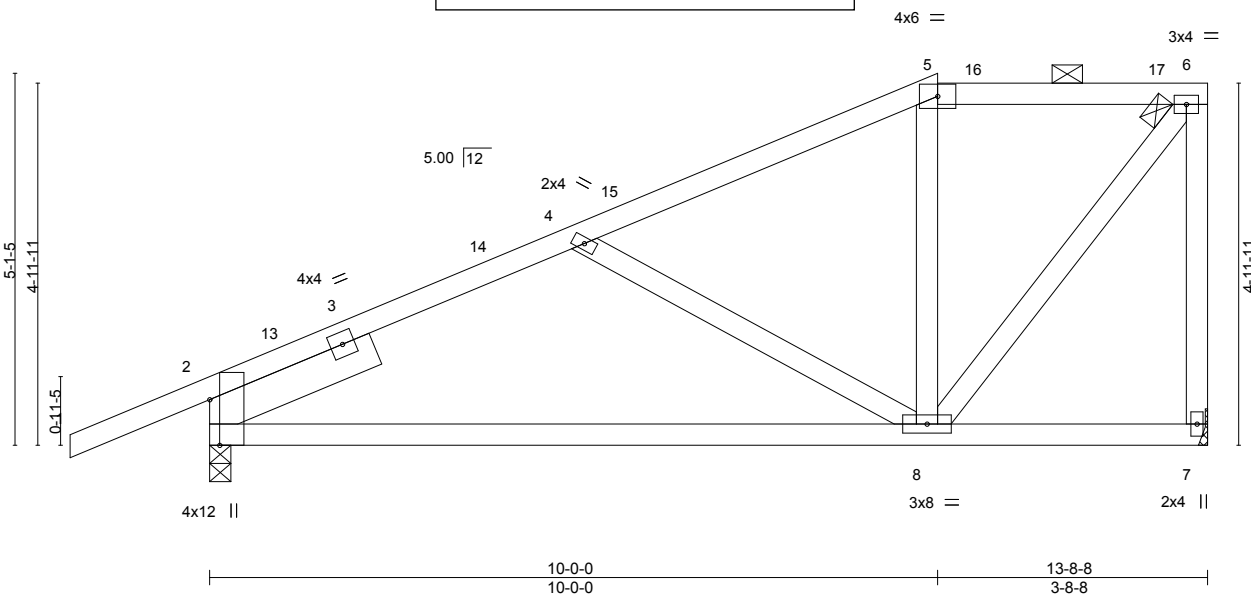


Plate Offsets (X,Y)-- [2:0-7-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	-0.15	8-11	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.29	8-11	>559	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.01	2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 62 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 2-6-0

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

REACTIONS. (size) 7=Mechanical, 2=0-3-8
Max Horz 2=170(LC 15)
Max Uplift 7=-57(LC 13), 2=-108(LC 16)
Max Grav 7=601(LC 2), 2=854(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-857/159, 4-5=-491/115, 5-6=-388/131, 6-7=-589/190
BOT CHORD 2-8=-307/756
WEBS 4-8=-432/165, 6-8=-189/616

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 10-0-0, Exterior(2E) 10-0-0 to 13-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 7 and 108 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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 2525051	Truss E7	Truss Type Half Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	Roeser/1464 Winterset	I43577281
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID:WV5xOZ45cNK4PQ2HmSu_kyyPFt9-Kd3Z2PE4W23y4YmFdRc1mQqRkqiLaVGi7f?YBjyKUSd 12/21/2020				9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:50 2020 Page 1 Job Reference (optional)

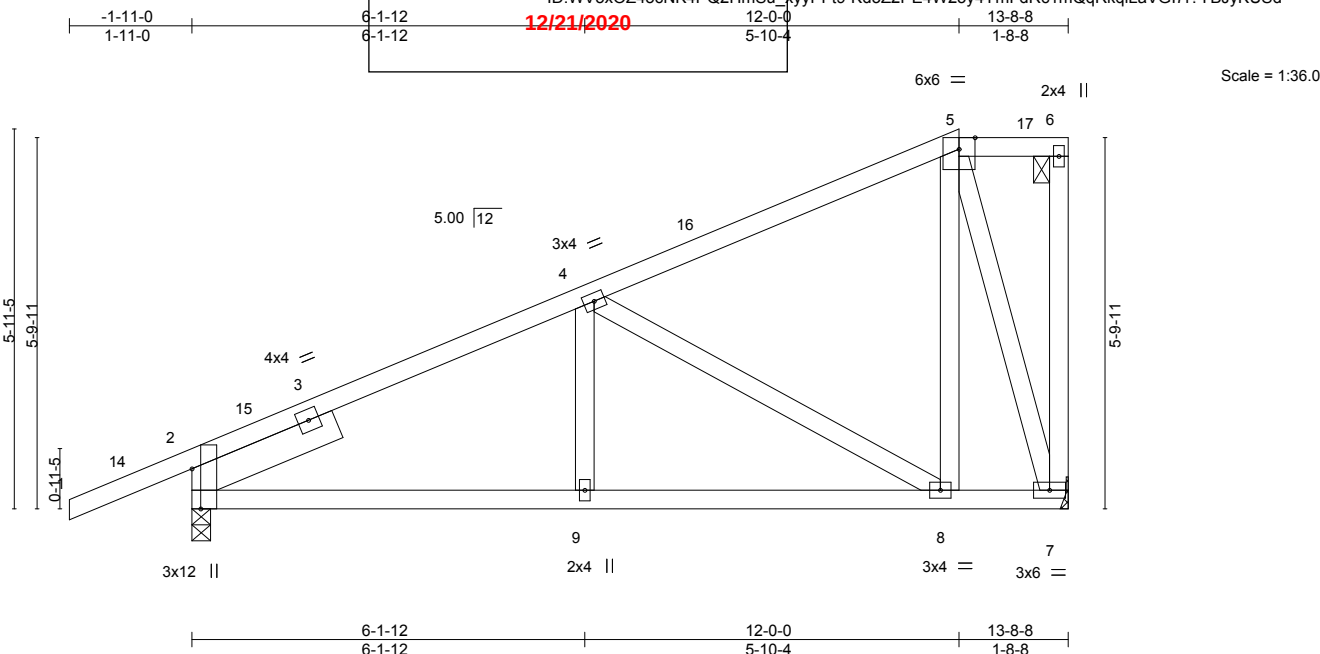


Plate Offsets (X,Y)-- [2:0-7-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.36	Vert(LL)	-0.03	8-9	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.06	8-9	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.02	7	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 68 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x6 SPF No.2 2-6-0

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

REACTIONS. (size) 2=0-3-8, 7=Mechanical
 Max Horz 2=199(LC 15)
 Max Uplift 2=-106(LC 16), 7=-52(LC 13)
 Max Grav 2=837(LC 36), 7=618(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-797/140, 4-5=-318/104
 BOT CHORD 2-9=-269/794, 8-9=-269/794
 WEBS 4-8=-675/175, 5-8=-53/424, 5-7=-715/223

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 12-0-0, Exterior(2E) 12-0-0 to 13-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 2 and 52 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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 2525051	Truss E8	Truss Type Jack-Closed	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2Hm\$u_xyyPFT9-opdxFiFiHMBpiilRB87GldMWUD_yJyQSLJk5klyKUSc 12/21/2020			Roeser/1464 Winterset 143577282 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:51 2020 Page 1 \$u_xyyPFT9-opdxFiFiHMBpiilRB87GldMWUD_yJyQSLJk5klyKUSc			

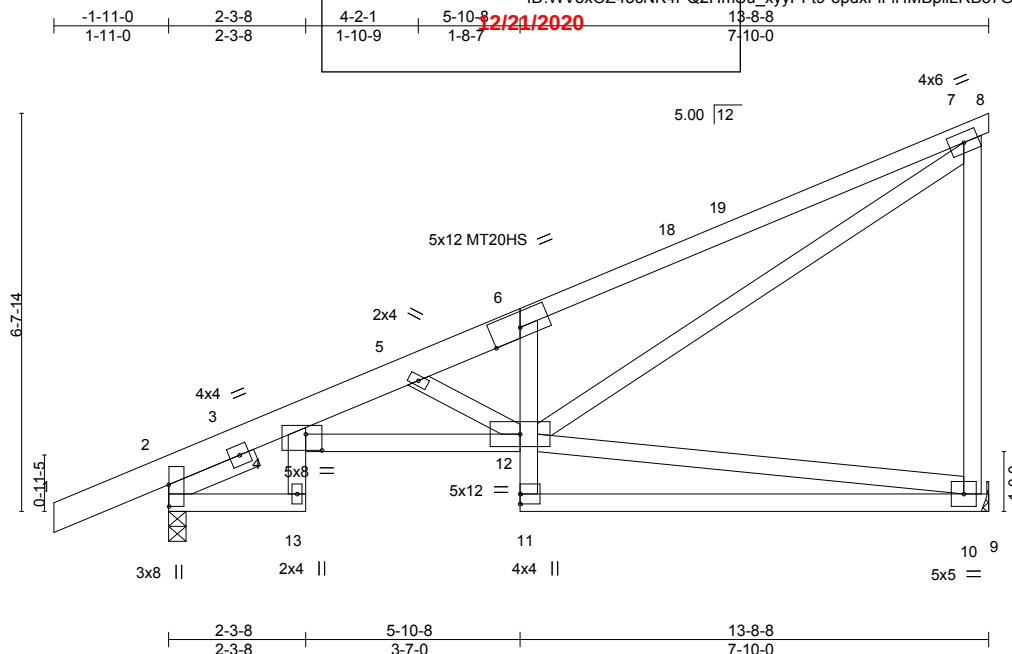


Plate Offsets (X,Y)-- [2:0-4-6,0-0-1], [4:0-3-4,0-3-4]

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.75	in (loc)	l/defl	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.54	Vert(LL)	-0.11 4-12 >999	MT20HS		148/108	
TCDL	10.0	Lumber DOL	1.15	WB	0.50	Vert(CT)	-0.22 10-11 >723				
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.15 10 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 75 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
 1-6: 2x6 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 1-7-3

BRACING-

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

REACTIONS.

(size) 10=Mechanical, 2=0-3-8
 Max Horz 2=194(LC 16)
 Max Uplift 10=-87(LC 16), 2=-69(LC 16)
 Max Grav 10=606(LC 2), 2=751(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 4-15=-297/54, 4-5=-1498/217, 5-6=-1159/160, 6-7=-1244/279, 7-10=-512/221
 BOT CHORD 4-12=-414/1513, 6-12=-499/234
 WEBS 7-12=-365/1227, 5-12=-463/106

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 13-8-8 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 10 and 69 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 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 2525051	Truss E9	Truss Type Jack-Closed	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:VV5xOZ45cNK4PQ2HmSu 12/21/2020		Roeser/1464 Winterset I43577283 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:52 2020 Page 1 ID:VV5xOZ45cNK4PQ2HmSu xyyPFt9-G0BJS5GL2gJgKswelseVrrvmHdM92MqbazUfGCyKUSb
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,			
-1-11-0 1-11-0		6-10-4 6-10-4	13-8-8 6-10-4		

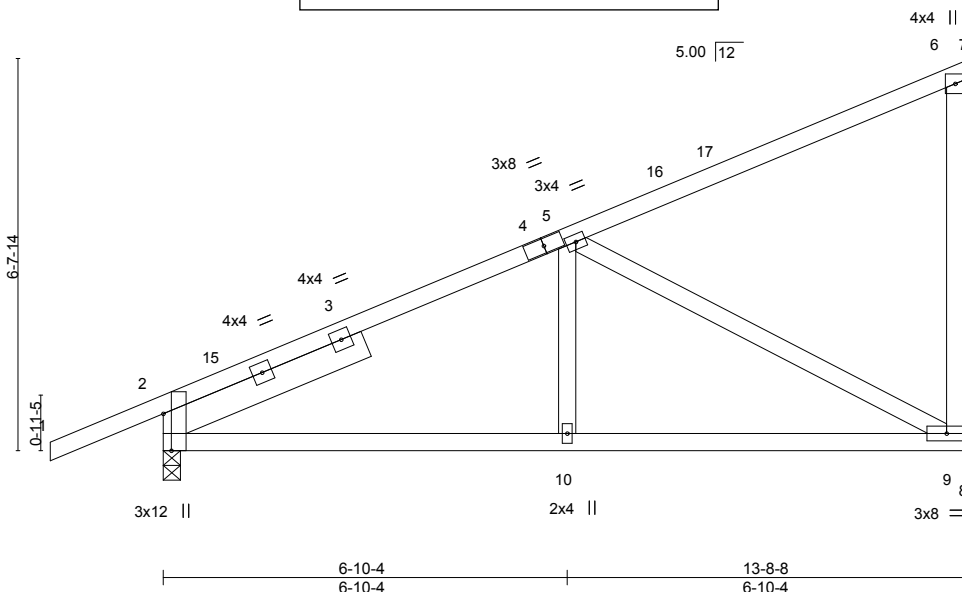


Plate Offsets (X,Y)-- [2:0-7-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.05	9-10	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.09	9-10	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.68	Horz(CT)	0.01	9	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 60 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 3-9-2

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

REACTIONS. (size) 2=0-3-8, 9=Mechanical
Max Horz 2=225(LC 15)
Max Uplift 2=-103(LC 16), 9=-54(LC 16)
Max Grav 2=748(LC 2), 9=606(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-647/127
BOT CHORD 2-10=-248/656, 9-10=-248/656
WEBS 5-10=0/280, 5-9=-712/203

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 13-8-8 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) TCDL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 103 lb uplift at joint 2 and 54 lb uplift at joint 9.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 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: 2525051

Truss: E10

Truss Type: Jack-Closed Girder

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/21/2020

Ply: 2

Job Reference (optional): Roeser/1464 Winterset

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:39 2020 Page 1

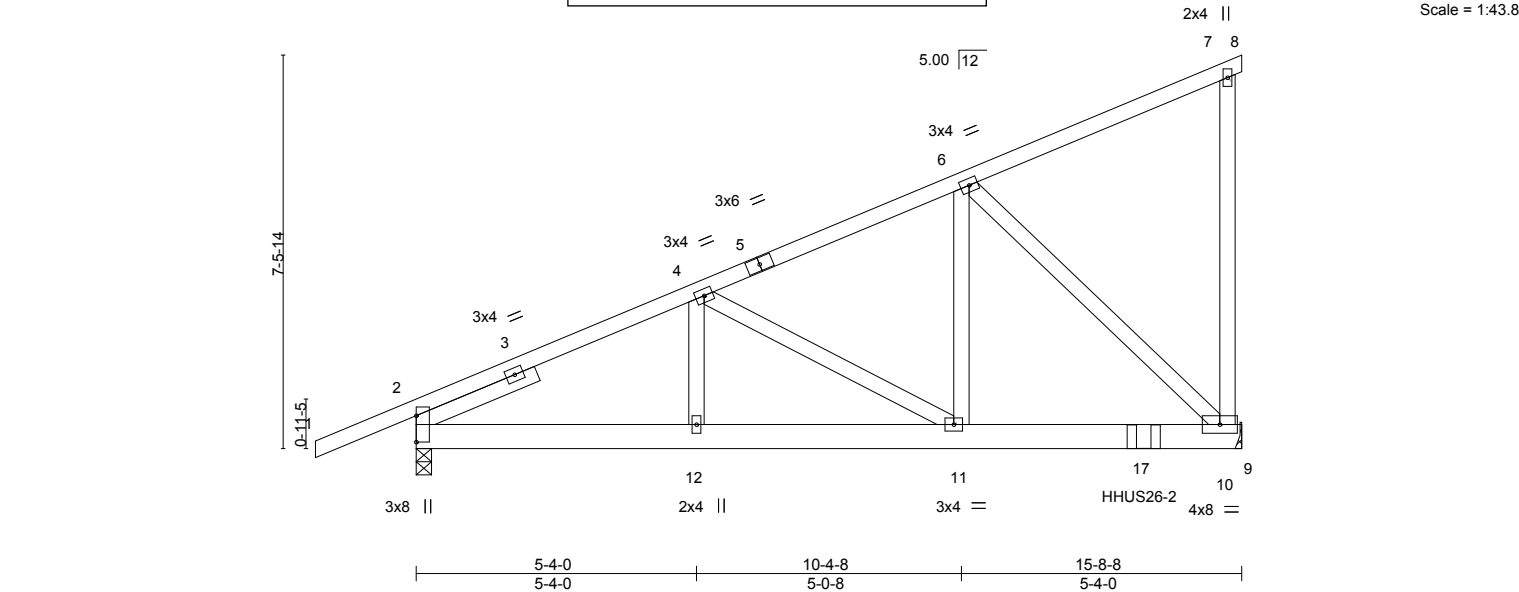
ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-9WvPkeB6ggWGsQ8UdvSp5scKOrlVamgbRqTlSyKUSo

-1-11-0
1-11-0

5-4-0
5-4-0

10-4-8
5-0-8

15-8-8
5-4-0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.18	in (loc)	I/defl	L/d			
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.76	Vert(LL)	-0.02 10-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.23	Vert(CT)	-0.07 10-11	>999	180		
BCLL	0.0	Rep Stress Incr	NO	Matrix-MS		Horz(CT)	0.01 10	n/a	n/a		
BCDL	10.0	Code IRC2018/TP12014								Weight: 164 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x6 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 2-6-0		

REACTIONS.	
(size)	10=Mechanical, 2=0-3-8
Max Horz	2=252(LC 11)
Max Uplift	2=-25(LC 12)
Max Grav	10=1878(LC 2), 2=973(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-4=-1191/0, 4-6=-1043/0
BOT CHORD	2-12=0/1064, 11-12=0/1064, 10-11=0/907
WEBS	6-11=0/821, 6-10=-1222/0

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 13-10-2 from the left end to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard	
November 11,2020	

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply	2	Roeser/1464 Winterset	I43577284
2525051	E10	Jack-Closed Girder	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:39 2020 Page 2		Job Reference (optional)			
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-9WvPke6B6ggWGsQ8UdvSp5scKOrlVamgbRqTlSyKUSo				
LOAD CASE(S) Standard								
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15								
Uniform Loads (plf)								
Vert: 1-7=-51, 7-8=-51, 9-13=-20								
Concentrated Loads (lb)								
Vert: 17=-1297(F)								

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2525051	Truss E11	Truss Type Jack-Closed	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-9WvPke6B6ggWG8Q8UdvSp5sWoOvLVZlgbRqTISyKUSo 12/21/2020		Roeser/1464 Winterset 143577285 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:39 2020 Page 1 PFt9-9WvPke6B6ggWG8Q8UdvSp5sWoOvLVZlgbRqTISyKUSo
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	7-10-4 7-10-4	15-8-8 7-10-4	

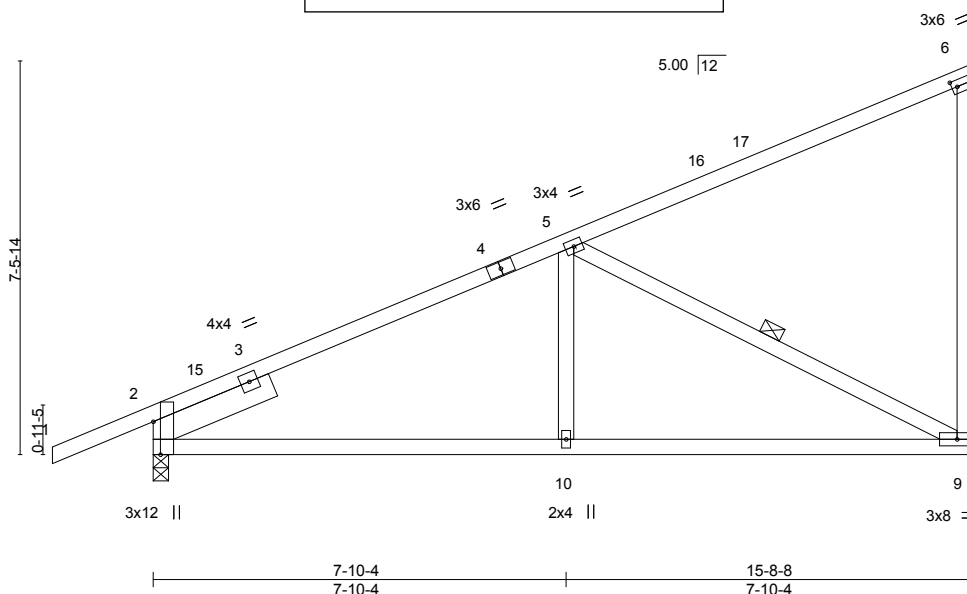


Plate Offsets (X,Y)-- [2:0-7-8,Edge], [6:0-1-3,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	-0.08	9-10	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.16	9-10	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.29	Horz(CT)	0.02	9	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 66 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-9

REACTIONS. (size) 2=0-3-8, 9=Mechanical
Max Horz 2=254(LC 15)
Max Uplift 2=-109(LC 16), 9=-63(LC 16)
Max Grav 2=837(LC 2), 9=697(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-848/140, 6-9=-268/145
BOT CHORD 2-10=-255/783, 9-10=-255/783
WEBS 5-10=0/324, 5-9=-845/203

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 15-8-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 2 and 63 lb uplift at joint 9.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 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 2525051	Truss E12	Truss Type Jack-Closed	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1	Roeser/1464 Winterset	I43577286
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-diTx_7pt_oNu07K2LRhMJPafoCGE?3qq5a0ruiKUSn				Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:40 2020 Page 1

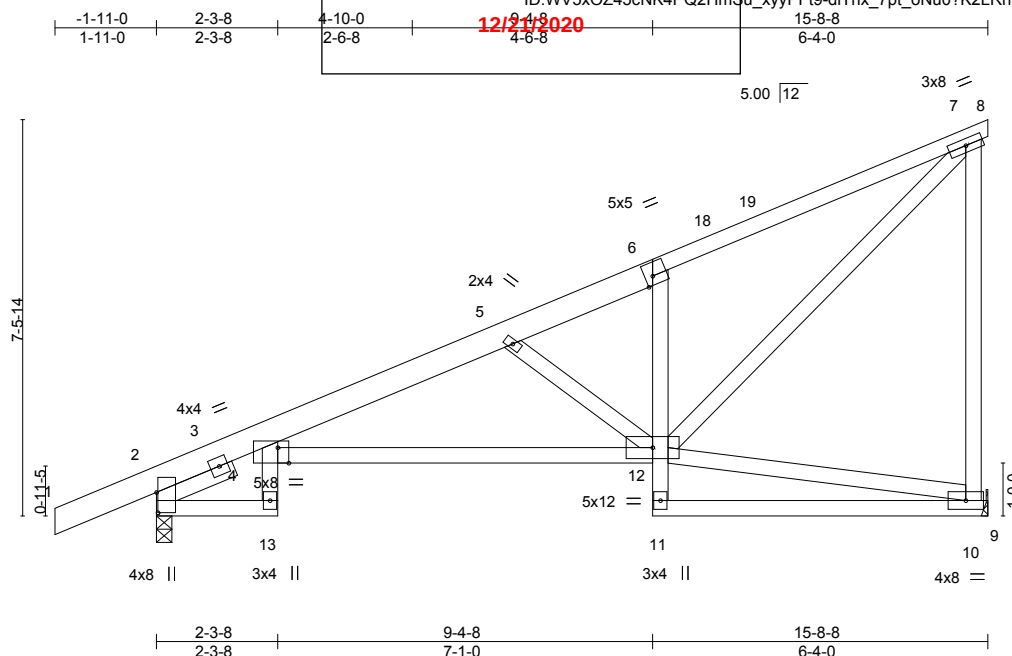


Plate Offsets (X,Y)-- [2:0-4-10,0-0-5], [4:0-2-8,Edge], [6:0-1-12,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.19 4-12 >999 240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.40 4-12 >469 180
TCDL	10.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.23 10 n/a n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS			
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						Weight: 83 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-7-3

BRACING-

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

REACTIONS.

(size) 10=Mechanical, 2=0-3-8
Max Horz 2=255(LC 15)
Max Uplift 10=-62(LC 16), 2=-108(LC 16)
Max Grav 10=698(LC 2), 2=839(LC 2)

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

TOP CHORD 4-15=-380/75, 4-5=-1363/154, 5-6=-911/124, 6-7=-921/192, 7-10=-637/246
BOT CHORD 4-12=-425/1312, 6-12=-272/155
WEBS 7-12=-290/1067, 5-12=-658/188

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 15-8-8 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
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 10 and 108 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (10-0-0 max.): 6-7.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x6 SPF No.2 2-6-0		

REACTIONS. (size) 8=Mechanical, 2=0-3-8
 Max Horz 2=230(LC 15)
 Max Uplift 8=-60(LC 16), 2=-112(LC 16)
 Max Grav 8=731(LC 36), 2=876(LC 36)

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

TOP CHORD	2-4=-942/153, 4-6=-334/109
BOT CHORD	2-10=-274/944, 9-10=-274/944
WEBS	4-10=0/278 4-9=-847/184 6-9=-64/510 6-8=-881/237

NOTES-

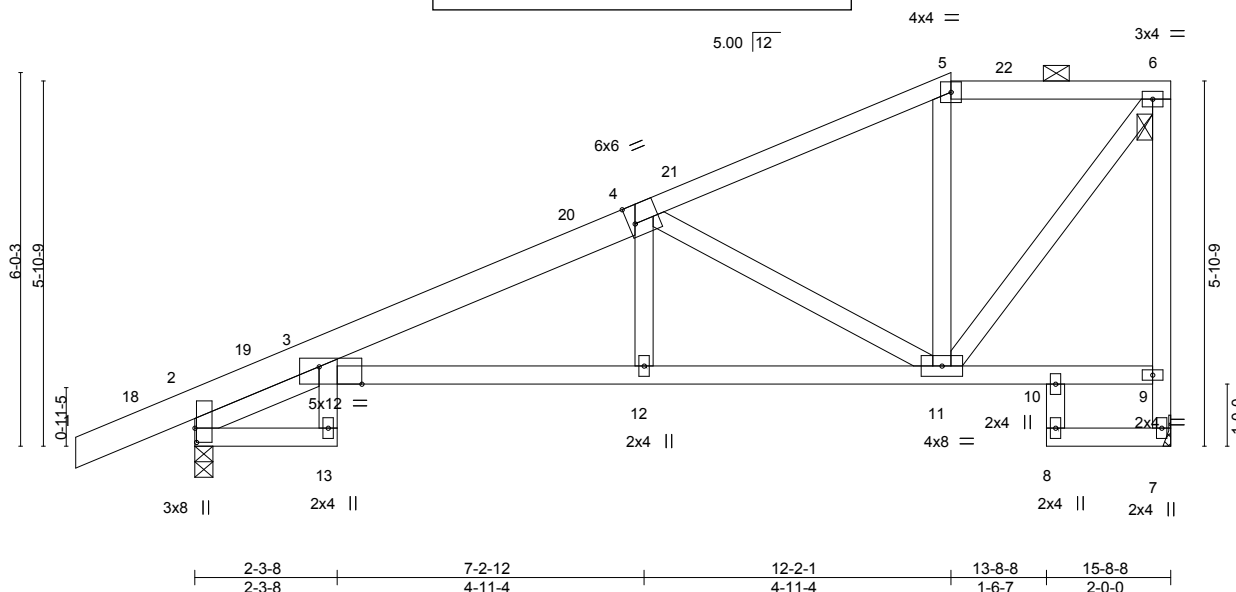
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 14-2-1, Exterior(2E) 14-2-1 to 15-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 8 and 112 lb uplift at joint 2.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





November 11, 2020

			RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI					
Job	Truss	Truss Type	Qty	Ply	Roeser/1464 Winterset			
2525051	E14	Half Hip	1	1	I43577288			
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)					
			ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-Z5aYMG83Pb257K9j9IT9RkU?4brBtE7HP37vnyKUSI			9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:42 2020 Page 1		
-1-11-0 1-11-0			2-3-8 2-3-8			3-11-11 1-8-3		
			7-2-12 3-3-1			12-2-1 4-11-4		
			13-8-8 1-6-7			15-8-8 2-0-0		



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP
TCLL (roof)	25.0	Plate Grip DOL	2-0-0	TC	0.60	Vert(LL)	-0.20 3-12 >927	MT20	197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.34 3-12 >546			
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.24 7 n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL	10.0									

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-4: 2x6 SPF 2100F 1.8E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 2-2-11		

REACTIONS. (size) 7=Mechanical, 2=0-3-8
 Max Horz 2=202(LC 15)
 Max Uplift 7=63(LC 13), 2=114(LC 16)
 Max Grav 7=692(LC 2), 2=919(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-15=-1019/225, 3-4=-1372/162, 4-5=-568/119, 5-6=-438/129, 7-9=-669/173,
 6-9=-652/167
 BOT CHORD 3-12=-396/1294, 11-12=-392/1294
 WEBS 4-11=-969/238, 6-11=-188/705

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 12-2-1, Exterior(2E) 12-2-1 to 15-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 7 and 114 lb uplift at joint 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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/TPI 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 2525051	Truss E15	Truss Type Half Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2Hm\$u_xyyPFt9-VTilnMAJxCloMdl5HAVdW9aLBPYJar4QkjYD_fyKUSj 12/21/2020		Ply 1 Roeser/1464 Winterset Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:44 2020 Page 1 Su_xyyPFt9-VTilnMAJxCloMdl5HAVdW9aLBPYJar4QkjYD_fyKUSj
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:44 2020 Page 1 ID:WV5xOZ45cNK4PQ2Hm\$u_xyyPFt9-VTilnMAJxCloMdl5HAVdW9aLBPYJar4QkjYD_fyKUSj		

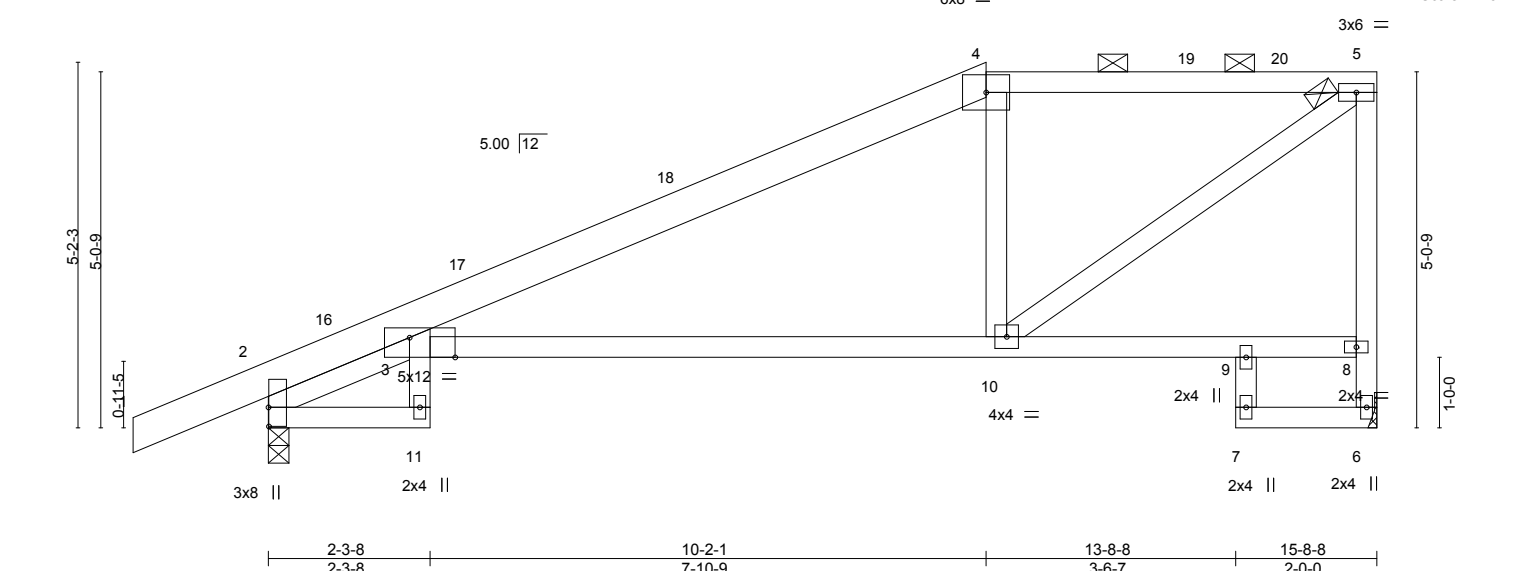


Plate Offsets (X,Y)-- [2:0-3-4,0-0-1], [3:0-7-12,Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.62	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.73	Vert(LL)	-0.34 3-10 >544		197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.22	Vert(CT)	-0.63 3-10 >298		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.33 6 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 71 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF 2100F 1.8E *Except* 4-5: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 2-2-11		

REACTIONS. (size) 6=Mechanical, 2=0-3-8
 Max Horz 2=172(LC 15)
 Max Uplift 6=68(LC 13), 2=115(LC 16)
 Max Grav 6=692(LC 2), 2=931(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-13=-892/233, 3-4=-852/140, 4-5=-752/160, 6-8=-673/155, 5-8=-671/165
 BOT CHORD 3-10=-255/768
 WEBS 4-10=-361/190, 5-10=-231/906

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 10-2-1, Exterior(2R) 10-2-1 to 14-4-15, Interior(1) 14-4-15 to 15-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 68 lb uplift at joint 6 and 115 lb uplift at joint 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

Job

2525051

Truss

E16

Truss Type

Half Hip Girder

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/21/2020

Ply

2

Roeser/1464 Winterset

143577290

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:45 2020 Page 1

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

ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-zgGg_iByhWRf_ntlru0s3M6UgpgwvHiZzNHnW6yKUSi

Scale = 1:30.7

Plate Offsets (X,Y)--		[2:0-0-1,0-0-3], [2:0-0-2,0-5-15], [3:0-6-4,0-4-9]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.77	in (loc)	l/defl	L/d		MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.60	Vert(LL)	-0.12 3-14	>999	240		197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.26	Vert(CT)	-0.20 3-14	>917	180		
BCLL	0.0	Rep Stress Incr	NO	Matrix-MS		Horz(CT)	0.16 9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 192 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x6 SP 2400F 2.0E *Except* 5-8: 2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-8.
BOT CHORD	2x4 SPF No.2 *Except* 2-15,3-15: 2x6 SPF No.2, 3-11: 2x6 SPF 2100F 1.8E	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) 9=Mechanical, 2=0-3-8
 Max Horz 2=143(LC 52)
 Max Uplift 9=222(LC 9), 2=270(LC 12)
 Max Grav 9=1932(LC 31), 2=2022(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-17=-1199/141, 3-4=-4531/515, 4-5=-2994/359, 5-6=-2286/282, 6-7=-2286/282, 7-8=-1154/150, 8-9=-1880/239
 BOT CHORD 3-15=-182/1228, 3-14=-570/4338, 13-14=-575/4364, 12-13=-359/2645, 11-12=-183/1209, 7-11=-1245/176
 WEBS 4-14=-81/768, 4-13=-1981/243, 5-13=-149/1422, 5-12=-603/72, 7-12=-180/1530, 8-11=-274/2132

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

STATE OF MISSOURI

ANDREW THOMAS JOHNSON

NUMBER PE-2017018993

PROFESSIONAL ENGINEER

November 11, 2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020	Ply	Roeser/1464 Winterset 143577290
2525051	E 16	Half Hip Girder	8.240 s Mar 9 2020 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-Rsq2C2BaSqZWcxSUObX5baffQCFvekyiC11K2YyKUSH	2	Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:46 2020 Page 2

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

NOTES-

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 222 lb uplift at joint 9 and 270 lb uplift at joint 2.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 4-0-12 from the left end to 12-0-12 to connect truss(es) to back face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 366 lb down and 64 lb up at 2-0-12, and 363 lb down and 52 lb up at 13-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-51, 3-5=-51, 5-8=-61, 15-16=-20, 3-11=-20, 9-10=-20
 - Concentrated Loads (lb)
 - Vert: 15=-366(B) 13=-336(B) 11=-363(B) 20=-331(B) 21=-271(B) 22=-355(B) 23=-355(B)

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-kCligRHzzpRXy0UqJZAKN2RxG1jinv4kpdDCoeyKUSA
 12/21/2020

Job 2525051	Truss G1	Truss Type Half Hip Girder	Ply 1	Roeser/1464 Winterset 143577291
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)	

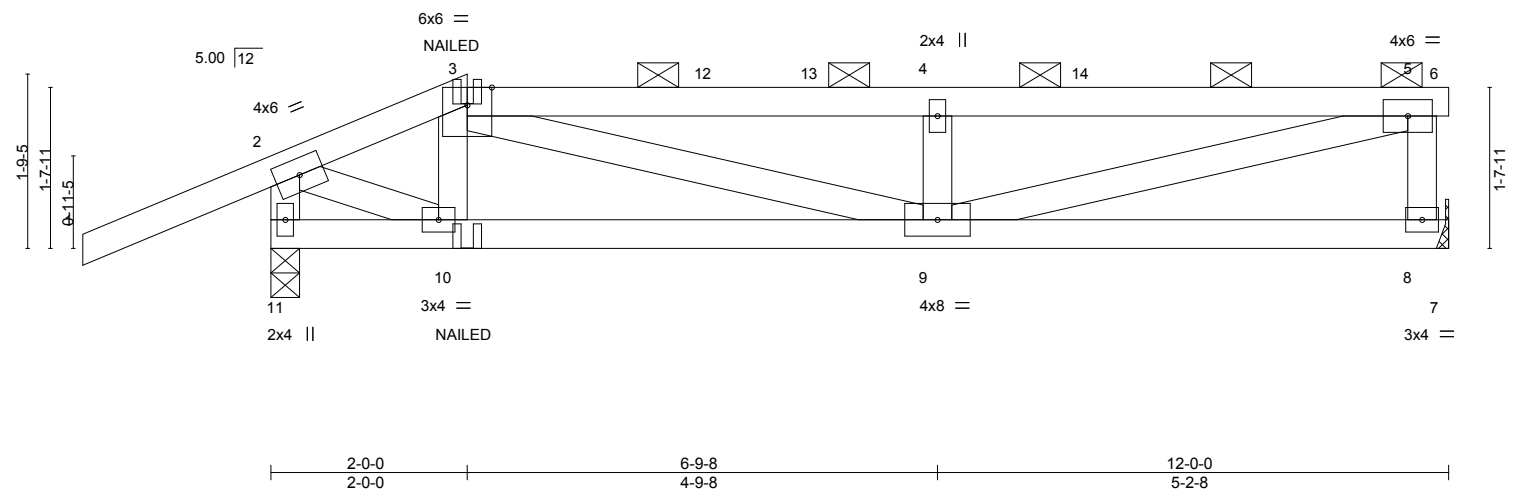
1-11-0
1-11-0

2-0-0
2-0-0

6-9-8
4-9-8

12-0-0
5-2-8

Scale = 1:23.5



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.05 9 >999 240	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.09 9-10 >999 180				
TCDL	10.0	Rep Stress Incr	NO	WB	0.30	Horz(CT)	0.01 8 n/a n/a				
BCLL	0.0	Code IRC2018/TP12014		Matrix-MS							
BCDL	10.0										
								Weight: 47 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-0 max.): 3-6.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 10-11.

REACTIONS. (size) 8=Mechanical, 11=0-3-8

Max Horz 11=59(LC 11)

Max Uplift 8=-56(LC 9), 11=-108(LC 12)

Max Grav 8=618(LC 31), 11=678(LC 2)

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

TOP CHORD 2-3=-668/46, 3-4=-1333/114, 4-5=-1331/113, 5-8=-549/75, 2-11=-684/111

BOT CHORD 9-10=-71/641

WEBS 3-9=-110/729, 4-9=-450/96, 5-9=-113/1223, 2-10=-42/725

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 8 and 108 lb uplift at joint 11.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - "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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-51, 2-3=-51, 3-5=-61, 5-6=-61, 7-11=-20



November 11, 2020

Continued on page 2

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS, REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020			Ply	1	Roeser/1464 Winterset	I43577291
2525051	G1	Half Hip Girder						Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:53 2020 Page 2 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-kCligRHzpRXy0UqJZakN2RxG1jinv4kpdDCoeyKUSa						

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 10=3(B)

 **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
2525051

Truss
G2

Truss Type
Half Hip

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

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

12/21/2020

Ply
1

Roeser/1464 Winterset

Job Reference (optional)

ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-hbtS57IDLbHFBKeDQ_CCSTXHUrN2Fn_1GxiJtXyKUSY

9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:55 2020 Page 1

-1-11-0
1-11-0

2-3-8
2-3-8

4-0-0
1-8-8

7-9-8
3-9-8

10-0-0
2-2-8

12-0-0
2-0-0

Scale: 1/2"=1'

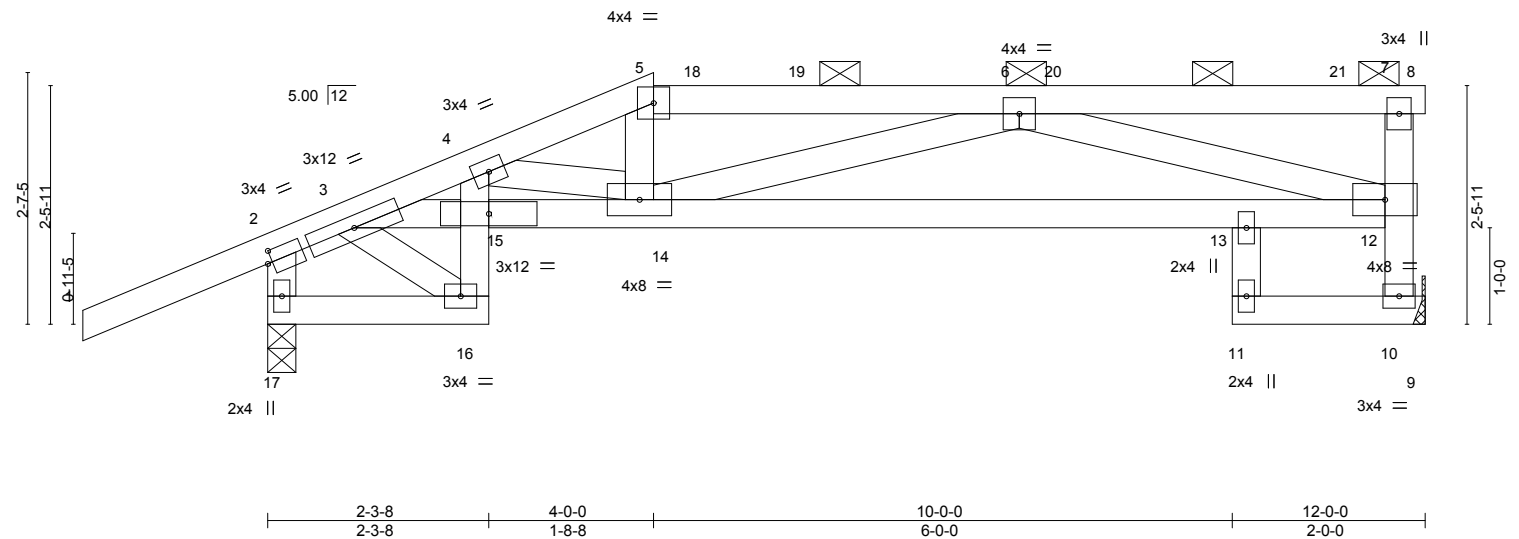


Plate Offsets (X,Y)-- [2:0-0,10:0,1-8]		2-3-8 2-3-8		4-0-0 1-8-8		10-0-0 6-0-0		12-0-0 2-0-0	
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.06 13-14	>999	240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.14 13-14	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.07 10	n/a	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS					
BCDL	10.0								
								PLATES	GRIP
								MT20	197/144
								Weight: 52 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (5-3-15 max.): 5-8.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.

REACTIONS.	(size) 10=Mechanical, 17=0-3-8
	Max Horz 17=88(LC 15)
	Max Uplift 10=-58(LC 13), 17=-109(LC 16)
	Max Grav 10=592(LC 35), 17=678(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-325/90, 3-4=-1184/407, 4-5=-1145/275, 5-6=-1102/278, 10-12=-553/117, 2-17=-642/249
BOT CHORD	14-15=-521/1185, 13-14=-324/1209, 12-13=-301/1246
WEBS	3-15=-408/970, 6-12=-1062/326

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 0-10-6, Interior(1) 0-10-6 to 4-0-0, Exterior(2R) 4-0-0 to 8-2-15, Interior(1) 8-2-15 to 12-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 10 and 109 lb uplift at joint 17.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

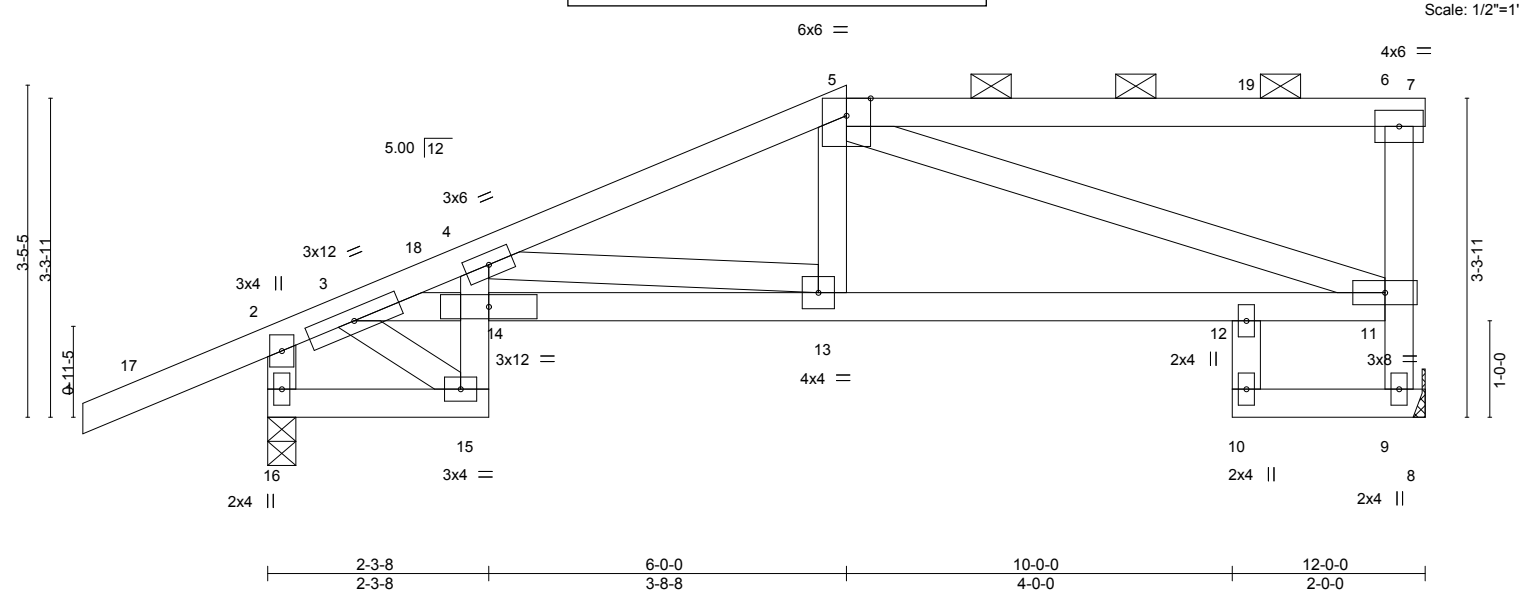
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Roeser/1464 Winterset	I43577293
2525051	G3	Half Hip	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:56 2020 Page 1		1	Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:WV5xOZ45cNK4PQ2HmSu_xyyPF19-9nQlSJr6up5pTDP_ijR?h3QsEkh_CRBVbSsPzyKUSX				
-1-11-0		2-3-8	6-0-0	12/21/2020	10-0-0	12-0-0	
1-11-0		2-3-8	3-8-8		4-0-0	2-0-0	



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.45	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	20.4/20.0	1.15		BC	0.38	Vert(LL)	-0.04 13-14	>999			
TCDL	10.0	1.15		WB	0.45	Vert(CT)	-0.08 13-14	>999			
BCLL	0.0	YES		Matrix-AS		Horz(CT)	0.06 9	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 54 lb	FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 5-7.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.

REACTIONS.	
(size)	9=Mechanical, 16=0-3-8
Max Horz	16=117(LC 15)
Max Uplift	9=56(LC 13), 16=108(LC 16)
Max Grav	9=546(LC 35), 16=715(LC 36)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-323/75, 3-4=-1203/463, 4-5=-868/220, 9-11=-510/131, 6-11=-280/95, 2-16=-681/240
BOT CHORD	13-14=-676/1284, 12-13=-296/768, 11-12=-294/796
WEBS	4-13=-627/383, 5-13=-18/274, 5-11=-682/249, 3-14=-494/986

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 0-10-6, Interior(1) 0-10-6 to 6-0-0, Exterior(2R) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 12-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 56 lb uplift at joint 9 and 108 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

Job
2525051

Truss
G4

Truss Type
Half Hip

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

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

12/24/2020

Ply
1

Roeser/1464 Winterset
I43577294

Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:43:57 2020 Page 1
ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-dz_CWoKTtCxyQdobYPEgYucate4jhrKkFBPpPyKUSW

-1-11-0
1-11-0

2-3-8
2-3-8

8-0-0
5-8-8

10-0-0
2-0-0

12-0-0
2-0-0

Scale = 1:27.4

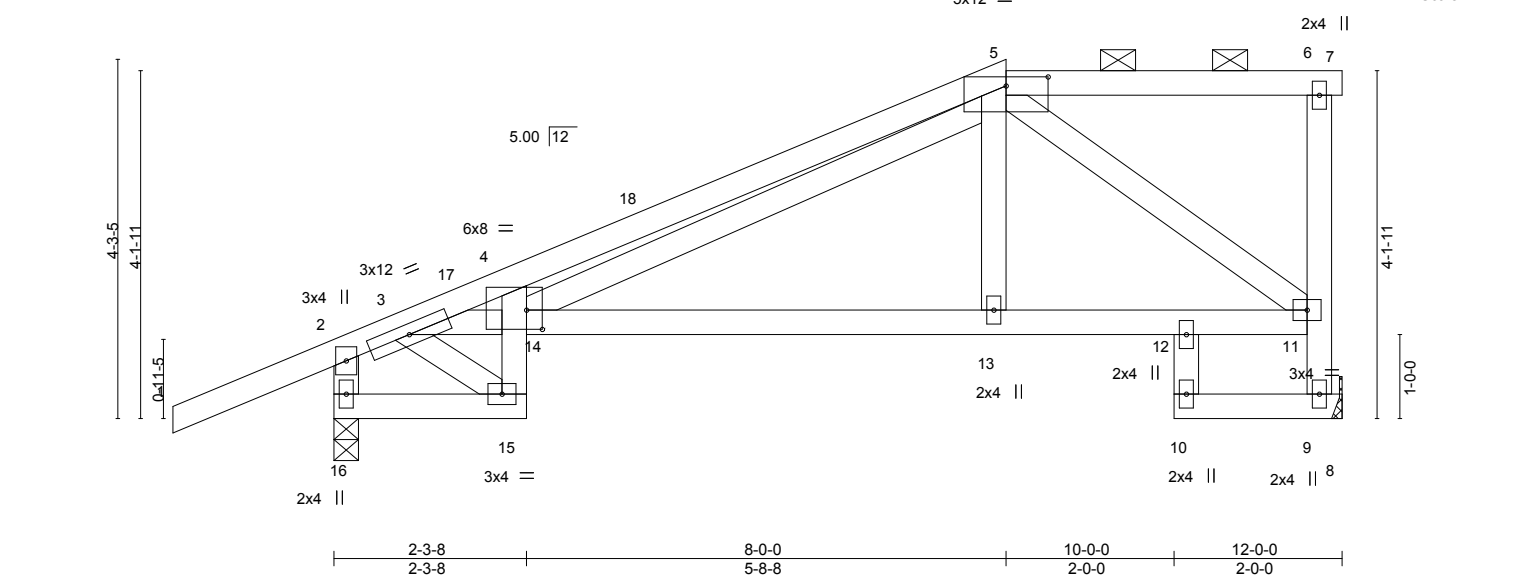


Plate Offsets (X,Y)--		[4:0-2-4,0-2-12], [5:0-6-0,0-1-5]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	25.0	2-0-0				in (loc)		l/defl		L/d	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL 1.15		TC 0.56		Vert(LL) -0.08 13-14		>999		240	
TCDL	10.0	Lumber DOL 1.15		BC 0.33		Vert(CT) -0.16 13-14		>874		180	
BCLL	0.0	Rep Stress Incr YES		WB 0.38		Horz(CT) 0.08 9		n/a		n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 57 lb	
										FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (6-0-0 max.): 5-7.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.

REACTIONS.	
(size)	9=Mechanical, 16=0-3-8
Max Horz	16=146(LC 15)
Max Uplift	9=-53(LC 13), 16=-107(LC 16)
Max Grav	9=519(LC 2), 16=760(LC 36)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-334/49, 3-4=-1319/451, 4-5=-1751/670, 9-11=-495/155, 2-16=-726/232
BOT CHORD	15-16=-223/253, 4-14=-464/172, 13-14=-237/519, 12-13=-239/512, 11-12=-241/507
WEBS	3-14=-512/1075, 5-11=-634/237, 5-14=-565/1156

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 0-10-6, Interior(1) 0-10-6 to 8-0-0, Exterior(2E) 8-0-0 to 12-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 9 and 107 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

LUMBER- TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS 2x4 SPF No.2		BRACING- TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7. BOT CHORD Rigid ceiling directly applied.	
REACTIONS. (size) 8=Mechanical, 15=0-3-8 Max Horz 15=166(LC 15) Max Uplift 8=-50(LC 13), 15=-106(LC 16) Max Grav 8=514(LC 2), 15=785(LC 36)			
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.			
TOP CHORD 2-3=-378/42, 3-4=-1275/376, 4-5=-1001/236, 5-6=-461/88, 6-7=-355/104, 8-10=-501/175, 7-10=-532/169, 2-15=-741/227			
BOT CHORD 14-15=-255/294, 12-13=-427/934			
WEBS 7-12=-192/585, 3-13=-477/1054, 3-14=-266/227, 5-12=-637/278			

-

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

Job

2525051

Truss

GR1

Truss Type

Flat Girder

Release for Construction

As Noted on Plans

Development Services

Lee's Summit, Missouri

12/21/2020

Ply

2

Roeser/1464 Winterset

I43577296

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

ID:VV5xOZ45cNK4PQ2HmSu_xyy

PF19-1YgL8qMM97JXH5XADXoN9XE9Qs79wzBmQCQ4YkyKUST

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 10 19:44:00 2020

Page 1

3-5-10

6-7-12

9-9-14

13-0-0

15-8-6

18-6-8

3-5-10

3-2-2

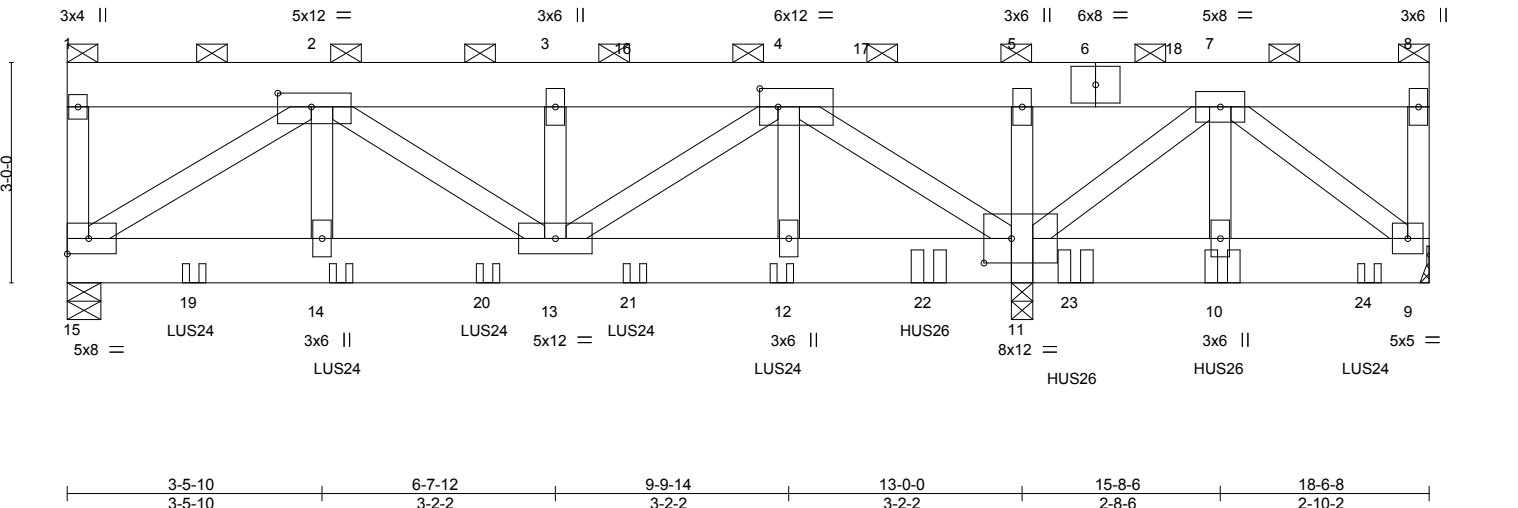
3-2-2

3-2-2

2-8-6

2-10-2

Scale = 1:31.4



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.28	in	(loc)	l/defl	L/d	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.21	Vert(LL)	-0.02	13	>999				
TCDL	10.0	Rep Stress Incr	NO	WB	0.66	Vert(CT)	-0.09	13	>999				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS		Horz(CT)	0.02	11	n/a				
BCDL	10.0												
										Weight: 302 lb		FT = 20%	

LUMBER-
TOP CHORD 2x8 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-8, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 15=0-5-8, 9=Mechanical, 11=0-3-8
Max Horz 15=-78(LC 26)
Max Grav 15=6090(LC 2), 9=1347(LC 2), 11=12250(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-15=-1223/0, 2-3=-7288/0, 3-4=-7288/0, 4-5=0/2639, 5-7=0/2639, 8-9=-980/0
BOT CHORD 14-15=0/6144, 13-14=0/6144, 12-13=0/4035, 11-12=0/4035, 10-11=-253/0, 9-10=-253/0
WEBS 2-15=-7417/0, 2-14=-290/785, 2-13=0/1433, 3-13=-2226/0, 4-13=0/4074, 4-12=-435/511, 4-11=-8360/0, 5-11=-3289/0, 7-11=-3191/0, 7-10=-472/299, 7-9=0/368

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide metal plate or equivalent at bearing(s) 11 to support reaction shown.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 8-0-0 oc max. starting at joint 12 from the left end to 17-8-12 to connect truss(es) to back face of bottom chord.



November 11, 2020

Job		Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply	Roeser/1464 Winterset	
2525051		GR1	Flat Girder	ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-1YgL8qMM97JXH5XADXoN9XE9Qs79wzBmQCQ4YkyKUST		2	I43577296	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:00 2020 Page 2		Job Reference (optional)		
NOTES-		14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or		equivalent spaced at 2'-0" oc max. starting at 11'-8"		12 from the left end to 15'-8-12 to connect truss(es)		
		to back face of bottom chord.						

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-8=-761, 9-15=-20
- Concentrated Loads (lb)
- Vert: 14=-598(B) 12=-580(B) 10=-580(B) 19=-505(B) 20=-580(B) 21=-580(B) 22=-580(B) 23=-580(B) 24=-583(B)
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-8=-770, 9-15=-20
- Concentrated Loads (lb)
- Vert: 14=-581(B) 12=-586(B) 10=-586(B) 19=-581(B) 20=-586(B) 21=-586(B) 22=-586(B) 23=-586(B) 24=-589(B)
- 3) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-8=-758, 9-15=-20
- Concentrated Loads (lb)
- Vert: 14=-498(B) 12=-504(B) 10=-504(B) 19=-498(B) 20=-504(B) 21=-504(B) 22=-504(B) 23=-504(B) 24=-507(B)
- 4) Dead + 0.75 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-8=-751, 9-15=-20
- Concentrated Loads (lb)
- Vert: 14=-511(B) 12=-499(B) 10=-499(B) 19=-441(B) 20=-499(B) 21=-499(B) 22=-499(B) 23=-499(B) 24=-502(B)
- 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
- Uniform Loads (plf)
- Vert: 1-8=-720, 9-15=-40
- Concentrated Loads (lb)
- Vert: 14=-364(B) 12=-378(B) 10=-377(B) 19=-364(B) 20=-378(B) 21=-378(B) 22=-378(B) 23=-378(B) 24=-383(B)
- 6) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-16=-682, 16-18=-686, 8-18=-693, 9-15=-8
- Horz: 1-15=15, 8-9=18
- Concentrated Loads (lb)
- Vert: 14=60(B) 12=95(B) 10=62(B) 19=66(B) 20=95(B) 21=95(B) 22=95(B) 23=95(B) 24=61(B)
- 7) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-2=-693, 2-17=-686, 8-17=-682, 9-15=-8
- Horz: 1-15=-18, 8-9=-15
- Concentrated Loads (lb)
- Vert: 14=60(B) 12=95(B) 10=62(B) 19=66(B) 20=95(B) 21=95(B) 22=95(B) 23=95(B) 24=61(B)
- 8) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-721, 9-15=-20
- Horz: 1-15=25, 8-9=7
- Concentrated Loads (lb)
- Vert: 14=72(B) 12=107(B) 10=74(B) 19=77(B) 20=107(B) 21=107(B) 22=107(B) 23=107(B) 24=71(B)
- 9) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-721, 9-15=-20
- Horz: 1-15=-7, 8-9=-25
- Concentrated Loads (lb)
- Vert: 14=72(B) 12=107(B) 10=74(B) 19=77(B) 20=107(B) 21=107(B) 22=107(B) 23=107(B) 24=71(B)
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-684, 9-15=-8
- Horz: 1-15=-23, 8-9=23
- Concentrated Loads (lb)
- Vert: 14=60(B) 12=95(B) 10=62(B) 19=66(B) 20=95(B) 21=95(B) 22=95(B) 23=95(B) 24=61(B)
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-699, 9-15=-8
- Horz: 1-15=-23, 8-9=23
- Concentrated Loads (lb)
- Vert: 14=60(B) 12=95(B) 10=62(B) 19=66(B) 20=95(B) 21=95(B) 22=95(B) 23=95(B) 24=61(B)
- 12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-721, 9-15=-20
- Horz: 1-15=-12, 8-9=12
- Concentrated Loads (lb)
- Vert: 14=72(B) 12=107(B) 10=74(B) 19=77(B) 20=107(B) 21=107(B) 22=107(B) 23=107(B) 24=71(B)
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-721, 9-15=-20
- Horz: 1-15=-12, 8-9=12

Continued on page 3

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020	Ply	Roeser/1464 Winterset I43577296
2525051	GR1	Flat Girder		2	Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:00 2020 Page 3 ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-1YgL8qMM97JXH5XADXoN9XE9Qs79wzBmQCQ4YkyKUST		
LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 14=72(B) 12=107(B) 10=74(B) 19=77(B) 20=107(B) 21=107(B) 22=107(B) 23=107(B) 24=71(B) 14) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90 Uniform Loads (plf) Vert: 1-8=-720, 9-15=-20 Concentrated Loads (lb) Vert: 14=-249(B) 12=-257(B) 10=-257(B) 19=-249(B) 20=-257(B) 21=-257(B) 22=-257(B) 23=-257(B) 24=-260(B) 15) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-751, 9-15=-20 Horz: 1-15=19, 8-9=5 Concentrated Loads (lb) Vert: 14=25(B) 12=50(B) 10=25(B) 19=29(B) 20=50(B) 21=50(B) 22=50(B) 23=50(B) 24=22(B) 16) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-751, 9-15=-20 Horz: 1-15=-5, 8-9=-19 Concentrated Loads (lb) Vert: 14=25(B) 12=50(B) 10=25(B) 19=29(B) 20=50(B) 21=50(B) 22=50(B) 23=50(B) 24=22(B) 17) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-751, 9-15=-20 Horz: 1-15=-9, 8-9=9 Concentrated Loads (lb) Vert: 14=25(B) 12=50(B) 10=25(B) 19=29(B) 20=50(B) 21=50(B) 22=50(B) 23=50(B) 24=22(B) 18) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-751, 9-15=-20 Horz: 1-15=-9, 8-9=9 Concentrated Loads (lb) Vert: 14=25(B) 12=50(B) 10=25(B) 19=29(B) 20=50(B) 21=50(B) 22=50(B) 23=50(B) 24=22(B) 19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-758, 9-15=-20 Horz: 1-15=19, 8-9=5 Concentrated Loads (lb) Vert: 14=25(B) 12=50(B) 10=25(B) 19=29(B) 20=50(B) 21=50(B) 22=50(B) 23=50(B) 24=22(B) 20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-758, 9-15=-20 Horz: 1-15=-5, 8-9=-19 Concentrated Loads (lb) Vert: 14=25(B) 12=50(B) 10=25(B) 19=29(B) 20=50(B) 21=50(B) 22=50(B) 23=50(B) 24=22(B) 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-758, 9-15=-20 Horz: 1-15=-9, 8-9=9 Concentrated Loads (lb) Vert: 14=25(B) 12=50(B) 10=25(B) 19=29(B) 20=50(B) 21=50(B) 22=50(B) 23=50(B) 24=22(B) 22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-758, 9-15=-20 Horz: 1-15=-9, 8-9=9 Concentrated Loads (lb) Vert: 14=25(B) 12=50(B) 10=25(B) 19=29(B) 20=50(B) 21=50(B) 22=50(B) 23=50(B) 24=22(B) 23) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-8=-760, 9-15=-20 Concentrated Loads (lb) Vert: 14=-598(B) 12=-580(B) 10=-580(B) 19=-505(B) 20=-580(B) 21=-580(B) 22=-580(B) 23=-580(B) 24=-583(B) 24) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-712, 9-15=-8 Horz: 1-15=16 Concentrated Loads (lb) Vert: 14=25(B) 12=52(B) 10=27(B) 19=30(B) 20=52(B) 21=52(B) 22=52(B) 23=52(B) 24=26(B) 25) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-712, 9-15=-8 Horz: 8-9=-16 Concentrated Loads (lb) Vert: 14=25(B) 12=52(B) 10=27(B) 19=30(B) 20=52(B) 21=52(B) 22=52(B) 23=52(B) 24=26(B) 26) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60					

Continued on page 4

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020	Ply	Roeser/1464 Winterset 143577296
2525051	GR1	Flat Girder		2	Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:00 2020 Page 4 ID:WV5xOZ45cNK4PQ2HmSu_xyyPF19-1YgL8qMM97JXH5XADXoN9XE9Qs79wzBmQCQ4YkyKUST		

- LOAD CASE(S)

Standard
- Uniform Loads (plf)

Vert: 1-16=-682, 16-18=-686, 8-18=-693, 9-15=-8

Horz: 1-15=15, 8-9=18
- Concentrated Loads (lb)

Vert: 14=-312(B) 12=-324(B) 10=-334(B) 19=-298(B) 20=-324(B) 21=-324(B) 22=-324(B) 23=-324(B) 24=-335(B)
- 27) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-693, 2-17=-686, 8-17=-682, 9-15=-8

Horz: 1-15=-18, 8-9=-15

Concentrated Loads (lb)

Vert: 14=-312(B) 12=-324(B) 10=-334(B) 19=-298(B) 20=-324(B) 21=-324(B) 22=-324(B) 23=-324(B) 24=-335(B)
- 28) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-721, 9-15=-20

Horz: 1-15=25, 8-9=7

Concentrated Loads (lb)

Vert: 14=-301(B) 12=-312(B) 10=-322(B) 19=-287(B) 20=-312(B) 21=-312(B) 22=-312(B) 23=-312(B) 24=-326(B)
- 29) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-721, 9-15=-20

Horz: 1-15=-7, 8-9=-25

Concentrated Loads (lb)

Vert: 14=-301(B) 12=-312(B) 10=-322(B) 19=-287(B) 20=-312(B) 21=-312(B) 22=-312(B) 23=-312(B) 24=-326(B)
- 30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-684, 9-15=-8

Horz: 1-15=-23, 8-9=23

Concentrated Loads (lb)

Vert: 14=-312(B) 12=-324(B) 10=-334(B) 19=-298(B) 20=-324(B) 21=-324(B) 22=-324(B) 23=-324(B) 24=-335(B)
- 31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-699, 9-15=-8

Horz: 1-15=-23, 8-9=23

Concentrated Loads (lb)

Vert: 14=-312(B) 12=-324(B) 10=-334(B) 19=-298(B) 20=-324(B) 21=-324(B) 22=-324(B) 23=-324(B) 24=-335(B)
- 32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-721, 9-15=-20

Horz: 1-15=-12, 8-9=12

Concentrated Loads (lb)

Vert: 14=-301(B) 12=-312(B) 10=-322(B) 19=-287(B) 20=-312(B) 21=-312(B) 22=-312(B) 23=-312(B) 24=-326(B)
- 33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-721, 9-15=-20

Horz: 1-15=-12, 8-9=12

Concentrated Loads (lb)

Vert: 14=-301(B) 12=-312(B) 10=-322(B) 19=-287(B) 20=-312(B) 21=-312(B) 22=-312(B) 23=-312(B) 24=-326(B)
- 34) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-751, 9-15=-20

Horz: 1-15=19, 8-9=5

Concentrated Loads (lb)

Vert: 14=-484(B) 12=-417(B) 10=-425(B) 19=-422(B) 20=-417(B) 21=-417(B) 22=-417(B) 23=-417(B) 24=-428(B)
- 35) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-751, 9-15=-20

Horz: 1-15=-5, 8-9=-19

Concentrated Loads (lb)

Vert: 14=-484(B) 12=-417(B) 10=-425(B) 19=-422(B) 20=-417(B) 21=-417(B) 22=-417(B) 23=-417(B) 24=-428(B)
- 36) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-751, 9-15=-20

Horz: 1-15=-9, 8-9=9

Concentrated Loads (lb)

Vert: 14=-484(B) 12=-417(B) 10=-425(B) 19=-422(B) 20=-417(B) 21=-417(B) 22=-417(B) 23=-417(B) 24=-428(B)
- 37) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-751, 9-15=-20

Horz: 1-15=-9, 8-9=9

Concentrated Loads (lb)

Vert: 14=-484(B) 12=-417(B) 10=-425(B) 19=-422(B) 20=-417(B) 21=-417(B) 22=-417(B) 23=-417(B) 24=-428(B)
- 38) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-8=-758, 9-15=-20

Horz: 1-15=19, 8-9=5

Continued on page 5

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:VV5xOZ45cNK4PQ2HmSu_xyy 12/21/2020	Ply	Roeser/1464 Winterset
2525051	GR1	Flat Girder		2	I43577296
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:00 2020 Page 5 PF19-1YgL8qMM97JXH5XADXoN9XE9Qs79wzBmQCQ4YkyKUST		

LOAD CASE(S) Standard

- Concentrated Loads (lb)
Vert: 14=-475(B) 12=-484(B) 10=-491(B) 19=-464(B) 20=-484(B) 21=-484(B) 22=-484(B) 23=-484(B) 24=-494(B)
- 39) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-758, 9-15=-20
Horz: 1-15=-5, 8-9=-19
- Concentrated Loads (lb)
Vert: 14=-475(B) 12=-484(B) 10=-491(B) 19=-464(B) 20=-484(B) 21=-484(B) 22=-484(B) 23=-484(B) 24=-494(B)
- 40) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-758, 9-15=-20
Horz: 1-15=-9, 8-9=9
- Concentrated Loads (lb)
Vert: 14=-475(B) 12=-484(B) 10=-491(B) 19=-464(B) 20=-484(B) 21=-484(B) 22=-484(B) 23=-484(B) 24=-494(B)
- 41) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-758, 9-15=-20
Horz: 1-15=-9, 8-9=9
- Concentrated Loads (lb)
Vert: 14=-475(B) 12=-484(B) 10=-491(B) 19=-464(B) 20=-484(B) 21=-484(B) 22=-484(B) 23=-484(B) 24=-494(B)
- 42) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-712, 9-15=-8
Horz: 1-15=16
- Concentrated Loads (lb)
Vert: 14=-277(B) 12=-281(B) 10=-298(B) 19=-263(B) 20=-281(B) 21=-281(B) 22=-281(B) 23=-281(B) 24=-300(B)
- 43) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-712, 9-15=-8
Horz: 8-9=-16
- Concentrated Loads (lb)
Vert: 14=-277(B) 12=-281(B) 10=-298(B) 19=-263(B) 20=-281(B) 21=-281(B) 22=-281(B) 23=-281(B) 24=-300(B)

 **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

2525051

Truss

GR2

Truss Type

Flat Girder

Release For Construction

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/21/2020

Ply

2

Roeser/1464 Winterset

143577297

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 10 19:44:01 2020

Page 1

ID:WV5xOZ45cNK4PQ2HmS_u_xyyPFt9-VIEJLAN_wRSOvF6MnFJciknKqFOnfNfwfs9d4AyKUSS

3-3-1

3-3-1

6-4-7

3-1-5

9-5-12

3-1-5

12-7-1

3-1-5

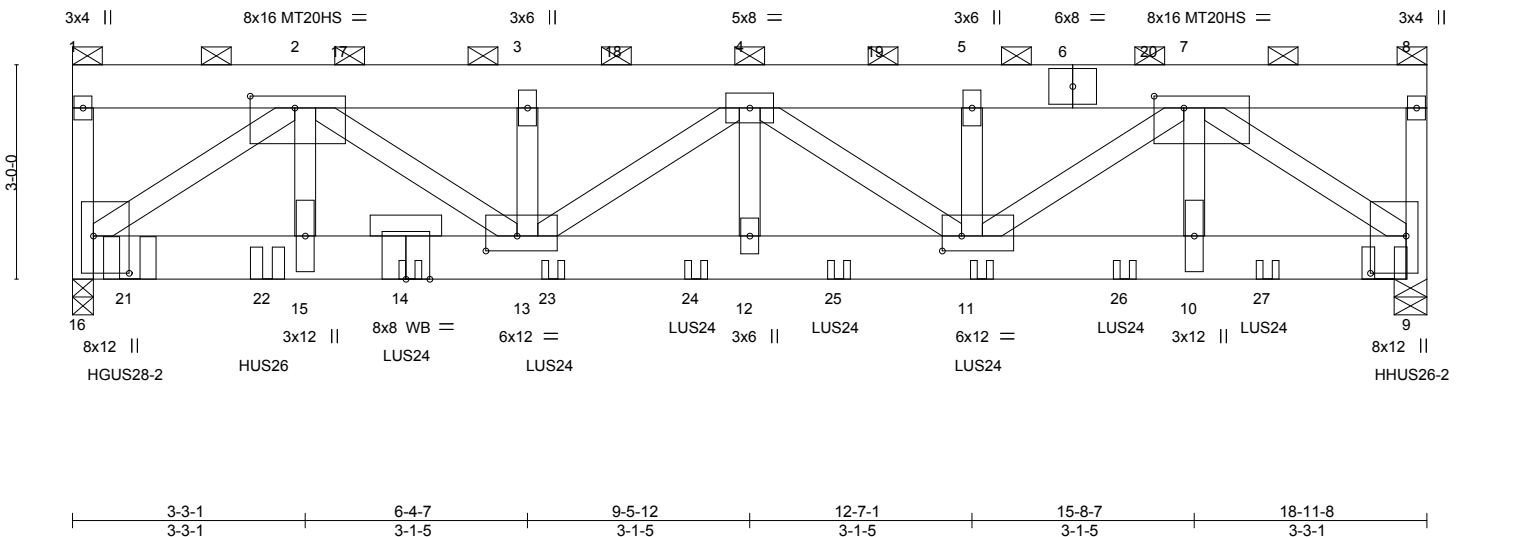
15-8-7

3-1-5

18-11-8

3-3-1

Scale: 3/8"=1'



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	in	(loc)	l/defl	L/d	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.57	Vert(LL)	-0.06	12	>999	MT20HS	148/108		
TCDL	10.0	Rep Stress Incr	NO	WB	0.84	Vert(CT)	-0.30	12	>745				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS		Horz(CT)	0.07	9	n/a				
BCDL	10.0												
										Weight: 309 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x8 SP 2400F 2.0E	TOP CHORD	2-0-0 oc purlins (5-8-8 max.): 1-8, except end verticals.
BOT CHORD	2x8 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2 *Except*		
	2-16,2-13,4-13,4-11,7-9: 2x4 SPF 1650F 1.5E		
OTHERS	2x4 SPF No.2		

REACTIONS.	
(size)	9=0-5-8, 16=0-3-8
Max Horz	16=-78(LC 28)
Max Grav	9=12043(LC 2), 16=11811(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-16=-1233/0, 2-3=-18132/0, 3-4=-18132/0, 4-5=-17990/0, 5-7=-17990/0, 8-9=-1204/0
BOT CHORD	15-16=0/11592, 13-15=0/11592, 12-13=0/20374, 11-12=0/20374, 10-11=0/11251, 9-10=0/11251
WEBS	2-16=-14370/0, 2-15=-39/1205, 2-13=0/8255, 3-13=-2105/0, 4-13=-2829/0, 4-12=-158/910, 4-11=-3009/0, 5-11=-2070/0, 7-11=0/8505, 7-10=-288/752, 7-9=-13973/0

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-7-0 oc, Except member 2-15 2x4 - 1 row at 0-9-0 oc, member 13-2 2x4 - 1 row at 0-9-0 oc, member 3-13 2x4 - 1 row at 0-9-0 oc, member 13-4 2x4 - 1 row at 0-9-0 oc, member 4-12 2x4 - 1 row at 0-9-0 oc, member 11-4 2x4 - 1 row at 0-9-0 oc, member 5-11 2x4 - 1 row at 0-9-0 oc, member 11-7 2x4 - 1 row at 0-9-0 oc, member 7-10 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.00; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 9, 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide metal plate or equivalent at bearing(s) 9 to support reaction shown.

Continued on page 2



November 11,2020

Job		Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply	Roeser/1464 Winterset I43577297	
2525051		GR2	Flat Girder			2	Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,				8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:01 2020 Page 2 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-VIEjLAN_wRSOvF6MnFJcIknKqFOnfNfwfs9d4AyKUSS		
NOTES- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1. 11) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss. 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 13) Use Simpson Strong-Tie HGUS28-2 (36-10d Girder, 6-10d Truss) or equivalent at 0-9-10 from the left end to connect truss(es) to back face of bottom chord. 14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 2-8-12 from the left end to connect truss(es) to back face of bottom chord. 15) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 4-8-12 from the left end to 16-8-12 to connect truss(es) to back face of bottom chord. 16) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 18-9-12 from the left end to connect truss(es) to back face of bottom chord. 17) Fill all nail holes where hanger is in contact with lumber.								
LOAD CASE(S) Standard 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-8=-761, 9-16=-20 Concentrated Loads (lb) Vert: 14=-654(B) 11=-711(B) 9=-1920(B) 21=-1825(B) 22=-654(B) 23=-655(B) 24=-655(B) 25=-655(B) 26=-618(B) 27=-605(B) 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-8=-770, 9-16=-20 Concentrated Loads (lb) Vert: 14=-677(B) 11=-672(B) 9=-1841(B) 21=-1862(B) 22=-677(B) 23=-678(B) 24=-678(B) 25=-678(B) 26=-672(B) 27=-672(B) 3) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-8=-758, 9-16=-20 Concentrated Loads (lb) Vert: 14=-582(B) 11=-576(B) 9=-1580(B) 21=-1700(B) 22=-582(B) 23=-583(B) 24=-583(B) 25=-583(B) 26=-576(B) 27=-576(B) 4) Dead + 0.75 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-8=-751, 9-16=-20 Concentrated Loads (lb) Vert: 14=-565(B) 11=-605(B) 9=-1640(B) 21=-1672(B) 22=-565(B) 23=-565(B) 24=-565(B) 25=-565(B) 26=-536(B) 27=-526(B) 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf) Vert: 1-8=-720, 9-16=-40 Concentrated Loads (lb) Vert: 14=-437(B) 11=-425(B) 9=-1168(B) 21=-1442(B) 22=-437(B) 23=-438(B) 24=-438(B) 25=-438(B) 26=-425(B) 27=-425(B) 6) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-18=-682, 18-20=-686, 8-20=-693, 9-16=-8 Horz: 1-16=15, 8-9=18 Concentrated Loads (lb) Vert: 14=71(B) 11=68(B) 9=226(B) 21=-888(B) 22=71(B) 23=71(B) 24=71(B) 25=71(B) 26=72(B) 27=76(B) 7) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-17=-693, 17-19=-686, 8-19=-682, 9-16=-8 Horz: 1-16=-18, 8-9=-15 Concentrated Loads (lb) Vert: 14=71(B) 11=68(B) 9=226(B) 21=-888(B) 22=71(B) 23=71(B) 24=71(B) 25=71(B) 26=72(B) 27=76(B) 8) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-721, 9-16=-20 Horz: 1-16=25, 8-9=7 Concentrated Loads (lb) Vert: 14=83(B) 11=80(B) 9=233(B) 21=-878(B) 22=83(B) 23=82(B) 24=82(B) 25=82(B) 26=83(B) 27=88(B) 9) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-721, 9-16=-20 Horz: 1-16=-7, 8-9=-25 Concentrated Loads (lb) Vert: 14=83(B) 11=80(B) 9=233(B) 21=-878(B) 22=83(B) 23=82(B) 24=82(B) 25=82(B) 26=83(B) 27=88(B) 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-684, 9-16=-8 Horz: 1-16=-23, 8-9=23 Concentrated Loads (lb) Vert: 14=71(B) 11=68(B) 9=226(B) 21=-888(B) 22=71(B) 23=71(B) 24=71(B) 25=71(B) 26=72(B) 27=76(B) 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-8=-699, 9-16=-8 Horz: 1-16=-23, 8-9=23 Concentrated Loads (lb) Vert: 14=71(B) 11=68(B) 9=226(B) 21=-888(B) 22=71(B) 23=71(B) 24=71(B) 25=71(B) 26=72(B) 27=76(B) 12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60								

Continued on page 3

			RELEASE FOR CONSTRUCTION		Ply 2	Roeser/1464 Winterset Job Reference (optional)		
Job	Truss	Truss Type	AS NOTED ON PLANS REVIEW					
2525051	GR2	Flat Girder	DEVELOPMENT SERVICES					
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			LEE'S SUMMIT, MISSOURI		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:01 2020 Page 3			
			12/21/2020		ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-VIEjLAN_wRSOvF6MnFJciknKqFOnfNfwfs9d4AyKUSS			
LOAD CASE(S) Standard Uniform Loads (plf)								

LOAD CASE(S) Standard

- Uniform Loads (plf)
Vert: 1-8=-721, 9-16=-20
Horz: 1-16=-12, 8-9=12
- Concentrated Loads (lb)
Vert: 14=83(B) 11=80(B) 9=233(B) 21=-878(B) 22=83(B) 23=82(B) 24=82(B) 25=82(B) 26=83(B) 27=88(B)
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-721, 9-16=-20
Horz: 1-16=-12, 8-9=12
- Concentrated Loads (lb)
Vert: 14=83(B) 11=80(B) 9=233(B) 21=-878(B) 22=83(B) 23=82(B) 24=82(B) 25=82(B) 26=83(B) 27=88(B)
- 14) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
- Uniform Loads (plf)
Vert: 1-8=-720, 9-16=-20
- Concentrated Loads (lb)
Vert: 14=-297(B) 11=-289(B) 9=-798(B) 21=-1215(B) 22=-297(B) 23=-298(B) 24=-298(B) 25=-298(B) 26=-289(B) 27=-289(B)
- 15) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-751, 9-16=-20
Horz: 1-16=19, 8-9=5
- Concentrated Loads (lb)
Vert: 14=27(B) 11=26(B) 9=73(B) 21=-878(B) 22=27(B) 23=26(B) 24=26(B) 25=26(B) 26=28(B) 27=32(B)
- 16) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-751, 9-16=-20
Horz: 1-16=-5, 8-9=-19
- Concentrated Loads (lb)
Vert: 14=27(B) 11=26(B) 9=73(B) 21=-878(B) 22=27(B) 23=26(B) 24=26(B) 25=26(B) 26=28(B) 27=32(B)
- 17) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-751, 9-16=-20
Horz: 1-16=-9, 8-9=9
- Concentrated Loads (lb)
Vert: 14=27(B) 11=26(B) 9=73(B) 21=-878(B) 22=27(B) 23=26(B) 24=26(B) 25=26(B) 26=28(B) 27=32(B)
- 18) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-751, 9-16=-20
Horz: 1-16=-9, 8-9=9
- Concentrated Loads (lb)
Vert: 14=27(B) 11=26(B) 9=73(B) 21=-878(B) 22=27(B) 23=26(B) 24=26(B) 25=26(B) 26=28(B) 27=32(B)
- 19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-758, 9-16=-20
Horz: 1-16=19, 8-9=5
- Concentrated Loads (lb)
Vert: 14=27(B) 11=26(B) 9=73(B) 21=-878(B) 22=27(B) 23=26(B) 24=26(B) 25=26(B) 26=28(B) 27=32(B)
- 20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-758, 9-16=-20
Horz: 1-16=-5, 8-9=-19
- Concentrated Loads (lb)
Vert: 14=27(B) 11=26(B) 9=73(B) 21=-878(B) 22=27(B) 23=26(B) 24=26(B) 25=26(B) 26=28(B) 27=32(B)
- 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-758, 9-16=-20
Horz: 1-16=-9, 8-9=9
- Concentrated Loads (lb)
Vert: 14=27(B) 11=26(B) 9=73(B) 21=-878(B) 22=27(B) 23=26(B) 24=26(B) 25=26(B) 26=28(B) 27=32(B)
- 22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-758, 9-16=-20
Horz: 1-16=-9, 8-9=9
- Concentrated Loads (lb)
Vert: 14=27(B) 11=26(B) 9=73(B) 21=-878(B) 22=27(B) 23=26(B) 24=26(B) 25=26(B) 26=28(B) 27=32(B)
- 23) Dead + Minimum Snow: Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
Vert: 1-8=-760, 9-16=-20
- Concentrated Loads (lb)
Vert: 14=-654(B) 11=-711(B) 9=-1920(B) 21=-1825(B) 22=-654(B) 23=-655(B) 24=-655(B) 25=-655(B) 26=-618(B) 27=-605(B)
- 24) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-8=-712, 9-16=-8
Horz: 1-16=16
- Concentrated Loads (lb)
Vert: 14=30(B) 11=27(B) 9=110(B) 21=-888(B) 22=30(B) 23=30(B) 24=30(B) 25=30(B) 26=31(B) 27=35(B)

Continued on page 4

Job		Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply	Roeser/1464 Winterset	
2525051		GR2	Flat Girder	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:01 2020 Page 4		2	I43577297	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-VIEjLAN_wRSOvF6MnFJciknKqFOnfNfwfs9d4AyKUSS		Job Reference (optional)		
LOAD CASE(S) Standard 25) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60								

LOAD CASE(S) Standard

- 25) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-8=-712, 9-16=-8
Horz: 8-9=-16
Concentrated Loads (lb)
Vert: 14=30(B) 11=27(B) 9=110(B) 21=-888(B) 22=30(B) 23=30(B) 24=30(B) 25=30(B) 26=31(B) 27=35(B)
- 26) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-18=-682, 18-20=-686, 8-20=-693, 9-16=-8
Horz: 1-16=15, 8-9=18
Concentrated Loads (lb)
Vert: 14=-383(B) 11=-363(B) 9=-992(B) 21=-1209(B) 22=-383(B) 23=-384(B) 24=-384(B) 25=-384(B) 26=-349(B) 27=-337(B)
- 27) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-17=-693, 17-19=-686, 8-19=-682, 9-16=-8
Horz: 1-16=-18, 8-9=-15
Concentrated Loads (lb)
Vert: 14=-383(B) 11=-363(B) 9=-992(B) 21=-1209(B) 22=-383(B) 23=-384(B) 24=-384(B) 25=-384(B) 26=-349(B) 27=-337(B)
- 28) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-8=-721, 9-16=-20
Horz: 1-16=25, 8-9=7
Concentrated Loads (lb)
Vert: 14=-372(B) 11=-351(B) 9=-985(B) 21=-1200(B) 22=-372(B) 23=-372(B) 24=-372(B) 25=-372(B) 26=-337(B) 27=-326(B)
- 29) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-8=-721, 9-16=-20
Horz: 1-16=-7, 8-9=-25
Concentrated Loads (lb)
Vert: 14=-372(B) 11=-351(B) 9=-985(B) 21=-1200(B) 22=-372(B) 23=-372(B) 24=-372(B) 25=-372(B) 26=-337(B) 27=-326(B)
- 30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-8=-684, 9-16=-8
Horz: 1-16=-23, 8-9=23
Concentrated Loads (lb)
Vert: 14=-383(B) 11=-363(B) 9=-992(B) 21=-1209(B) 22=-383(B) 23=-384(B) 24=-384(B) 25=-384(B) 26=-349(B) 27=-337(B)
- 31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-8=-699, 9-16=-8
Horz: 1-16=-23, 8-9=23
Concentrated Loads (lb)
Vert: 14=-383(B) 11=-363(B) 9=-992(B) 21=-1209(B) 22=-383(B) 23=-384(B) 24=-384(B) 25=-384(B) 26=-349(B) 27=-337(B)
- 32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-8=-721, 9-16=-20
Horz: 1-16=-12, 8-9=12
Concentrated Loads (lb)
Vert: 14=-372(B) 11=-351(B) 9=-985(B) 21=-1200(B) 22=-372(B) 23=-372(B) 24=-372(B) 25=-372(B) 26=-337(B) 27=-326(B)
- 33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-8=-721, 9-16=-20
Horz: 1-16=-12, 8-9=12
Concentrated Loads (lb)
Vert: 14=-372(B) 11=-351(B) 9=-985(B) 21=-1200(B) 22=-372(B) 23=-372(B) 24=-372(B) 25=-372(B) 26=-337(B) 27=-326(B)
- 34) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-8=-751, 9-16=-20
Horz: 1-16=19, 8-9=5
Concentrated Loads (lb)
Vert: 14=-489(B) 11=-573(B) 9=-1353(B) 21=-1335(B) 22=-489(B) 23=-490(B) 24=-490(B) 25=-490(B) 26=-510(B) 27=-494(B)
- 35) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-8=-751, 9-16=-20
Horz: 1-16=-5, 8-9=-19
Concentrated Loads (lb)
Vert: 14=-489(B) 11=-573(B) 9=-1353(B) 21=-1335(B) 22=-489(B) 23=-490(B) 24=-490(B) 25=-490(B) 26=-510(B) 27=-494(B)
- 36) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-8=-751, 9-16=-20
Horz: 1-16=-9, 8-9=9

Continued on page 5

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020	Ply	Roeser/1464 Winterset 143577297 Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:01 2020 Page 5 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-VIEjLAN_wRSOvF6MnFJcKnKqFOnfNfwfs9d4AyKUSS
2525051	GR2	Flat Girder		2	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

LOAD CASE(S) Standard

- Concentrated Loads (lb)
- Vert: 14=-489(B) 11=-573(B) 9=-1353(B) 21=-1335(B) 22=-489(B) 23=-490(B) 24=-490(B) 25=-490(B) 26=-510(B) 27=-494(B)
- 37) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-751, 9-16=-20
- Horz: 1-16=-9, 8-9=9
- Concentrated Loads (lb)
- Vert: 14=-489(B) 11=-573(B) 9=-1353(B) 21=-1335(B) 22=-489(B) 23=-490(B) 24=-490(B) 25=-490(B) 26=-510(B) 27=-494(B)
- 38) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-758, 9-16=-20
- Horz: 1-16=19, 8-9=5
- Concentrated Loads (lb)
- Vert: 14=-567(B) 11=-551(B) 9=-1431(B) 21=-1417(B) 22=-567(B) 23=-567(B) 24=-567(B) 25=-567(B) 26=-540(B) 27=-532(B)
- 39) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-758, 9-16=-20
- Horz: 1-16=-5, 8-9=-19
- Concentrated Loads (lb)
- Vert: 14=-567(B) 11=-551(B) 9=-1431(B) 21=-1417(B) 22=-567(B) 23=-567(B) 24=-567(B) 25=-567(B) 26=-540(B) 27=-532(B)
- 40) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-758, 9-16=-20
- Horz: 1-16=-9, 8-9=9
- Concentrated Loads (lb)
- Vert: 14=-567(B) 11=-551(B) 9=-1431(B) 21=-1417(B) 22=-567(B) 23=-567(B) 24=-567(B) 25=-567(B) 26=-540(B) 27=-532(B)
- 41) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-758, 9-16=-20
- Horz: 1-16=-9, 8-9=9
- Concentrated Loads (lb)
- Vert: 14=-567(B) 11=-551(B) 9=-1431(B) 21=-1417(B) 22=-567(B) 23=-567(B) 24=-567(B) 25=-567(B) 26=-540(B) 27=-532(B)
- 42) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-712, 9-16=-8
- Horz: 1-16=16
- Concentrated Loads (lb)
- Vert: 14=-343(B) 11=-322(B) 9=-874(B) 21=-1169(B) 22=-343(B) 23=-343(B) 24=-343(B) 25=-343(B) 26=-308(B) 27=-296(B)
- 43) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-8=-712, 9-16=-8
- Horz: 8-9=-16
- Concentrated Loads (lb)
- Vert: 14=-343(B) 11=-322(B) 9=-874(B) 21=-1169(B) 22=-343(B) 23=-343(B) 24=-343(B) 25=-343(B) 26=-308(B) 27=-296(B)

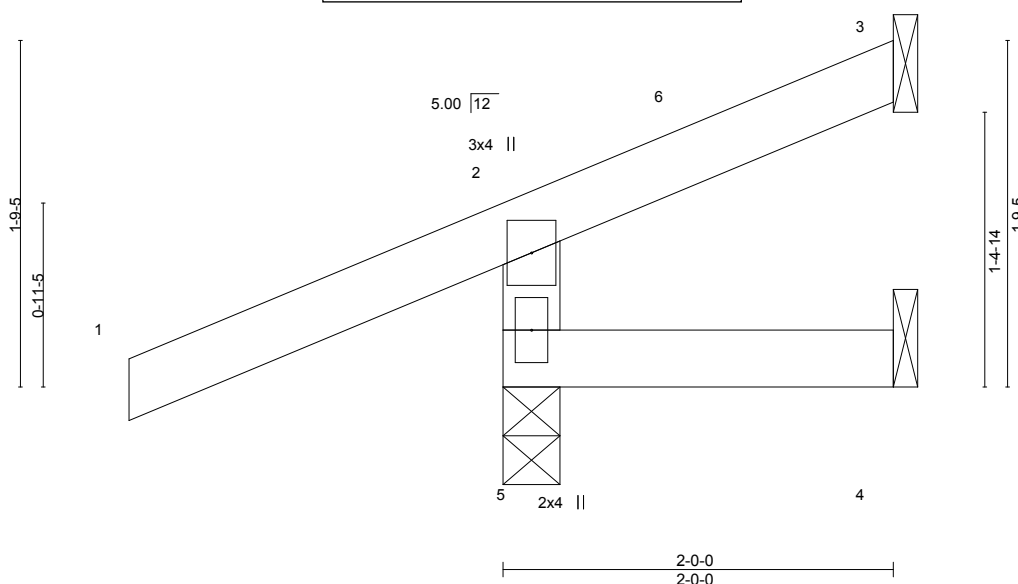
 **WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2525051	Truss J1	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1 Roeser/1464 Winterset 143577298 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:02 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-_xo5ZWochkaFXOhZKyqrFyJVUfrcO1?3tWvAcdyKUSR 12/21/2020		
-1-11-0 1-11-0			2-0-0 2-0-0		



Scale = 1:11.8

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.31	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) 0.00 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) 0.00 4-5 >999 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) -0.01 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=74(LC 16)
 Max Uplift 5=-84(LC 16), 3=-21(LC 20), 4=-6(LC 21)
 Max Grav 5=325(LC 21), 3=12(LC 28), 4=28(LC 7)

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

TOP CHORD 2-5=-282/205

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 1-11-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 5, 21 lb uplift at joint 3 and 6 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

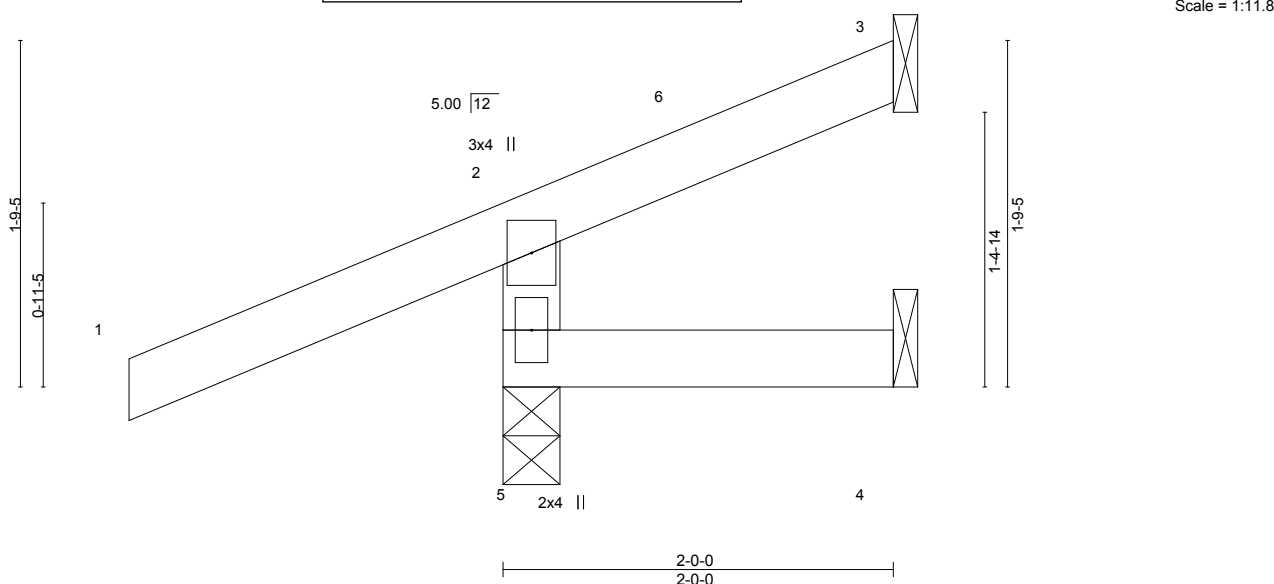
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 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 2525051	Truss J2	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1 Roeser/1464 Winterset 143577299 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:09 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-GHjl1vT?2uSFsTjvFwSU1Q6ijUEFXCk5U652MjyKUSK		



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.00	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	0.00				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01				
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MR							
BCDL	10.0										

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

REACTIONS.	
(size)	5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz	5=74(LC 16)
Max Uplift	5=-84(LC 16), 3=-21(LC 20), 4=-6(LC 21)
Max Grav	5=325(LC 21), 3=12(LC 28), 4=28(LC 7)

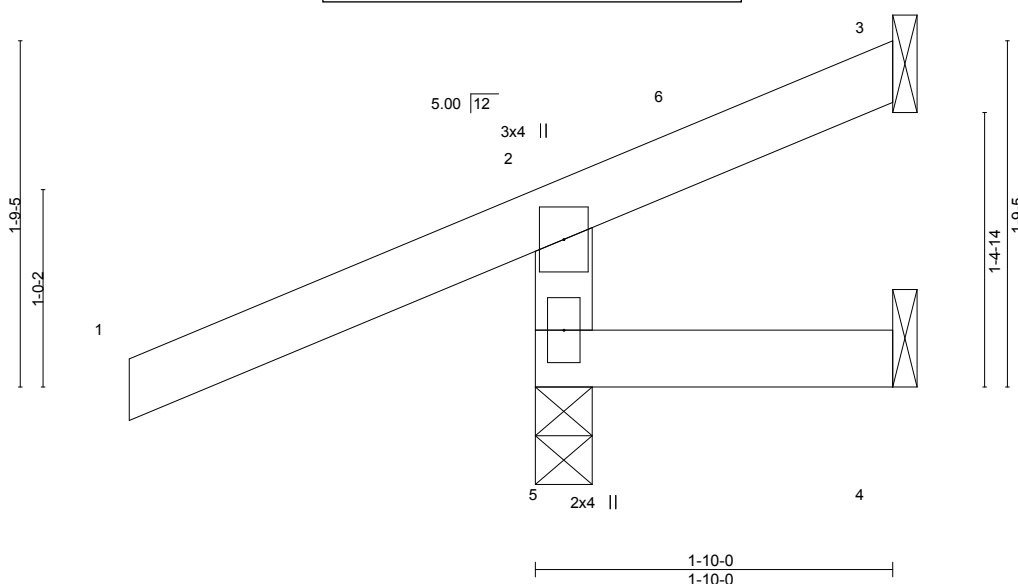
FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-5=-282/205

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 1-11-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 5, 21 lb uplift at joint 3 and 6 lb uplift at joint 4.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

Job 2525051	Truss J3	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSt... 12/21/2020		Ply 1 Roeser/1464 Winterset I43577300 Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:17 2020 Page 1 xyyPFt9-1qCmieZ09LT7qikRjcbMM6R2qizyPpiGKM1TeFyKUSC
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.37	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.10	Vert(LL) 0.00 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) 0.00 4-5 >999 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) -0.01 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 8 lb	FT = 20%

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=76(LC 16)
 Max Uplift 5=95(LC 16), 3=35(LC 20), 4=14(LC 21)
 Max Grav 5=354(LC 21), 3=12(LC 12), 4=23(LC 7)

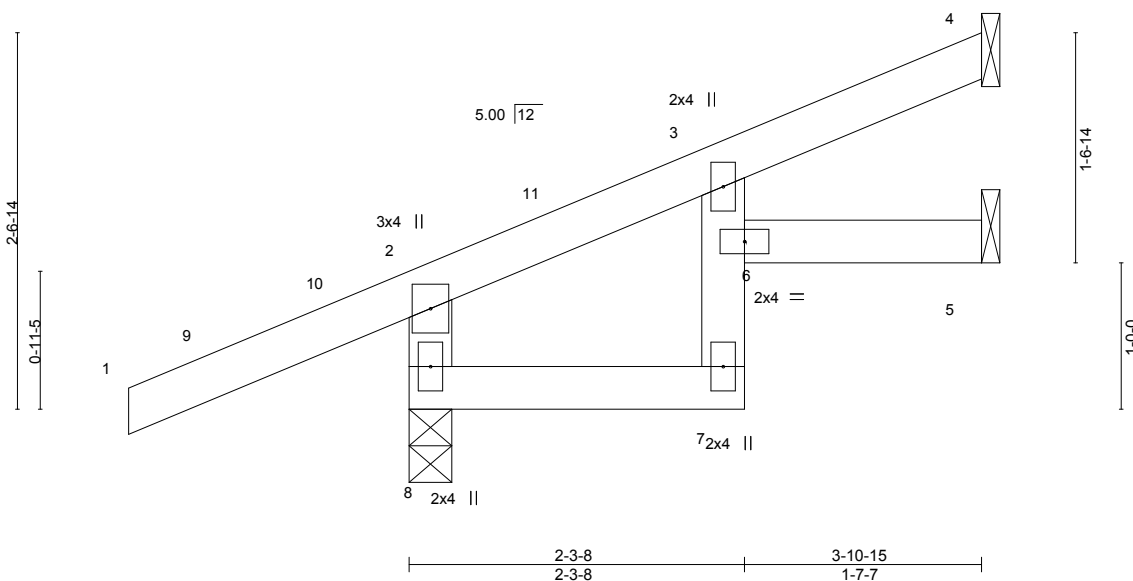
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-306/226

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -2-1-0 to 0-11-0, Interior(1) 0-11-0 to 1-9-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 95 lb uplift at joint 5, 35 lb uplift at joint 3 and 14 lb uplift at joint 4.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

Job 2525051	Truss J4	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-1qCmieZ09LT7qIKRjcbMM6R3Kiz5PpiGKM1TeFyKUSC 12/21/2020		Ply 1 Roeser/1464 Winterset 143577301 Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:17 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-1qCmieZ09LT7qIKRjcbMM6R3Kiz5PpiGKM1TeFyKUSC
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,			



Scale = 1:15.7

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	25.0	2-0-0		TC	0.27	in	(loc)	I/defl	L/d	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.09	Vert(LL)	-0.01	7	>999		
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.02	7	>999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		Horz(CT)	0.01	5	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 14 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 3-10-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=95(LC 16)
 Max Uplift 8=-72(LC 16), 4=-20(LC 16)
 Max Grav 8=357(LC 21), 4=99(LC 21), 5=54(LC 7)

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

TOP CHORD 2-8=-320/203

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 72 lb uplift at joint 8 and 20 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 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

2525051

Truss

J5

Truss Type

Jack-Open

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

ID:WV5xOZ45cNK4PQ2HmSu_kyyPFt9-W0m9w_aewfb_RsvdGJ6buK_Ic6J28GyQZ0n1BhyKUSB

12/21/2020

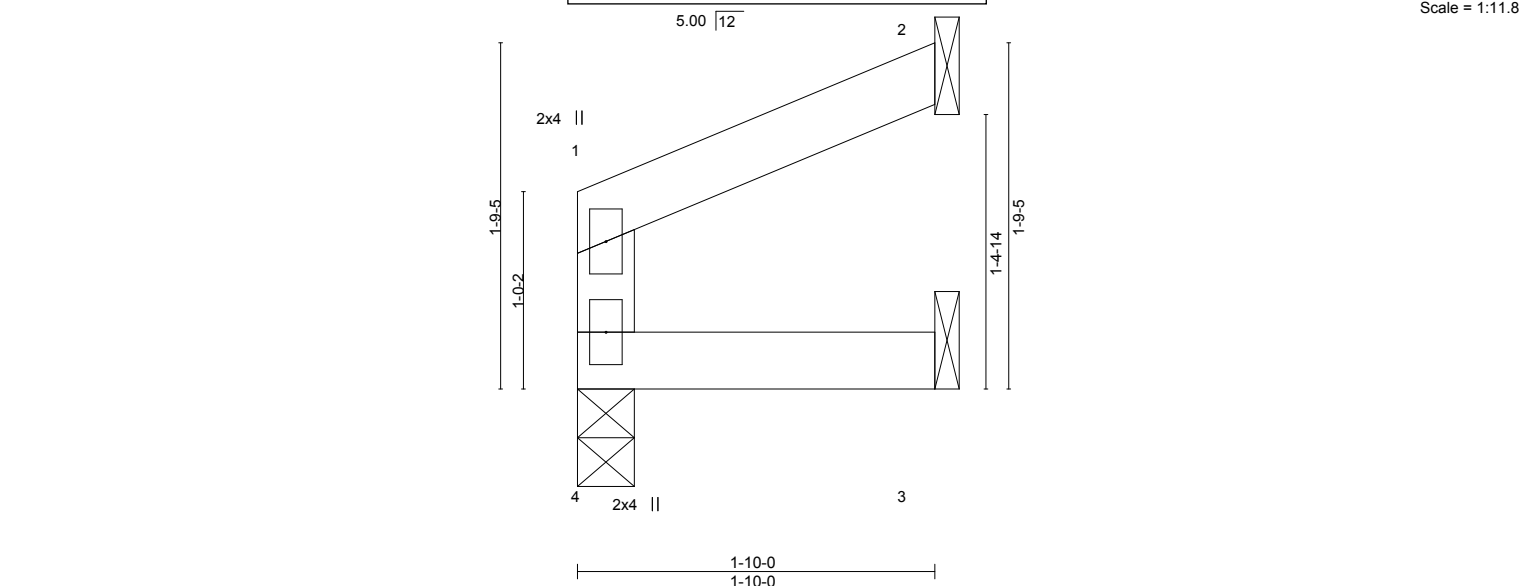
8.240 s Mar

9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:18 2020 Page 1

Roeser/1464 Winterset

I43577302

Job Reference (optional)



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.05	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.04	Vert(LL)	-0.00 4 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.00 4 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		Horz(CT)	-0.00 2 n/a	n/a			
BCDL	10.0	Code IRC2018/TP12014							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 1-10-0 oc purlins, except end verticals.

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

REACTIONS.

(size) 4=0-3-8, 2=Mechanical, 3=Mechanical

Max Horz 4=37(LC 16)

Max Uplift 2=-21(LC 16), 3=-2(LC 16)

Max Grav 4=75(LC 2), 2=55(LC 2), 3=32(LC 7)

FORCES.

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

3) Unbalanced snow loads have been considered for this design.

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

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

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 2 and 2 lb uplift at joint 3.

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.

STATE OF MISSOURI

ANDREW THOMAS JOHNSON

NUMBER PE-2017018993

PROFESSIONAL ENGINEER

November 11,2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

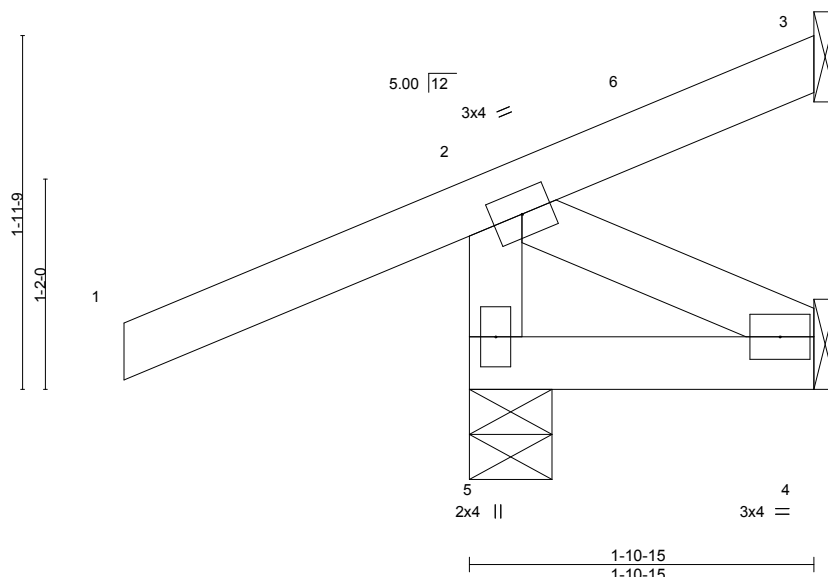
MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job 2525051	Truss J6	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Roeser/1464 Winterset Job Reference (optional) ID:WV5xOZ45cNK4PQ2HmSu_xyyPFT9-_CJX7KbGhzjr30Uqq1dqRXWPDWfXtjxZngWaj8yKUSA
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			-1-11-0 1-11-0	12/21/2020	1-10-15 1-10-15

Scale = 1:12.8



LOADING (psf)		SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof)	25.0	2-0-0	TC 0.31	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 5 >999 240		
TCDL	10.0	Lumber DOL 1.15	WB 0.02	Vert(CT) -0.00 4-5 >999 180		
BCLL	0.0	Rep Stress Incr YES	Matrix-MP	Horz(CT) -0.00 3 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014			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 1-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-8, 3=Mechanical, 4=Mechanical
Max Horz 5=43(LC 15)
Max Uplift 5=86(LC 16), 3=44(LC 20), 4=17(LC 16)
Max Grav 5=324(LC 21), 3=28(LC 16), 4=35(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-306/205

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 1-10-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 86 lb uplift at joint 5, 44 lb uplift at joint 3 and 17 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

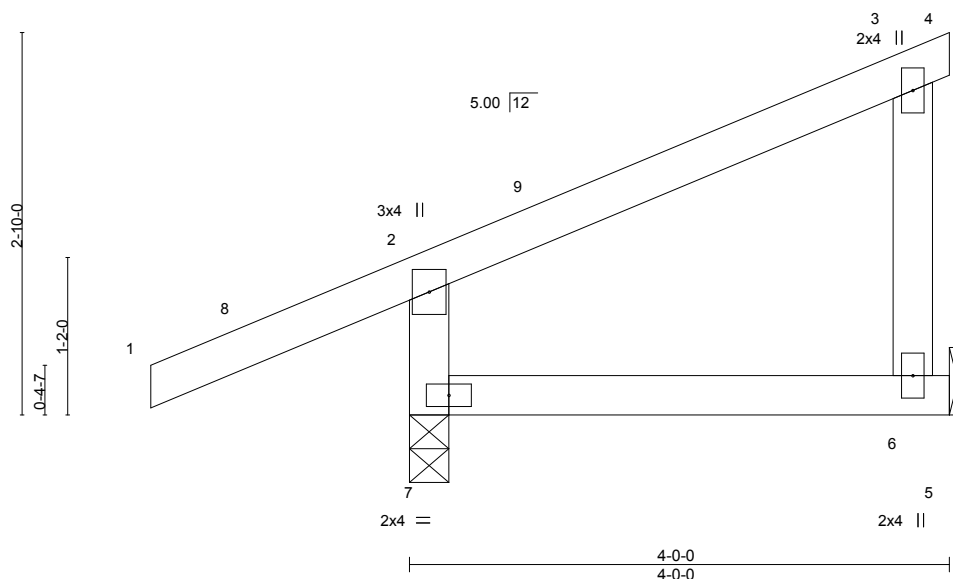
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2525051	Truss J7	Truss Type MONO TRUSS	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-_CJX7KbGhzjr30Uqq1dqRXWPqWeHtjsZngWaj8yKUSA 12/21/2020	Ply 1	Roeser/1464 Winterset I43577304 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:19 2020 Page 1 xyyPFt9-_CJX7KbGhzjr30Uqq1dqRXWPqWeHtjsZngWaj8yKUSA
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,			



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.27	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.11	Vert(LL)	-0.01 6-7 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.02	Vert(CT)	-0.02 6-7 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-MS		Horz(CT)	0.00 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014							Weight: 15 lb	FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 7=0-3-8
Max Horz 7=101(LC 16)
Max Uplift 6=-24(LC 16), 7=-65(LC 16)
Max Grav 6=166(LC 21), 7=347(LC 2)

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

TOP CHORD 2-7=-308/207

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 4-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 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 24 lb uplift at joint 6 and 65 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 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 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 2525051	Truss J9	Truss Type JACK-OPEN	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1 Roeser/1464 Winterset Job Reference (optional) ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-SPTvLgcVSGrih930Ok93zl3Yuwxc1hj0KG7FayKUS9
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:20 2020 Page 1 Su_xyyPFt9-SPTvLgcVSGrih930Ok93zl3Yuwxc1hj0KG7FayKUS9		

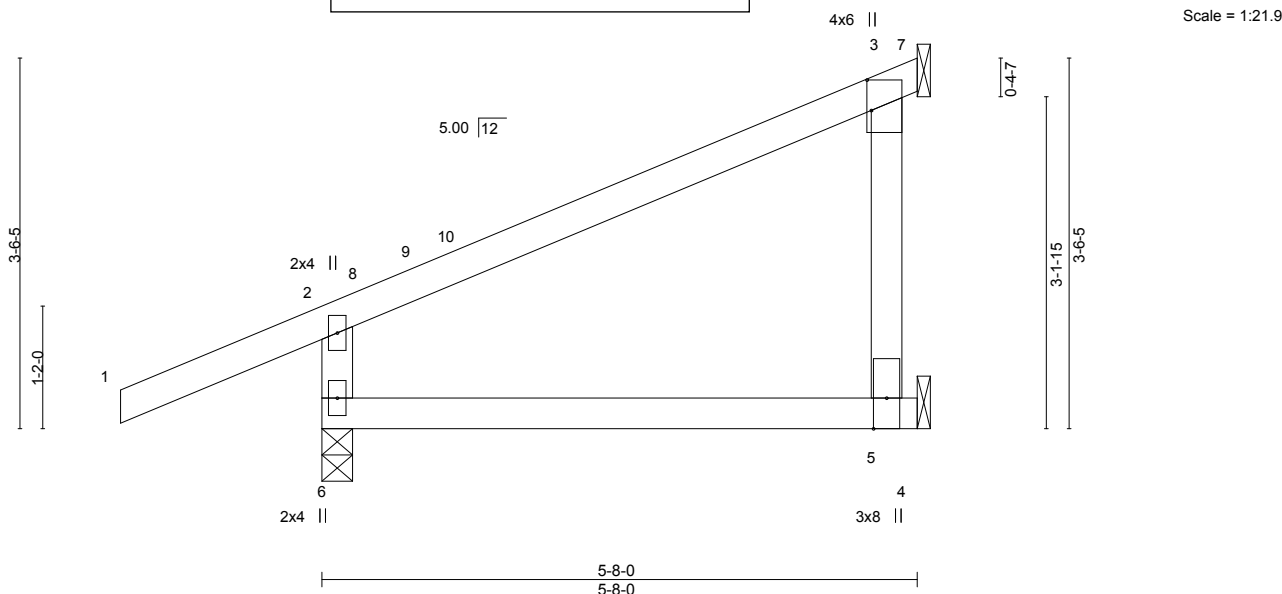


Plate Offsets (X,Y)-- [3:0-3-8,0-0-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.04	5-6	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.09	5-6	>705	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.63	Horz(CT)	-0.25	3	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 20 lb	FT = 20%

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

REACTIONS. (size) 6=0-3-8, 5=Mechanical, 3=Mechanical
 Max Horz 6=121(LC 16)
 Max Uplift 6=-130(LC 16), 5=-474(LC 14), 3=-2098(LC 16)
 Max Grav 6=413(LC 2), 5=2124(LC 16), 3=588(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-6=-361/304
 WEBS 3-5=-3551/1725

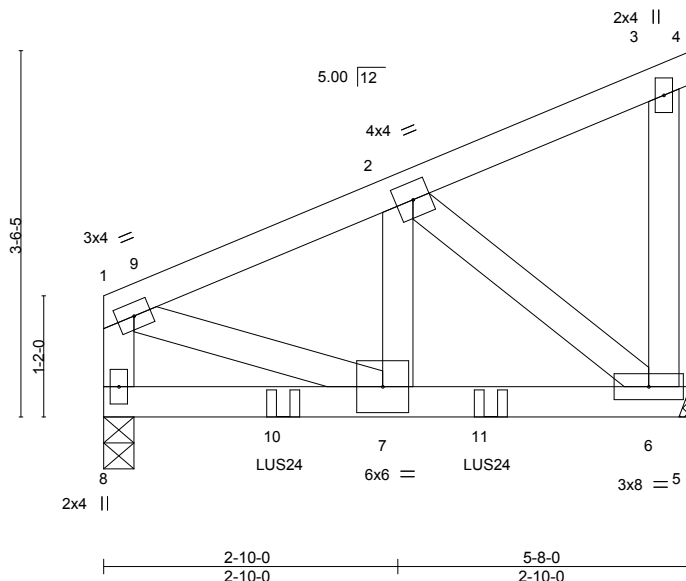
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 5-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 6, 474 lb uplift at joint 5 and 2098 lb uplift at joint 3.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



November 11,2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-S7MUmsPES2i68YFlugL4n9sjL3117RDD6Aek93yKUSQ			Roeser/1464 Winterset	I43577306
2525051	J10	Jack-Closed Girder				Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:03 2020 Page 1 2-10-0 12/21/2020 5-8-0 2-10-0			

Scale = 1:22.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.02	7-8	>999	240	MT20
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.03	7-8	>999	180	197/144
TCDL 10.0	Rep Stress Incr	NO	WB 0.19	Horz(CT)	0.00	6	n/a	n/a	
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MP						
BCDL 10.0									
								Weight: 26 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 5-8-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 6=Mechanical
Max Horz 8=108(LC 11)
Max Uplift 8=69(LC 12), 6=85(LC 9)
Max Grav 8=797(LC 2), 6=790(LC 2)

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

TOP CHORD 1-8=-642/65, 1-2=-827/87
BOT CHORD 6-7=-102/742
WEBS 1-7=-54/785, 2-7=-59/685, 2-6=-949/114

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 8 and 85 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-8-12 from the left end to 3-8-12 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-51, 3-4=-51, 5-8=-20
Concentrated Loads (lb)
Vert: 10=-490(F) 11=-490(F)



November 11, 2020

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

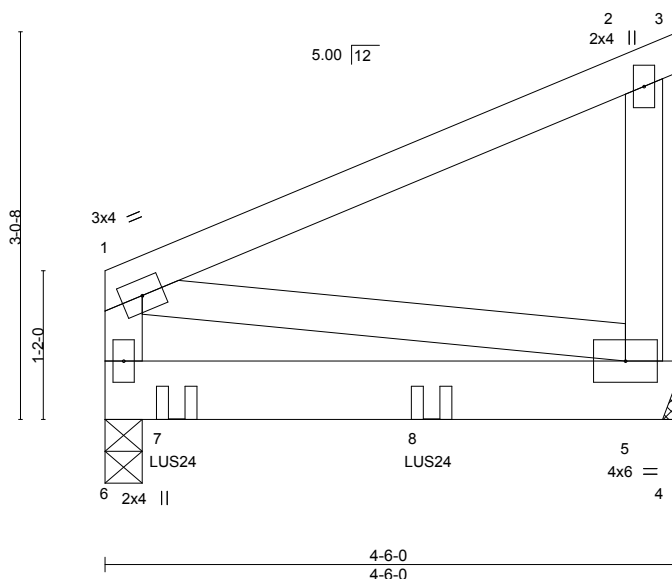
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TPI 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	Jack-Closed Girder	Release For Construction AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply	1	Roeser/1464 Winterset	I43577307
2525051	J11						Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-S7UMsPES2i68YFlugL4n9sf93167U4D6Aek93yKUSQ				
				12/29/2020				

Scale = 1:18.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.03	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.06				
TCDL	10.0	Rep Stress Incr	NO	WB	0.01	Horz(CT)	-0.00				
BCLL	0.0	Code IRC2018/TP12014		Matrix-MP							
BCDL	10.0										
								Weight: 21 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 4-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 5=Mechanical
Max Horz 6=88(LC 9)
Max Uplift 6=-79(LC 12), 5=-64(LC 9)
Max Grav 6=909(LC 2), 5=579(LC 2)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 79 lb uplift at joint 6 and 64 lb uplift at joint 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.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 0-6-12 from the left end to 2-6-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-51, 2-3=-51, 4-6=-20
Concentrated Loads (lb)
Vert: 7=-495(B) 8=-490(B)



November 11, 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 2525051	Truss J12	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-wKvs_CPsDMqzmiqxsNsJKNPqkTWistuMLqOHhVyKUSP 12/21/2020			Ply 1	Roeser/1464 Winterset	I43577308
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:04 2020 Page 1 Job Reference (optional)					

Scale = 1:18.1

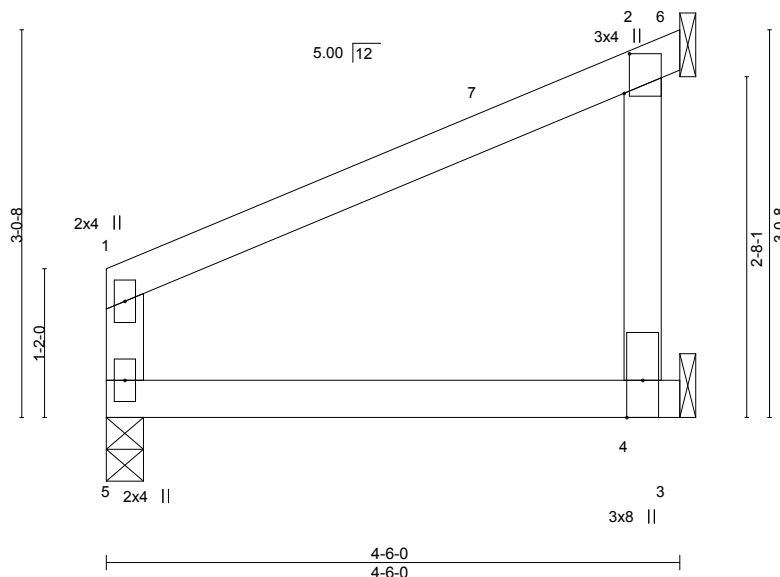


Plate Offsets (X,Y)-- [2:0-3-12,0-0-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.02 4-5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.03 4-5	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.29	Horz(CT)	-0.11 2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL 10.0								Weight: 14 lb	FT = 20%

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

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

REACTIONS. (size) 5=0-3-8, 4=Mechanical, 2=Mechanical
Max Horz 5=71(LC 16)
Max Uplift 5=-31(LC 16), 4=-332(LC 14), 2=-996(LC 16)
Max Grav 5=200(LC 20), 4=994(LC 16), 2=428(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-2147/1009

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 5, 332 lb uplift at joint 4 and 996 lb uplift at joint 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.
 - 9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



November 11, 2020

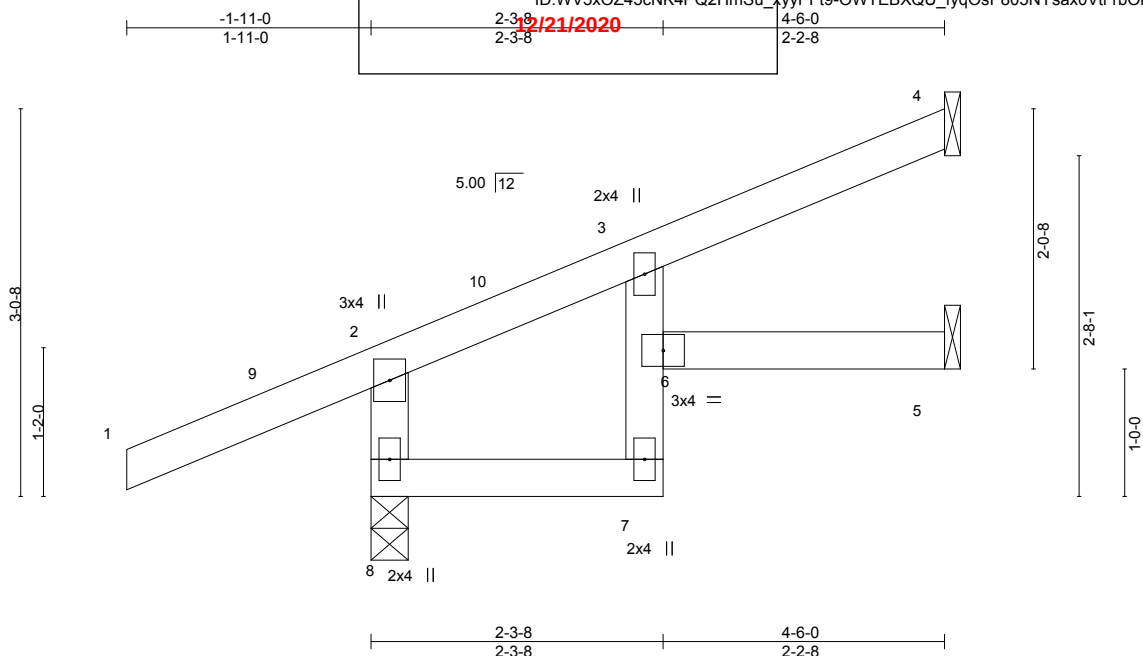
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2525051	Truss J13	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-OWTEBXQU_fyqOsP805NYsax0Vtr1bOkvZU7rDxyKUSO 12/21/2020		Ply 1 Roeser/1464 Winterset 143577309 Job Reference (optional)
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:05 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-OWTEBXQU_fyqOsP805NYsax0Vtr1bOkvZU7rDxyKUSO	



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.26	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	1.15		BC	0.17	-0.02	6	>999			
TCDL	10.0	1.15		WB	0.00	-0.03	6	>999			
BCLL	0.0	YES		Matrix-AS		-0.01	5	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
									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, except end verticals.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
 Max Horz 8=107(LC 16)
 Max Uplift 8=66(LC 16), 4=-28(LC 16)
 Max Grav 8=372(LC 2), 4=121(LC 21), 5=67(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-8=-327/205

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 4-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 8 and 28 lb uplift at joint 4.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

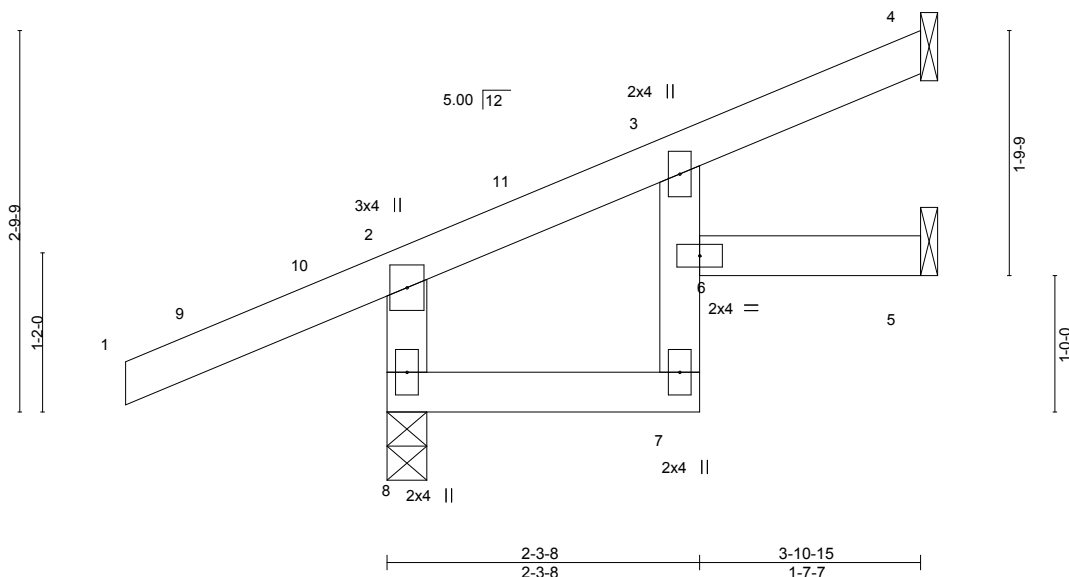
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2525051	Truss J14	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Roeser/1464 Winterset I43577310 Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:05 2020 Page 1 ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-OWTEBXQU_fyqOsP805NYsax0MtsAbOkVZU7rDxyKUSO
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	25.0	2-0-0		TC	0.27	in	(loc)	I/defl	L/d	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.10	Vert(LL)	-0.01	7	>999		
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.02	7	>999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		Horz(CT)	-0.01	5	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 14 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 3-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=100(LC 16)
Max Uplift 8=67(LC 16), 4=-22(LC 16), 5=-2(LC 13)
Max Grav 8=357(LC 21), 4=100(LC 21), 5=54(LC 7)

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

TOP CHORD 2-8=-320/203

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 8, 22 lb uplift at joint 4 and 2 lb uplift at joint 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.



November 11, 2020

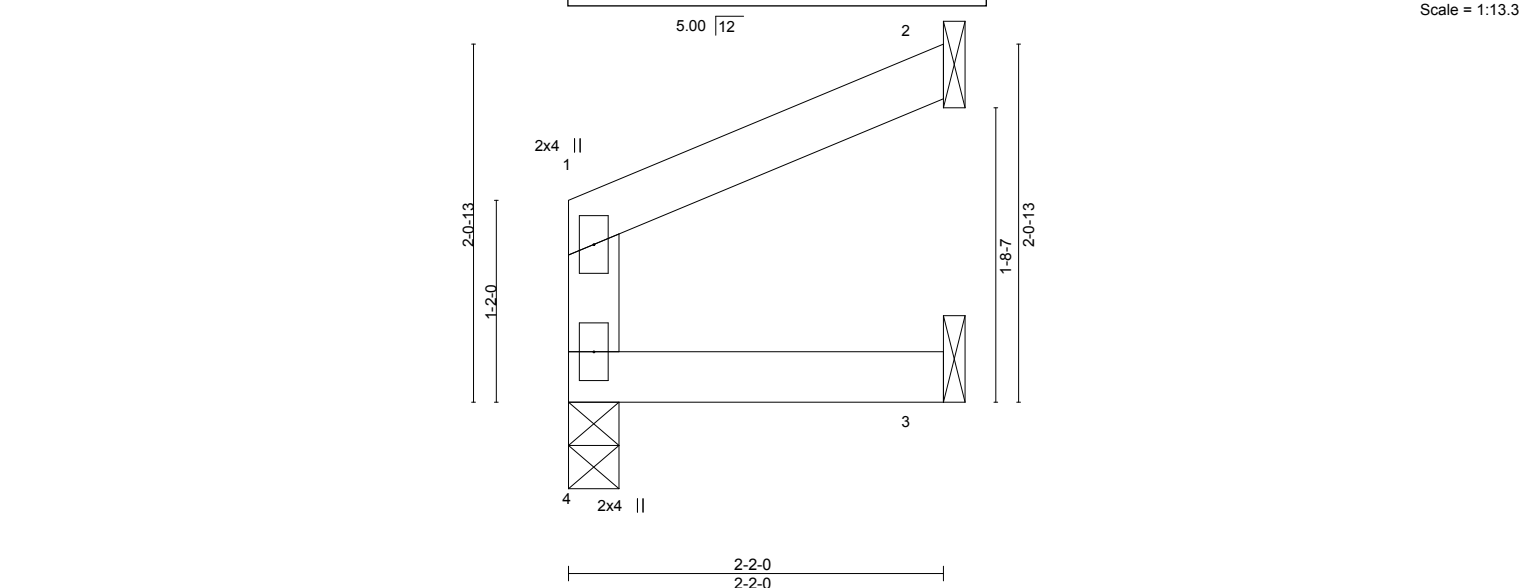
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2525051	Truss J15	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020	Ply 1	Roeser/1464 Winterset I43577311 Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:06 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPfT9-si1cPtR7Iz4h70_KZounPoUFNGDxKr_fo8tOIoyKUSN
----------------	--------------	-------------------------	--	----------	---



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.06	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.06	Vert(LL)	-0.00 4 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.00 3-4 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		Horz(CT)	-0.01 2 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 6 lb	FT = 20%	

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

REACTIONS. (size) 4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 4=44(LC 16)
Max Uplift 2=-25(LC 16), 3=-2(LC 16)
Max Grav 4=88(LC 2), 2=65(LC 2), 3=38(LC 7)

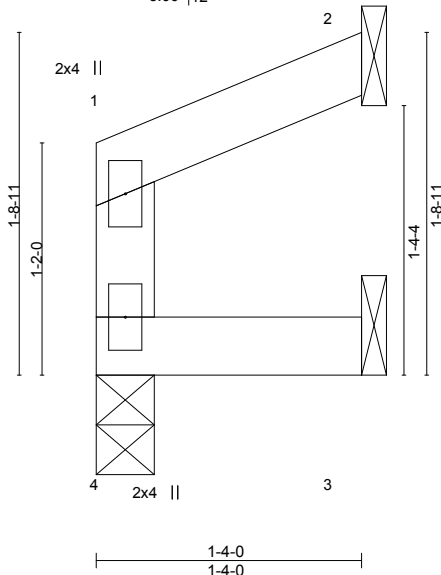
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 2 and 2 lb uplift at joint 3.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

Job 2525051	Truss J16	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-Kub_cDSIWHCYdAZW7VQ0y?1QWgZb3IEo1ocxlyKUSM 12/21/2020 5.00 12	Ply 1	Roeser/1464 Winterset I43577312 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:07 2020 Page 1
----------------	--------------	-------------------------	---	----------	---



Scale = 1:11.6

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.04	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.04	Vert(LL)	-0.00 4 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.00 4 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		Horz(CT)	-0.00 2 n/a	n/a			
BCDL	10.0	Code IRC2018/TP12014							Weight: 4 lb	FT = 20%	

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

REACTIONS.	
(size)	4=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz	4=35(LC 16)
Max Uplift	2=-20(LC 16), 3=-6(LC 16)
Max Grav	4=53(LC 2), 2=39(LC 27), 3=23(LC 7)

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

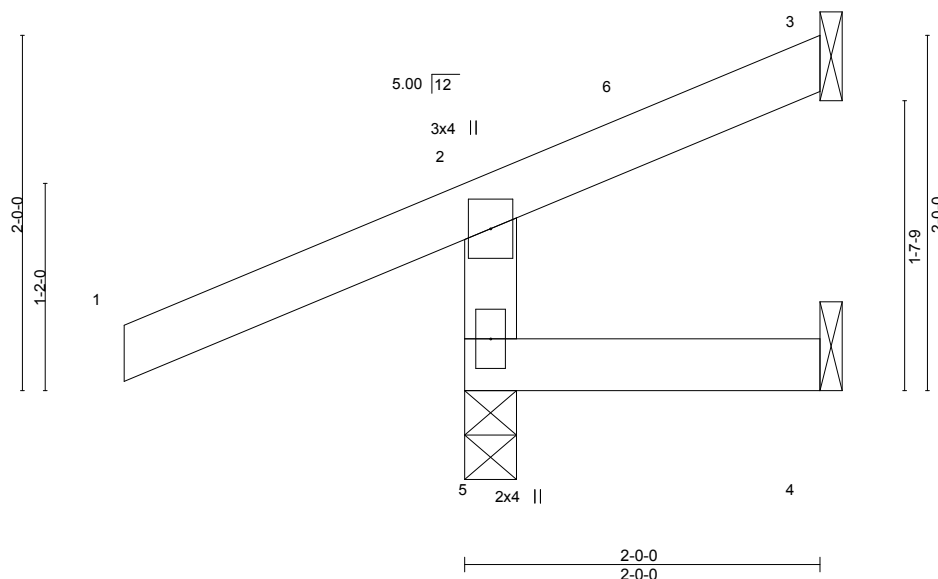
- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 2 and 6 lb uplift at joint 3.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

Job 2525051	Truss J17	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:VV5xOZ45cNK4PQ2HmSu_xyyPF19-Kub_cDSIWHCYdAZW7VQ0y?1MDgYw3IEo1ocxIqyKUSM 12/21/2020		Ply 1 Roeser/1464 Winterset I43577313 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:07 2020 Page 1 PF19-Kub_cDSIWHCYdAZW7VQ0y?1MDgYw3IEo1ocxIqyKUSM		

Scale = 1:13.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.31	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.08	0.00	4-5 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.00	0.00	4-5 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		-0.01	3 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 8 lb	FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=79(LC 16)
 Max Uplift 5=-74(LC 16), 3=-22(LC 20), 4=-4(LC 21)
 Max Grav 5=325(LC 21), 3=12(LC 14), 4=29(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-284/202

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 1-11-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 5, 22 lb uplift at joint 3 and 4 lb uplift at joint 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

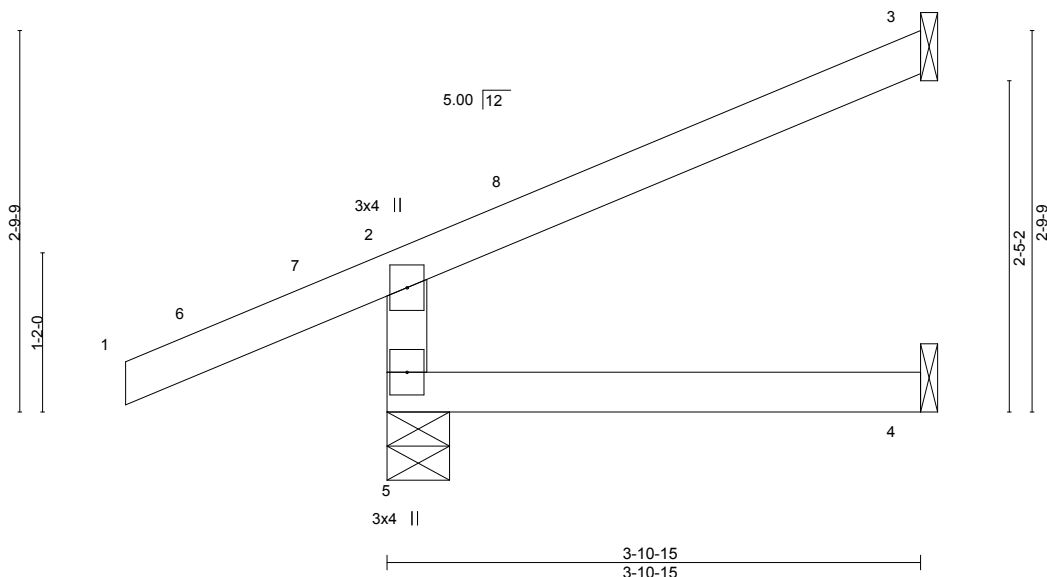
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2525051	Truss J18	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-o59NpZSNHaKPFJ8ihDxFUDZxc4tBoIUyGSMVqGyKUSL 12/21/2020		Ply 1 Roeser/1464 Winterset I43577314 Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 19 19:44:08 2020 Page 1 xyyPFt9-o59NpZSNHaKPFJ8ihDxFUDZxc4tBoIUyGSMVqGyKUSL
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar	



Scale = 1:16.9

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.27	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.14	Vert(LL)	-0.01 4-5 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.02 4-5 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		Horz(CT)	-0.02 3 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 13 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 3-10-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=100(LC 16)
 Max Uplift 5=67(LC 16), 3=30(LC 16)
 Max Grav 5=357(LC 21), 3=110(LC 21), 4=67(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-317/209

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 5 and 30 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

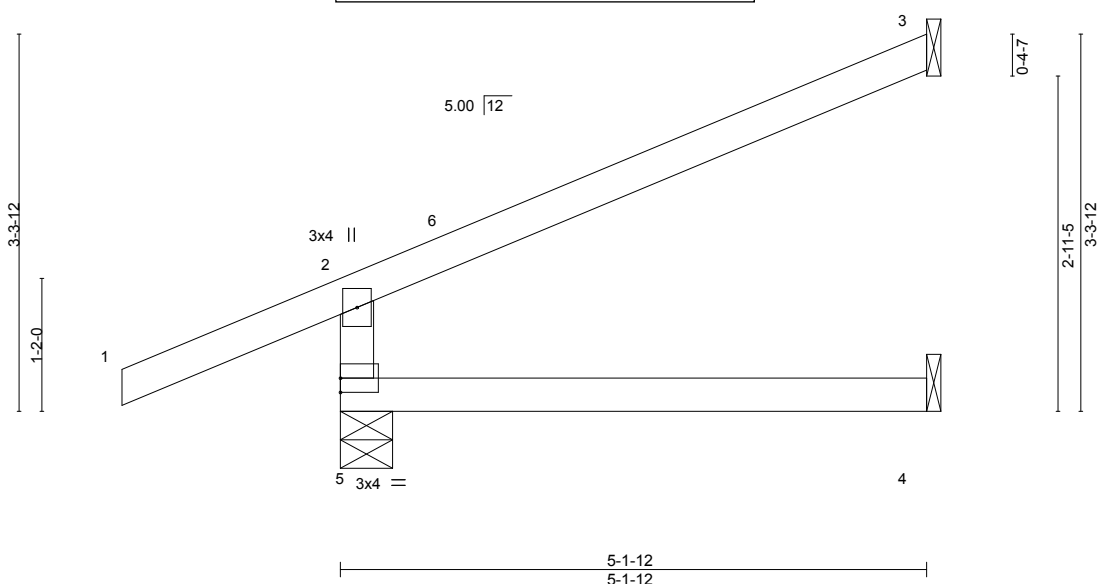
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 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 2525051	Truss J19	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-GHj1vT?2uSFsTjvFwSU1Q6hUCJXCK5U652MjyKUSK 12/21/2020		Ply 1 Roeser/1464 Winterset I43577315 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:09 2020 Page 1 5-1-12 5-1-12		



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.03	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.06				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.04				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL	10.0										
								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, except end verticals.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=0-5-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=114(LC 16)
 Max Uplift 5=66(LC 16), 3=44(LC 16)
 Max Grav 5=397(LC 2), 3=164(LC 21), 4=90(LC 7)

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

TOP CHORD 2-5=-347/222

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 5-1-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 5 and 44 lb uplift at joint 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

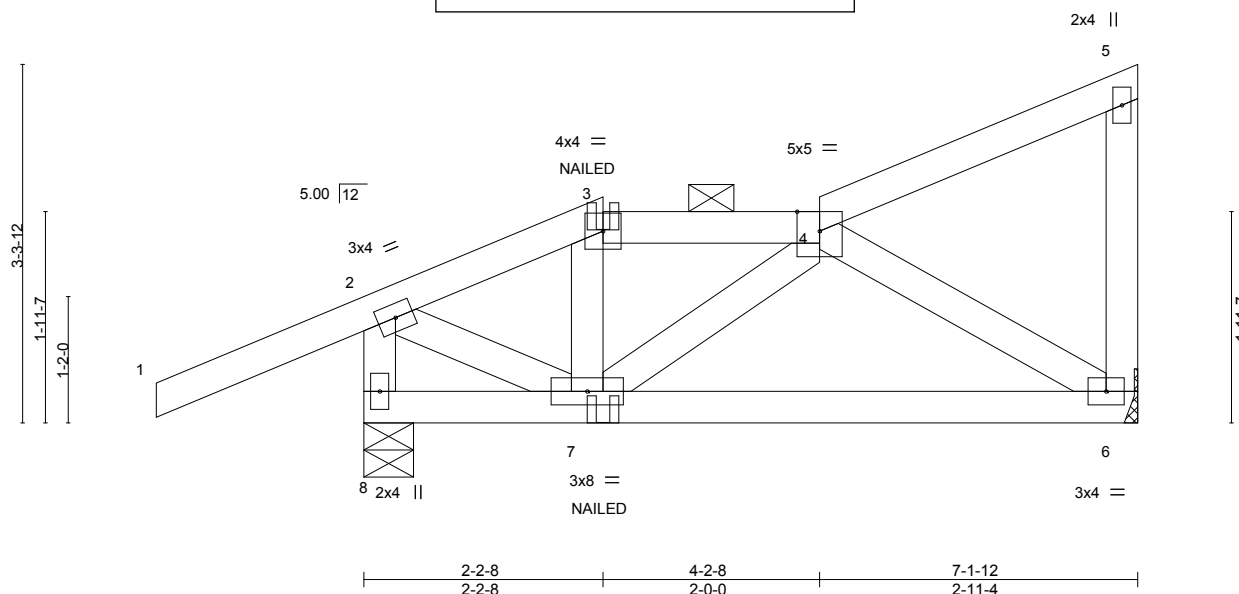
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020			Ply	Roeser/1464 Winterset	I43577316
2525051	J20	Roof Special	Girder	2-2-8	2-2-8	2-0-0	1	
Builders FirstSource (Valley Center),			Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:10 2020 Page 1 ID:WV5xOZ45cNK4PQ2HhSu_xyyPFt9-1TH7EFUdpCa6Udl5oezjZefrzuYQGf2EjmrCu9yKUSJ		
-1-11-0			2-2-8			7-1-12		
1-11-0			2-2-8			2-11-4		



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.02 6-7 >999 240	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.04 6-7 >999 180				
TCDL	10.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00 6 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MP							
BCDL	10.0										
								Weight: 33 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=Mechanical, 8=0-5-8
Max Horz 8=113(LC 9)
Max Uplift 6=-31(LC 9), 8=-92(LC 12)
Max Grav 6=283(LC 2), 8=494(LC 35)

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

TOP CHORD 2-3=-276/18, 2-8=-497/90
WEBS 4-6=-275/45, 2-7=0/263

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 6 and 92 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-51, 2-3=-51, 3-4=-61, 4-5=-51, 6-8=-20
Concentrated Loads (lb)
Vert: 7=3(B)



November 11, 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
2525051

Truss
J21

Truss Type
Half Hip

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

ID:WV5xOZ45cNK4PQ2HmSu
12/21/2020

Ply
1

Roeser/1464 Winterset
I43577317

Job Reference (optional)
9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:11 2020 Page 1
xyyPFt9-DggVSbVFaviz6ntHMLUy6rB29Hv8?5COyQa9RbyKUSI

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

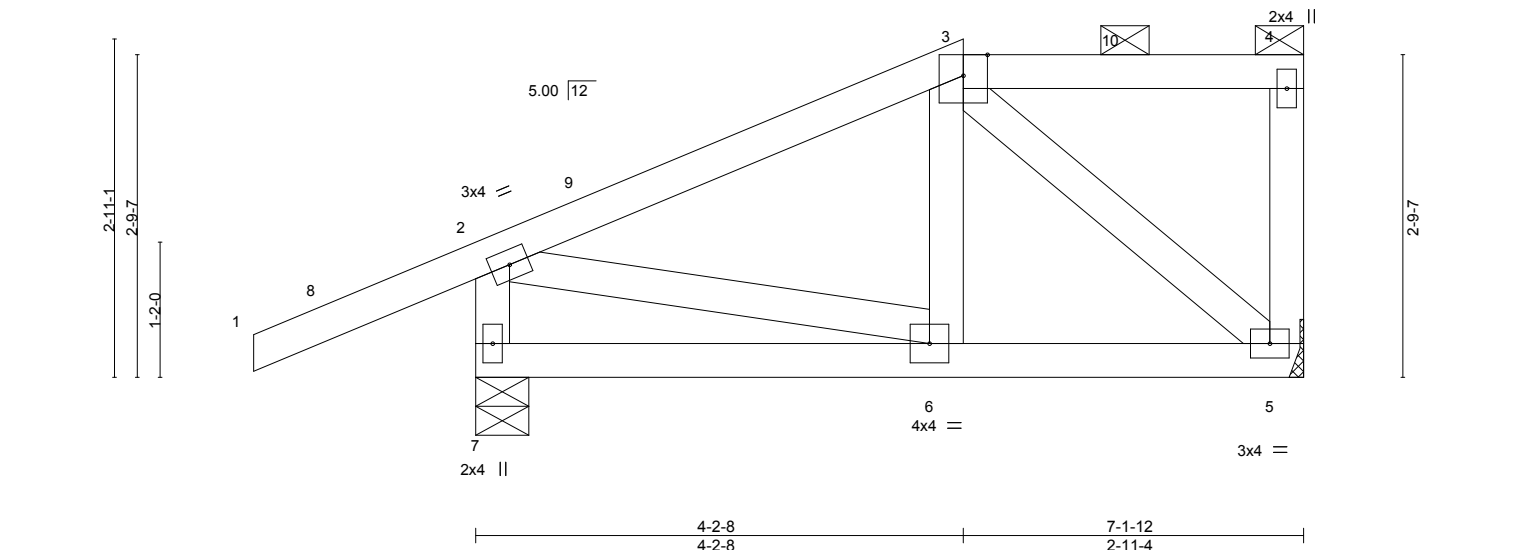
-1-11-0
1-11-0

4-2-8
4-2-8

5x5 =

7-1-12
2-11-4

Scale = 1:19.9



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	25.0	2-0-0		TC	0.32	in	(loc)	I/defl	L/d	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.12	Vert(LL)	-0.01	6-7	>999		
TCDL	10.0	Lumber DOL	1.15	WB	0.07	Vert(CT)	-0.02	6-7	>999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	-0.00	5	n/a		
BCDL	10.0	Code IRC2018/TPI2014								Weight: 33 lb	FT = 20%

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

REACTIONS. (size) 7=0-5-8, 5=Mechanical
Max Horz 7=98(LC 15)
Max Uplift 7=92(LC 16), 5=37(LC 13)
Max Grav 7=526(LC 36), 5=287(LC 2)

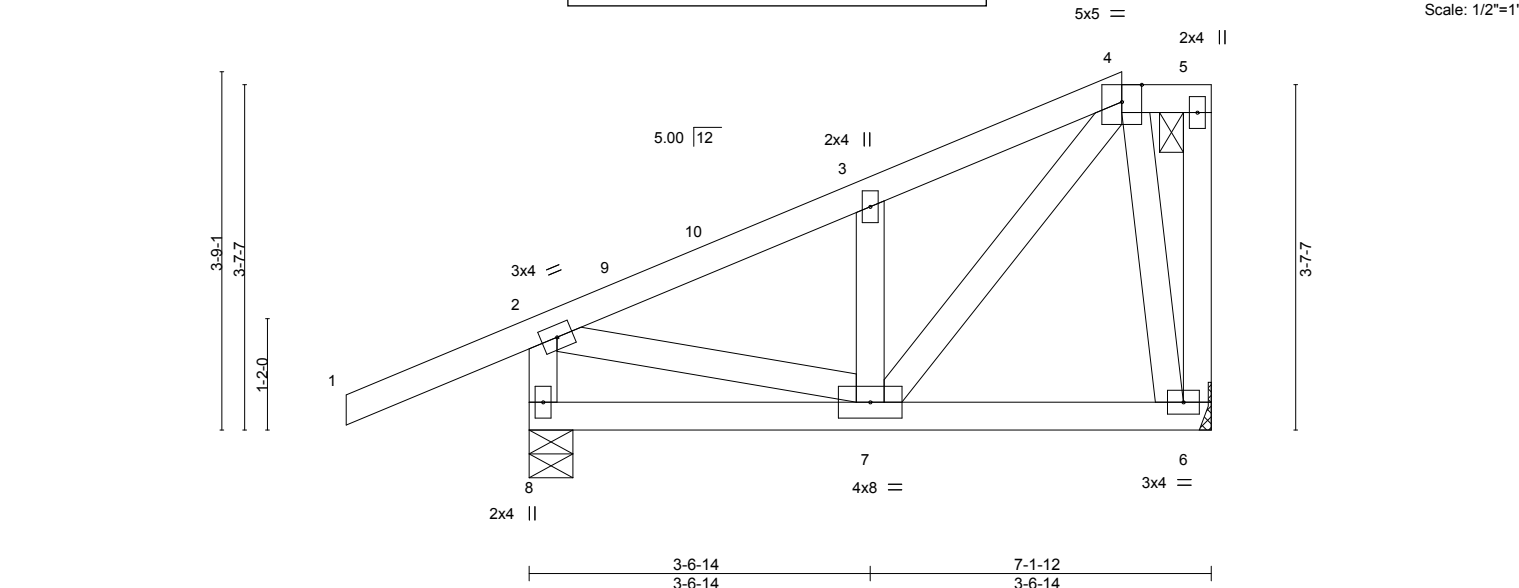
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-268/80, 2-7=-494/247
WEBS 3-5=-250/154

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 4-2-8, Exterior(2E) 4-2-8 to 7-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 7 and 37 lb uplift at joint 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

Job 2525051	Truss J22	Truss Type Half Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1 Roeser/1464 Winterset 143577318
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID: WV5xOZ45cNK4PQ2Hm\$u_xyyPFt9-hsOtfxWtLpqqjxRUw3?Bf3kBTfPkyKXA4Kiz2yKUSH 12/21/2020		



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0		2-0-0	TC	0.34	in	(loc)	I/defl	L/d	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.10	Vert(LL)	-0.01	7-8	>999				
TCDL	10.0	Lumber DOL	1.15	WB	0.07	Vert(CT)	-0.01	7-8	>999				
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	-0.00	6	n/a				
BCDL	10.0	Code IRC2018/TPI2014											
										Weight: 38 lb		FT = 20%	

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

REACTIONS. (size) 6=Mechanical, 8=0-5-8
 Max Horz 8=127(LC 15)
 Max Uplift 6=-35(LC 13), 8=-91(LC 16)
 Max Grav 6=290(LC 36), 8=555(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-339/69, 3-4=-302/103, 2-8=-526/234
 BOT CHORD 7-8=-253/172
 WEBS 4-6=-259/182, 2-7=0/256, 4-7=-178/299

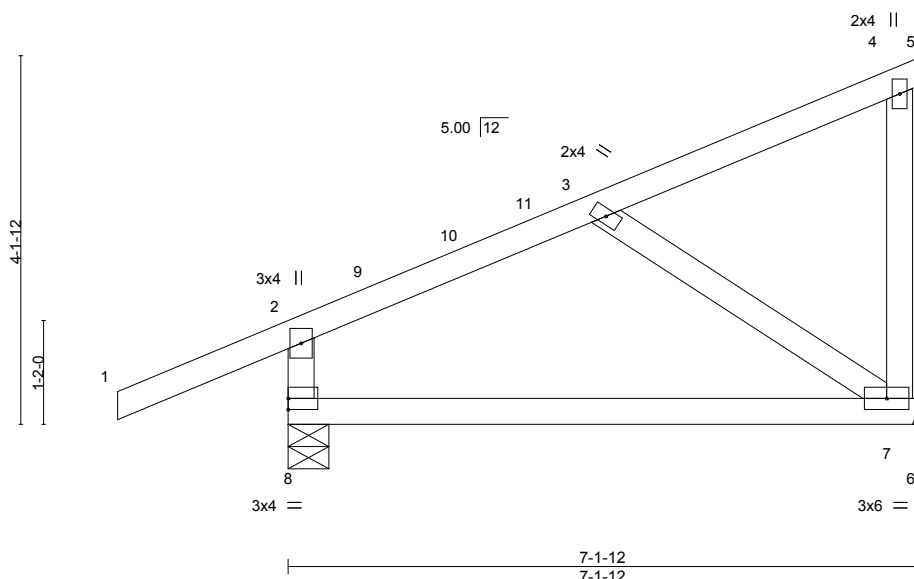
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 6-2-8, Exterior(2E) 6-2-8 to 7-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 6 and 91 lb uplift at joint 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

Job 2525051	Truss J23	Truss Type Jack-Partial	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: WV5xOZ45cNK4PQ2HmSu_xyyPft9-92yGtGWW57yhL50gUmWQBGGMS5XhT?ehPk3GVUyKUSG 12/21/2020		Roeser/1464 Winterset Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:13 2020 Page 1 ID: WV5xOZ45cNK4PQ2HmSu_xyyPft9-92yGtGWW57yhL50gUmWQBGGMS5XhT?ehPk3GVUyKUSG
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,			
-1-11-0 1-11-0		3-6-14 3-6-14		7-1-12 3-6-14	

Scale = 1:25.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.33	in (loc)	l/defl	L/d			
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.38	Vert(LL)	-0.08 7-8 >961	240	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	WB	0.07	Vert(CT)	-0.16 7-8 >507	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.00 7 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 29 lb	FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-5-8, 7=Mechanical
Max Horz 8=138(LC 16)
Max Uplift 8=-64(LC 16), 7=-48(LC 16)
Max Grav 8=469(LC 2), 7=331(LC 21)

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

TOP CHORD 2-8=-386/214, 2-3=-260/54

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 7-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 8 and 48 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 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

2525051

Truss

J24

Truss Type

Half Hip

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

12/21/2020

ID:WV5xOZ45cNK4PQ2HmSu_xyyPFT9-dfWe4cX8sQ4YzEbs1U2fkUpUqVv9CRsqeOpp2wyKUSF

Ply

1

Roeser/1464 Winterset

I43577320

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 10 19:44:14 2020

Page 1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.54	Vert(LL)	-0.03	6-7	>999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.23	Vert(CT)	-0.07	6-7	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT)	-0.00	5	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 37 lb	FT = 20%

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

REACTIONS. (size) 7=0-5-8, 5=Mechanical
 Max Horz 7=124(LC 15)
 Max Uplift 7=91(LC 16), 5=35(LC 13)
 Max Grav 7=553(LC 36), 5=287(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-7=507/243
 WEBS 3-6=0/258, 3-5=322/147

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 6-0-0, Exterior(2E) 6-0-0 to 7-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 7 and 35 lb uplift at joint 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 11,2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek

16023 Swingley Ridge Rd

Chesterfield, MO 63017

Job: 2525051

Truss: J25

Truss Type: Half Hip Girder

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

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

ID: WV5xOZ45cNK4PQ2HmSu_kyyPFt9-5R40HyYmdkCPaOA3bBZuGhMiEvDlxtz_t2YMaMyKUSE

12/21/2020

Ply: 1

Roeser/1464 Winterset

Job Reference (optional)

9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:15 2020 Page 1

143577321

2-11-0

1-11-0

4-0-0

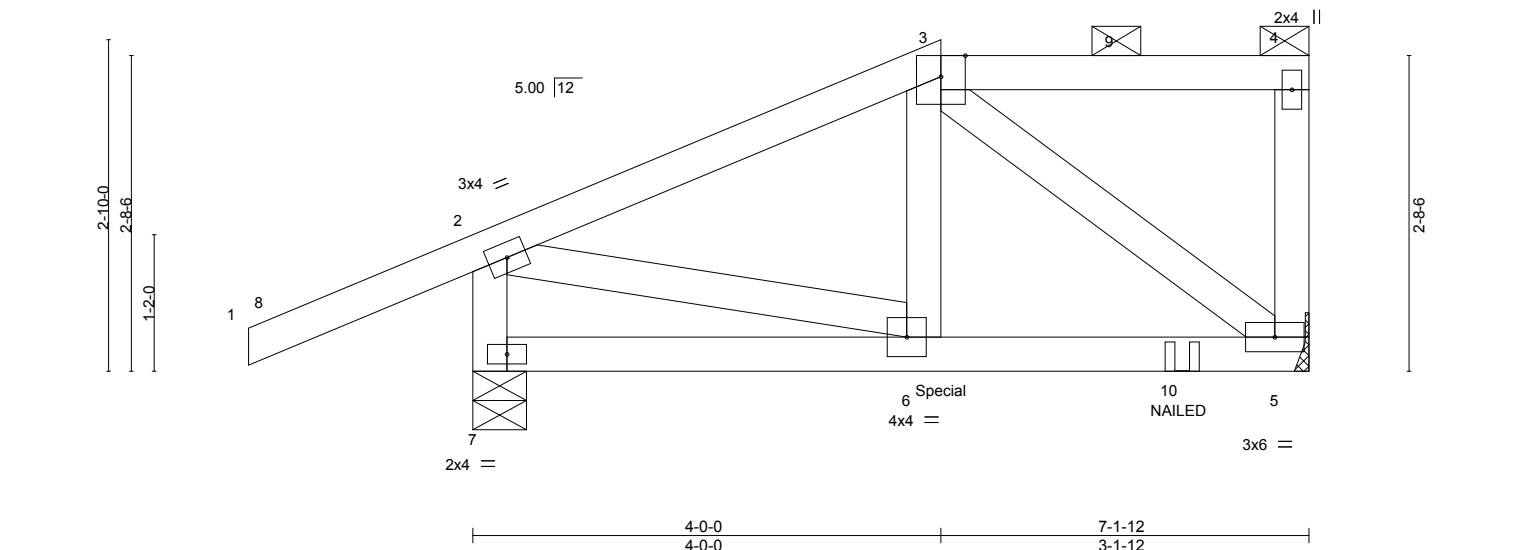
4-0-0

7-1-12

3-1-12

5x5 =

Scale = 1:19.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.01	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.02				
TCDL	10.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.00				
BCLL	0.0	Code IRC2018/TP12014		Matrix-MP							
BCDL	10.0										
								Weight: 33 lb		FT = 20%	

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

REACTIONS.	
(size)	7=0-5-8, 5=Mechanical
Max Horz	7=95(LC 11)
Max Uplift	7=-147(LC 12), 5=-124(LC 9)
Max Grav	7=681(LC 32), 5=579(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-532/120, 2-7=-656/160
BOT CHORD	5-6=-121/407
WEBS	3-6=-78/347, 3-5=-526/133, 2-6=-55/440

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 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 147 lb uplift at joint 7 and 124 lb uplift at joint 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.
 - 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) 304 lb down and 132 lb up at 4-0-0 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	
Continued on page 2	



November 11, 2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020			Ply	Roeser/1464 Winterset		I43577321
2525051	J25	Half Hip Girder				1	Job Reference (optional)		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.240 s Mar 9 2020	MiTek Industries, Inc. Tue Nov 10 19:44:15 2020 Page 2		
						ID:WV5xOZ45cNK4PQ2HmSu_kyyPFt9-5R40HyYmdkCPaOA3bBZuGhMiEvDlxtz_t2YMaMyKUSE			

LOAD CASE(S) Standard

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

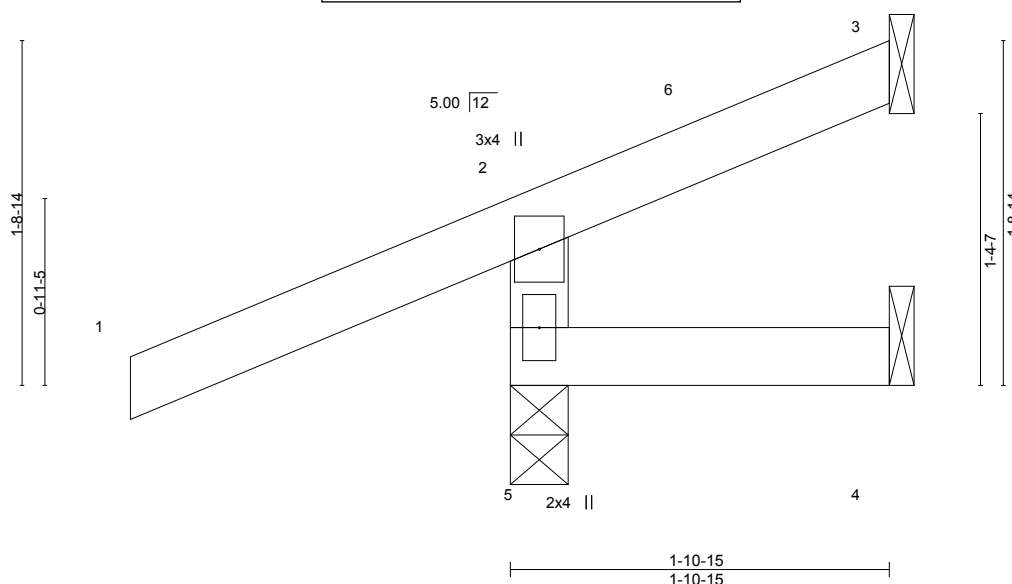
Uniform Loads (plf)

Vert: 1-2=-51, 2-3=-51, 3-4=-61, 5-7=-20

Concentrated Loads (lb)

Vert: 6=-304(F) 10=-146(F)

Job 2525051	Truss J26	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1 Roeser/1464 Winterset Job Reference (optional)
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		ID:WV5xOZ45cNK4PQ2HmS_u_xyyPFt9-ZdeOVIZOO2LGCYIF9u47pvuuzldvgMT75ilw6pyKUSD 12/21/2020	



Scale = 1:11.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.31	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) 0.00 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) 0.00 4-5 >999 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) -0.01 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 8 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 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=73(LC 16)
 Max Uplift 5=85(LC 16), 3=-24(LC 20), 4=-8(LC 21)
 Max Grav 5=324(LC 21), 3=9(LC 14), 4=26(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-281/207

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 1-10-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 5, 24 lb uplift at joint 3 and 8 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

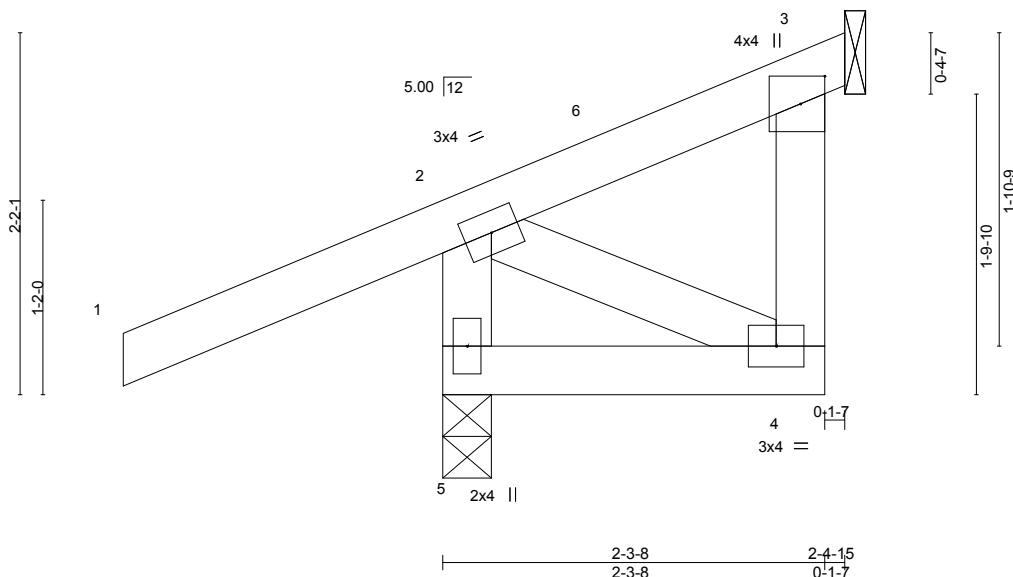
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 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 2525051	Truss J27	Truss Type Jack-Open	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1 Roeser/1464 Winterset I43577323 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-ZdeOVIZOO2LGCYIF9u47pvuuvleigMC75ilw6pyKUSD 12/21/2020		



Scale = 1:13.8

Plate Offsets (X,Y)-- [3:0-2-0,0-1-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.31	Vert(LL)	-0.00	5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	-0.00	3	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 13 lb	FT = 20%
BCDL 10.0										

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-4-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 3=Mechanical
 Max Horz 5=44(LC 15)
 Max Uplift 5=-82(LC 16), 3=-32(LC 34)
 Max Grav 5=329(LC 21), 3=39(LC 7), 3=19(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-309/200

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 2-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 5 and 32 lb uplift at joint 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



November 11, 2020

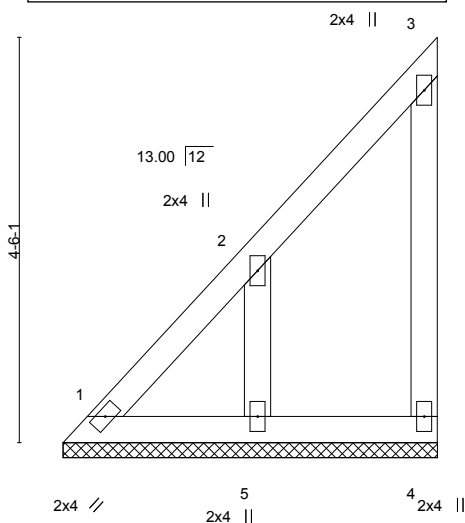
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2525051	Truss LG1	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:VV5xOZ45cNK4PQ2HmSu 12/21/2020	Ply 1	Roeser/1464 Winterset I43577324 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:21 2020 Page 1 xyyPFt9-wbRHY0cXDazYIJdCySglWycnXJL_LdGsF_?hn0yKUS8
----------------	--------------	---------------------	---	----------	--



Scale = 1:25.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.13	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	4	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 18 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 4-1-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-1-15, 4=4-1-15, 5=4-1-15
Max Horz 1=139(LC 11)
Max Uplift 1=-32(LC 12), 4=-48(LC 11), 5=-90(LC 14)
Max Grav 1=115(LC 24), 4=84(LC 23), 5=235(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-254/261

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 4-0-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 1, 48 lb uplift at joint 4 and 90 lb uplift at joint 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.



November 11, 2020

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

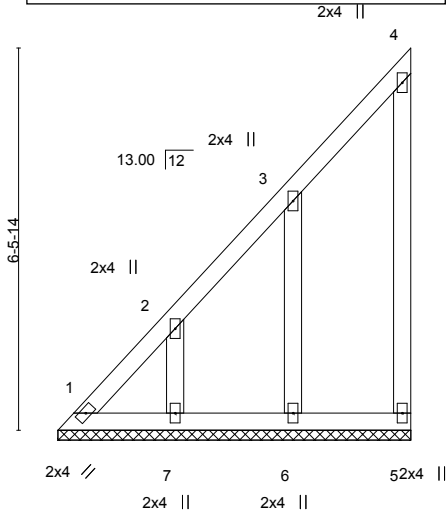
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 2525051	Truss LG2	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-wbRHY0cXDazYIjdCySglWyckYJL1LdtsF_?hn0yKUS8 5-11-14 12/21/2020	Ply 1 Roeser/1464 Winterset I43577325 Job Reference (optional)
----------------	--------------	---------------------	--	--

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:21 2020 Page 1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.32	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	5	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P					Weight: 29 lb	FT = 20%
BCDL 10.0	Code IRC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-11-14 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. All bearings 5-11-14.
 (lb) - Max Horz 1=208(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6, 7
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6, 7

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-397/398, 2-3=-283/289

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 5-10-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 6, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11,2020

Job 2525051	Truss LG3	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020	Ply 1	Roeser/1464 Winterset 143577326 Job Reference (optional) ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-On?flD9_u5PwTCPV9BX3A8vFjf74270UelEKSyKUS7
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:22 2020 Page 1 7-3-7 7-11-14 7-3-7 0-8-7		

Scale = 1:49.4

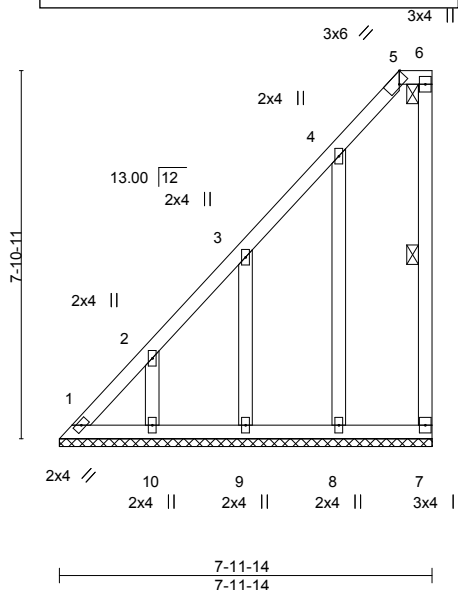


Plate Offsets (X,Y)-- [5:0-2-9,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.18	Horz(CT)	-0.00	7	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-S						Weight: 43 lb	FT = 20%
BCDL 10.0										

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 6-7

REACTIONS.

All bearings 7-11-14.
(lb) - Max Horz 1=265(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9, 10 except 1=-110(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 8, 9, 10

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-490/485, 2-3=-378/378, 3-4=-278/291
WEBS 4-8=-284/219

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-3-7, Exterior(2E) 7-3-7 to 7-10-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9, 10 except (jt=lb) 1=110.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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 2525051	Truss LG4	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI	Ply 1	Roeser/1464 Winterset 143577327 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID: WV5xOZ45cNK4PQ2HmS... 7-3-7 7-11-14 12-21-2020 0-8-7		

Scale = 1:49.4

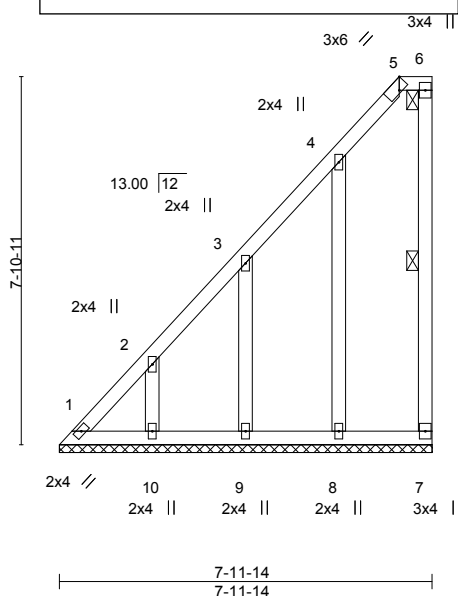


Plate Offsets (X,Y)-- [5:0-2-9,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.18	Horz(CT)	-0.00	7	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-S							
BCDL 10.0									Weight: 43 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, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 6-7

REACTIONS.

All bearings 7-11-14.
 (lb) - Max Horz 1=265(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9, 10 except 1=-110(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 8, 9, 10

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-490/485, 2-3=-378/378, 3-4=-278/291
 WEBS 4-8=-284/219

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-3-7, Exterior(2E) 7-3-7 to 7-10-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9, 10 except (jt=lb) 1=110.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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 2525051	Truss LG5	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1 Roeser/1464 Winterset 143577328 Job Reference (optional) ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-KA7QA1fPWVL7AnMdaD78bEJRXMRy_hlxxELOyKUS5
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:24 2020 Page 1 17-6-10 13-4-11		

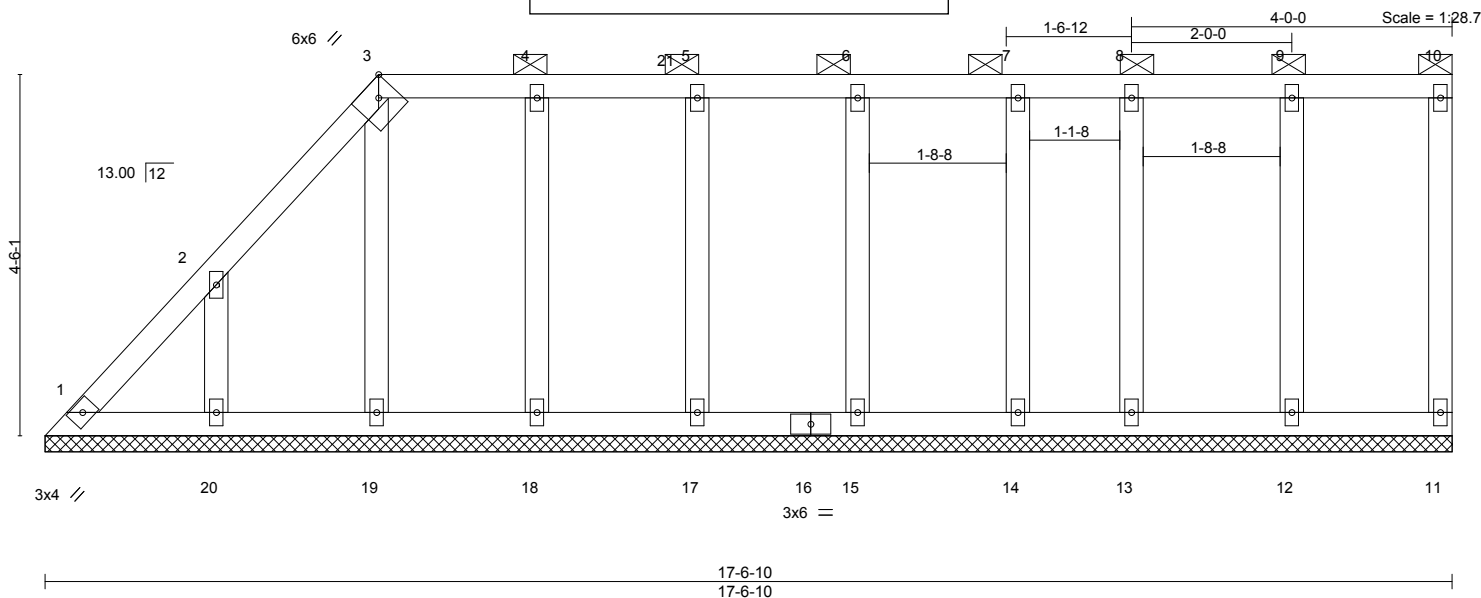


Plate Offsets (X,Y)-- [3:0-2-9,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	999
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	999
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	11	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
						PLATES	GRIP		
						MT20	197/144		
						Weight: 80 lb		FT = 20%	

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

REACTIONS. All bearings 17-6-10.
 (lb) - Max Horz 1=147(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 12, 13, 14, 15, 17, 18, 19, 20
 Max Grav All reactions 250 lb or less at joint(s) 1, 11, 12, 13, 14, 15, 17, 18, 19, 20

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 4-1-15, Exterior(2R) 4-1-15 to 8-1-10, Interior(1) 8-1-10 to 17-4-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 12, 13, 14, 15, 17, 18, 19, 20.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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 2525051	Truss LG5A	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020	Ply 1	Roeser/1464 Winterset 143577329 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-oMhoONg1HpT_nxx_BHkEgomU4xiZHPJSAbzuwnyKUS4 8-10-15 9-2-14 12-7-13 13-4-14 7-2-15 7-2-15 1-8-0 0-3-15 3-4-15 0-9-1		

Scale = 1:45.4

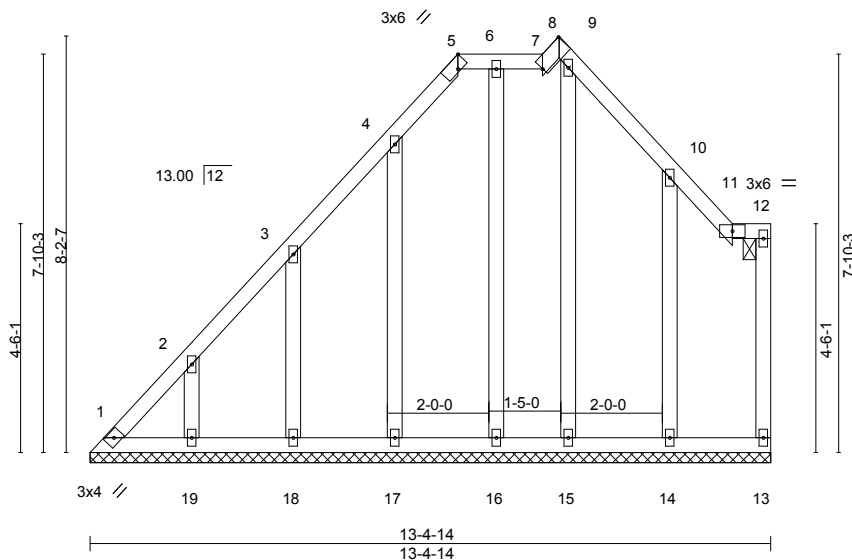


Plate Offsets (X,Y)-- [5:0-2-9,Edge], [7:0-1-5,0-1-3], [7:0-8-1,Edge], [8:0-1-14,0-1-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.15	Horz(CT)	-0.00	13	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-S							
BCDL 10.0									Weight: 77 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, and 2-0-0 oc purlins (6-0-0 max.): 5-7, 11-12.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-4-14.
(lb) - Max Horz 1=231(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 13, 19, 18, 17, 16 except 1=138(LC 12), 14=105(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 1, 13, 19, 18, 17, 16, 15, 14

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-262/248

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-2-15, Exterior(2E) 7-2-15 to 8-10-15, Interior(1) 8-10-15 to 9-2-14, Exterior(2R) 9-2-14 to 12-2-14, Interior(1) 12-2-14 to 13-3-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13, 19, 18, 17, 16 except (jt=lb) 1=138, 14=105.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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 2525051	Truss LG6	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI			Ply 1	Roeser/1464 Winterset	I43577330
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-oMhoONg1HpT_nxx_BHkEgomTqXH0HQiSAbzuwnyKUS4 5-5-7 12/21/2020 7-11-14 5-5-7 2-6-7					Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:25 2020 Page 1

Scale = 1:33.7

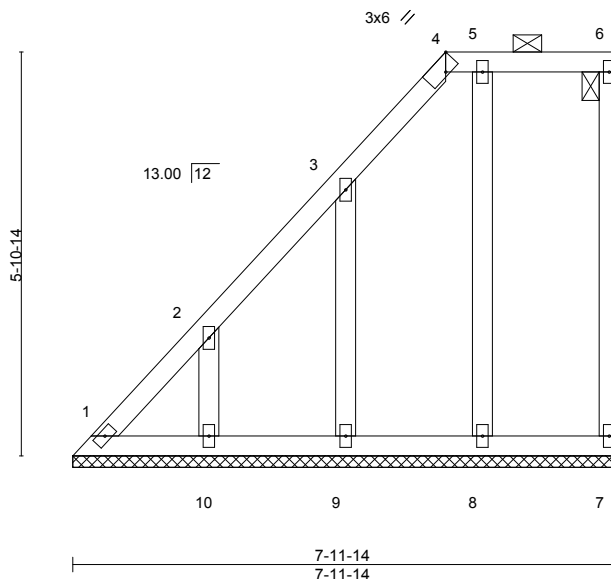


Plate Offsets (X,Y)-- [4:0-2-9,Edge]

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.17	in (loc)	l/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.09	Vert(LL)	n/a	999			
TCDL	10.0	Lumber DOL	1.15	WB	0.13	Vert(CT)	n/a	999			
BCLL	0.0	Rep Stress Incr	YES	Matrix-S		Horz(CT)	-0.00	7			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 39 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, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 7-11-14.
 (lb) - Max Horz 1=196(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 8, 9, 10
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 8, 9, 10

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-354/353, 2-3=-248/254

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 5-5-7, Exterior(2E) 5-5-7 to 7-10-2 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 8, 9, 10.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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 2525051	Truss LG7	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply 1	Roeser/1464 Winterset 143577331
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:26 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-HYEAbjgf26brP4Wak?FTD0JeiK1J0t8bOFjSTEyKUS3		
		5-3-15 12/21/2020 5-3-15		7-11-14 2-7-15		

Scale = 1:33.0

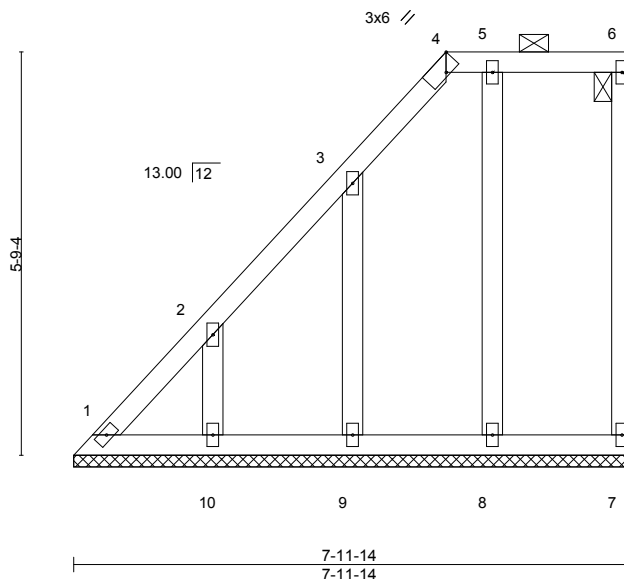


Plate Offsets (X,Y)-- [4:0-2-9,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.12	Horz(CT)	-0.00	7	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-S							
BCDL 10.0									Weight: 39 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, and 2-0-0 oc purlins (6-0-0 max.): 4-6.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 7-11-14.
 (lb) - Max Horz 1=191(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 8, 9, 10
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 8, 9, 10

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-344/343

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 5-3-15, Exterior(2E) 5-3-15 to 7-10-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 8, 9, 10.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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

2525051

Truss

LG8

Truss Type

GABLE

Release for Construction

AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

Ply

1

Roeser/1464 Winterset

143577332

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MITek Industries, Inc.

Tue Nov 10 19:44:27 2020

Page 1

ID:VV5xOZ45cNK4PC2HmSu_xyyPFt9-IloYp3hloQj1E5MinimDsr7kOQILldvS??gyKUS2

4-1-11

4-1-11

9-2-6

5-0-12

12/21/2020

Job Reference (optional)

Scale = 1:26.7

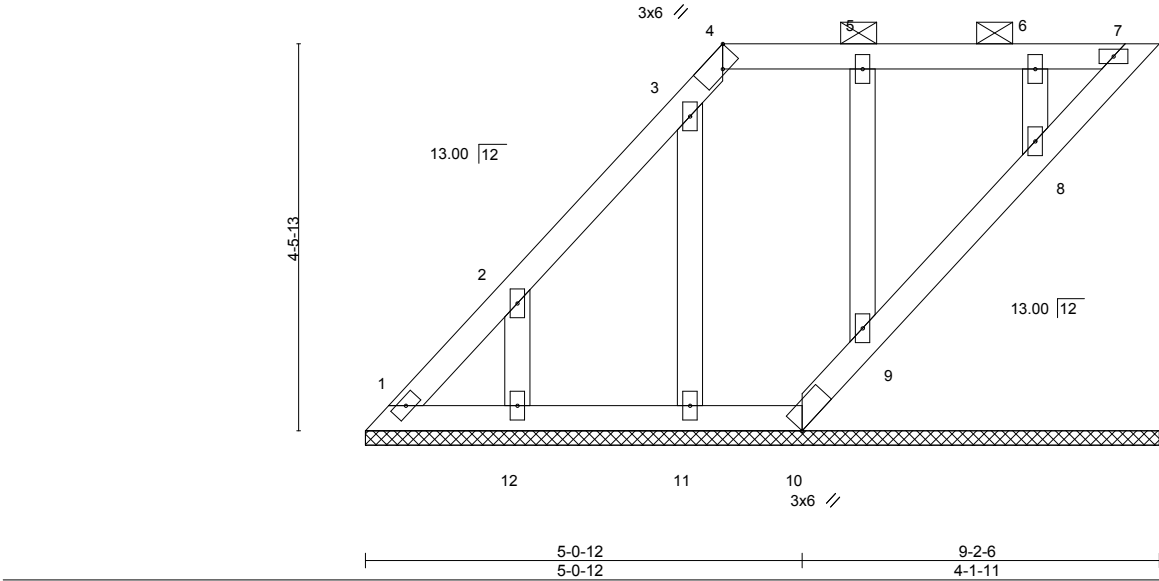


Plate Offsets (X,Y)-- [4:0-2-9,Edge]		5-0-12		9-2-6	
		5-0-12		4-1-11	
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	25.0	2-0-0		in (loc) l/defl L/d	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL 1.15		Vert(LL) n/a - n/a 999	
TCDL	10.0	Lumber DOL 1.15		Vert(CT) n/a - n/a 999	
BCLL	0.0	Rep Stress Incr YES		Horz(CT) 0.00 7 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014			
		Matrix-S			
				PLATES	
				MT20	
				GRIP	
				197/144	
				Weight: 35 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.): 4-7.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 7-8.

REACTIONS.

All bearings 9-2-6.

(lb) - Max Horz 1=116(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 10, 12, 11, 9, 8

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 12, 11, 9, 8

FORCES.

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

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 4-1-11, Exterior(2R) 4-1-11 to 7-1-11, Interior(1) 7-1-11 to 8-10-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.

4) Provide adequate drainage to prevent water ponding.

5) All plates are 2x4 MT20 unless otherwise indicated.

6) Gable requires continuous bottom chord bearing.

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

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 10, 12, 11, 9, 8.

9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 9, 8.

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

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



November 11,2020

Job 2525051	Truss LG9	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-DxMw0PiwZkrZeOgZsQlxlRO_k8kCUjousZCYX6yKUS1		Roeser/1464 Winterset 143577333 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:28 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-DxMw0PiwZkrZeOgZsQlxlRO_k8kCUjousZCYX6yKUS1		
1-10-13 1-10-13			6-3-4 4-4-7 12/21/2020 13-2-6 6-11-2		
			4x4 =		

Scale = 1:52.4

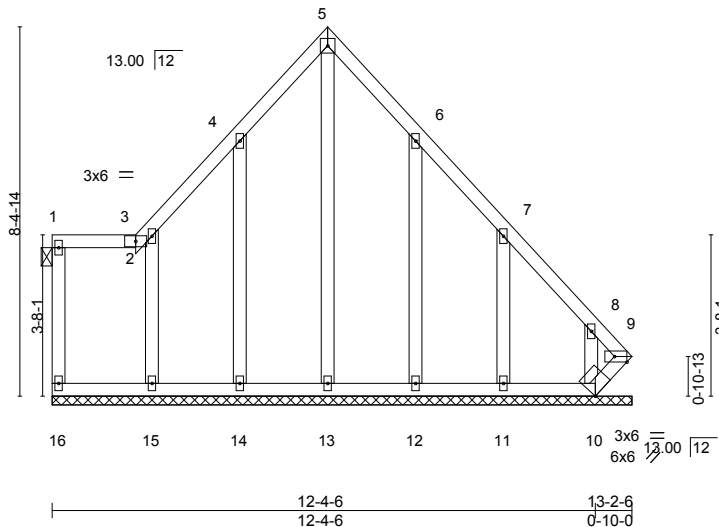


Plate Offsets (X,Y)-- [9:Edge,0-1-8]

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.07	in (loc)	l/defl	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.06	n/a	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.36	n/a	n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-S		0.00	9				
BCDL	10.0										
								Weight: 72 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, and 2-0-0 oc purlins (6-0-0 max.): 1-2.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10.

REACTIONS.

All bearings 13-2-6.
(lb) - Max Horz 16=-228(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 16, 14, 12, 11 except 9=-374(LC 13), 13=-141(LC 12), 15=-107(LC 14), 10=-208(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 16, 14, 15, 12, 11 except 9=403(LC 12), 13=270(LC 14), 10=320(LC 24)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-250/261, 5-6=-250/261, 7-8=-253/217, 8-9=-268/260
BOT CHORD 9-10=-266/274
WEBS 5-13=-323/243

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 1-10-13, Interior(1) 1-10-13 to 6-3-4, Exterior(2R) 6-3-4 to 9-3-4, Interior(1) 9-3-4 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 14, 12, 11 except (jt=lb) 9=374, 13=141, 15=107, 10=208.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
12/21/2020

Job 2525051	Truss M1	Truss Type Monopitch	Ply 1	Roeser/1464 Winterset Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:29 2020 Page 1 ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-h7wJDijYK1zQGYFIQ7pAReX3IYyDDEz15Dx63YyKUS0	

Scale = 1:29.6

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.46	in	(loc)	I/defl	L/d	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.52	Vert(LL)	-0.17	7-8	>626				
TCDL	10.0	Lumber DOL	1.15	WB	0.11	Vert(CT)	-0.34	7-8	>316				
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.00	7	n/a				
BCDL	10.0	Code IRC2018/TPI2014								Weight: 34 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 7=Mechanical
 Max Horz 8=167(LC 15)
 Max Uplift 8=-95(LC 16), 7=-36(LC 13)
 Max Grav 8=562(LC 2), 7=423(LC 21)

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

TOP CHORD 2-3=-353/107, 2-8=-472/273
 WEBS 3-7=-343/266

NOTES-

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



November 11, 2020

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

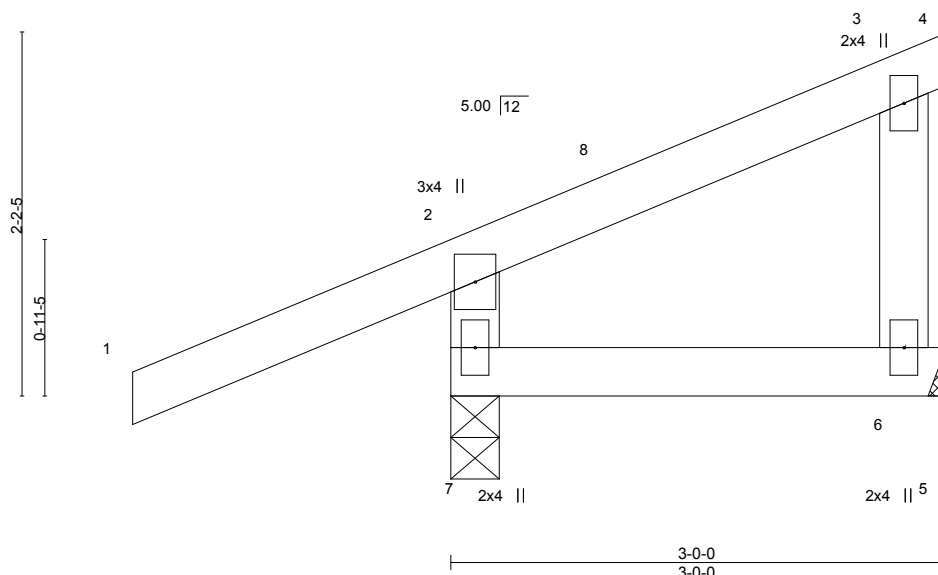
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Roeser/1464 Winterset	I43577335
2525051	M2	Monopitch			1	Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:38 2020 Page 1		ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-wszi6qqBDo68xRURWTHiYpeCA8WqJgM97d4tXyKURt		
		-1-11-0	12/21/2020		2-10-8	3-0-0	0-1-8
		1-11-0			2-10-8	3-0-0	0-1-8

Scale = 1:13.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.32	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.06	Vert(LL)	-0.00 6-7 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.02	Vert(CT)	-0.00 6-7 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-MS		Horz(CT)	0.00 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014							Weight: 12 lb	FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-3-8, 6=Mechanical
Max Horz 7=85(LC 16)
Max Uplift 7=-75(LC 16), 6=-10(LC 13)
Max Grav 7=346(LC 21), 6=89(LC 21)

FORCES.

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

TOP CHORD 2-7=-308/206

NOTES-

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



November 11, 2020

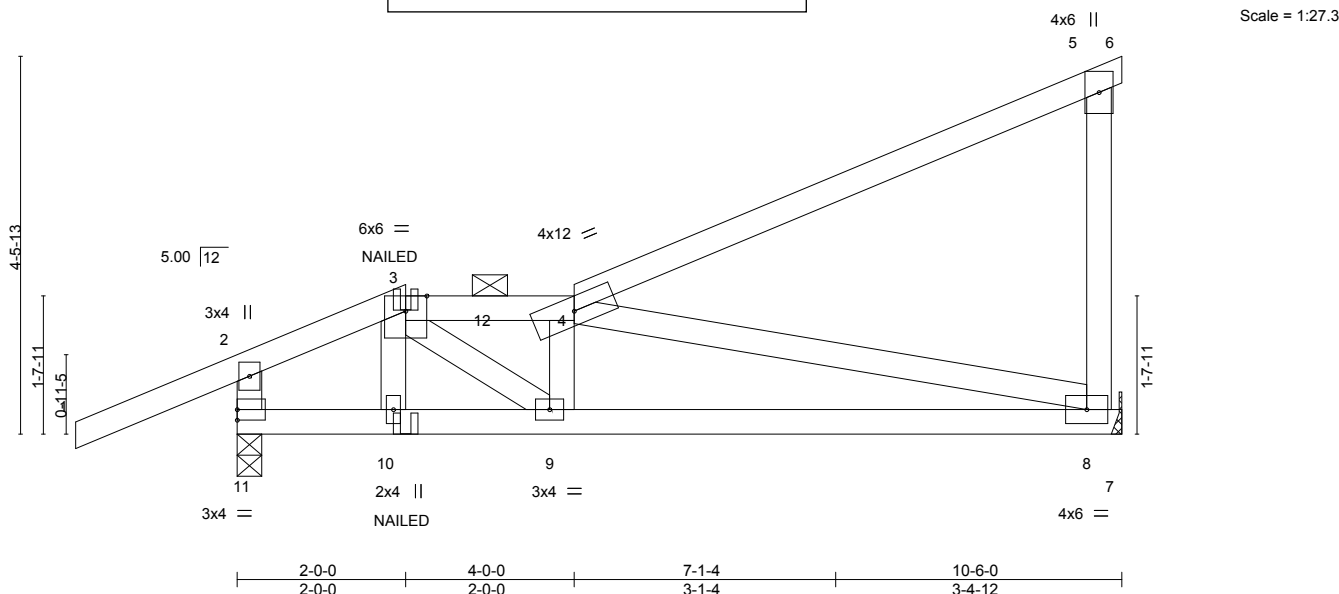
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2525051	Truss M3	Truss Type Roof Special	Girder	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020	Ply 1	Roeser/1464 Winterset 143577336 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:41 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPf9-KRerirs4VUjiO927e1_KAR43N451Ylpr5rkUsyKURq
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.05	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.10				
TCDL	10.0	Rep Stress Incr	NO	WB	0.57	Horz(CT)	0.01				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS							
BCDL	10.0										
								Weight: 44 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 8=Mechanical, 11=0-3-8
Max Horz 11=155(LC 9)
Max Uplift 8=-37(LC 12), 11=-99(LC 12)
Max Grav 8=505(LC 35), 11=635(LC 35)

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

TOP CHORD 2-3=-385/17, 3-4=-784/42, 5-8=-267/49, 2-11=-504/106
BOT CHORD 10-11=-110/321, 9-10=-108/334, 8-9=-61/807
WEBS 3-9=-39/636, 4-8=-774/73

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10; Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) 8, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-51, 2-3=-51, 3-4=-61, 4-5=-51, 5-6=-51, 7-11=-20
Concentrated Loads (lb)
Vert: 10=3(F)



November 11, 2020

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

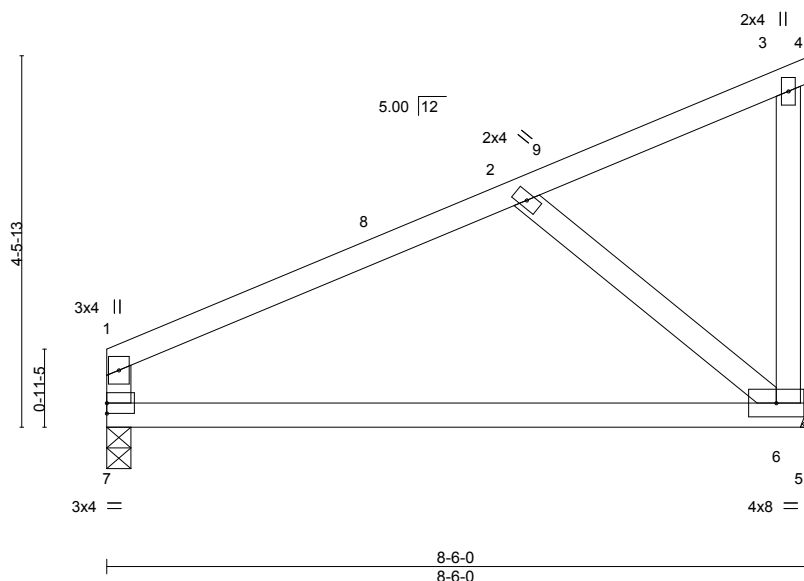
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Roeser/1464 Winterset
2525051	M4	Monopitch			1	I43577337
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:41 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-KRertrs4VUjiO927e1_KAR9gN4T1f3pr5rkUsyKURq		
		5-0-14 5-0-14		8-6-0 3-5-3		

Scale = 1:27.8



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.37	in (loc)	l/defl	L/d			
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.42	Vert(LL)	-0.12 6-7 >827	240	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	WB	0.10	Vert(CT)	-0.23 6-7 >423	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.00 6 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 30 lb	FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=0-3-8, 6=Mechanical
 Max Horz 7=142(LC 13)
 Max Uplift 7=-23(LC 16), 6=-36(LC 16)
 Max Grav 7=364(LC 2), 6=402(LC 20)

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

TOP CHORD 1-2=-363/135, 1-7=-280/149
 BOT CHORD 6-7=-232/276
 WEBS 2-6=-324/251

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 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
2525051

Truss
M5

Truss Type
Half Hip

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

RELEASE FOR

CONSTRUCTION

AS NOTED ON PLANS REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

ID:WV5xOZ45cNK4PQ2HmS_u_xyyPFt9-pdCDyBtiG1caKYkFgMYDsOzKnnMxm65y4lbI0lyKURp

12/21/2020

Ply
1

Roeser/1464 Winterset
I43577338

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:42 2020 Page 1

-1-11-0
1-11-0

4-6-9
4-6-9

8-0-0
3-5-7

8-6-0
0-6-0

4x4 = Scale = 1:27.1

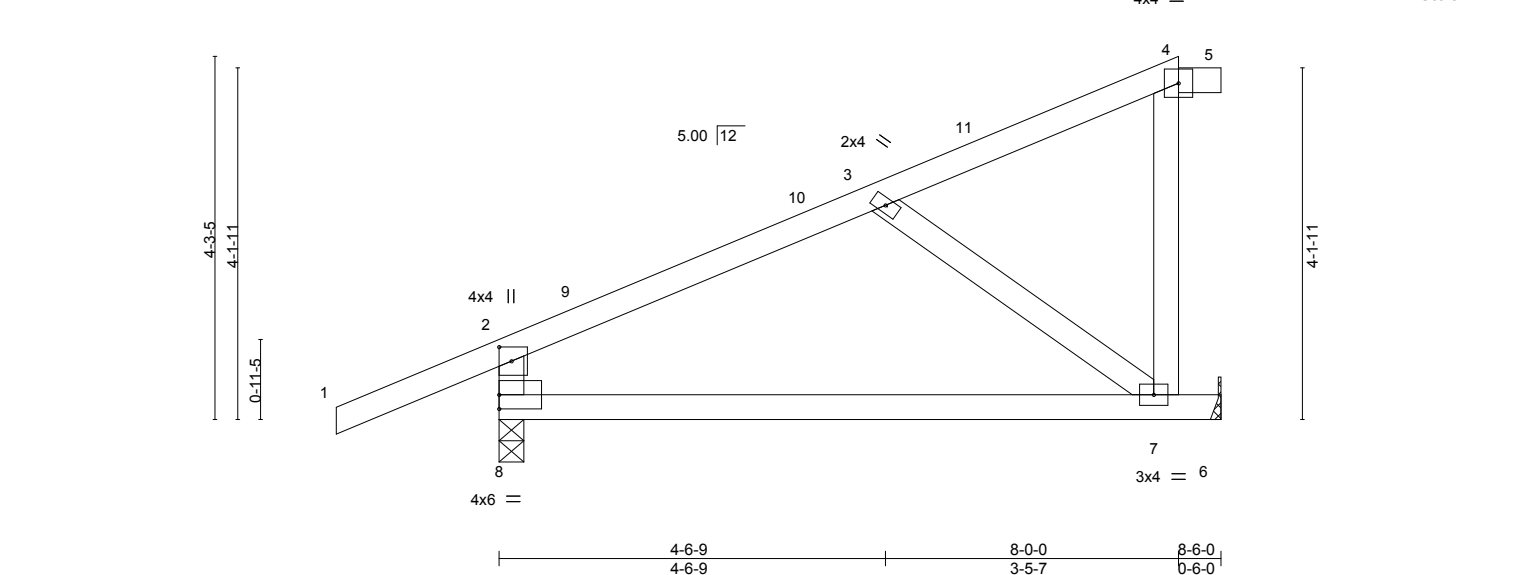


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.35	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.67	Vert(LL)	-0.20	197/144	
TCDL	10.0	Lumber DOL	1.15	WB	0.12	Vert(CT)	-0.43		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.00		
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 32 lb FT = 20%	

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

REACTIONS.	
(size)	8=0-3-8, 6=Mechanical
Max Horz	8=138(LC 16)
Max Uplift	8=-76(LC 16), 6=-65(LC 16)
Max Grav	8=627(LC 36), 6=389(LC 36)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-393/70, 2-8=-496/215
BOT CHORD	7-8=-171/292
WEBS	3-7=-366/215

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 8-0-0, Exterior(2E) 8-0-0 to 8-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

Job
2525051

Truss
M6

Truss Type
Half Hip

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

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

ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-HqmbAXuK1kRxiJRE33SPbWUGBoVZb5JPKrYlyKURo

12/21/2020

Ply
1

Roeser/1464 Winterset 143577339

Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:43 2020 Page 1

-1-11-0
1-11-0

6-0-0
6-0-0

8-6-0
2-6-0

Scale = 1:22.6

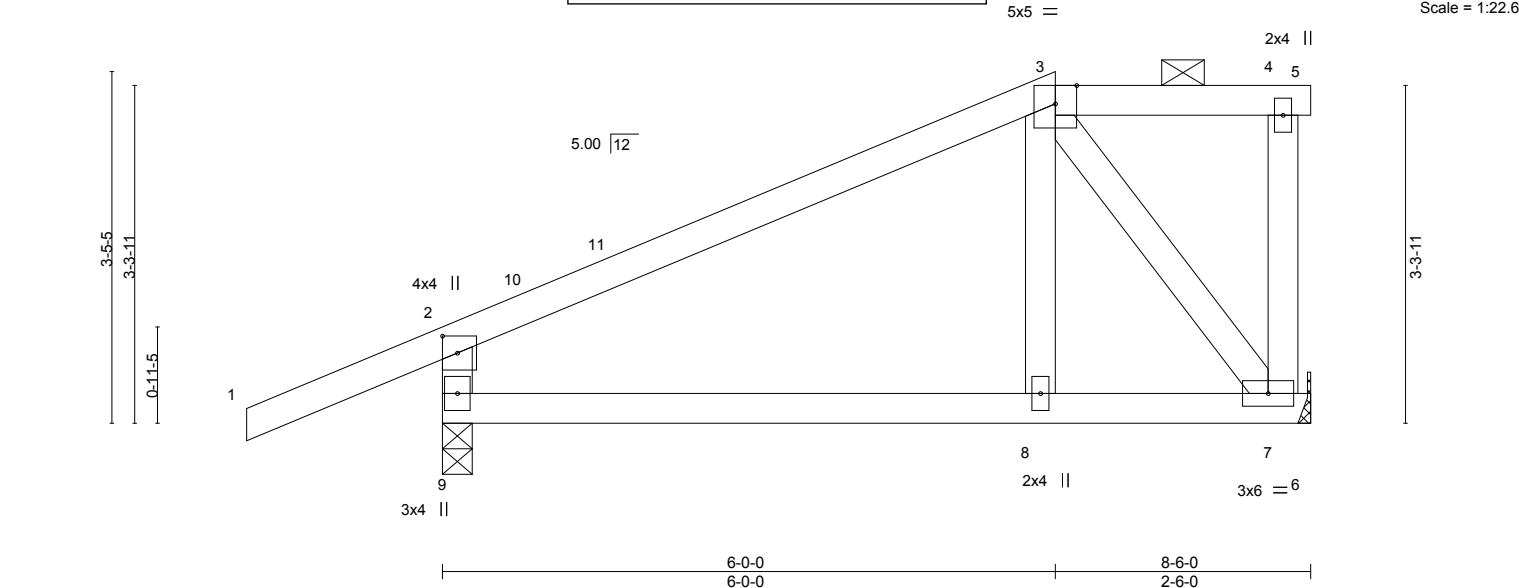


Plate Offsets (X,Y)--		[2-0-2-0,0-1-12]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	25.0	2-0-0		TC 0.43		in (loc) l/defl L/d				MT20	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL 1.15		BC 0.20		Vert(LL) -0.02 8-9 >999 240				GRIP	
TCDL	10.0	Lumber DOL 1.15		WB 0.10		Vert(CT) -0.05 8-9 >999 180				197/144	
BCLL	0.0	Rep Stress Incr YES		Matrix-AS		Horz(CT) 0.00 7 n/a n/a					
BCDL	10.0	Code IRC2018/TPI2014								Weight: 33 lb	
										FT = 20%	

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

REACTIONS.	
(size)	9=0-3-8, 7=Mechanical
Max Horz	9=117(LC 15)
Max Uplift	9=-96(LC 16), 7=-39(LC 13)
Max Grav	9=600(LC 36), 7=356(LC 2)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-347/80, 2-9=-542/247
WEBS	3-7=-383/235

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 6-0-0, Exterior(2E) 6-0-0 to 8-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11,2020

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
2525051

Truss
M7

Truss Type
Half Hip

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

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

12/21/2020

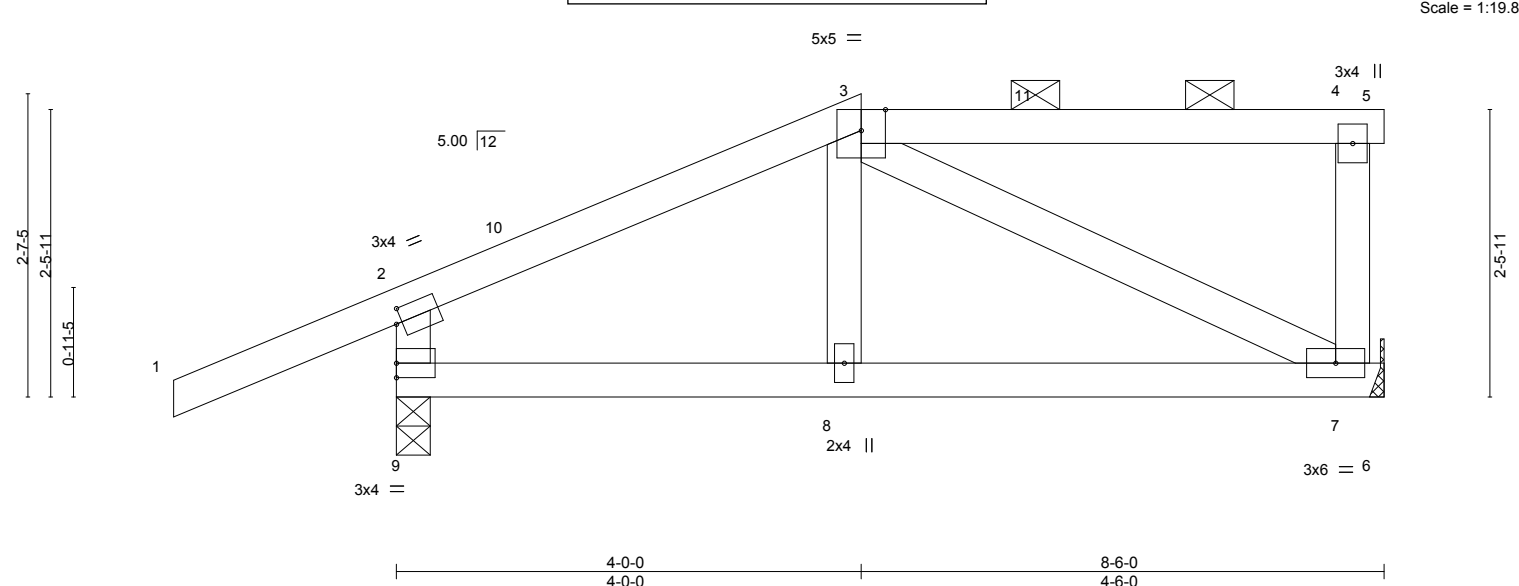
Ply
1

Roeser/1464 Winterset

Job Reference (optional)

I43577340

Page 1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.02	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.04				
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL	10.0										

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

REACTIONS.	
(size)	9=0-3-8, 7=Mechanical
Max Horz	9=88(LC 15)
Max Uplift	9=-98(LC 16), 7=-41(LC 13)
Max Grav	9=556(LC 36), 7=392(LC 35)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-387/107, 2-9=-489/239
BOT CHORD	8-9=-178/294, 7-8=-181/293
WEBS	3-7=-256/156

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 4-0-0, Exterior(2E) 4-0-0 to 8-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-hPSkoZwCKG6?o920vCc91E8_NOpiiaY?MZV93yKURI
 12/21/2020

Job 2525051	Truss M8	Truss Type Half Hip Girder	Ply 1	Roeser/1464 Winterset 143577341
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)	

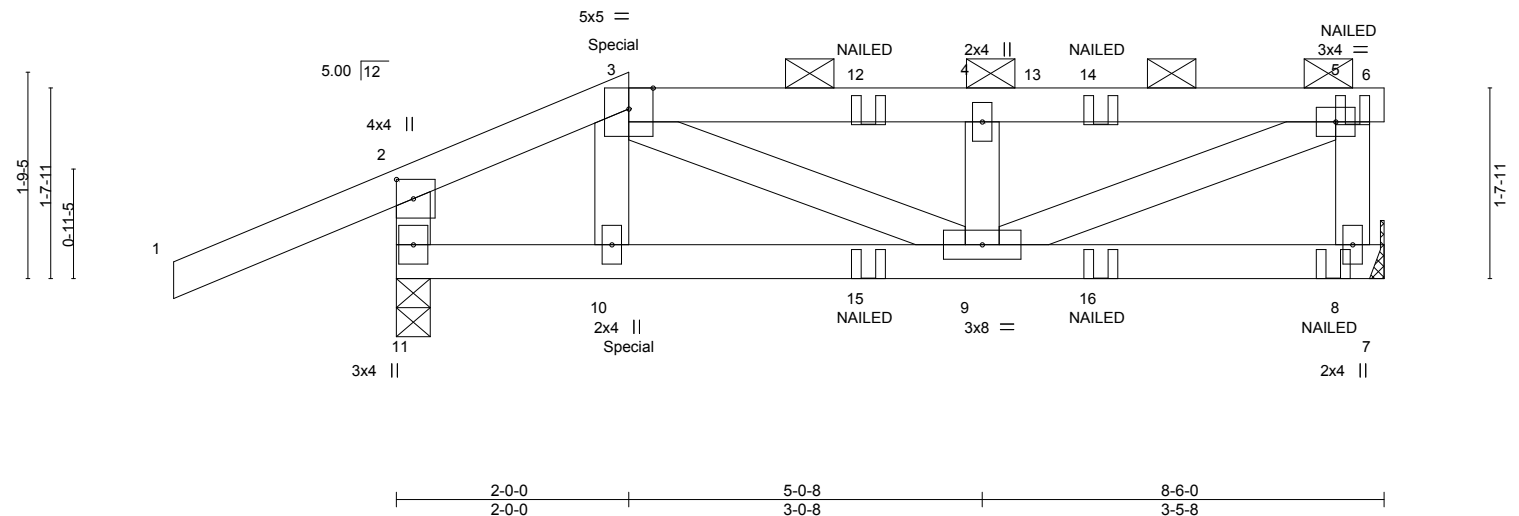
-1-11-0
1-11-0

2-0-0
2-0-0

5-8-8
3-0-8

8-6-0
3-5-8

Scale = 1:19.8



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	GRIP
TCLL (roof)	25.0		2-0-0	TC	0.44	Vert(LL)	-0.02	in (loc)	9-10	I/defl	L/d
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.29	Vert(CT)	-0.04	9-10	>999	240	
TCDL	10.0	Lumber DOL	1.15	WB	0.15	Horz(CT)	0.00	8	n/a	180	
BCLL	0.0	Rep Stress Incr	NO	Matrix-MS							
BCDL	10.0	Code IRC2018/TPI2014									
Weight: 33 lb											FT = 20%

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

REACTIONS. (size) 8=Mechanical, 11=0-3-8
 Max Horz 11=59(LC 11)
 Max Uplift 8=45(LC 9), 11=98(LC 12)
 Max Grav 8=425(LC 31), 11=526(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-370/34, 3-4=-613/57, 4-5=-610/56, 5-8=-386/59, 2-11=-419/101
 BOT CHORD 10-11=-52/308, 9-10=-55/314
 WEBS 3-9=-44/351, 4-9=-309/67, 5-9=-65/605

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 11.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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) 109 lb down and 34 lb up at 2-0-0 on top chord, and 31 lb down and 43 lb up at 2-0-0 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

Continued on page 2



November 11, 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/TPI Quality Criteria, DSB-89 and BCSI Building Component**

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

MiTek

16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-hPSkoZwCKG6?o920vCc91E8_NOpiivaY?MZV93yKURI 12/21/2020			Ply	1	Roeser/1464 Winterset	I43577341
2525051	M8	Half Hip Girder						Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:46 2020 Page 2 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:46 2020 Page 2 xyyPFt9-hPSkoZwCKG6?o920vCc91E8_NOpiivaY?MZV93yKURI			

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-51, 2-3=-51, 3-5=-61, 5-6=-61, 7-11=-20

Concentrated Loads (lb)

Vert: 8=2(F) 10=6(F) 15=2(F) 16=2(F)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 ID: WV5xOZ45cNK4PQ2HmSulxyPFt9-9b06?vxr5ZE5QJdCTv8OZRh9lo98RMshE0I3hWyKURk
 12/21/2020

Job 2525051	Truss M9	Truss Type Half Hip Girder	Ply 1	Roeser/1464 Winterset Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:47 2020 Page 1 xxyPFt9-9b06?vxr5ZE5QJdCTv8OZRh9lo98RMshE0I3hWyKURk
Builders FirstSource (Valley Center), Valley Center, KS - 67147,				

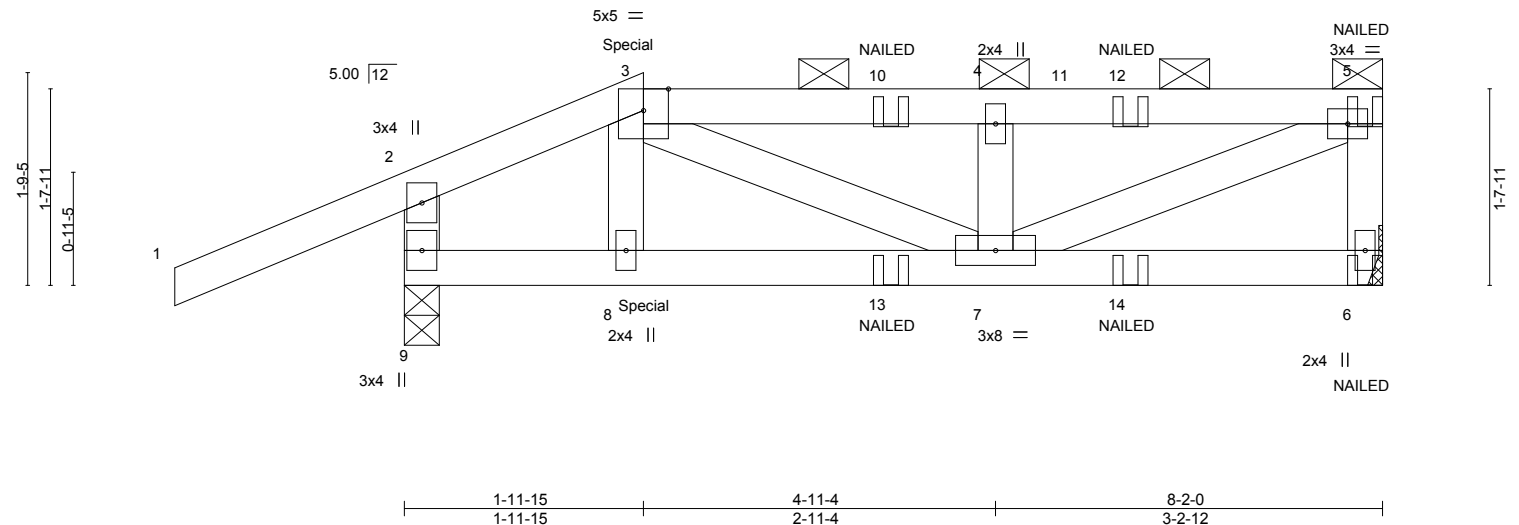
1-11-0
1-11-0

1-11-15
1-11-15

2-11-4
2-11-4

8-2-0
3-2-12

Scale = 1:19.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.43	in (loc)	I/defl	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.28	Vert(LL)	-0.02 7-8 >999 240				
TCDL	10.0	Lumber DOL	1.15	WB	0.15	Vert(CT)	-0.04 7-8 >999 180				
BCLL	0.0	Rep Stress Incr	NO	Matrix-MS		Horz(CT)	0.00 6 n/a n/a				
BCDL	10.0	Code IRC2018/TP12014									
								Weight: 32 lb		FT = 20%	

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

REACTIONS. (size) 6=Mechanical, 9=0-3-8
 Max Horz 9=59(LC 72)
 Max Uplift 6=-44(LC 9), 9=-98(LC 12)
 Max Grav 6=386(LC 31), 9=518(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-355/33, 3-4=-584/54, 4-5=-581/53, 5-6=-356/54, 2-9=-412/100
 BOT CHORD 8-9=-51/295, 7-8=-54/300
 WEBS 3-7=-43/337, 4-7=-308/66, 5-7=-65/598

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - "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) 109 lb down and 34 lb up at 1-11-15 on top chord, and 31 lb down and 43 lb up at 1-11-15 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

November 11, 2020

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020			Roeser/1464 Winterset	I43577342
2525051	M9	Half Hip Girder		1		Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:47 2020 Page 2 ID:VV5xOZ45cNK4PQ2HmSu_xyyPFt9-9b06?vxr5ZEsQJdCTv8OZRh9lo98RMshE0I3hWyKURk				

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-51, 2-3=-51, 3-5=-61, 6-9=-20

Concentrated Loads (lb)

Vert: 6=1(F) 8=6(F) 13=2(F) 14=2(F)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
11/21/2020

Job 2525051	Truss M10	Truss Type Half Hip	Ply 1	Roeser/1464 Winterset Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:30 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-9KUHR5jA5L5HuiqzrKPNsUERxKmygEBJthfc?yKUS?	

-1-11-0
1-11-0

1-9-8
1-9-8

3-11-15
2-2-7

8-2-0
4-2-1

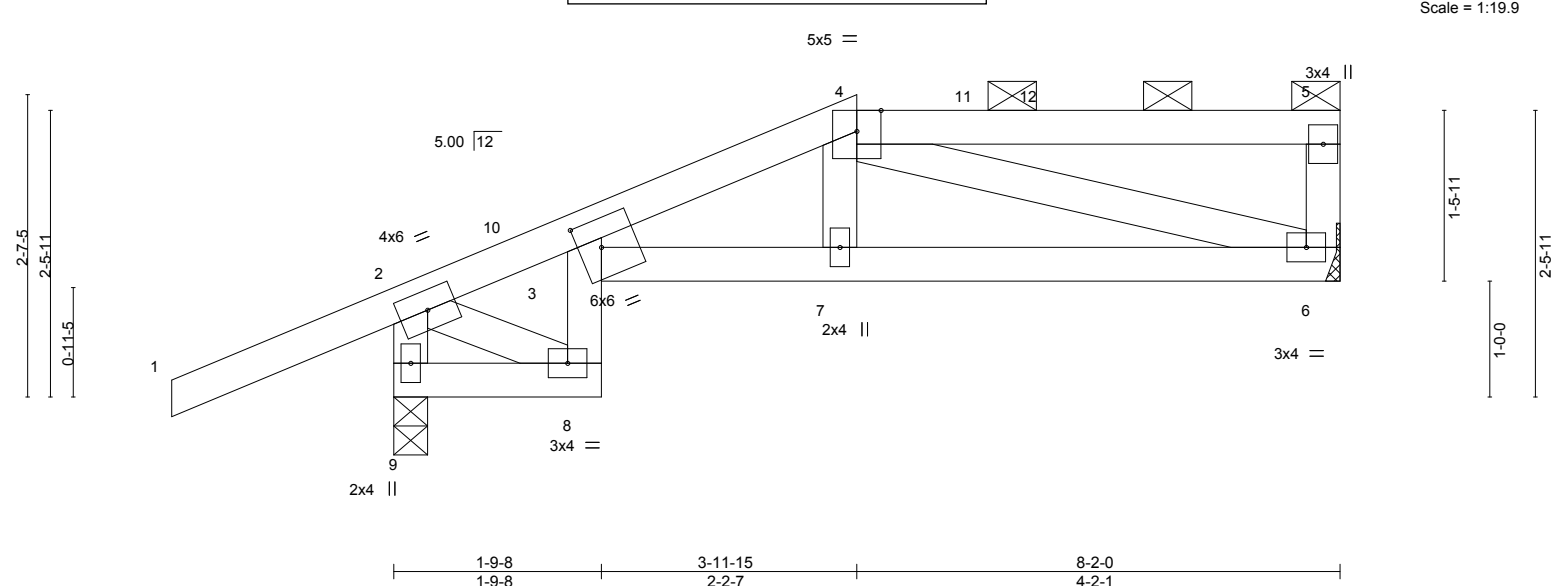


Plate Offsets (X,Y)--		[3:0-2-5,0-2-14]									
LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES	
TCLL (roof)	25.0		2-0-0	TC	0.50	in (loc)	l/defl	L/d		MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.43	0.06 3-7	>999	240			197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.17	-0.08 3-7	>999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		0.07 6	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014								Weight: 31 lb	FT = 20%

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

REACTIONS. (size) 6=Mechanical, 9=0-3-8
 Max Horz 9=72(LC 13)
 Max Uplift 6=-38(LC 13), 9=-95(LC 16)
 Max Grav 6=351(LC 35), 9=552(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-4=-632/260, 2-9=-534/248
 BOT CHORD 3-7=-304/586, 6-7=-309/580
 WEBS 4-6=-521/280

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 3-11-15, Exterior(2E) 3-11-15 to 8-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TC LL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

Job 2525051	Truss M11	Truss Type Half Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020		Ply 1 Roeser/1464 Winterset I43577344 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-dW23eQkosfD8VsO7XYrew30OeLdvh8mKYXQD8RyKUS_		

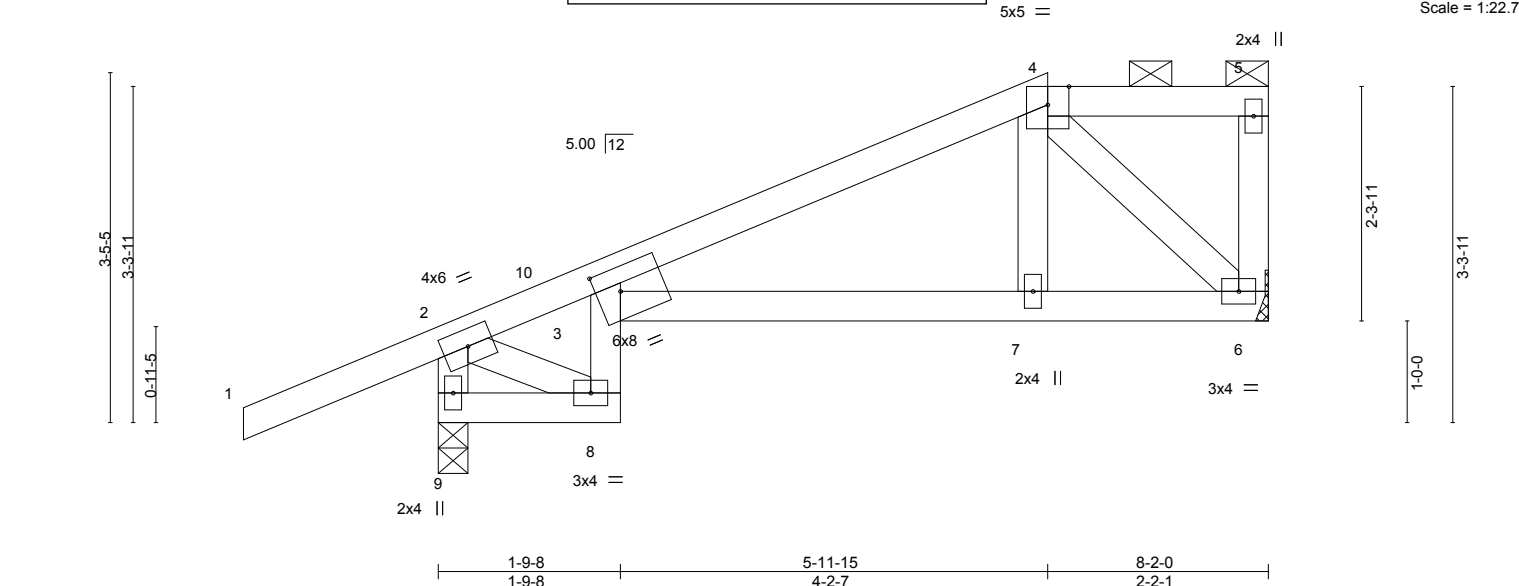


Plate Offsets (X,Y)-- [3:0-2-13,0-2-13]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/def L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.54	Vert(LL)	0.10 3-7 >951 240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.15 3-7 >626 180
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.12 6 n/a n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS			
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						Weight: 32 lb	FT = 20%

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

REACTIONS.	(size) 6=Mechanical, 9=0-3-8
	Max Horz 9=101(LC 13)
	Max Uplift 6=-35(LC 13), 9=-93(LC 16)
	Max Grav 6=336(LC 2), 9=594(LC 36)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	3-4=-418/141, 2-9=-575/235
BOT CHORD	8-9=-252/192, 3-7=-224/350, 6-7=-223/340
WEBS	4-6=-508/299, 2-8=-219/287

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 5-11-15, Exterior(2E) 5-11-15 to 8-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 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.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-dW23eQkosfD8VsO7XYrew30O_Lg0h8hKYYQD8RyKUS_

Job 2525051	Truss M12	Truss Type Half Hip	Ply 1	Roeser/1464 Winterset Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:31 2020 Page 1 PFt9-dW23eQkosfD8VsO7XYrew30O_Lg0h8hKYYQD8RyKUS_	

-1-11-0 1-9-8 5-3-5 7-11-15 8-2-0

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

Scale = 1:26.6

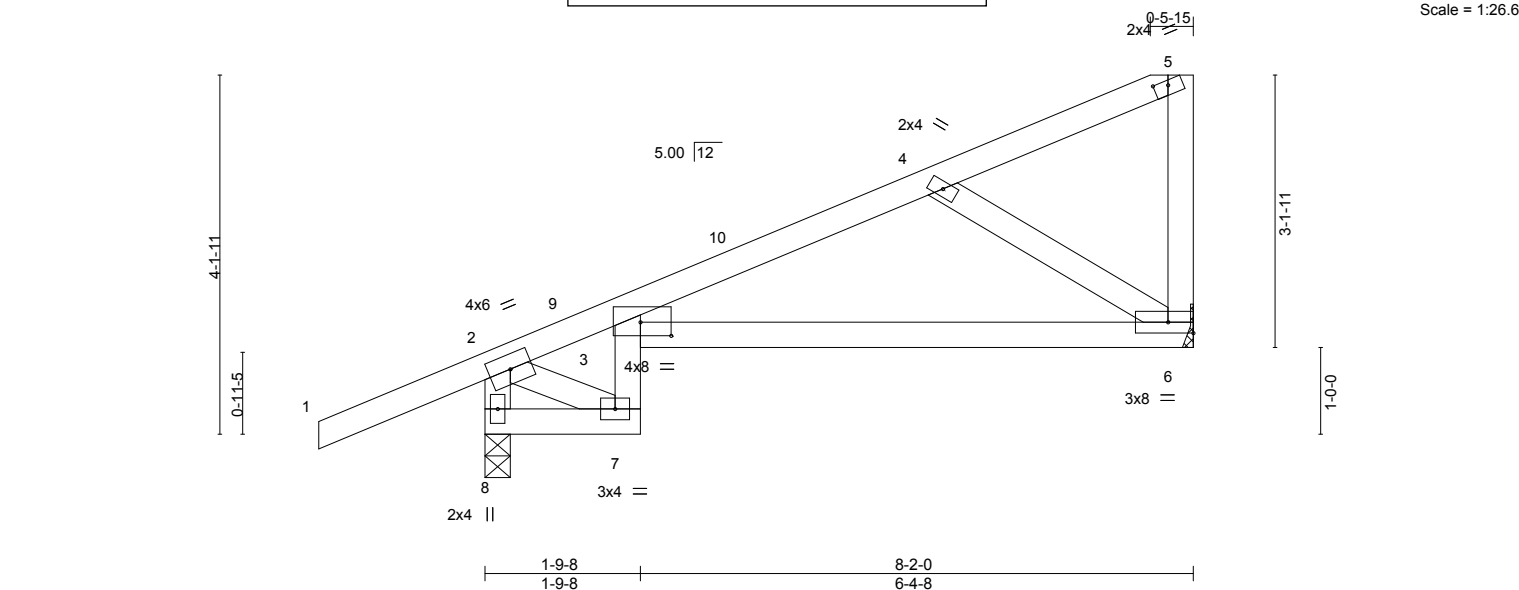


Plate Offsets (X,Y)--		[3:0-4-4,0-1-14], [5:0-2-0,0-0-11]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15
TCDL	10.0	Rep Stress Incr	YES
BCLL	0.0	Code IRC2018/TPI2014	
BCDL	10.0		
		CSI.	
		TC	0.52
		BC	0.37
		WB	0.10
		Matrix-AS	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	-0.09 3-6 >999
		Vert(CT)	-0.20 3-6 >483
		Horz(CT)	0.11 6 n/a
			L/d
			240
			180
			n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 32 lb	FT = 20%

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

REACTIONS. (size) 6=Mechanical, 8=0-3-8
 Max Horz 8=135(LC 13)
 Max Uplift 6=-33(LC 13), 8=-91(LC 16)
 Max Grav 6=356(LC 21), 8=519(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-4=-440/110, 2-8=-500/229
 BOT CHORD 7-8=-289/244, 3-6=-260/408
 WEBS 4-6=-440/259, 2-7=-278/328

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



November 11,2020

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 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 2525051	Truss M13	Truss Type Jack-Closed	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-5icRsmIqdyM77zK5GMtSHZYUiz5QbUUnBAmftyKURz 12/21/2020		Ply 1 Roeser/1464 Winterset I43577346 Job Reference (optional) 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:32 2020 Page 1
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:32 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-5icRsmIqdyM77zK5GMtSHZYUiz5QbUUnBAmftyKURz		

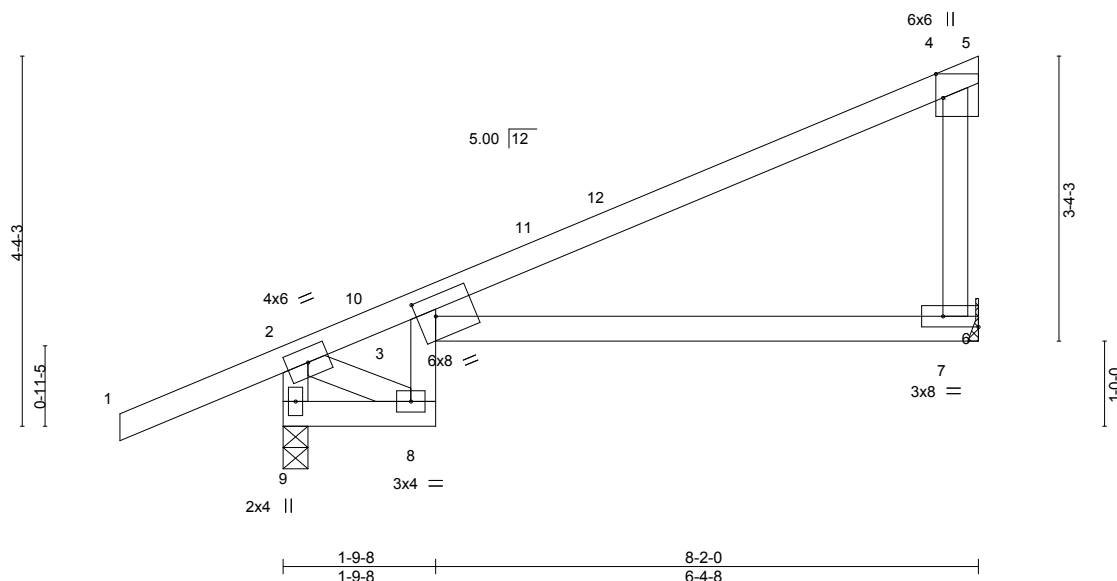


Plate Offsets (X,Y)-- [3:0-2-9,0-2-13], [4:0-3-6,Edge], [7:Edge,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	0.15	3-7	>620	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.57	Vert(CT)	-0.25	3-7	>370	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.16	7	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 28 lb	FT = 20%

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

REACTIONS. (size) 9=0-3-8, 7=Mechanical
 Max Horz 9=135(LC 13)
 Max Uplift 9=-90(LC 16), 7=-32(LC 13)
 Max Grav 9=514(LC 2), 7=375(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-9=-495/228
 BOT CHORD 8-9=-304/241
 WEBS 2-8=-274/344

NOTES-

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



November 11, 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 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 2525051	Truss M14	Truss Type Jack-Closed	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmS_u_xyyPFt9-ZvAp36m3OGUsi9YWfzt6?U5pj9LF912d0rvJCKyKURy 12/21/2020		Ply 1 Roeser/1464 Winterset 143577347 Job Reference (optional)
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:33 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmS_u_xyyPFt9-ZvAp36m3OGUsi9YWfzt6?U5pj9LF912d0rvJCKyKURy	

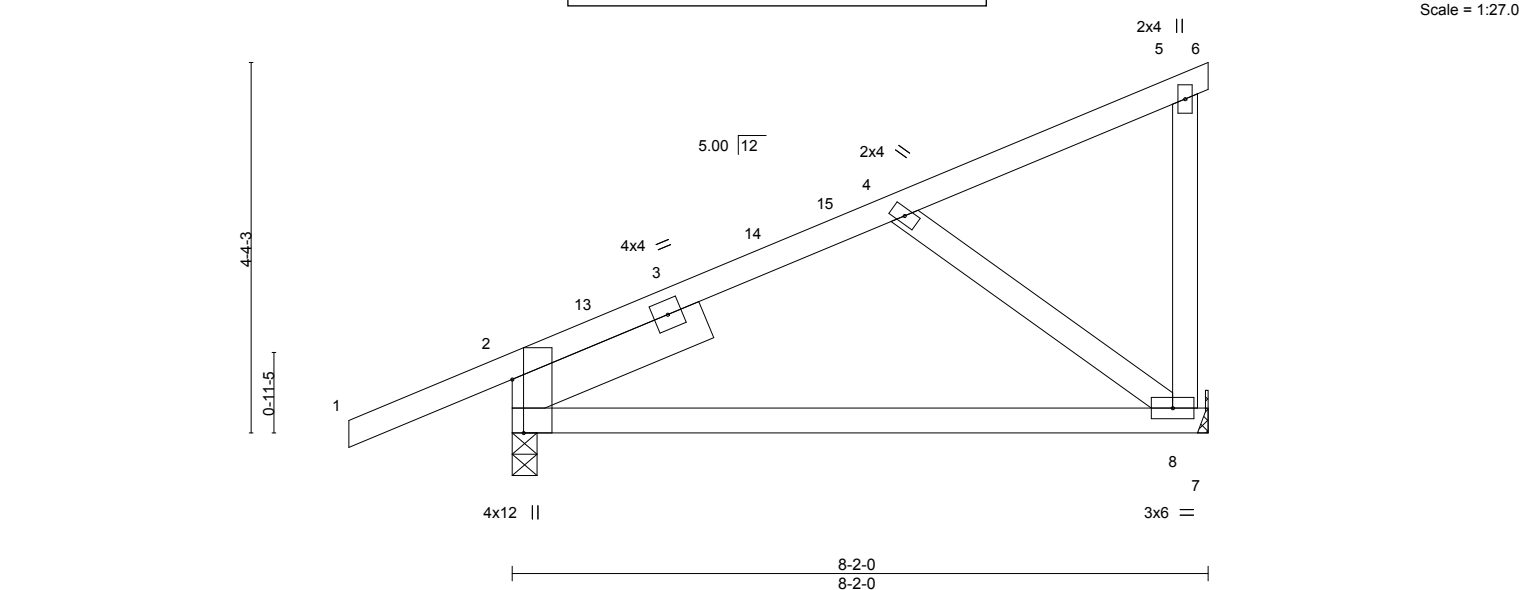


Plate Offsets (X,Y)-- [2:0-7-9,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.10	8-11	>933
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.20	8-11	>469
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.01	2	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS					
BCDL	10.0								
								PLATES	GRIP
								MT20	197/144
								Weight: 35 lb	FT = 20%

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

REACTIONS. (size) 2=0-3-8, 8=Mechanical
 Max Horz 2=145(LC 15)
 Max Uplift 2=-88(LC 16), 8=-32(LC 13)
 Max Grav 2=506(LC 2), 8=383(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-580/106
 BOT CHORD 2-8=-212/266
 WEBS 4-8=-330/208

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



November 11, 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 2525051	Truss M15	Truss Type Half Hip	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-25jCHSnh9aciMJ7iCgPLYievMZiAuS7nEVftkmyKURx 12/21/2020		Ply 1 Roeser/1464 Winterset 143577348 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:34 2020 Page 1 Su_xyyPFt9-25jCHSnh9aciMJ7iCgPLYievMZiAuS7nEVftkmyKURx		

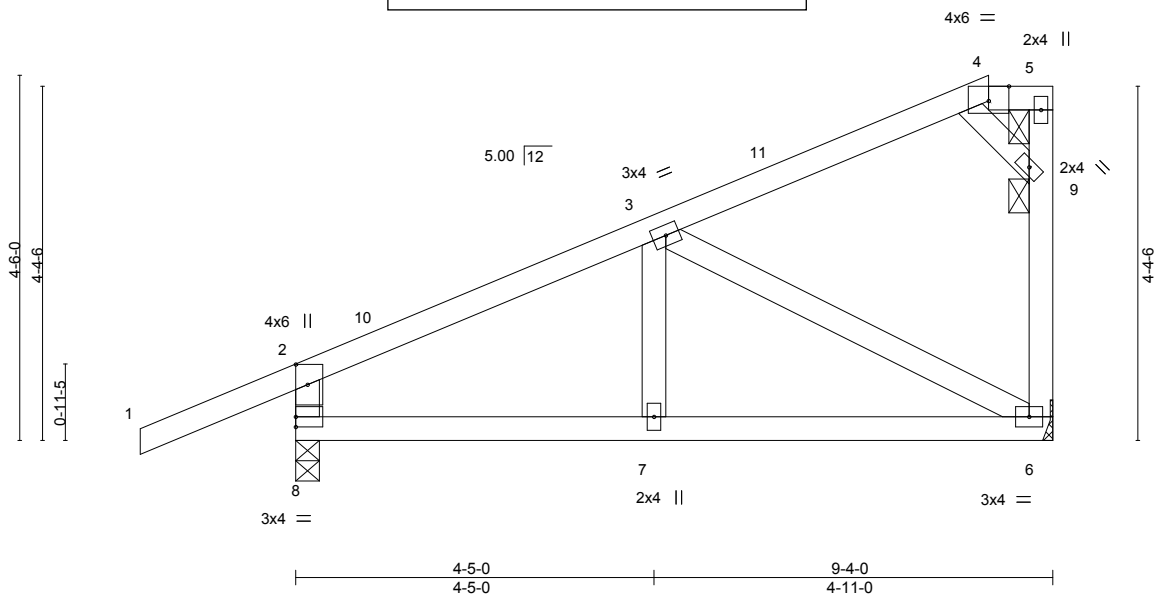


Plate Offsets (X,Y)-- [2:0-3-0,0-1-12], [4:0-3-0,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.04	6-7	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.07	6-7	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.01	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MS							
BCDL 10.0									Weight: 39 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-5.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 JOINTS 1 Brace at Jt(s): 5, 9

REACTIONS.

(size) 8=0-3-8, 6=Mechanical
 Max Horz 8=146(LC 16)
 Max Uplift 8=-76(LC 16), 6=-52(LC 16)
 Max Grav 8=664(LC 36), 6=417(LC 36)

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

TOP CHORD 2-3=-533/68, 2-8=-585/199
 BOT CHORD 7-8=-175/407, 6-7=-175/407
 WEBS 3-6=-420/178, 4-9=-264/140

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -1-11-0 to 1-1-0, Interior(1) 1-1-0 to 8-6-8, Exterior(2E) 8-6-8 to 9-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 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/TPI 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 2525051	Truss M16	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID: WV5xOZ45cNK4PQ2HmSu_xyyPFt9-WHHaUonJwtkZ_TivmOwa4vB7Yy4odxKwT9OQGCyKURw 12/21/2020		Ply 1 Roeser/1464 Winterset 143577349 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:35 2020 Page 1 6-6-8 6-6-8 6-6-8 7-6-8 9-4-0 1-0-0 1-9-8		

Scale = 1:27.4

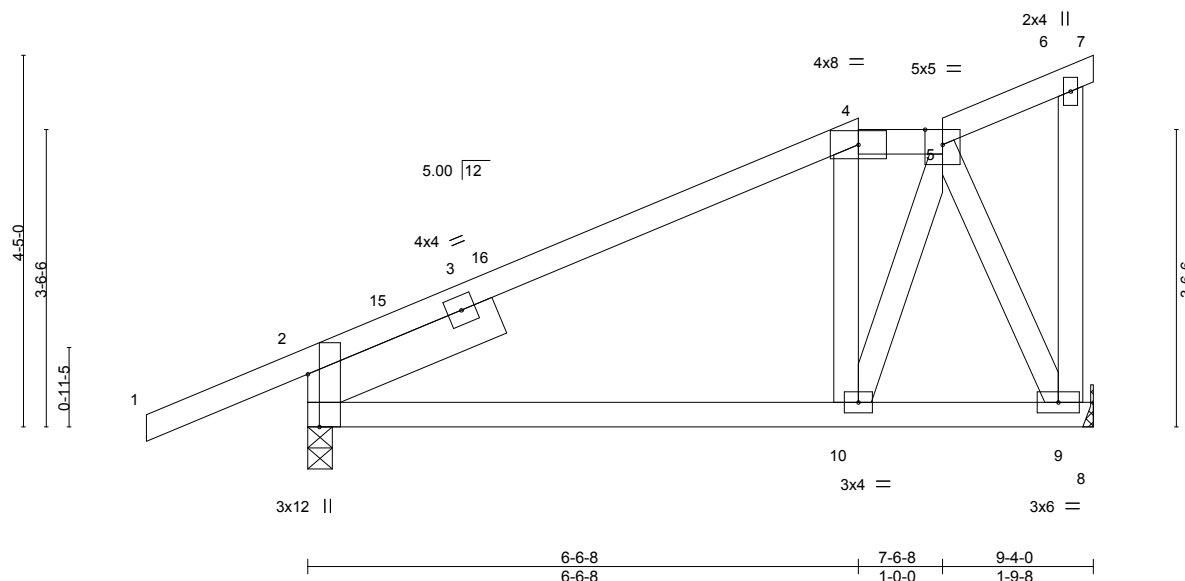


Plate Offsets (X,Y)-- [2:0-7-8,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	-0.03 10-13	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.06 10-13	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.02 2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL 10.0								Weight: 44 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x6 SPF No.2 2-6-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 9=Mechanical, 2=0-3-8
 Max Horz 2=147(LC 15)
 Max Uplift 9=-36(LC 13), 2=-92(LC 16)
 Max Grav 9=441(LC 39), 2=638(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-374/185, 4-5=-321/126
 BOT CHORD 2-10=-192/307
 WEBS 4-10=-309/262, 5-10=-266/482, 5-9=-388/176

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



November 11, 2020

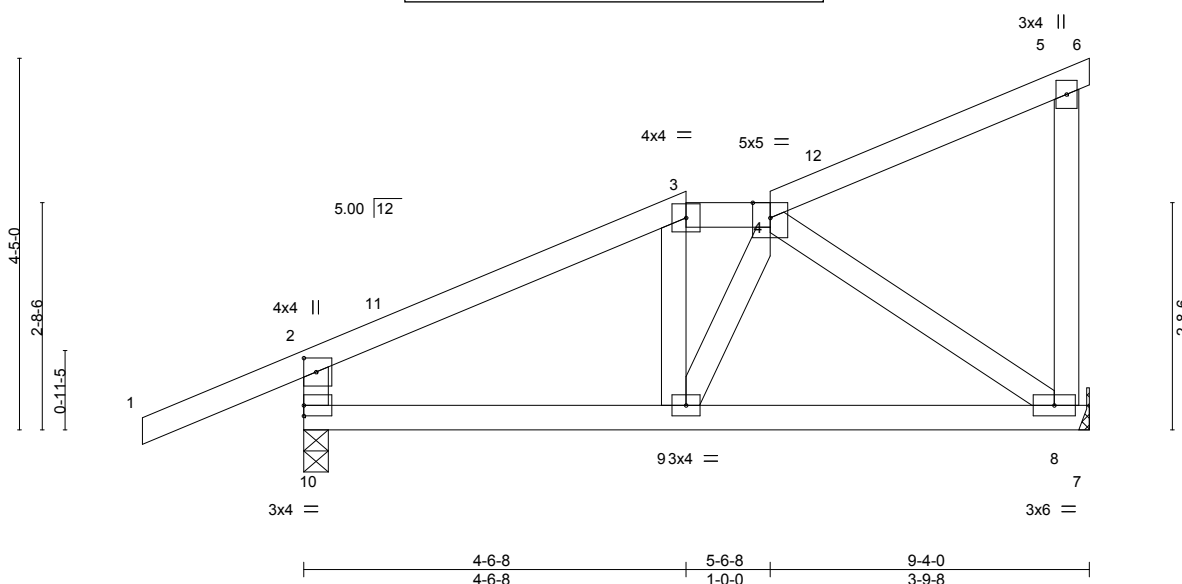
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2525051	Truss M17	Truss Type Roof Special	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI ID:WV5xOZ45cNK4PQ2HmSu_xyPFT9-WHHaUonJwtkZ_TivmOwa4vB5dy3Ndw8wT9OQGCyKURw 12/21/2020		Ply 1 Roeser/1464 Winterset I43577350 Job Reference (optional)
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:35 2020 Page 1 PF19-WHHaUonJwtkZ_TivmOwa4vB5dy3Ndw8wT9OQGCyKURw		



Scale = 1:27.4

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.47	Vert(LL)	-0.02	8-9	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.04	8-9	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	8	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 39 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 8=Mechanical, 10=0-3-8
 Max Horz 10=152(LC 13)
 Max Uplift 8=-35(LC 13), 10=-96(LC 16)
 Max Grav 8=443(LC 39), 10=633(LC 39)

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

TOP CHORD 2-3=-458/87, 3-4=-335/99, 2-10=-561/235
 BOT CHORD 9-10=-237/338, 8-9=-204/336
 WEBS 4-8=-383/191

NOTES-

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



November 11, 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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
 ID: WV5xOZ45cNK4PQ2HmSu...xyyPFt9-SgPKvUpZSV_HDnsHupyz9KGPQmjw5rlDwTtXL5yKURu
 12/21/2020

Job 2525051	Truss M18	Truss Type Roof Special	Girder	Ply 1	Roeser/1464 Winterset I43577351
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)		

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:37 2020 Page 1
ID: WV5xOZ45cNK4PQ2HmSu...xyyPFt9-SgPKvUpZSV_HDnsHupyz9KGPQmjw5rlDwTtXL5yKURu

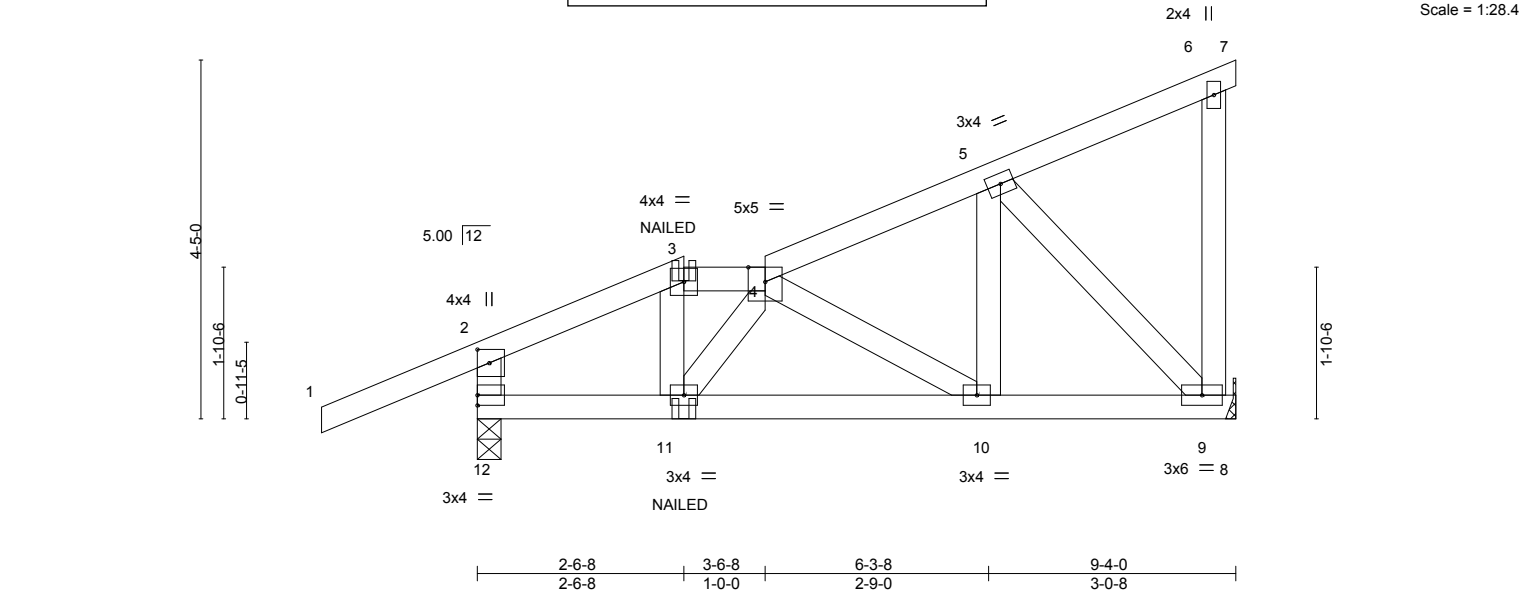


Plate Offsets (X,Y)--		[2:0-2-0,0-1-12]							
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.58	in (loc)	l/defl	L/d	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.34	Vert(LL)	-0.03 10-11	>999	240
TCDL	10.0	Lumber DOL	1.15	WB	0.12	Vert(CT)	-0.05 10-11	>999	180
BCLL	0.0	Rep Stress Incr	NO	Matrix-MS		Horz(CT)	0.01 9	n/a	n/a
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 43 lb	FT = 20%

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

REACTIONS. (size) 9=Mechanical, 12=0-3-8
 Max Horz 12=152(LC 9)
 Max Uplift 9=-33(LC 9), 12=-97(LC 12)
 Max Grav 9=455(LC 35), 12=619(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-394/13, 3-4=-270/15, 4-5=-378/37, 2-12=-521/101
 BOT CHORD 11-12=-92/310, 10-11=-74/444, 9-10=-45/310
 WEBS 4-11=-303/46, 5-9=-438/49

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 12.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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 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).

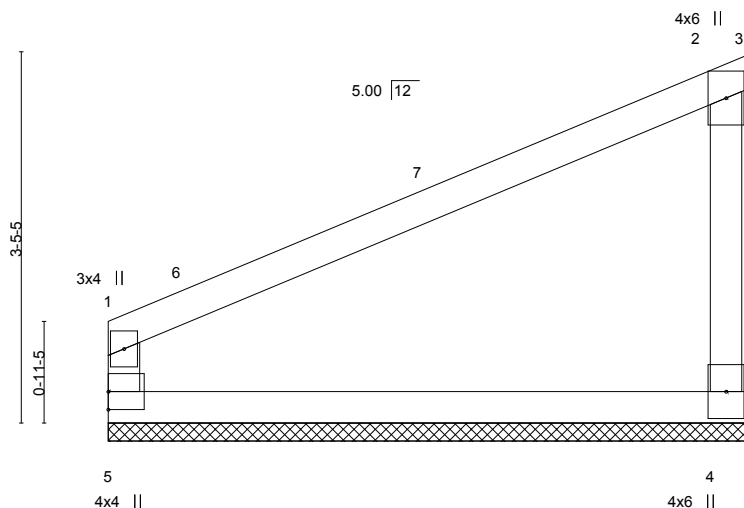
LOAD CASE(S) Standard
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-51, 2-3=-51, 3-4=-61, 4-6=-51, 6-7=-51, 8-12=-20



November 11, 2020

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 11=2(B)

Job 2525051	Truss M19	Truss Type GABLE	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 12/21/2020	Ply 1	Roeser/1464 Winterset I43577352 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:37 2020 Page 1 ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-SgPKvUpZSV_HDnsHupy29KGSUMkj5sfDwTtXL5yKURu
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.39	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.28	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.03	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-R					Weight: 18 lb	FT = 20%
BCDL 10.0	Code IRC2018/TPI2014							

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=6-0-0, 3=6-0-0, 4=6-0-0
Max Horz 5=106(LC 13)
Max Uplift 5=-12(LC 16), 3=-314(LC 20), 4=-129(LC 13)
Max Grav 5=237(LC 2), 3=93(LC 13), 4=621(LC 20)

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

TOP CHORD 2-4=-540/651

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 6-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 3=314, 4=129.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

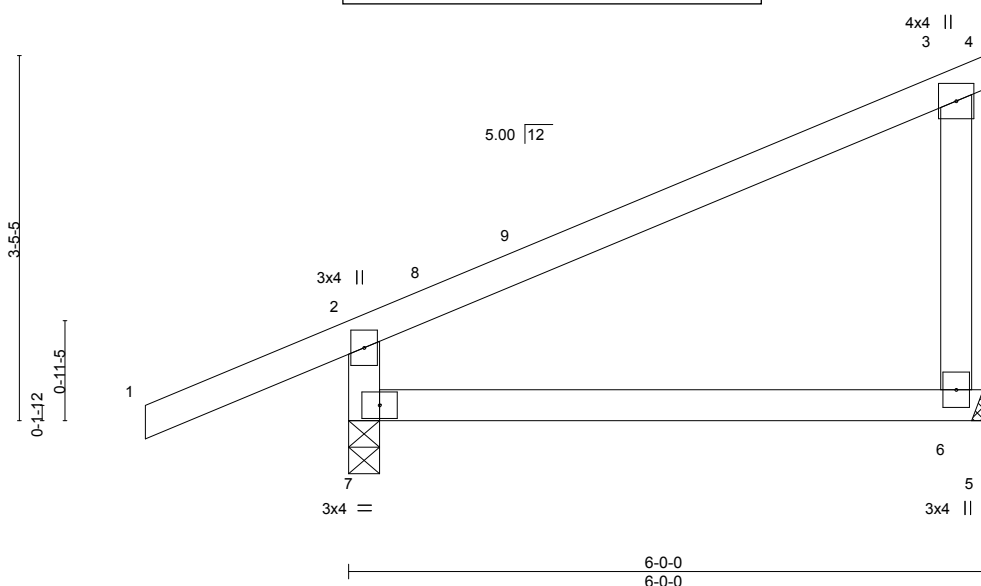
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Roeser/1464 Winterset	I43577353
2525051	M20	Jack-Closed	ID:WV5xOZ45cNK4PQ2HmSu_xyyPFt9-O2X5K9qp_6E?T40g?E_WFLp0aShZm9WOnMePzyKURs		1	Job Reference (optional)	
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:39 2020 Page 1			
		-1-11-0 1-11-0		12/21/2020			
				6-0-0 6-0-0			



Scale = 1:21.7

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.32	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.19	Vert(LL)	-0.03 6-7 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.05 6-7 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.00 6 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 20 lb	FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 7=0-3-8
Max Horz 7=118(LC 13)
Max Uplift 6=-27(LC 13), 7=-88(LC 16)
Max Grav 6=278(LC 21), 7=422(LC 2)

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

TOP CHORD 2-7=-375/247

NOTES-

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



November 11, 2020

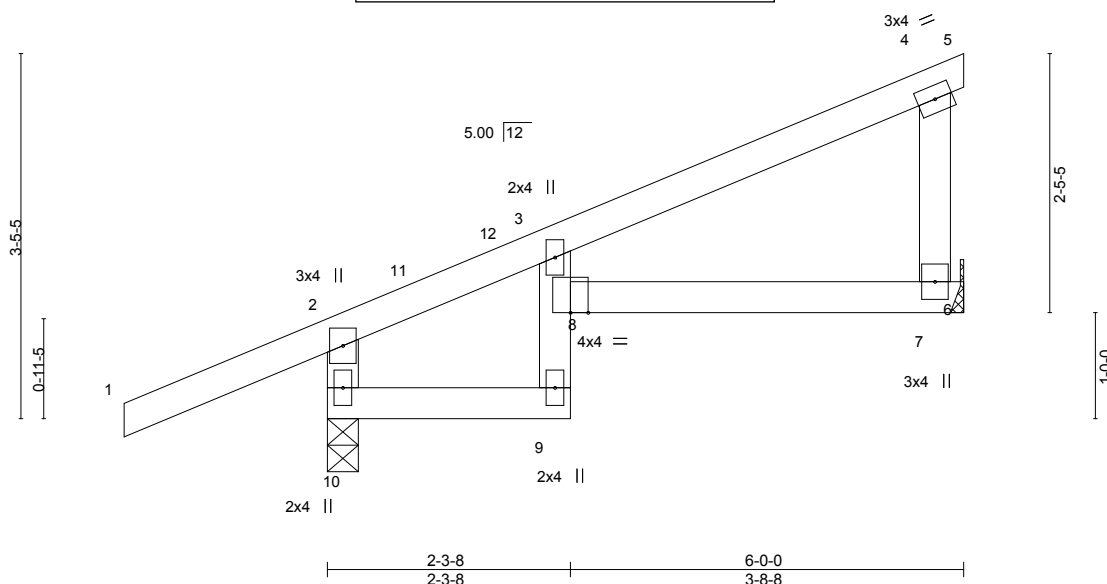
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI		Ply	Roeser/1464 Winterset
2525051	M21	Jack-Closed	ID:WV5xOZ45cNK4PQ2HmSu_xyPF19-O2X5K9qp_6E?T40g?E_WFILqZaQCZm9WOnMePzyKURs		1	I43577354
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		9 2020 MiTek Industries, Inc. Tue Nov 10 19:44:39 2020 Page 1		
-1-11-0		2-3-8		PF19-O2X5K9qp_6E?T40g?E_WFILqZaQCZm9WOnMePzyKURs		
1-11-0		2-3-8		12/21/2020		
				6-0-0		
				3-8-8		



Scale = 1:21.7

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.29	in (loc)	l/defl	L/d	MT20	197/144	
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.28	Vert(LL)	-0.04 8 >999	240			
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.07 7-8 >991	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.03 7 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 21 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 10=0-3-8, 7=Mechanical
Max Horz 10=104(LC 13)
Max Uplift 10=-85(LC 16), 7=-26(LC 13)
Max Grav 10=422(LC 2), 7=278(LC 21)

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

TOP CHORD 2-10=-374/219

NOTES-

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



November 11, 2020

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

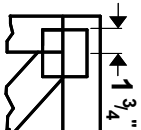
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



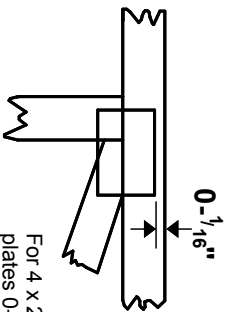
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

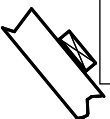
This symbol indicates the required direction of slots in connector plates.

Plate location details available in **MiTek 20/20** software or upon request.

PLATE SIZE

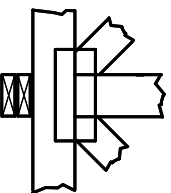
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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

