



MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Re: 2585378
SUMMIT/PIKEWOOD CRAFTSMAN #70/MO

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

01/13/2021

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: I44123391 thru I44123476

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

Missouri COA: Engineering 001193



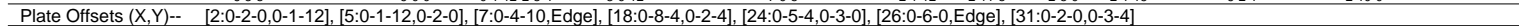
December 28, 2020

Sevier, Scott ,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.

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:20:45 2020 Page 1

Scale = 1:84.9



TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-2-0 max.): 7-8.
BOT CHORD	Rigid ceiling directly applied.

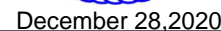
(size) 34=0-3-8, 16=0-3-8, 31=0-3-8
 Max Horz 34=-175(LC 10)
 Max Uplift 34=-96(LC 26), 16=-255(LC 13), 31=-290(LC 12)
 Max Grav 34=341(LC 25), 16=1473(LC 2), 31=2730(LC 2)

TOP CHORD 2-4s=145/380, 4-5s=71/1369, 6-7s=793/200, 7-8s=1581/323, 8-9s=1753/330,
9-10=2177/385, 10-11=2422/426, 11-13=2250/399, 13-14=2468/409, 2-34=282/156,
14-16=1401/253

BOT CHORD 33-34s=181/261, 5-31s=1944/223, 6-29s=1619/177, 28-29s=243/282, 27-28s=9/732,
26-27s=27/1901, 9-26s=195/953, 18-19s=387/2348

WEBS 4-33s=0/457, 31-33s=336/153, 4-31s=1043/186, 6-28s=95/1364, 7-28s=841/158,
7-27s=210/1174, 24-26s=148/2036, 10-26s=364/179, 2-33s=377/88, 11-19s=590/136,
19-24s=230/2039, 13-19s=418/166, 14-18s=338/2130, 5-29s=95/1595, 29-31s=1338/293,
8-27s=0/419, 9-27s=867/231

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-8-5, Interior(1) 3-8-5 to 18-11-4, Exterior(2R) 18-11-4 to 25-4-12, Interior(1) 25-4-12 to 26-8-12, Exterior(2R) 26-8-12 to 33-2-4, Interior(1) 33-2-4 to 46-6-9 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 3x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Bearing at joint(s) 31 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 34, 255 lb uplift at joint 16 and 290 lb uplift at joint 31.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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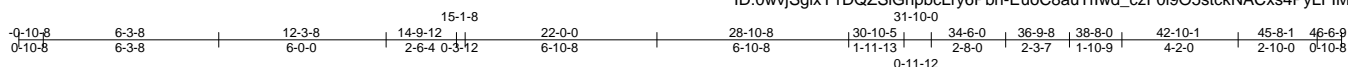


Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123392
2585378	A2	Hip	1	1	Job Reference (optional)	

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



Scale = 1:82.6

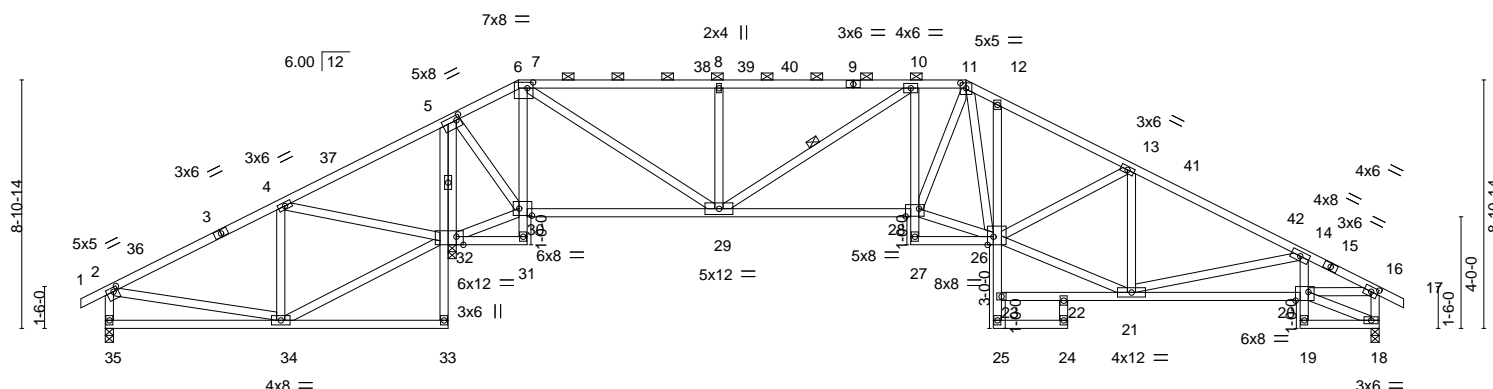


Plate Offsets (X, Y)--	[0:0-2-0,0-1-12], [5:0-1-12,0-2-0], [6:0-2-8,0-2-8], [6:0-0-0,0-1-12], [11:0-2-8,0-2-4], [16:0-2-15,0-2-0], [20:0-5-8,Edge], [26:0-2-8,Edge], [28:0-5-12,0-3-4], [30:0-5-8,0-3-0], [32:0-3-0,Edge]											

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.65	Vert(LL) -0.15 28 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.63	Vert(CT) -0.30 28-29 >999 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.74	Horz(CT) 0.14 18 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 252 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 (3-9-9 max.); 6-11.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 10-29

REACTIONS.

(size) 35=0-3-8, 18=0-3-8, 32=0-3-8
 Max Horz 35=-149(LC 10)
 Max Uplift 35=-249(LC 26), 18=-254(LC 13), 32=-293(LC 12)
 Max Grav 35=185(LC 25), 18=1376(LC 26), 32=2772(LC 1)

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

TOP CHORD 2-4=-94/622, 4-5=-111/1709, 5-6=-22/572, 6-7=0/472, 7-8=-1329/259, 8-10=-1329/259,
10-11=-2043/401, 11-12=-2128/483, 12-13=-2173/423, 13-14=-2064/399,
14-16=-2267/408, 2-35=-127/304, 16-18=-1316/253

BOT CHORD 5-32=-1983/207, 7-30=-1730/250, 29-30=-444/298, 28-29=-108/2074, 20-21=-383/2153

WEBS 4-34=-20/515, 32-34=-565/202, 4-32=-1172/209, 7-29=-278/2091, 8-29=-514/213,
10-29=-901/206, 26-28=-57/1815, 11-28=-146/706, 11-26=-213/354, 2-34=-590/139,
5-30=-134/1630, 30-32=-1624/350, 13-21=-542/136, 21-26=-233/1845, 14-21=-402/159,
16-20=-336/1959

NOTES-

- 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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-8-5, Interior(1) 3-8-5 to 14-9-12, Exterior(2R) 14-9-12 to 21-3-4, Interior(1) 21-3-4 to 30-10-5, Exterior(2R) 30-10-5 to 37-3-13, Interior(1) 37-3-13 to 46-6-9 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 3x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 32 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 249 lb uplift at joint 35, 254 lb uplift at joint 18 and 293 lb uplift at joint 32.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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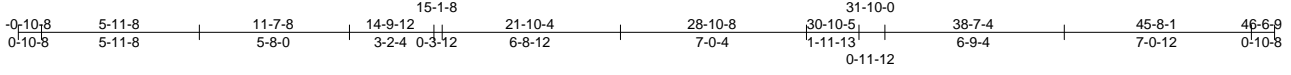
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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123394
2585378	A4	Piggyback Base	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:20:51 2020 Page 1
ID:0wvjSgixY1DQZSiGhpbclry6Pbn-BGwzZFvkAvALDw7e77CsAHzy0AmIPiPhPkPQsy67Sg



Scale = 1:87.0

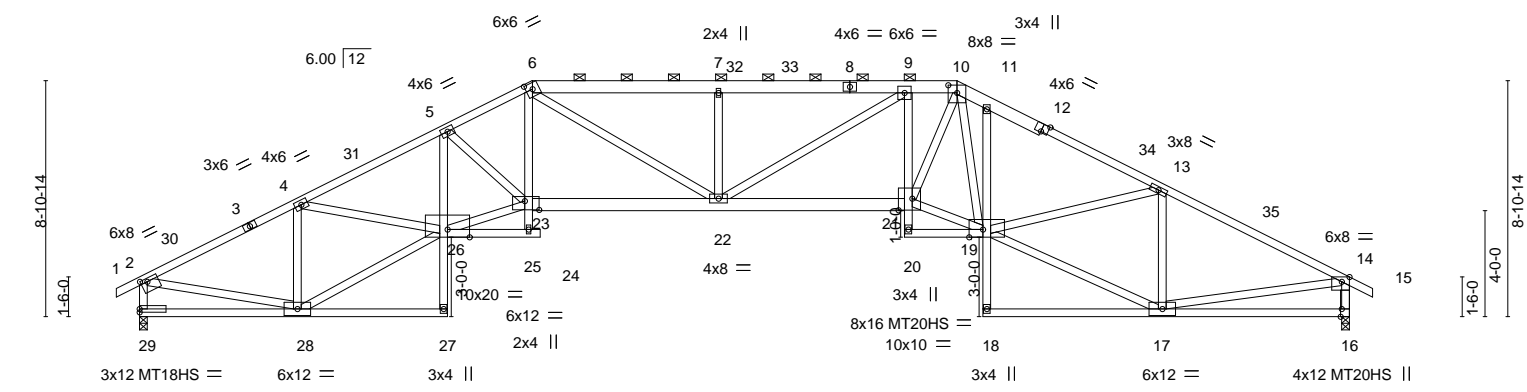


Plate Offsets (X,Y)--	[2:0-3-0,0-1-8], [6:0-3-0,0-2-12], [10:0-4-0,0-3-8], [12:0-3-0,Edge], [14:0-3-8,Edge], [16:0-3-8,Edge], [19:0-6-4,Edge], [21:0-6-4,0-5-4], [23:0-6-8,0-4-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.48	21-22	>999	240	MT20 197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.86	21-22	>631	180	MT20HS 148/108
BCLL 0.0 *	Rep Stress Incr	YES	WB 1.00	Horz(CT)	0.54	16	n/a	n/a	MT18HS 197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 260 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 6-8,10-12,8-10: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-9-10 max.): 6-10.
BOT CHORD 2x4 SPF No.2 *Except* 21-23: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2 *Except* 23-26: 2x4 SPF 1650F 1.5E	

REACTIONS.	(size) 29=0-3-8, 16=0-3-8 Max Horz 29=150(LC 10) Max Uplift 29=205(LC 12), 16=207(LC 13) Max Grav 29=2119(LC 1), 16=2116(LC 1)
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FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-2941/364, 4-5=-5042/613, 5-6=-5167/624, 6-7=-5292/645, 7-9=-5289/644, 9-10=-4940/616, 10-11=-4405/624, 11-13=-4469/554, 13-14=-3023/380, 2-29=-2051/324, 14-16=-2039/333
BOT CHORD	28-29=-145/262, 5-26=-489/83, 22-23=-374/4549, 21-22=-364/4982, 9-21=-618/237, 11-19=-327/212, 16-17=-76/282
WEBS	4-28=-1760/266, 26-28=-291/2790, 4-26=-155/1986, 6-22=-234/1101, 7-22=-604/232, 9-22=-147/604, 19-21=-265/4090, 10-21=-286/2419, 10-19=-653/126, 17-19=-260/2755, 13-19=-142/1413, 13-17=-1448/237, 2-28=-209/2400, 14-17=-195/2357, 5-23=-72/395, 23-26=-401/4615, 6-23=-145/1518

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-8-5, Interior(1) 3-8-5 to 14-10-0, Exterior(2R) 14-10-0 to 21-3-8, Interior(1) 21-3-8 to 30-10-5, Exterior(2R) 30-10-5 to 37-3-13, Interior(1) 37-3-13 to 46-6-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 205 lb uplift at joint 29 and 207 lb uplift at joint 16.
 - 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 sheathing be applied directly to the bottom chord.



December 28, 2020

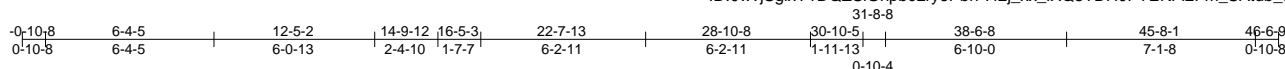
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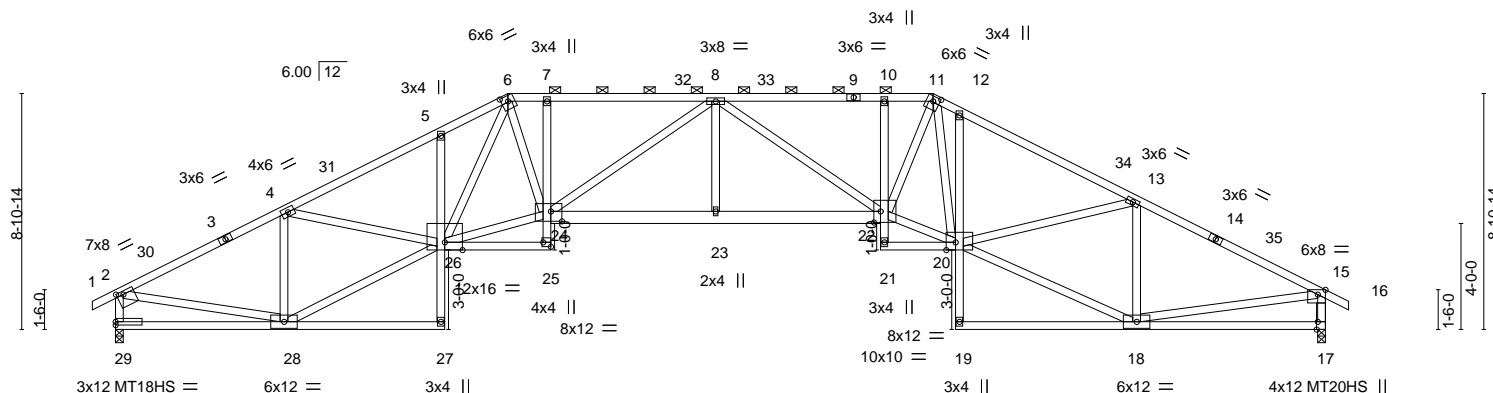
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123394
2585378	A4	Piggyback Base	2	1	Job Reference (optional)	

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



Scale = 1:87.0



	6-4-5	12-5-2	14-9-12	16-5-3	22-7-13	28-10-8	31-8-8	38-6-8	45-8-1
	6-4-5	6-0-13	2-4-10	1-7-7	6-2-11	6-2-11	2-10-0	6-10-0	7-1-8
Plate Offsets (X,Y)--	[2:0-3,0-0-1-8],	[6:0-3,0-0,2-7],	[11:0-3,0-0,2-4],	[15:0-3,8,Edge],	[17:0-3,8,Edge],	[20:0-4,4,Edge],	[22:0-3,0-0,5-0],	[24:0-5,0-0,4-8],	[25:Edge,0-3-8]
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.84		Vert(LL) -0.50 23 >999 240		MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.95		Vert(CT) -0.90 23-24 >604 180		MT20HS	148/108
BCLL 0.0 *		Rep Stress Incr YES		WB 0.96		Horz(CT) 0.54 17 n/a n/a		MT18HS	197/144
BCDL 10.0		Code IRC2018/TPI2014		Matrix-AS				Weight: 256 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 (2-1-10 max.): 6-11.
BOT CHORD	2x4 SPF No.2 *Except* 22-24: 2x6 SPF No.2	BOT CHORD	
WEBS	2x4 SPF No 2		Rigid ceiling directly applied.

REACTIONS. (size) 29=0-3-8, 17=0-3-8
 Max Horz 29=-149(LC 10)
 Max Uplift 29=-290(LC 12), 17=-293(LC 13)
 Max Grav 29=2113(LC 1), 17=2113(LC 1)

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

TOP CHORD
2-4=-2971/397, 4-5=-4784/640, 5-6=-4741/723, 6-7=-4647/612, 7-8=-4688/619,
8-10=-4736/604, 10-11=-4697/599, 11-12=-4381/627, 12-13=-4402/551, 13-15=-3030/409,
2-29=-2042/330, 15-17=-2036/335

BOT CHORD
28-29=-156/281, 5-26=-323/175, 25-26=-36/298, 7-24=-305/157, 23-24=-436/5178,
22-23=-436/5178, 10-22=-314/156, 20-21=-35/271, 17-18=-77/271

WEBS
4-28=-1637/318, 26-28=-408/2773, 4-26=-142/1727, 24-26=-342/3908, 6-24=-200/1865,
8-24=-795/201, 8-23=0/319, 8-22=-738/197, 20-22=-239/3826, 11-22=-272/2269,
11-20=-385/124, 18-20=-303/2761, 13-20=-143/1325, 13-18=-1439/258, 2-28=-223/2391,
15-18=-207/2376, 6-26=-213/326

NOTES-

- 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; BC DL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-8-5, Interior(1) 3-8-5 to 14-9-12, Exterior(2R) 14-9-12 to 21-3-4, Interior(1) 21-3-4 to 30-10-5, Exterior(2R) 30-10-5 to 37-3-13, Interior(1) 37-3-13 to 46-6-9 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 290 lb uplift at joint 29 and 293 lb uplift at joint 17.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123396
2585378	A6	Piggyback Base	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:20:54 2020 Page 1

ID:0wvjSgixY1DQZSiGhpbclLy6Pbn-brc5CHycTqZw4NsCpFIzowbVcOpXc9185dz31By67Sd

4-8-5	9-1-2	9-5-12	14-9-15	17-6-0	20-2-2	25-6-4	26-4-8	33-2-8	40-4-0	41-2-8
4-8-5	4-4-13	0-4-10	5-4-3	2-8-1	2-8-1	5-4-3	0-10-4	6-10-0	7-1-8	0-10-8

Scale = 1:72.7

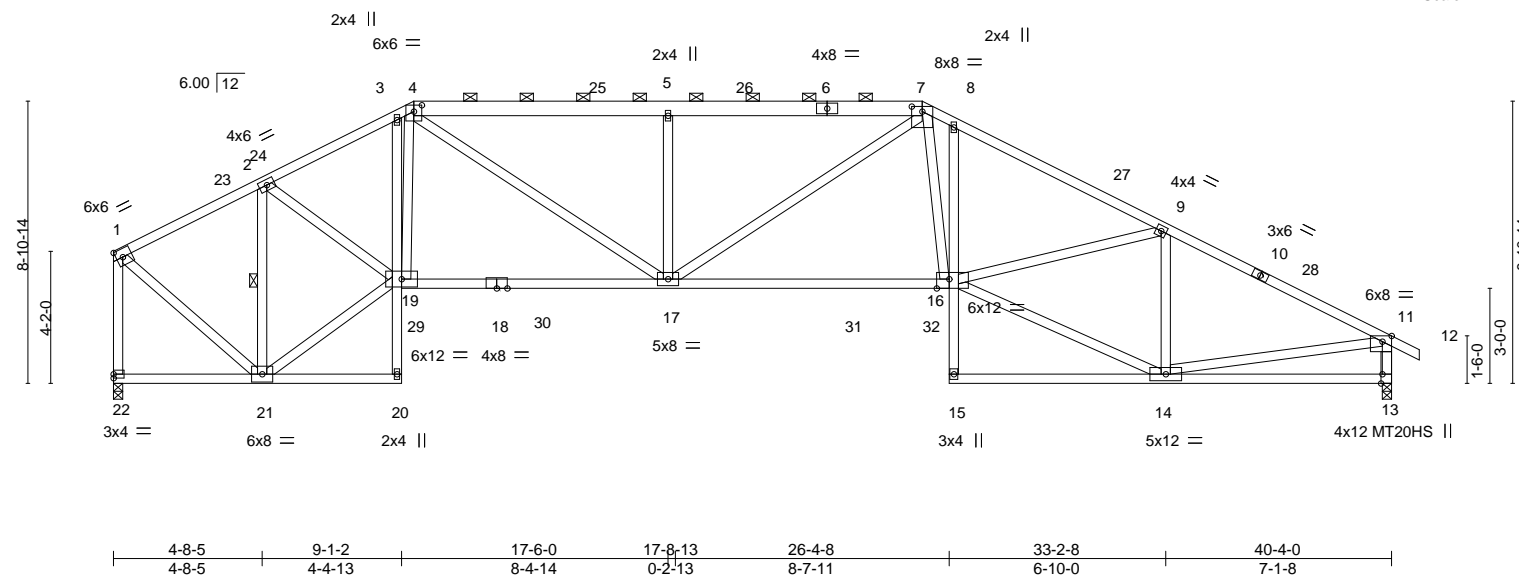


Plate Offsets (X,Y)-- [4:0-3-0,0-2-7], [7:0-4-0,0-1-15], [11:0-3-8,Edge], [13:0-3-8,Edge], [16:0-4-12,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.38	16-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.69	16-17	>696	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.29	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 223 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6,6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
16-18: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-5-4 max.): 4-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-21

REACTIONS.

(size) 22=0-3-8, 13=0-3-8
Max Horz 22=-229(LC 10)
Max Uplift 22=-218(LC 12), 13=-278(LC 13)
Max Grav 22=1891(LC 2), 13=1943(LC 2)

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

TOP CHORD 1-2=-1460/239, 2-3=-2817/368, 3-4=-2689/382, 4-5=-3493/459, 5-7=-3491/458,
7-8=-3750/528, 8-9=-3874/484, 9-11=-2743/385, 1-22=-1816/251, 11-13=-1819/315
BOT CHORD 17-19=-233/2471, 16-17=-176/3189, 13-14=-76/265
WEBS 14-16=-271/2554, 9-16=-118/1090, 9-14=-1233/242, 11-14=-185/2140, 2-21=-1790/235,
2-19=-113/1511, 19-21=-158/1548, 1-21=-188/1629, 5-17=-676/269, 7-17=-178/575,
4-17=-230/1315, 7-16=-162/1168, 4-19=-197/277

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 9-5-12, Exterior(2R) 9-5-12 to 15-2-3, Interior(1) 15-2-3 to 25-6-4, Exterior(2R) 25-6-4 to 31-2-12, Interior(1) 31-2-12 to 41-2-8 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 218 lb uplift at joint 22 and 278 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123397
2585378	A7	Piggyback Base	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020
MiTek Industries, Inc.
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Page 1

ID:0wvjSgixY1DQZSIghpbclRy6Pbn-XEksdzs?SpeKh?bwgn1tLgnEBUU43XQZxSA53y67Sb

4-10-10
4-10-10
9-5-12
4-7-2
11-1-2
1-7-6
17-6-0
6-4-14
25-6-4
8-0-4
26-4-8
0-10-4
33-2-8
6-10-0
40-4-0
7-1-8
41-2-8
0-10-8

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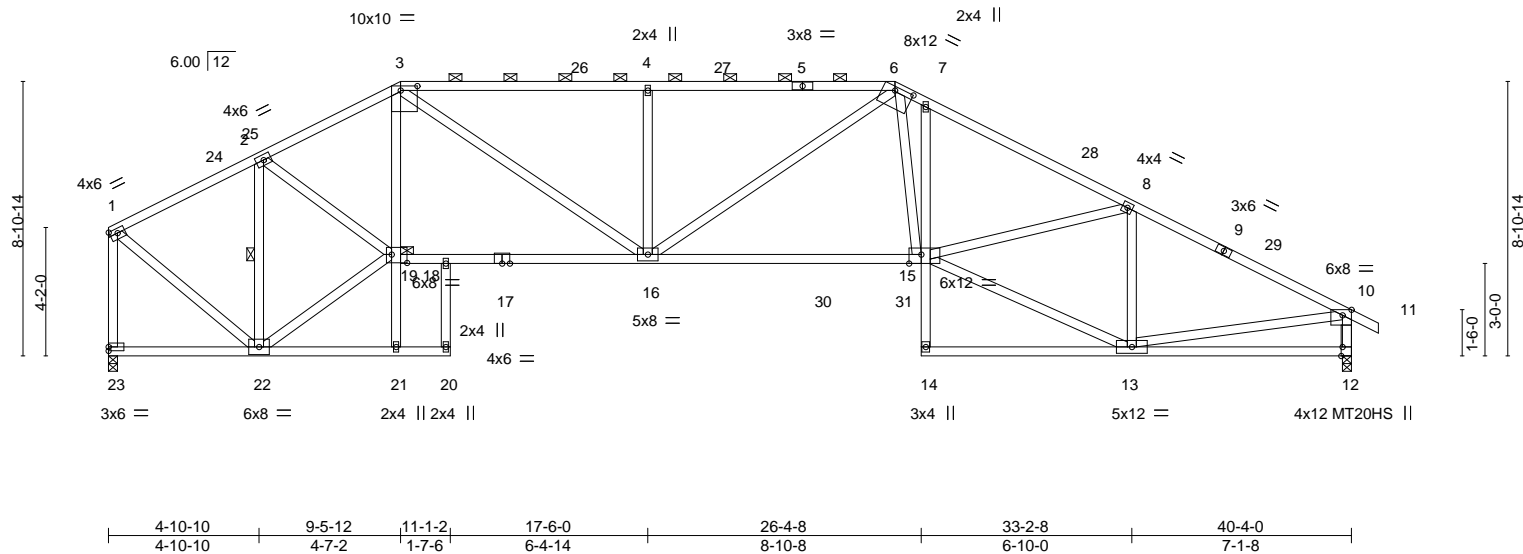


Plate Offsets (X,Y)--		[1:Edge,0-1-12], [3:0-6-8,0-1-12], [6:0-7-4,0-1-8], [10:0-3-8,Edge], [12:0-3-8,Edge], [15:0-4-12,Edge], [19:0-6-0,0-3-4]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.82	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.85	Vert(LL) -0.41 15-16 >999 240
BCLL 0.0 *	Lumber DOL 1.15	WB 0.63	Vert(CT) -0.75 15-16 >642 180
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.30 12 n/a n/a
	Code IRC2018/TPI2014		
		PLATES	GRIP
		MT20	197/144
		MT20HS	148/108
		Weight: 213 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
3-5,5-6: 2x4 SPF 1650F 1.5E	2-0-0 oc purlins (2-2-0 max.): 3-6.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied.
15-17: 2x4 SPF 1650F 1.5E	WEBS 1 Row at midpt 2-22
WEBS 2x4 SPF No.2	JOINTS 1 Brace at Jt(s): 19

REACTIONS.	(size) 23=0-3-8, 12=0-3-8
	Max Horz 23=-229(LC 8)
	Max Uplift 23=-217(LC 12), 12=-278(LC 13)
	Max Grav 23=1883(LC 2), 12=1941(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1483/244, 2-3=-2811/361, 3-4=-3421/454, 4-6=-3421/454, 6-7=-3776/517, 7-8=-3870/482, 8-10=-2739/384, 1-23=-1801/254, 10-12=-1817/314
BOT CHORD	18-19=-209/2494, 16-18=-224/2469, 15-16=-177/3172, 12-13=-76/265
WEBS	3-19=-1/306, 3-16=-234/1236, 4-16=-623/259, 6-16=-169/523, 6-15=-140/1245, 13-15=-269/2555, 8-15=-117/1088, 8-13=-1234/241, 10-13=-185/2138, 2-22=-1716/219, 1-22=-187/1616, 2-19=-105/1466, 19-22=-150/1529

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 9-5-12, Exterior(2R) 9-5-12 to 15-2-3, Interior(1) 15-2-3 to 25-6-4, Exterior(2R) 25-6-4 to 31-2-12, Interior(1) 31-2-12 to 41-2-8 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
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 217 lb uplift at joint 23 and 278 lb uplift at joint 12.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 28,2020

RELEASE FOR

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
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01/13/2021

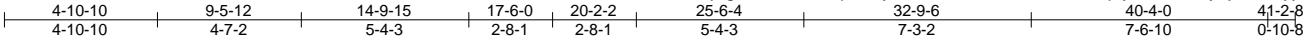
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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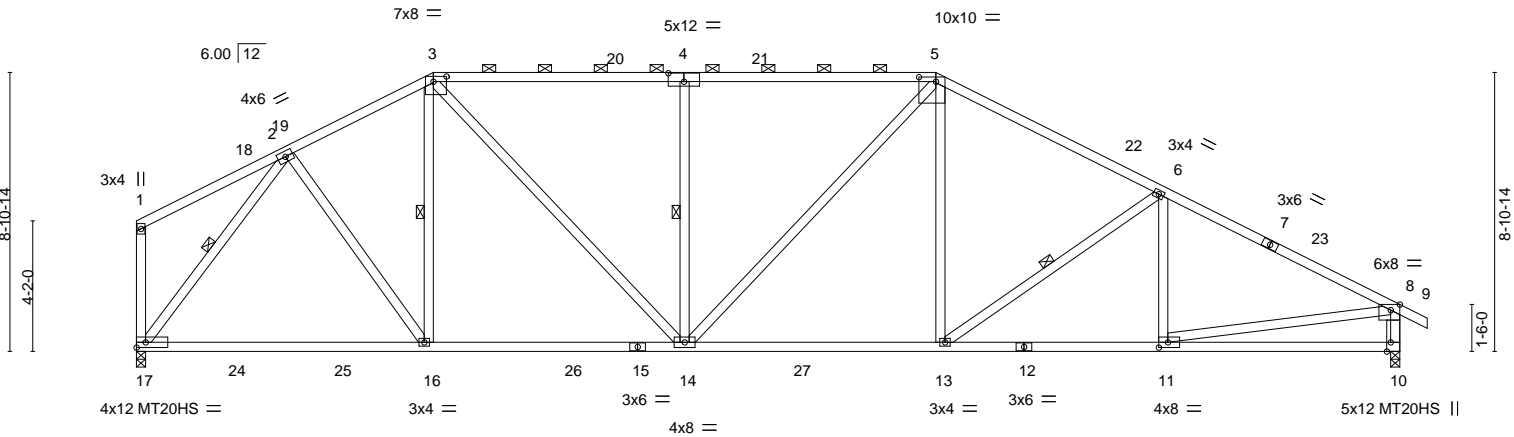
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123398
2585378	A8	Piggyback Base	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:20:58 2020 Page 1

ID:0wvjSgixY1DQZSIghpbclRy6Pbn-Tdrc1f?7X33MZ?9_25qVymI5U?9_YySj0FxFHAYy67SZ



Scale = 1:73.6



	9-5-12	17-6-0	25-6-4	32-9-6	40-4-0	
	9-5-12	8-0-4	8-0-4	7-3-2	7-6-10	
Plate Offsets (X,Y)--	[3:0-5-0,0-2-0], [4:0-6-0,0-3-4], [5:0-6-8,0-1-12], [8:0-3-8,Edge], [10:0-3-8,Edge], [11:0-3-8,0-2-0]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.90	Vert(LL)	-0.27 16-17	>999 240
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.46 16-17	>999 180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.60	Horz(CT)	0.10 10	n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS			
						PLATES
						MT20 197/144
						MT20HS 148/108
						Weight: 197 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.): 3-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-16, 6-13, 2-17, 4-14
REACTIONS.	
(size) 17=0-3-8, 10=0-3-8	
Max Horz 17=-229(LC 8)	
Max Uplift 17=-217(LC 12), 10=-278(LC 13)	
Max Grav 17=1973(LC 2), 10=1976(LC 2)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1946/320, 3-4=-2304/388, 4-5=-2303/387, 5-6=-2513/392, 6-8=-2798/387, 8-10=-1843/317
BOT CHORD	16-17=-151/1281, 14-16=-145/1694, 13-14=-111/2150, 11-13=-256/2417, 10-11=-83/298
WEBS	2-16=-79/753, 3-16=-347/177, 5-13=-16/538, 6-13=-369/186, 2-17=-2036/286, 8-11=-175/2150, 4-14=-631/263, 3-14=-189/954, 5-14=-148/399

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 9-5-12, Exterior(2R) 9-5-12 to 15-2-3, Interior(1) 15-2-3 to 25-6-4, Exterior(2R) 25-6-4 to 31-2-12, Interior(1) 31-2-12 to 41-2-8 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
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 217 lb uplift at joint 17 and 278 lb uplift at joint 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.



December 28,2020

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123399
2585378	A9	Piggyback Base	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020
MiTek Industries, Inc.
Wed Dec 23 09:20:59 2020
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4-10-10
4-10-10

9-5-12
4-7-2

17-6-0
8-0-4

20-1-8
2-7-8

25-6-4
5-4-12

32-9-6
7-3-2

40-4-0
7-6-10

41-2-8
0-10-8

Scale = 1:70.9

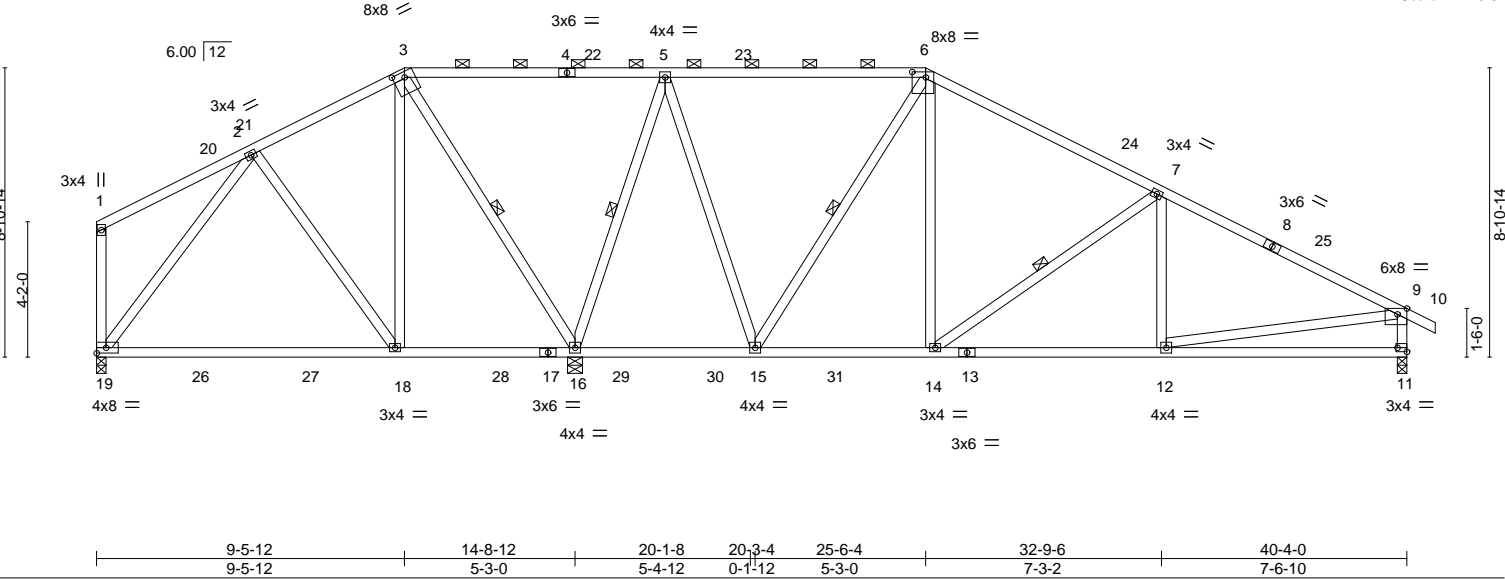


Plate Offsets (X,Y)-- [3:0-4-4,0-2-0], [6:0-5-0,0-2-0], [9:0-3-8,Edge], [11:Edge,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.28 18-19 >624 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.46 18-19 >380 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.02 11 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 203 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.): 3-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 7-14, 3-16, 6-15, 5-16

REACTIONS. (size) 19=0-3-8, 11=0-3-8, 16=0-5-8
Max Horz 19=-229(LC 8)
Max Uplift 19=-104(LC 12), 11=-198(LC 13), 16=-218(LC 13)
Max Grav 19=522(LC 27), 11=1112(LC 28), 16=2387(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-5=0/454, 5-6=-283/174, 6-7=-859/243, 7-9=-1368/253, 9-11=-1006/237
BOT CHORD 18-19=-62/256, 14-15=0/670, 12-14=-137/1141, 11-12=-81/254
WEBS 3-18=-21/519, 6-14=-44/581, 7-14=-582/203, 2-19=-286/118, 9-12=-57/900, 3-16=-960/143, 6-15=-750/182, 5-15=-93/913, 5-16=-1449/275

- 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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 9-5-12, Exterior(2R) 9-5-12 to 15-2-3, Interior(1) 15-2-3 to 25-6-4, Exterior(2R) 25-6-4 to 31-2-12, Interior(1) 31-2-12 to 41-2-8 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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 19, 198 lb uplift at joint 11 and 218 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.



December 28,2020

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123400
2585378	A10	Hip	1	1	Job Reference (optional)	

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

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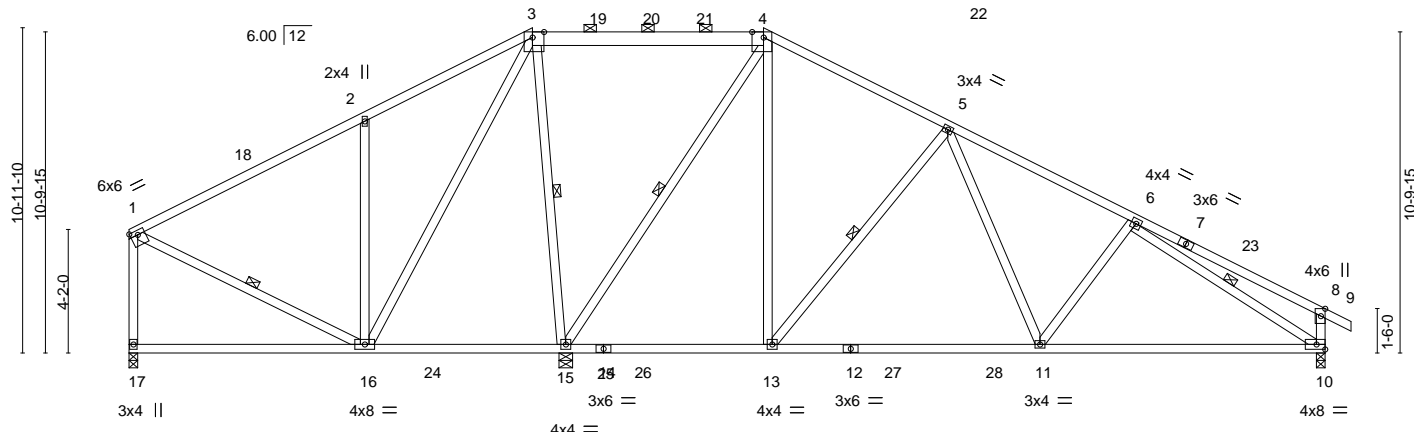
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6-11-6	7-11-6	13-7-4	21-4-12	27-7-6	33-9-15	40-4-0	41-2-8
6-11-6	1-0-0	5-7-14	7-9-8	6-2-9	6-2-9	6-6-1	0-10-8

8x8 =

8x8 =

Scale = 1:77.7



6-11-6	7-11-6	13-7-4	14-6-0	21-4-12	30-8-10	40-4-0
6-11-6	1-0-0	5-7-14	0-10-12	6-10-12	9-3-14	9-7-6

Plate Offsets (X,Y)-- [1:Edge,0-1-12], [3:0-4-10,Edge], [4:0-4-10,Edge], [8:0-3-0,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.23	11-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.36	11-13	>854	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 211 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-13, 1-16, 6-10, 3-15, 4-15

REACTIONS.

(size) 17=0-3-8, 10=0-3-8, 15=0-5-8
Max Horz 17=-255(LC 8)
Max Uplift 17=-109(LC 12), 10=-192(LC 13), 15=-214(LC 13)
Max Grav 17=504(LC 25), 10=1106(LC 28), 15=2502(LC 2)

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

TOP CHORD 1-2=-343/180, 2-3=-327/270, 3-4=0/463, 4-5=-447/213, 5-6=-1191/272, 6-8=-378/118, 1-17=-427/148, 8-10=-401/168
BOT CHORD 15-16=-380/270, 13-15=0/346, 11-13=-18/776, 10-11=-157/1095
WEBS 4-13=-104/921, 5-13=-721/259, 5-11=-48/574, 6-11=-253/205, 6-10=-1025/156, 2-16=-519/297, 3-16=-214/840, 3-15=-1084/237, 4-15=-1383/244

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 13-7-4, Exterior(2R) 13-7-4 to 19-3-11, Interior(1) 19-3-11 to 21-4-12, Exterior(2R) 21-4-12 to 27-1-4, Interior(1) 27-1-4 to 41-2-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 17, 192 lb uplift at joint 10 and 214 lb uplift at joint 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

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

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

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123401
2585378	A11	Hip	1	1		

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

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ID:0wvjSgixY1DQZSIghpbcLry6Pbn-xGM86MbQlww16w8ecfkm7ouYChwlK2?sRcR1WMY67T4

5-11-6	11-7-4	14-8-12	18-5-8	22-2-4	23-4-12	28-11-6	34-5-15	40-4-0	41-2-8
5-11-6	5-7-14	3-1-8	3-8-12	3-8-12	1-2-8	5-6-9	5-6-9	5-10-1	0-10-8

Scale = 1:73.6

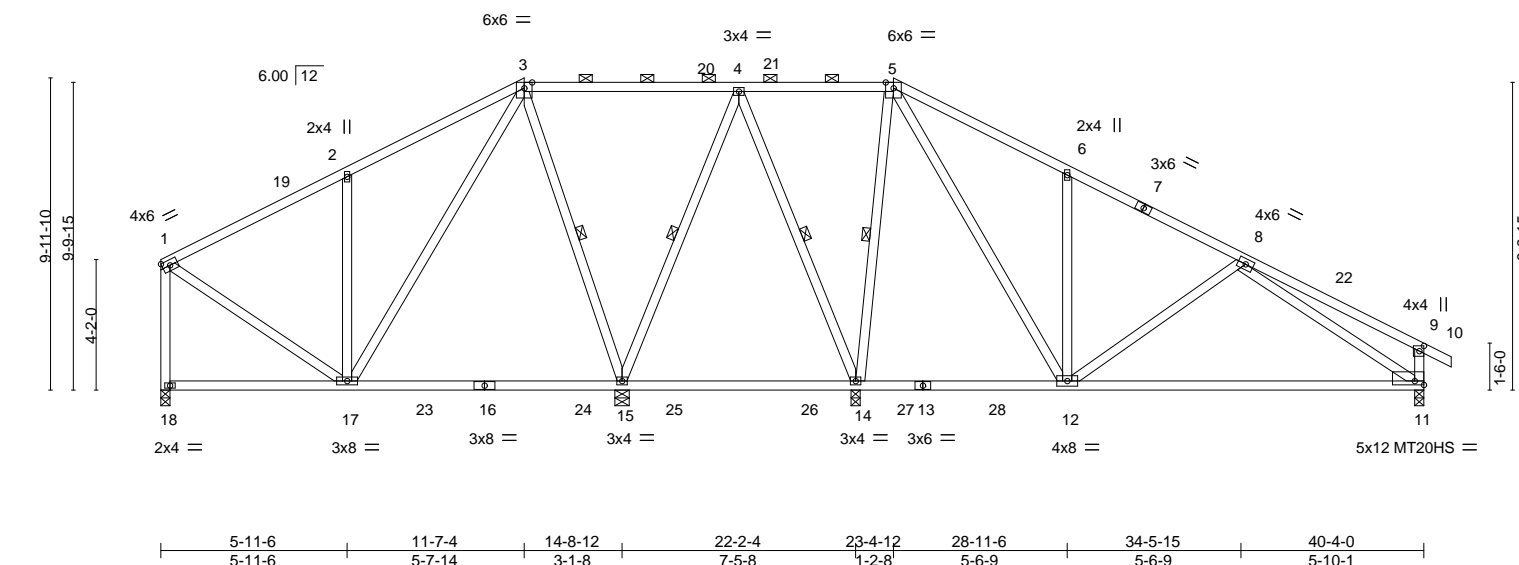


Plate Offsets (X,Y)--		[9:0-2-0,0-1-12], [11:Edge,0-1-8]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.36	11-12	>601	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(CT)	-0.72	11-12	>298	MT20HS	148/108
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.01	11	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 210 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 (10-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-15, 5-14, 4-15, 4-14

REACTIONS.

All bearings 0-3-8 except (jt=length) 15=0-5-8.

(lb) - Max Horz 18=242(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) except 11=136(LC 13), 15=146(LC 12), 14=273(LC 13),

18=111(LC 12)

Max Grav All reactions 250 lb or less at joint(s) except 11=766(LC 28), 15=1165(LC 27), 14=1494(LC 28), 18=614(LC 27)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-460/123, 2-3=-464/239, 4-5=0/261, 5-6=-488/261, 6-8=-486/133, 8-9=-428/57, 1-18=-554/132, 9-11=-380/136
BOT CHORD 11-12=-98/591
WEBS 6-12=-408/223, 3-15=-710/205, 5-14=-957/256, 4-14=-372/106, 5-12=-253/982, 8-11=-445/142, 8-12=-317/202, 1-17=-51/393, 2-17=-426/243, 3-17=-138/579

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 11-7-4, Exterior(2R) 11-7-4 to 17-3-11, Interior(1) 17-3-11 to 23-4-12, Exterior(2R) 23-4-12 to 28-11-6, Interior(1) 28-11-6 to 41-2-8 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
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 18 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 136 lb uplift at joint 11, 146 lb uplift at joint 15, 273 lb uplift at joint 14 and 111 lb uplift at joint 18.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123402
2585378	A12	Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:20:27 2020 Page 1

ID:0wvjSgixY1DQZSIghpbcLry6Pbn-tfTuX2dgqY9lEH0j4mECDzvTVdbox69uww8bFy67T2

4-11-6	9-7-4	18-5-8	25-4-12	32-8-10	40-4-0	41-2-8
4-11-6	4-7-14	8-10-4	6-11-4	7-3-14	7-7-6	0-10-8

Scale = 1:69.7

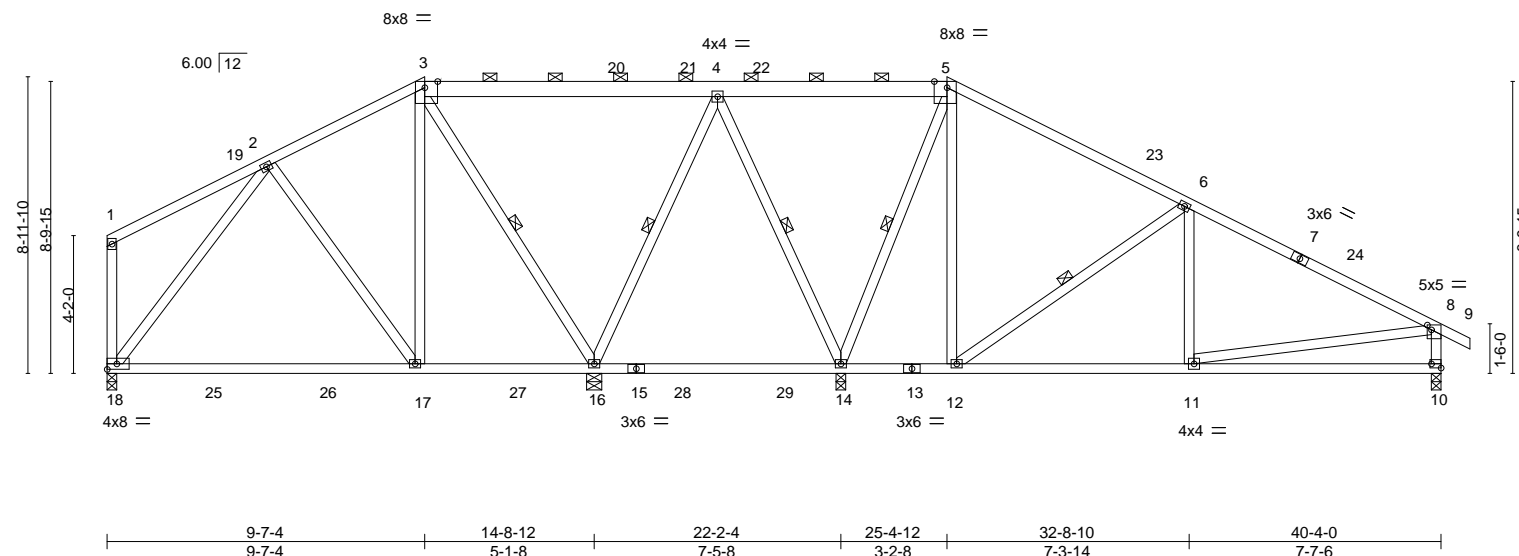


Plate Offsets (X,Y)-- [3:0-4-10,Edge], [5:0-4-10,Edge], [8:0-1-8,0-1-12], [10:Edge,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.31 17-18 >570 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.50 17-18 >349 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.01 10 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 213 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-5: 2x6 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 (10-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-16, 4-16, 4-14, 5-14, 6-12

REACTIONS.

All bearings 0-3-8 except (jt=length) 16=0-5-8.

(lb) - Max Horz 18=-229(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) except 16=-161(LC 9), 14=-249(LC 13), 18=-115(LC 12), 10=-148(LC 13)

Max Grav All reactions 250 lb or less at joint(s) except 16=1072(LC 27), 14=1515(LC 28), 18=655(LC 27), 10=755(LC 28)

FORCES.

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

TOP CHORD 2-3=-347/152, 4-5=0/300, 6-8=-777/170, 8-10=-679/188

BOT CHORD 17-18=-67/360, 16-17=-21/307, 11-12=-62/613

WEBS 3-17=-8/444, 3-16=-780/144, 4-16=-312/163, 4-14=-489/139, 5-14=-943/221, 5-12=-70/527, 6-12=-684/217, 6-11=0/282, 2-18=-420/136, 8-11=0/382

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 9-7-4, Exterior(2R) 9-7-4 to 15-3-11, Interior(1) 15-3-11 to 25-4-12, Exterior(2R) 25-4-12 to 31-1-4, Interior(1) 31-1-4 to 41-2-8 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

3) Provide adequate drainage to prevent water ponding.

4) All plates are 3x4 MT20 unless otherwise indicated.

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

6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 161 lb uplift at joint 16, 249 lb uplift at joint 14, 115 lb uplift at joint 18 and 148 lb uplift at joint 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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



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16023 Swingley Ridge Rd

Chesterfield, MO 63017

01/13/2021

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

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123403
2585378	A13	Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:20:29 2020 Page 1

ID:0wvjSgixY1DQZSIGHpbCLy6Pbn-q2beykewM9PTaXRPrVoiHe2BNJMRGrfSLEPF7y67T0

7-7-4	13-2-13	14-9-14	18-10-7	22-2-4	24-6-0	27-4-12	32-7-6	37-10-0	40-4-0	41-2-8
7-7-4	5-7-9	1-7-1	4-0-9	3-3-13	2-3-12	2-10-12	5-2-10	5-2-10	2-6-0	0-10-8

Scale = 1:73.9

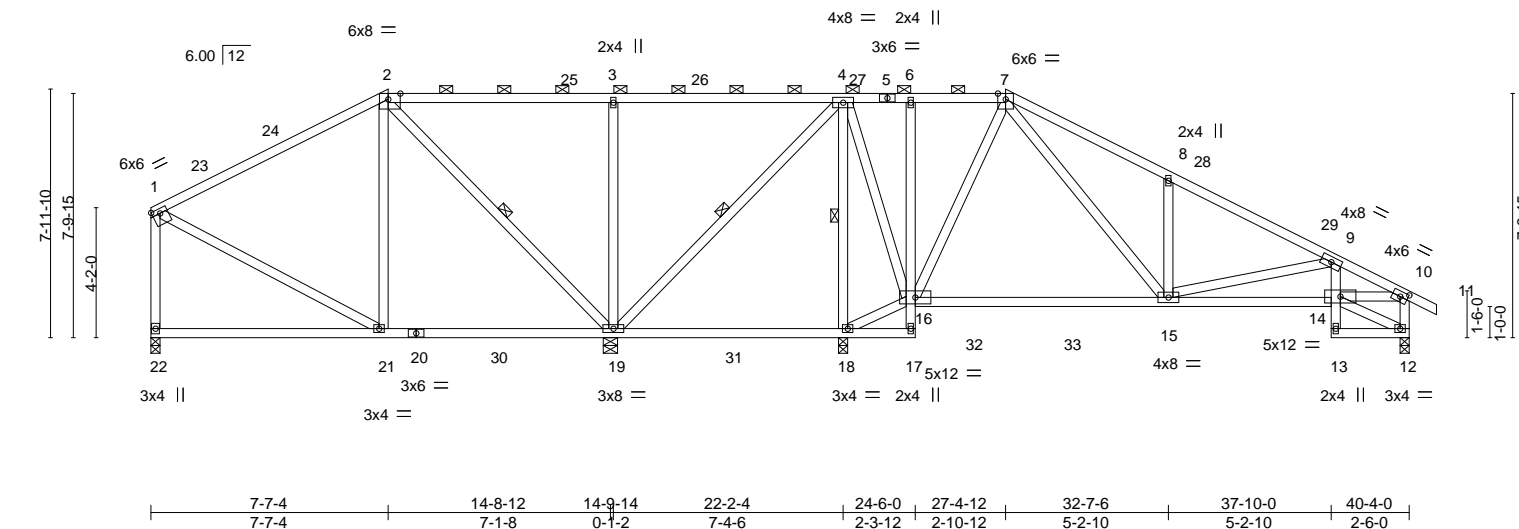


Plate Offsets (X,Y)--	[1:Edge,0-1-12], [2:0-4-10,Edge], [10:0-2-15,0-2-0]
LOADING (psf)	SPACING 2-0-0
TCLL 25.0	Plate Grip DOL 1.15
TCDL 10.0	Lumber DOL 1.15
BCLL 0.0 *	Rep Stress Incr YES
BCDL 10.0	Code IRC2018/TPI2014
	CSI
	TC 0.74
	BC 0.57
	WB 0.64
	Matrix-AS
	DEFL.
	in (loc) l/defl L/d
	Vert(LL) -0.17 15-16 >999 240
	Vert(CT) -0.28 15-16 >784 180
	Horz(CT) 0.04 12 n/a n/a
	PLATES MT20
	GRIP 197/144
	Weight: 211 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 (10-0-0 max.): 2-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-19, 2-19, 4-18

REACTIONS.

All bearings 0-3-8 except (jt=length) 19=0-5-8.

(lb) - Max Horz 22=216(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) except 22=105(LC 12), 12=139(LC 13), 19=240(LC 9), 18=209(LC 13)

Max Grav All reactions 250 lb or less at joint(s) except 22=526(LC 27), 12=719(LC 28), 19=1265(LC 27), 18=1464(LC 28)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-353/98, 2-3=0/371, 3-4=0/369, 7-8=-791/280, 8-9=-796/161, 9-10=-1046/198, 1-22=-442/140, 10-12=-662/144
BOT CHORD 19-21=-33/277, 18-19=-416/183, 14-15=-190/1005
WEBS 2-21=0/312, 7-16=-702/187, 8-15=-388/216, 9-15=-382/160, 10-14=-153/896, 3-19=-556/232, 2-19=-795/119, 4-18=-1050/179, 16-18=-334/259, 4-16=-31/670, 7-15=-202/872

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 7-7-4, Exterior(2R) 7-7-4 to 13-3-11, Interior(1) 13-3-11 to 27-4-12, Exterior(2R) 27-4-12 to 33-1-4, Interior(1) 33-1-4 to 41-2-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 22, 139 lb uplift at joint 12, 240 lb uplift at joint 19 and 209 lb uplift at joint 18.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123406
2585378	A16	HALF HIP GIRDER	1	1	Job Reference (optional)	

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

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-10=-70, 10-12=-70, 12-13=-70, 27-29=-20, 23-26=-20, 21-22=-20, 16-19=-20, 14-15=-20
- Concentrated Loads (lb)
- Vert: 6=-144(F) 24=-56(F) 10=-126(F) 17=-572(F) 30=-143(F) 31=-143(F) 32=-143(F) 33=-136(F) 34=-144(F) 35=-144(F) 36=-144(F) 37=-144(F) 38=-144(F) 39=-144(F) 40=-143(F) 41=-126(F) 42=-126(F) 43=-126(F) 44=-126(F) 45=-57(F) 46=-57(F) 47=-57(F) 48=-56(F) 49=-56(F) 50=-56(F) 51=-56(F) 52=-56(F) 53=-56(F) 54=-57(F) 56=-75(F) 57=-75(F) 58=-75(F) 59=-75(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123407
2585378	A17	Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:20:40 2020 Page 1

ID:0wvjSgixY1DQZSIghpbcLry6Pbn~?9moGVnqmXovPenW_JVHEZ?4vk35LpE4tSaKX_y67Sr

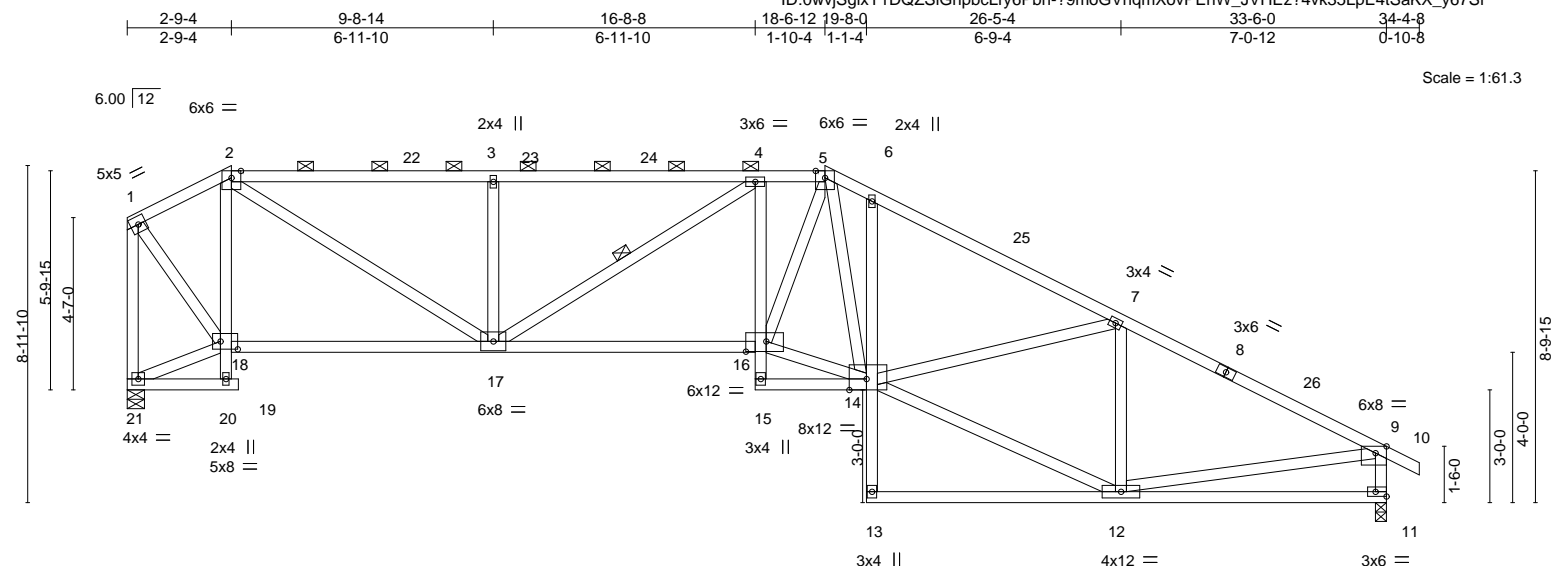


Plate Offsets (X,Y)--	[9:0-3-8,Edge], [11:Edge,0-1-8], [14:0-5-8,Edge], [16:0-6-8,0-3-4], [18:0-5-8,0-2-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.18 16-17	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.76	Vert(CT)	-0.36 16-17	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.17 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 180 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 (2-11-15 max.): 2-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-17

REACTIONS.

(size) 11=0-3-8, 21=0-5-8
Max Horz 21=-277(LC 8)
Max Uplift 11=-266(LC 13), 21=-161(LC 8)
Max Grav 11=1568(LC 1), 21=1499(LC 1)

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

TOP CHORD 1-2=-894/145, 2-3=-2344/297, 3-4=-2342/296, 4-5=-2779/451, 5-6=-2693/531, 6-7=-2798/456, 7-9=-2128/364, 1-21=-1464/157, 9-11=-1494/302
BOT CHORD 17-18=-71/830, 16-17=-158/2811, 4-16=-320/213, 6-14=-250/181
WEBS 2-17=-256/1822, 3-17=-551/222, 4-17=-565/193, 14-16=-93/2377, 5-16=-182/1173, 12-14=-261/1915, 7-14=-78/654, 7-12=-952/234, 9-12=-169/1589, 2-18=-971/245, 1-18=-118/1317, 18-21=-203/317

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 2-9-4, Exterior(2R) 2-9-4 to 7-6-2, Interior(1) 7-6-2 to 18-6-12, Exterior(2R) 18-6-12 to 23-3-10, Interior(1) 23-3-10 to 34-4-8 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 266 lb uplift at joint 11 and 161 lb uplift at joint 21.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123409
2585378	B1	Common	3	1	Job Reference (optional)	

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

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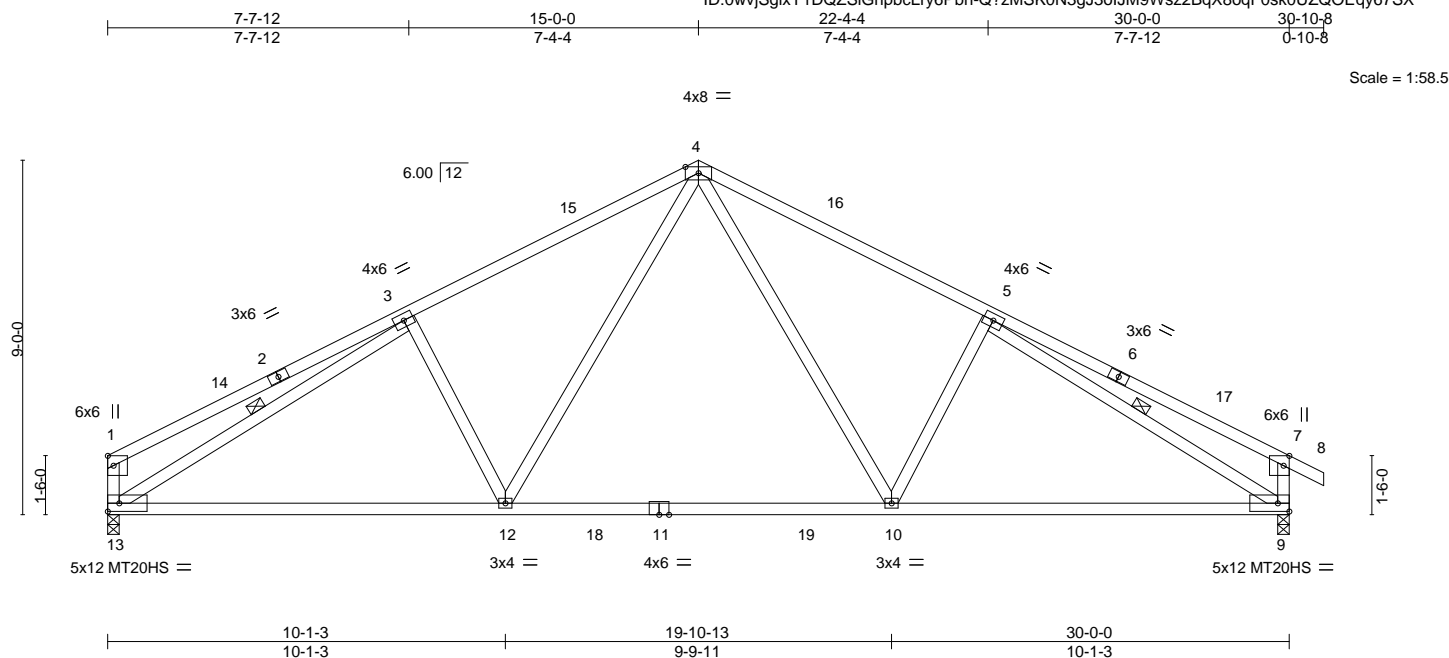


Plate Offsets (X,Y)--	[7:0-3-0,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.33 10-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.98	Vert(CT)	-0.48 10-12	>740	180	MT20HS	148/108
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.61	Horz(CT)	0.07 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 130 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.
WEBS 1 Row at midpt 3-13, 5-9

REACTIONS.

(size) 13=0-3-8, 9=0-3-8
Max Horz 13=-154(LC 10)
Max Uplift 13=-163(LC 12), 9=-186(LC 13)
Max Grav 13=1413(LC 2), 9=1474(LC 2)

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

TOP CHORD 1-3=-430/111, 3-4=-1844/313, 4-5=-1839/308, 5-7=-471/149, 1-13=-372/132, 7-9=-475/181
BOT CHORD 12-13=-238/1666, 10-12=-46/1234, 9-10=-143/1643
WEBS 4-10=-135/701, 5-10=-351/271, 4-12=-136/708, 3-12=-359/273, 3-13=-1629/183, 5-9=-1581/150

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 13 and 186 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.



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

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123410
2585378	B2	Hip	1	1	Job Reference (optional)	

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

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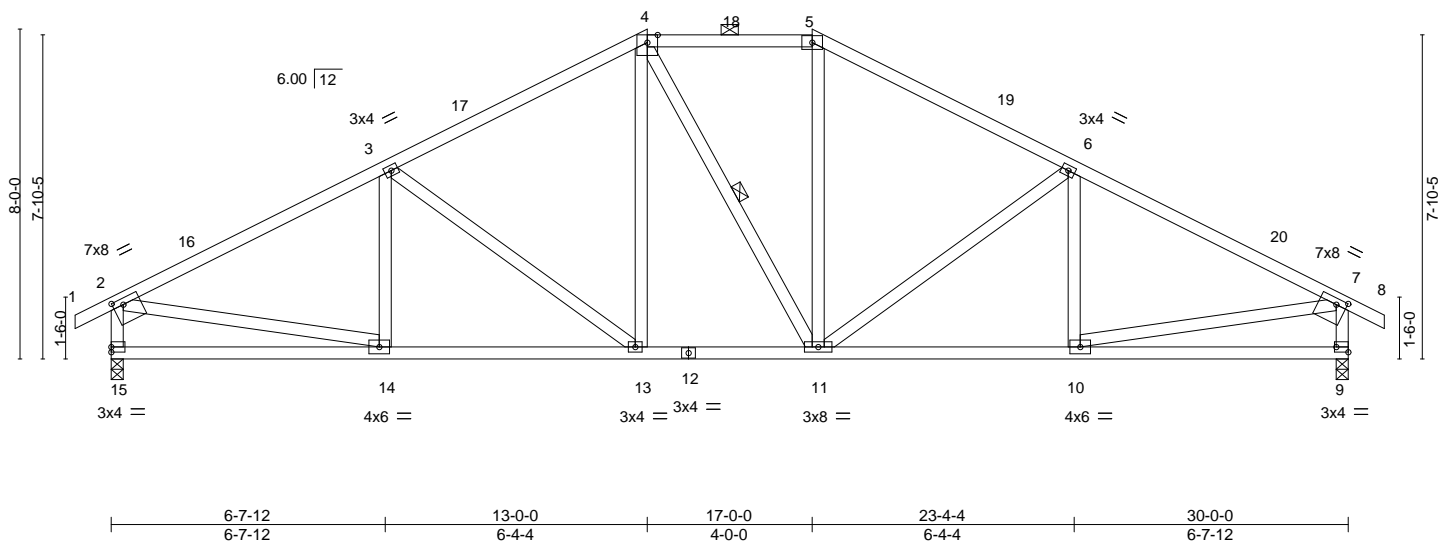
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0-10-8 6-7-12 13-0-0 17-0-0 23-4-4 30-0-0 30-10-8
0-10-8 6-7-12 6-4-4 4-0-0 6-4-4 6-7-12 0-10-8

6x6 =

4x6 =

Scale = 1:55.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.07 13-14 >999 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.15 13-14 >999 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.05 9 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							
								Weight: 144 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 (5-0-1 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-11

REACTIONS.

(size) 15=0-3-8, 9=0-3-8
Max Horz 15=137(LC 10)
Max Uplift 15=192(LC 12), 9=192(LC 13)
Max Grav 15=1408(LC 1), 9=1408(LC 1)

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

TOP CHORD 2-3=-1850/249, 3-4=-1555/280, 4-5=-1296/291, 5-6=-1556/280, 6-7=-1850/249, 2-15=-1341/247, 7-9=-1341/247
BOT CHORD 14-15=-137/256, 13-14=-217/1567, 11-13=-76/1295, 10-11=-139/1566
WEBS 3-13=-370/173, 4-13=-43/327, 5-11=-36/327, 6-11=-369/173, 2-14=-100/1393, 7-10=-102/1392

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-0-0, Exterior(2E) 13-0-0 to 17-0-0, Exterior(2R) 17-0-0 to 21-2-15, Interior(1) 21-2-15 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 192 lb uplift at joint 15 and 192 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.



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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123411
2585378	B3	Hip	1	1	Job Reference (optional)	

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

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0-10-8
0-10-8

5-7-12
5-7-12

11-0-0
5-4-4

19-0-0
8-0-0

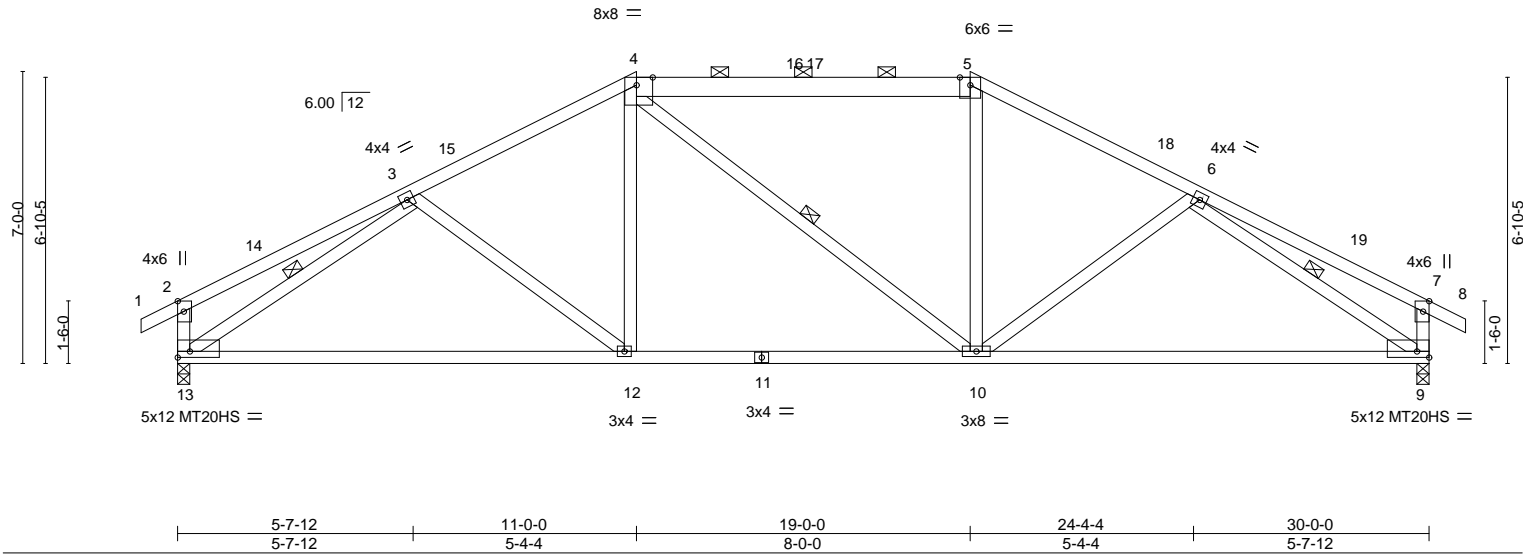
24-4-4
5-4-4

30-0-0
5-7-12

30-10-8
0-10-8

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Scale = 1:55.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.31	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.62	MT20HS	148/108		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.07				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 137 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 4-5: 2x6 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-2-7 max.): 4-5.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 4-10, 3-13, 6-9

REACTIONS. (size) 9=0-3-8, 13=0-3-8
Max Horz 13=124(LC 11)
Max Uplift 9=198(LC 13), 13=194(LC 12)
Max Grav 9=1452(LC 2), 13=1460(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-425/58, 3-4=-1781/266, 4-5=-1521/278, 5-6=-1765/266, 6-7=-426/58, 2-13=-389/131, 7-9=-389/131
BOT CHORD 12-13=-239/1532, 10-12=-99/1535, 9-10=-184/1520
WEBS 4-12=0/397, 5-10=0/365, 3-13=-1541/244, 6-9=-1541/245

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-0-0, Exterior(2R) 11-0-0 to 15-2-15, Interior(1) 15-2-15 to 19-0-0, Exterior(2R) 19-0-0 to 23-2-15, Interior(1) 23-2-15 to 30-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 198 lb uplift at joint 9 and 194 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.
 - 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.

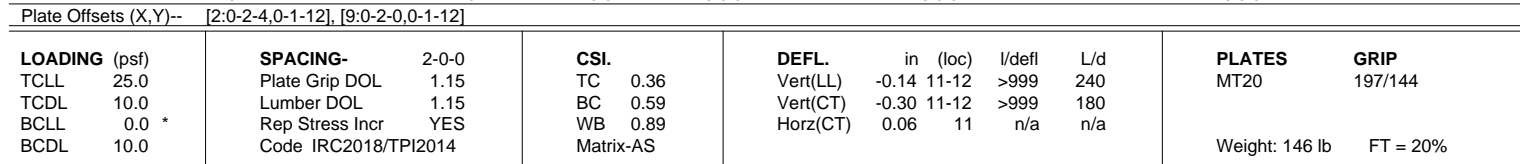


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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:04 2020 Page 1
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 -0-10-8 5-1-12 10-0-0 11-0-0 16-0-0 21-0-0 25-4-4 30-0-0 30-10-8
 0-10-8 5-1-12 4-10-4 1-0-0 5-0-0 5-0-0 4-4-4 4-7-12 0-10-8
 Scale = 1:53.3



REACTIONS. (size) 17=0-3-8, 11=0-3-8
 Max Horz 17=-118(LC 10)
 Max Uplift 17=-146(LC 12), 11=-234(LC 13)
 Max Grav 17=1408(LC 1), 11=1408(LC 1)

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

TOP CHORD 2-3=-1763/251, 3-4=-1692/289, 4-5=-1633/314, 5-6=-1808/351, 6-7=-1807/351,
7-8=-1742/320, 8-9=-257/56, 2-17=-1351/231, 9-11=-317/123

BOT CHORD 15-16=-179/1506, 13-15=-157/1638, 12-13=-142/1504, 11-12=-226/1438

WEBS 3-16=-264/93, 2-16=-130/1418, 4-15=-217/1254, 5-15=-1104/291, 7-13=-119/454,
6-13=-433/168, 5-13=-97/355, 8-11=-1621/297

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2E) 10-0-0 to 11-0-0, Interior(1) 11-0-0 to 21-0-0, Exterior(2R) 21-0-0 to 24-0-0, Interior(1) 24-0-0 to 30-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 146 lb uplift at joint 17 and 234 lb uplift at joint 11.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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 0-10-8 4-7-12 4-4-4 2-0-0 2-0-0 5-0-0 5-0-0 7-0-0 0-10-8
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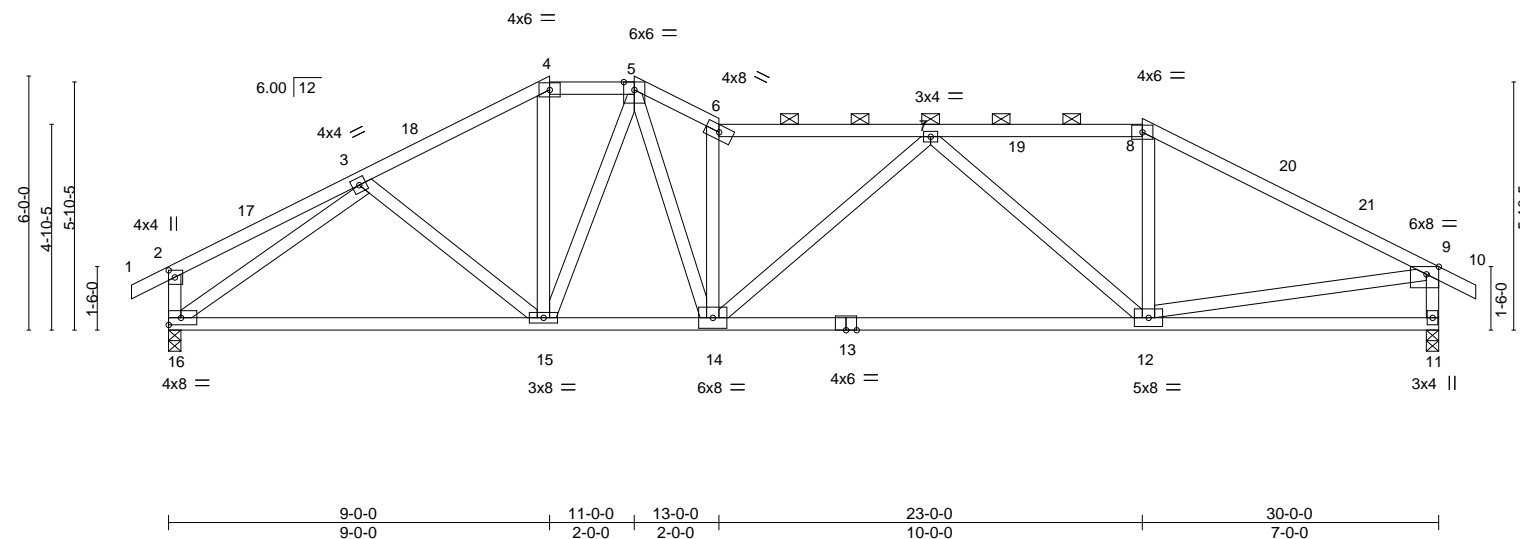


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [9:0-3-8,Edge]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.48	Vert(LL)	-0.27 12-14	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.58 12-14	>615	180	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.89	Horz(CT)	0.07 11	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 140 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 (3-8-3 max.): 4-5, 6-8.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS.

(size) 16=0-3-8, 11=0-3-8
 Max Horz 16=111(LC 11)
 Max Uplift 16=-136(LC 12), 11=-230(LC 13)
 Max Grav 16=1408(LC 1), 11=1408(LC 1)

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

TOP CHORD 2-3=-260/54, 3-4=-1737/307, 4-5=-1487/311, 5-6=-2379/417, 6-7=-2137/357,
7-8=-1578/302, 8-9=-1873/283, 2-16=-317/119, 9-11=-1353/264

BOT CHORD 15-16=-222/1437, 14-15=-166/1646, 12-14=-260/2084

WEBS 4-15=-58/481, 5-15=-538/116, 6-14=-1260/266, 7-12=-686/183, 8-12=0/437,
3-16=-1617/272, 9-12=-98/1356, 5-14=-261/1434

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-0-0, Exterior(2E) 9-0-0 to 13-0-0, Interior(1) 13-0-0 to 23-0-0, Exterior(2R) 23-0-0 to 26-0-0, Interior(1) 26-0-0 to 30-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 136 lb uplift at joint 16 and 230 lb uplift at joint 11.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
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01/13/2021



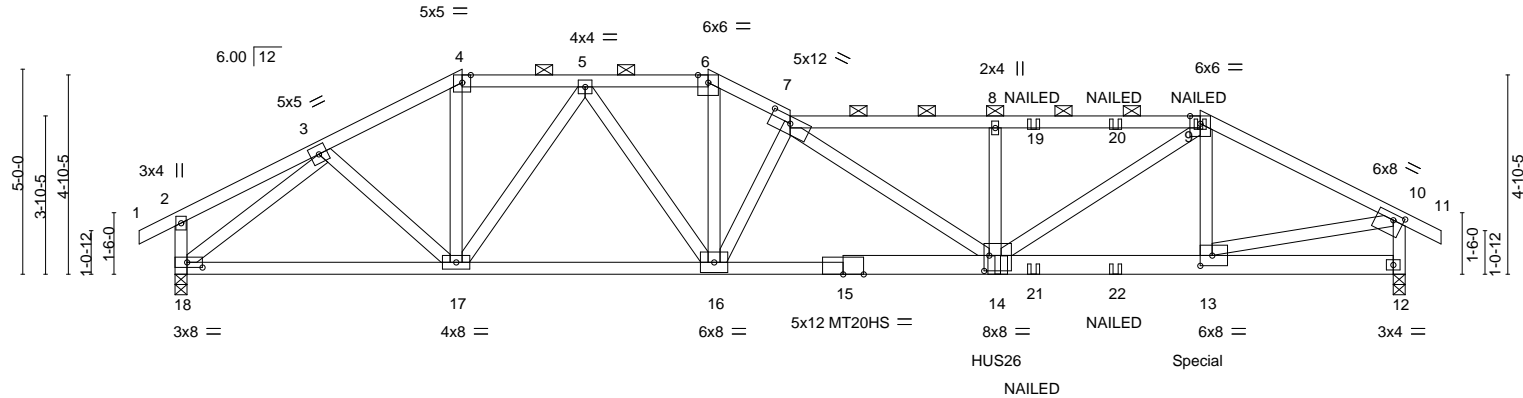
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123414
2585378	B6	ROOF SPECIAL GIRDER	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:07 2020 Page 1									
				ID:0wvjSgixY1DQZSiGhpbclry6Pbn-jLu0wj6mPqB48NLi3UUcqfcdcfD99zw259cF_wy67SQ									
-0-10-8	3-7-12	7-0-0	10-0-0	13-0-0	15-0-0	20-0-0	25-0-0	30-0-0	30-10-8				
0-10-8	3-7-12	3-4-4	3-0-0	3-0-0	2-0-0	5-0-0	5-0-0	5-0-0	0-10-8				
Scale = 1:56.2													



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Plate Offsets (X,Y)-- [7:0-6-0,0-2-0], [10:0-3-0,0-1-12], [13:0-3-8,0-3-0], [14:0-1-8,0-4-8], [18:0-4-8,0-1-8]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	1.00	Vert(LL)	-0.24 14-16	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.97	Vert(CT)	-0.43 14-16	>837	180	MT20HS 148/108
BCLL	0.0 *	Rep Stress Incr NO		WB	0.84	Horz(CT)	0.10 12	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 145 lb FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 2-9-7 oc purlins, except end verticals, and 2-0-0 oc purlins: 4-6, 7-9.
7-9: 2x4 SPF 1650F 1.5E	
BOT CHORD 2x4 SPF 1650F 1.5E *Except*	BOT CHORD Rigid ceiling directly applied or 7-7-5 oc bracing.
12-15: 2x6 SPF No.2	
WEBS 2x4 SPF No.2	

REACTIONS. (size) 18=0-3-8, 12=0-3-8
Max Horz 18=97(LC 6)
Max Uplift 18=261(LC 8), 12=610(LC 9)
Max Grav 18=1854(LC 1), 12=2554(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-2488/436, 4-5=-2172/401, 5-6=-3379/661, 6-7=-3857/743, 7-8=-5080/1159, 8-9=-5081/1160, 9-10=-3528/856, 2-18=-259/90, 10-12=-2492/624
BOT CHORD 17-18=-340/1851, 16-17=-534/2875, 14-16=-894/4564, 13-14=-713/3113
WEBS 4-17=-135/857, 7-14=-415/693, 8-14=-618/289, 9-14=-486/2407, 9-13=-286/119, 10-13=-701/3003, 3-18=-2329/360, 3-17=-76/551, 5-17=-1295/295, 7-16=-2494/634, 5-16=-238/930, 6-16=-300/1583

- NOTES-
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 18, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 18 and 610 lb uplift at joint 12.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 20-0-12 from the left end to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

Continued on page 2

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16023 Swingley Ridge Rd
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01/13/2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123414
2585378	B6	ROOF SPECIAL GIRDER	1	1	Job Reference (optional)	

- NOTES-**
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 305 lb down and 140 lb up at 24-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 4-6=-70, 6-7=-70, 7-9=-70, 9-10=-70, 10-11=-70, 12-18=-20

Concentrated Loads (lb)

Vert: 9=-83(F) 14=-968(F) 13=-305(F) 19=-83(F) 20=-83(F) 21=-35(F) 22=-35(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	C1	Hip	1	1	144123415

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:08 2020 Page 1

ID:0wvjSgixY1DQZSIGHpbclRy6Pbn-BYSO836OA8JxmXwvdB?rMtAy91dJuZsCjPmpXNy67SP

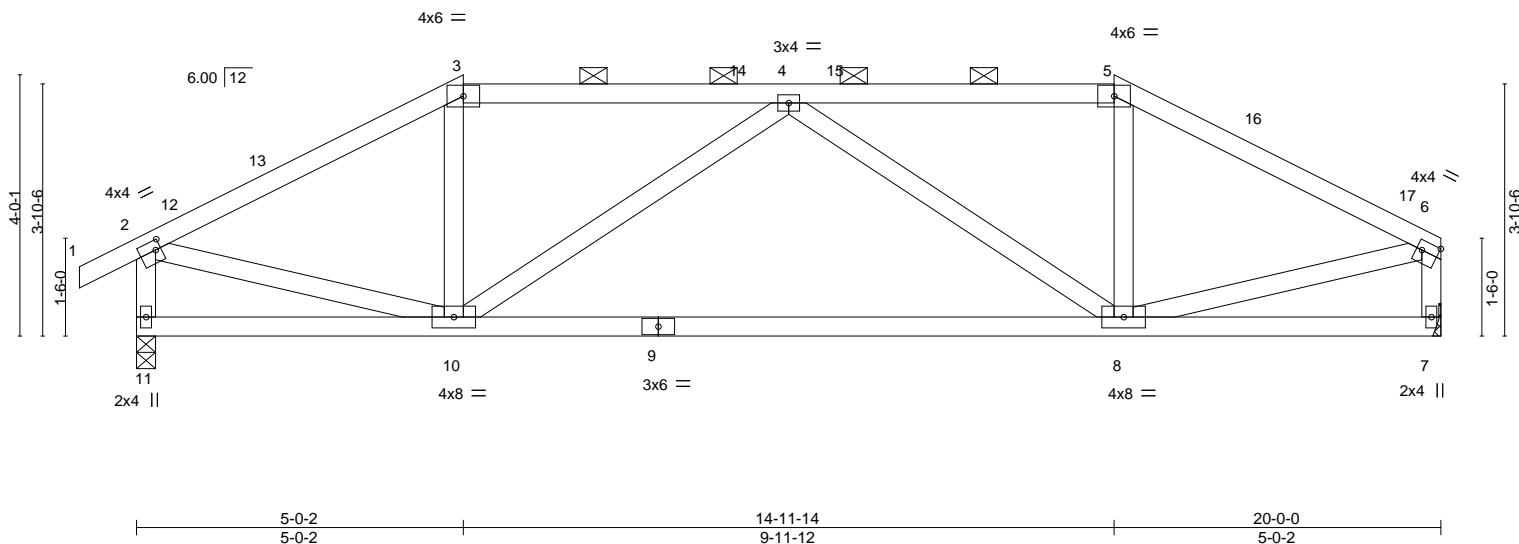
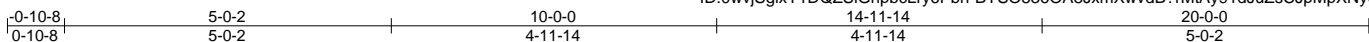


Plate Offsets (X,Y)--		[2:0-1-0,0-1-12], [6:Edge,0-1-12]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.23 8-10	>999	240
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.48 8-10	>489	180
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02 7	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS					
						PLATES	GRIP		
						MT20	197/144		
						Weight: 82 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 (5-9-5 max.): 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 11=0-3-8, 7=Mechanical
Max Horz 11=88(LC 9)
Max Uplift 11=-142(LC 12), 7=-119(LC 13)
Max Grav 11=960(LC 1), 7=885(LC 1)

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

TOP CHORD 2-3=-1132/168, 3-4=-944/189, 4-5=-951/189, 5-6=-1135/172, 2-11=-941/203,
6-7=-866/156
BOT CHORD 8-10=-218/1226
WEBS 4-10=-409/167, 4-8=-405/168, 2-10=-58/894, 6-8=-65/903

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-0-2, Exterior(2R) 5-0-2 to 9-3-1, Interior(1) 9-3-1 to 14-11-14, Exterior(2R) 14-11-14 to 19-2-13, Interior(1) 19-2-13 to 19-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 142 lb uplift at joint 11 and 119 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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RELEASE FOR

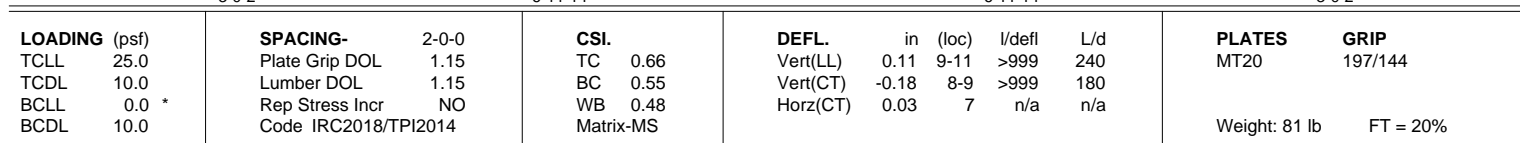
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:10 2020 Page 1
ID:0wvjSgixY1DQZSiGhpbclry6Pbn-7wa8Zl8eilafr4Hlc1JSIFCFqLQMqHUn7rvbFy67SN
0-10-8, 3-0-2, 10-0-0, 16-11-14, 20-0-0
0-10-8, 3-0-2, 6-11-14, 6-11-14, 3-0-2
Scale = 1:35,625



REACTIONS. (size) 12=0-3-8, 7=Mechanical
Max Horz 12=76(LC 26)
Max Uplift 12=-404(LC 8), 7=-381(LC 9)
Max Grav 12=1173(LC 1), 7=1097(LC 1)

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

TOP CHORD	2-3=-1245/453, 3-4=-2215/854, 4-5=-2215/854, 5-6=-1253/450, 2-12=-1174/413, 6-7=-1098/390
BOT CHORD	9-11=-438/1109, 8-9=-406/1120
WEBS	3-9=-484/1206, 4-9=-647/370, 5-9=-487/1200, 2-11=-428/1208, 6-8=-431/1206

- 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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 404 lb uplift at joint 12 and 381 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Use Simpson Strong-Tie TJC37 (4 nail, 30-90) or equivalent at 3-0-2 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the left, sloping 0.0 deg. down.
- 11) Use Simpson Strong-Tie TJC37 (4 nail 90-150) or equivalent at 16-11-14 from the left end to connect truss(es) to front face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
- 12) Fill all nail holes where hanger is in contact with lumber.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 14) 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



December 28, 2020

RELEASE FOR

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

16023 Swingley Ridge Rd
Clinton, MD 20747

01/13/2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123416
2585378	C2	Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:10 2020 Page 2
ID:0wvjSgixY1DQZSiGhpbCLry6Pbn-7wa8ZI8eilaf?r4Hlc1JSIFCFqLQMQUHUn7rvbFy67SN

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 7-12=-20

Concentrated Loads (lb)

Vert: 10=-10(F) 11=-131(F) 9=-10(F) 4=-13(F) 8=-131(F) 13=-13(F) 14=-13(F) 15=-13(F) 16=-13(F) 17=-13(F) 18=-13(F) 19=-10(F) 20=-10(F) 21=-10(F) 22=-10(F) 23=-10(F)

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

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LEE'S SUMMIT, MISSOURI**
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123417
2585378	CJ1	Diagonal Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:12 2020 Page 1

ID:0wvjSgixY1DQZSIghpbcLry6Pbn-3JhvrAvEMqME8Egs14nXjKfge27qPXnEQK0g8y67SL



Scale = 1:28.1

Plate Offsets (X,Y)-- [9:0-3-0,0-3-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	0.07	8-9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.12	8-9	>924	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.18	Horz(CT)	0.01	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 46 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: 10-11.

REACTIONS.

(size) 11=0-4-9, 8=Mechanical
Max Horz 11=171(LC 5)
Max Uplift 11=171(LC 4), 8=200(LC 5)
Max Grav 11=572(LC 1), 8=525(LC 1)

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

TOP CHORD 2-11=-543/213, 2-3=-823/270, 3-4=-870/326
BOT CHORD 8-9=-217/409
WEBS 2-9=-217/717, 4-9=-197/488, 4-8=-487/242

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 171 lb uplift at joint 11 and 200 lb uplift at joint 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.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-5=-70, 5-6=-20, 10-11=-20, 7-9=-20
Concentrated Loads (lb)
Vert: 13=-45(F=-23, B=-23) 15=-40(F=-20, B=-20) 16=-88(F=-44, B=-44)



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

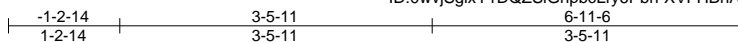
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

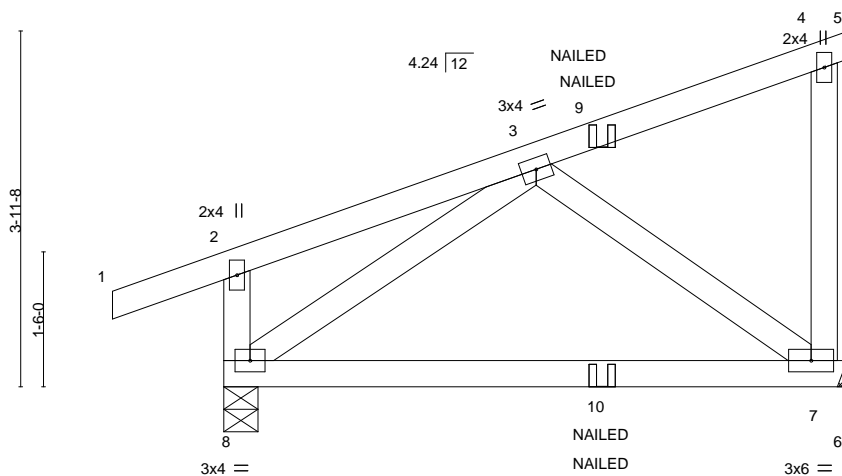
Job 2585378	Truss CJ2	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO I44123418
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:13 2020 Page 1

ID:0wvjSgixY1DQZSIghpbCLy6Pbn-XVFHBnAX?gyDsIpsQkb03wtrO2NWZtVxT43aCay67SK



Scale = 1:25.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.11 7-8	>722	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.22 7-8	>361	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.07	Horz(CT)	-0.00 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 31 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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=Mechanical, 8=0-4-9
Max Horz 8=164(LC 5)
Max Uplift 7=120(LC 5), 8=127(LC 4)
Max Grav 7=297(LC 1), 8=402(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 7 and 127 lb uplift at joint 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.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 4-5=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 10=-5(F=-2, B=-2)



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

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

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

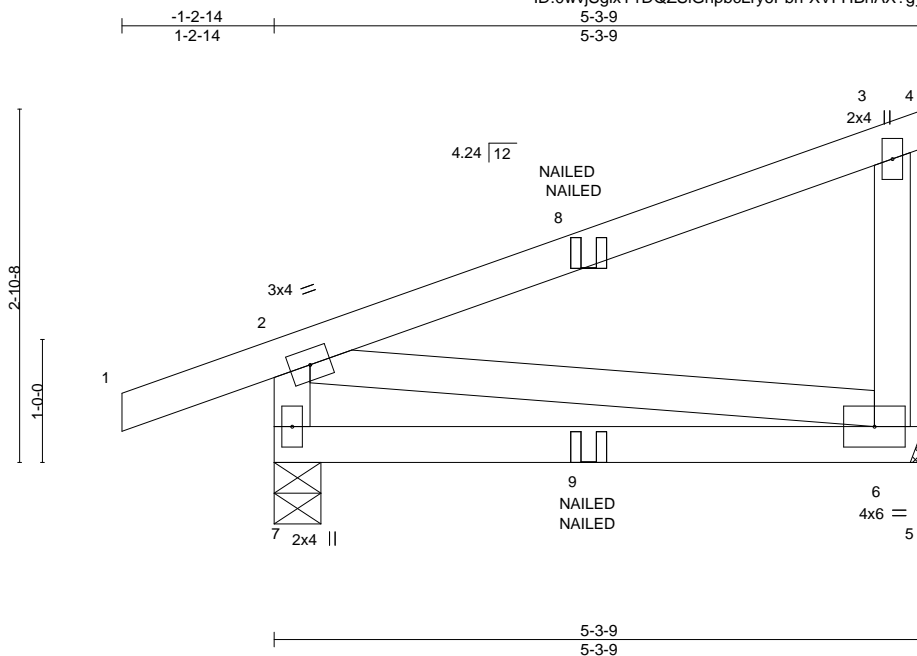
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123419
2585378	CJ3	Diagonal Hip Girder	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:13 2020 Page 1

ID:0wvjSgixY1DQZSiGhpbclry6Pbn-XVFHBnAX?gyDsIpsQkb03wtnv2RRZuGxT43aCay67SK



Scale = 1:18.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.03	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.07	6-7	>867	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.02	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						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 5-3-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-4-9, 6=Mechanical
Max Horz 7=119(LC 5)
Max Uplift 7=-104(LC 4), 6=-63(LC 8)
Max Grav 7=328(LC 1), 6=215(LC 1)

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

TOP CHORD 2-7=-281/124

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 7 and 63 lb uplift at joint 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-20, 5-7=-20
Concentrated Loads (lb)
Vert: 9=3(F=2, B=2)



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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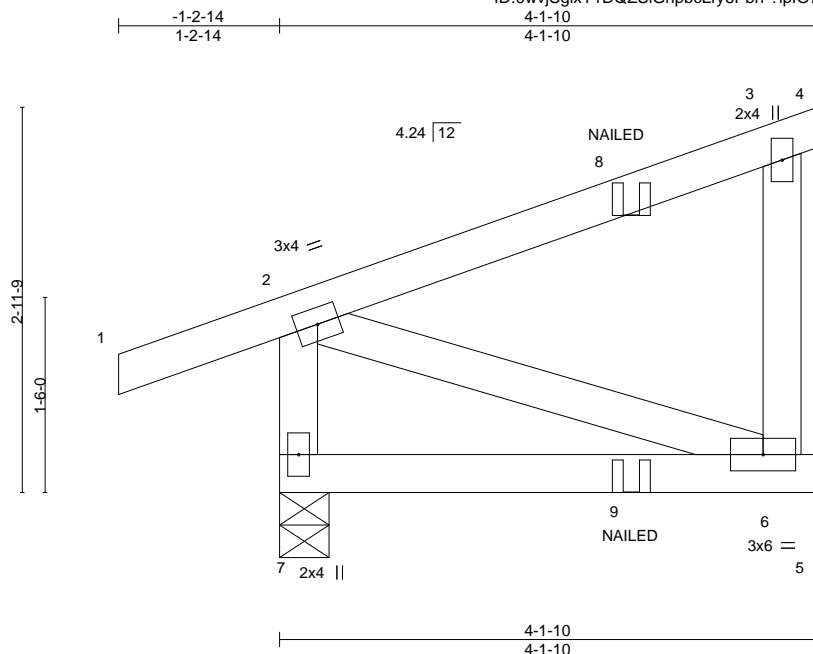
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	CJ4	Diagonal Hip Girder	2	1	144123420
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:14 2020 Page 1

ID:0wvjSgixY1DQZSiGhpbclry6Pbn-?ipfO7B9m_44USN2_S6Fc8Q?BSpZILX4ikp7k0y67SJ



Scale = 1:17.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	-0.01 6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.02 6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.02	Horz(CT)	-0.00 6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 19 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 4-1-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-4-9, 6=Mechanical
Max Horz 7=120(LC 5)
Max Uplift 7=92(LC 4), 6=65(LC 5)
Max Grav 7=281(LC 1), 6=160(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 92 lb uplift at joint 7 and 65 lb uplift at joint 6.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-20, 5-7=-20
Concentrated Loads (lb)
Vert: 9=1(B)



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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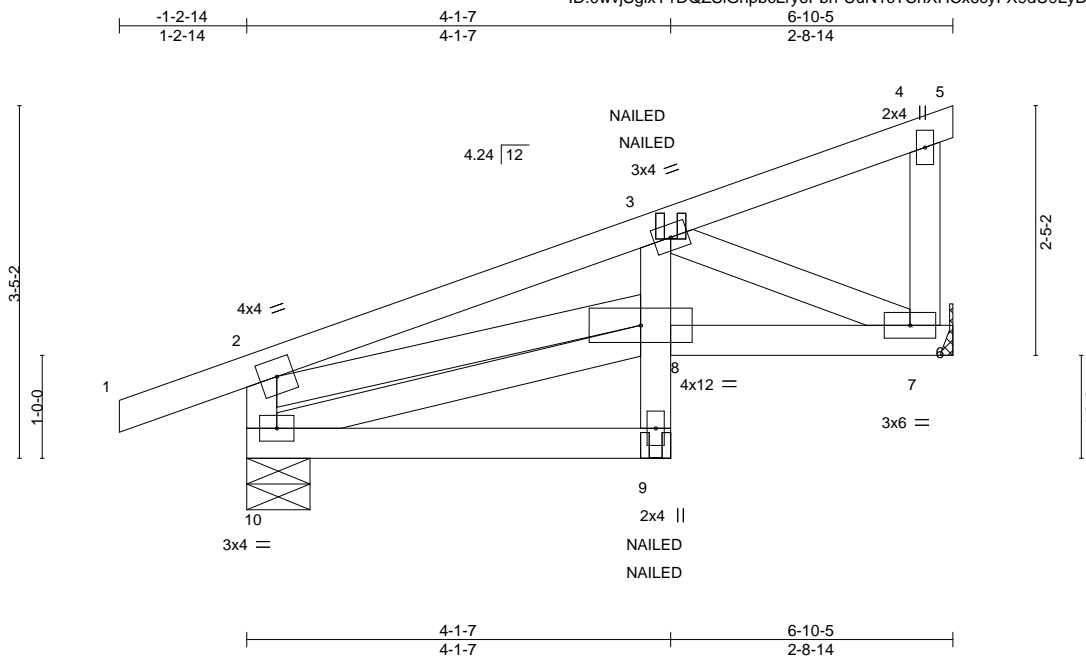
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123421
2585378	CJ5	Diagonal Hip Girder	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:15 2020 Page 1

ID:0wvjSgixY1DQZSIGhpbclry6Pbn-UuN1cTCnXHCx6cyFX9dU9LyBtr8Y1nPDwOYgGTy67SI



Scale = 1:22.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.01	9-10	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.03	9-10	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.10	Horz(CT)	0.01	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 34 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 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) 10=0-7-6, 7=Mechanical
Max Horz 10=127(LC 22)
Max Uplift 10=-108(LC 4), 7=-79(LC 8)
Max Grav 10=399(LC 1), 7=293(LC 1)

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

TOP CHORD 2-10=-353/148, 2-3=-490/116
BOT CHORD 7-8=-171/447
WEBS 2-8=-65/420, 3-7=-485/173

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 10 and 79 lb uplift at joint 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.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 4-5=-20, 9-10=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 9=-5(F=-2, B=-2)



December 28, 2020

RELEASE FOR

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
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01/13/2021

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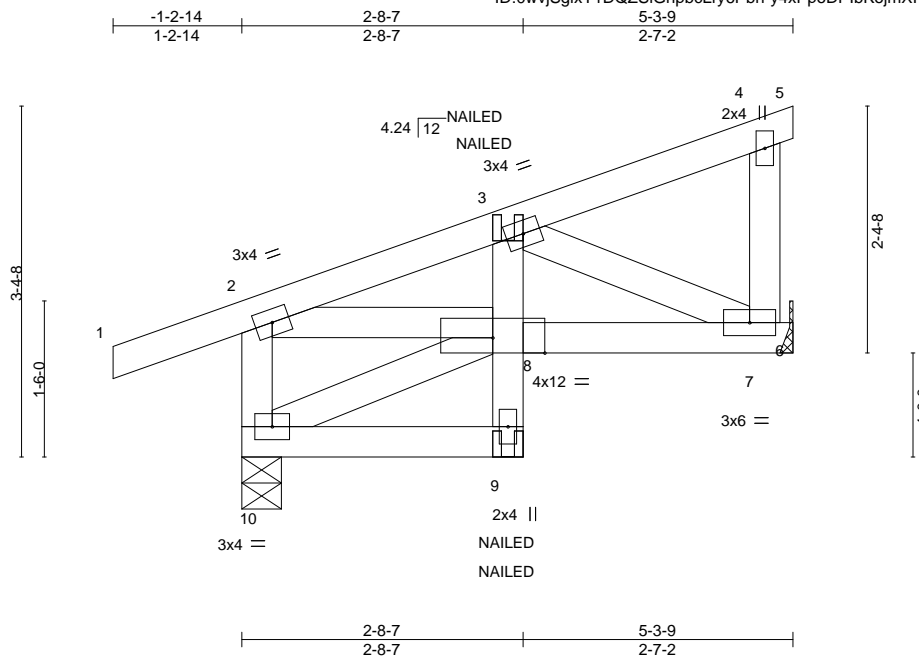
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	CJ6	Diagonal Hip Girder	1	1	144123422
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:16 2020 Page 1

ID:0wvjSgixY1DQZSIGHpbCLry6Pbn-y4xPpoDPibKojmXR5t8jhZVMnFVnmEJN92IEpvy67SH



Scale = 1:22.1

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.00	8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	7-8	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 27 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 5-3-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 10=0-4-9, 7=Mechanical
Max Horz 10=122(LC 5)
Max Uplift 10=-108(LC 4), 7=-75(LC 8)
Max Grav 10=329(LC 1), 7=216(LC 1)

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

TOP CHORD 2-10=-298/143, 2-3=-298/112
BOT CHORD 7-8=-170/267
WEBS 3-7=-290/167

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 10 and 75 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 4-5=-20, 9-10=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 9=3(F=1, B=1)



December 28, 2020

RELEASE FOR

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
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01/13/2021

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Job 2585378	Truss D1	Truss Type Roof Special	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123423
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:18 2020 Page 1

ID:0wvjSgixY1DQZSIghpbCLry6Pbn-uT3AEUEfpCaWz3hqDIBBm_adP33zEw9gdMnKtny67SF

2-11-8	9-10-0	16-8-8	19-8-0
2-11-8	6-10-8	6-10-8	2-11-8

Scale = 1:38.9

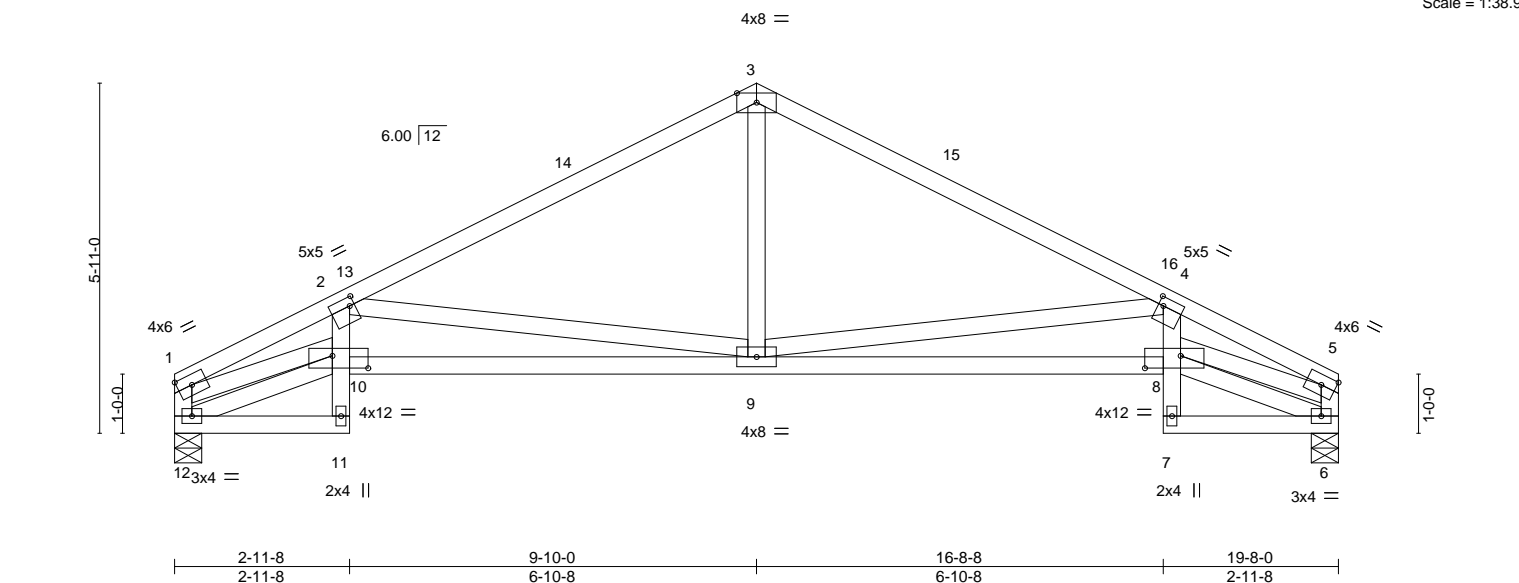


Plate Offsets (X,Y)-- [2:0-1-0,0-1-12], [4:0-1-0,0-1-12], [8:0-7-4,0-2-8], [10:0-7-4,0-2-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.09 9-10 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.63	Vert(CT)	-0.21 9-10 >999 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.15 6 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 85 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 12=0-5-8, 6=0-5-8
Max Horz 12=87(LC 12)
Max Uplift 12=110(LC 12), 6=110(LC 13)
Max Grav 12=882(LC 1), 6=882(LC 1)

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

TOP CHORD 1-2=-1961/376, 2-3=-1219/264, 3-4=-1219/266, 4-5=-1961/384
BOT CHORD 2-10=0/251, 9-10=-435/2018, 8-9=-399/2017, 4-8=0/251
WEBS 2-9=-1060/383, 3-9=-11/521, 4-9=-1059/331, 1-12=-755/157, 10-12=-354/114,
1-10=-342/1897, 5-6=-755/160, 6-8=-353/98, 5-8=-350/1897

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-0-0 to 2-9-12, Interior(1) 2-9-12 to 9-10-0, Exterior(2R) 9-10-0 to 12-10-0, Interior(1) 12-10-0 to 19-8-0 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 12 and 110 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.



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

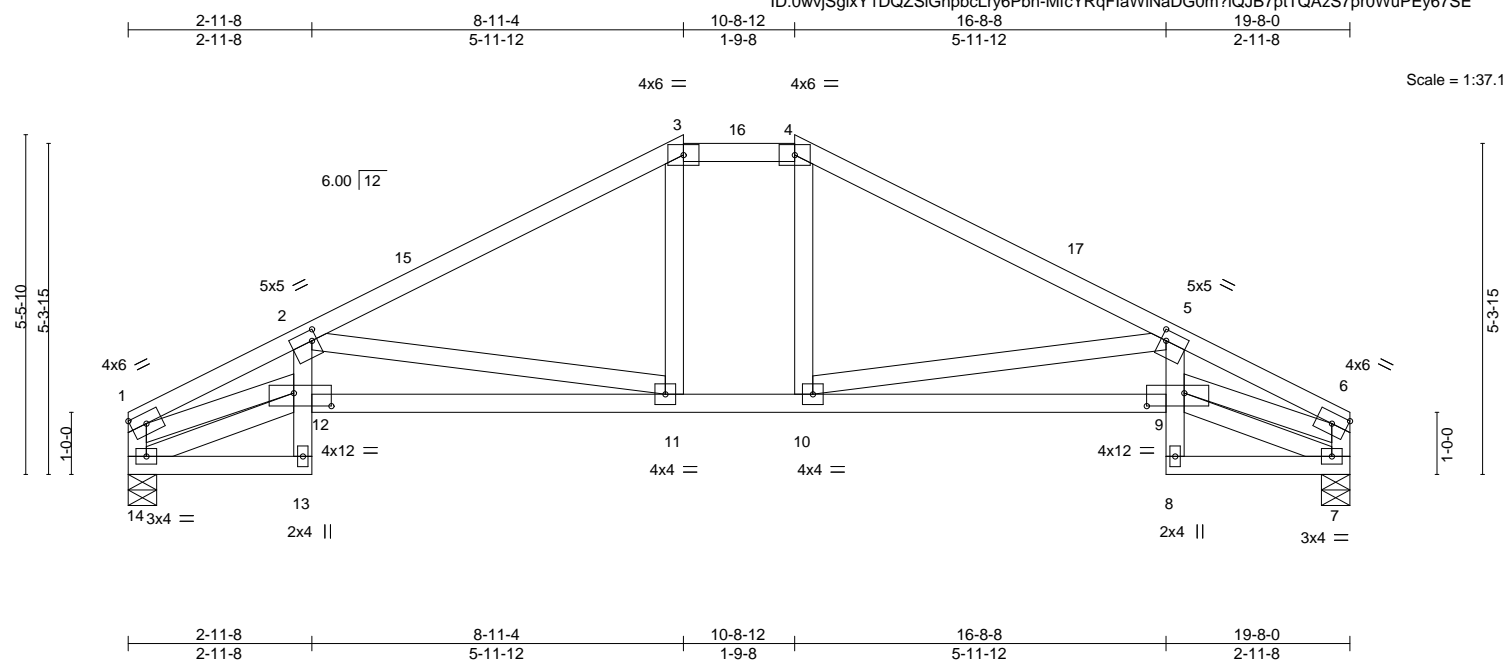


Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [5:0-1-0,0-2-0], [9:0-7-4,0-2-8], [12:0-7-4,0-2-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.11 11-12 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.21 11-12 >999 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.13 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 87 lb	FT = 20%

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

REACTIONS. (size) 14=0-5-8, 7=0-5-8
 Max Horz 14=78(LC 12)
 Max Uplift 14=-113(LC 12), 7=-113(LC 13)
 Max Grav 14=882(LC 1), 7=882(LC 1)

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

TOP CHORD	1-2=-1958/312, 2-3=-1296/230, 3-4=-1067/240, 4-5=-1296/232, 5-6=-1957/293
BOT CHORD	11-12=-415/1981, 10-11=-83/1067, 9-10=-312/1980
WEBS	2-11=-986/353, 3-11=-5/273, 4-10=-6/273, 5-10=-984/309, 6-7=-757/133, 1-14=-757/132, 12-14=-347/107, 7-9=-347/13, 1-12=-280/1893, 6-9=-261/1892

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 2-9-12, Interior(1) 2-9-12 to 8-11-4, Exterior(2E) 8-11-4 to 10-8-12, Exterior(2R) 10-8-12 to 14-11-11, Interior(1) 14-11-11 to 19-8-0 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 113 lb uplift at joint 14 and 113 lb uplift at joint 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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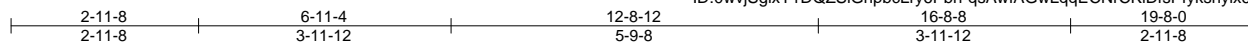
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123425
2585378	D3	Hip	1	1	Job Reference (optional)	

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

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ID:0wvjSgixY1DQZSIghpbcLry6Pbn-qsAwfAGwLqQECNrCKiDfsPfyksnyix6z4gGRygy67SD



Scale = 1:36.3

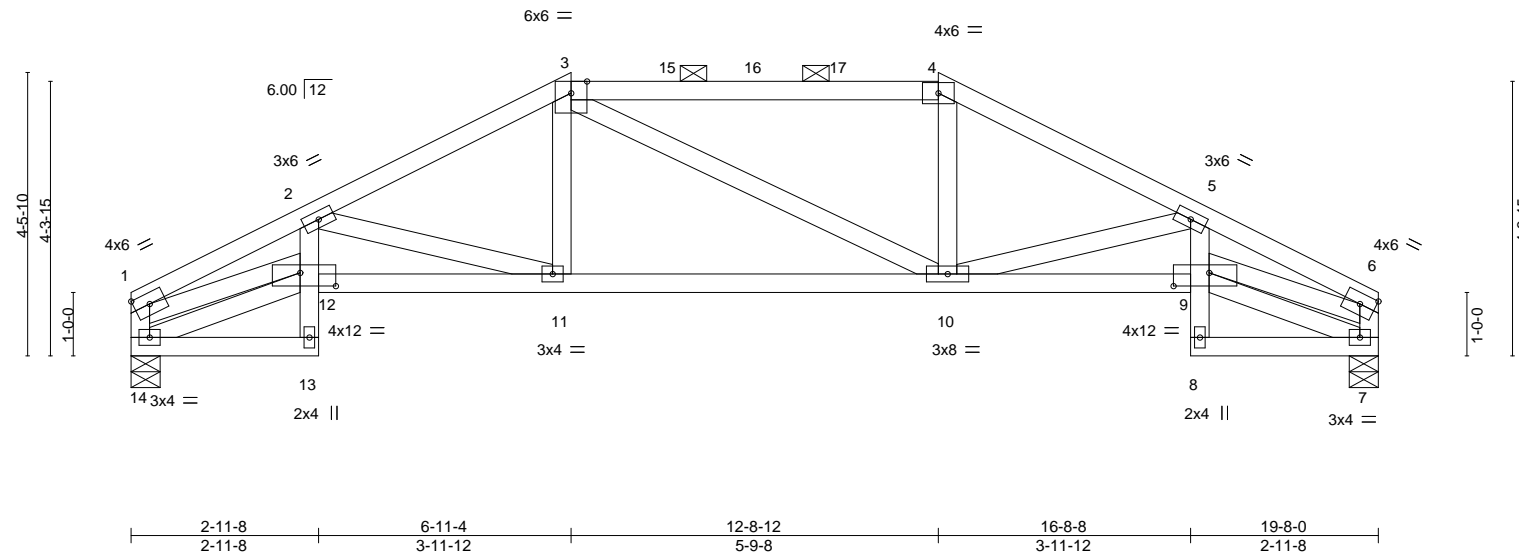


Plate Offsets (X,Y)-- [9:0-6-12,0-2-8], [12:0-6-12,0-2-8]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.47	Vert(LL)	-0.08 11	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.16 10-11	>999	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.46	Horz(CT)	0.11 7	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 87 lb	FT = 20%		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (4-4-12 max.): 3-4.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 7=0-5-8, 14=0-5-8
Max Horz 14=60(LC 12)
Max Uplift 7=-117(LC 13), 14=-117(LC 12)
Max Grav 7=882(LC 1), 14=882(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1933/333, 2-3=-1512/273, 3-4=-1303/280, 4-5=-1513/270, 5-6=-1932/327
BOT CHORD 11-12=-322/1817, 10-11=-158/1303, 9-10=-298/1816
WEBS 2-11=-521/197, 3-11=0/318, 4-10=0/318, 5-10=-519/167, 1-14=-761/147, 6-7=-761/149,
7-9=-335/56, 12-14=-335/68, 6-9=-297/1864, 1-12=-302/1865

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 2-9-12, Interior(1) 2-9-12 to 6-11-4, Exterior(2R) 6-11-4 to 11-2-3, Interior(1) 11-2-3 to 12-8-12, Exterior(2R) 12-8-12 to 16-10-4, Interior(1) 16-10-4 to 19-8-0 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 117 lb uplift at joint 7 and 117 lb uplift at joint 14.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123426
2585378	D4	Hip Girder	1	1	Job Reference (optional)	

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

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ID:0wvjSgixY1DQZSIGhpbclry6Pbn-FQs3HCloelCp3qZn?rmtt1HLx4jBvC4PmeU5Y?y67SA

2-11-8	4-11-4	9-10-0	14-8-12	16-8-8	19-8-0
2-11-8	1-11-12	4-10-12	4-10-12	1-11-12	2-11-8

Scale = 1:35.1

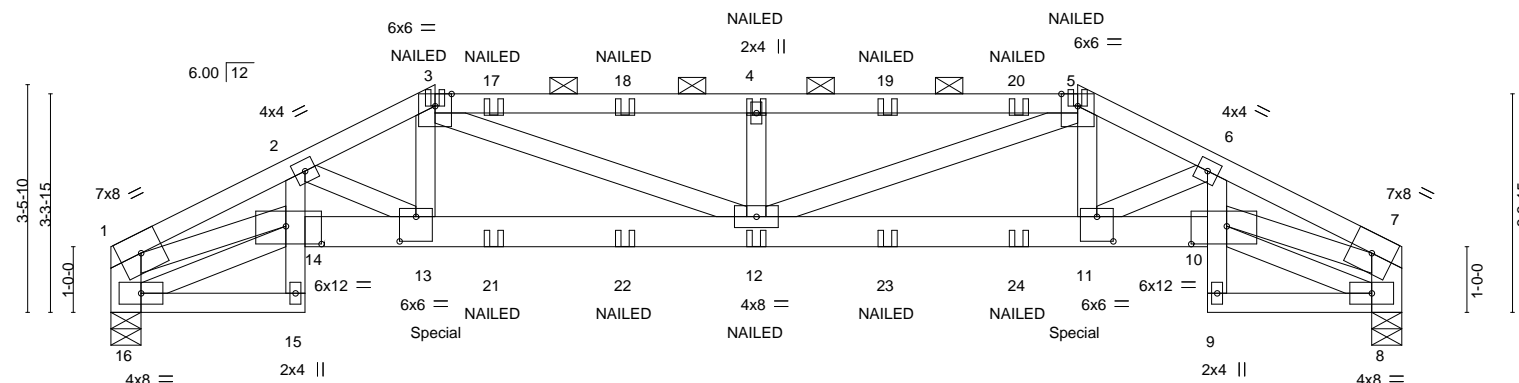


Plate Offsets (X,Y)--	[6:0-0-0,0-0-0], [10:0-6-8,0-3-4], [11:0-3-0,0-4-8], [13:0-3-0,0-4-8], [14:0-6-8,0-3-4]
-----------------------	---

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.98	Vert(LL)	0.22	12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.82	Vert(CT)	-0.38	12	>606	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.89	Horz(CT)	0.21	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 94 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
10-14: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
1-16,7-8: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-8 oc purlins, except
2-0-0 oc purlins (2-0-11 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 7-2-11 oc bracing.

REACTIONS.

(size) 16=0-5-8, 8=0-5-8
Max Horz 16=41(LC 8)
Max Uplift 16=453(LC 8), 8=453(LC 9)
Max Grav 16=1549(LC 1), 8=1549(LC 1)

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

TOP CHORD 1-2=-3616/1126, 2-3=-3545/1128, 3-4=-4114/1274, 4-5=-4114/1274, 5-6=-3545/1103,
6-7=-3616/1085
BOT CHORD 15-16=-99/340, 13-14=-1042/3314, 12-13=-974/3157, 11-12=-910/3157, 10-11=-962/3313,
8-9=-93/340
WEBS 3-13=-218/754, 3-12=-362/1092, 4-12=-597/259, 5-12=-362/1092, 5-11=-207/754,
1-16=-1286/412, 7-8=-1286/398, 8-10=-807/236, 14-16=-808/243, 7-10=-1071/3631,
1-14=-1112/3631

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 16, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 453 lb uplift at joint 16 and 453 lb uplift at joint 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 331 lb down and 150 lb up at 4-11-4, and 331 lb down and 150 lb up at 14-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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



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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123426
2585378	D4	Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:23 2020 Page 2
ID:0wvjSgixY1DQZSIGhpbclRy6Pbn-FQs3HCloelCp3qZn?rmMT1HLx4jBvC4PmeU5Y?y67SA

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-5=-70, 5-7=-70, 15-16=-20, 10-14=-20, 8-9=-20

Concentrated Loads (lb)

Vert: 3=-50(B) 5=-50(B) 13=-331(B) 12=-66(B) 4=-50(B) 11=-331(B) 17=-50(B) 18=-50(B) 19=-50(B) 20=-50(B) 21=-66(B) 22=-66(B) 23=-66(B) 24=-66(B)

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	E1	Half Hip	1	1	144123427
Job Reference (optional)					

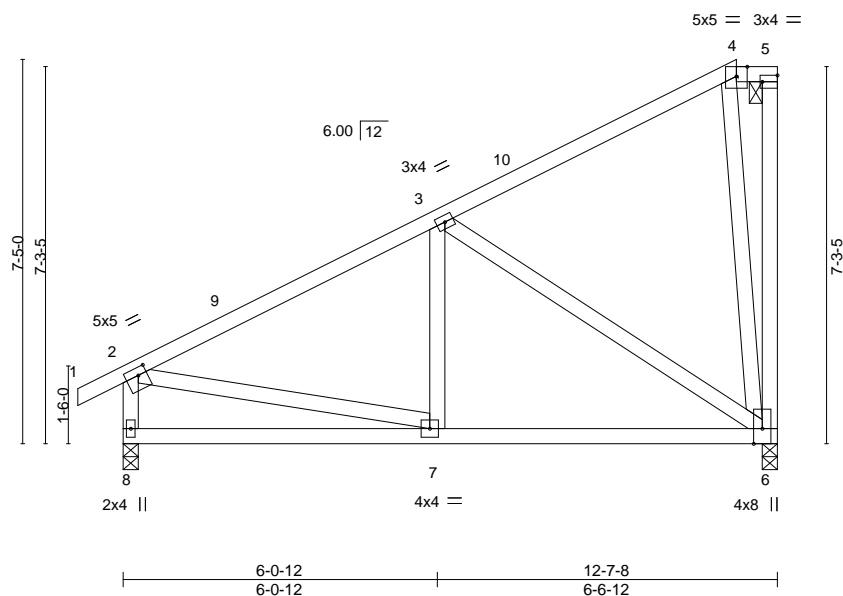
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:24 2020 Page 1

ID:0wvjSgixY1DQZSiGhpbclry6Pbn-jdQRVYJQP2Kgh_8zZYIb0FqglUA8ekwY?IEf5Ry67S9

0-10-8 6-0-12 11-10-0 12-7-8
0-10-8 6-0-12 5-9-4 0-9-8



Scale = 1:44.5

Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [5:Edge,0-1-8]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.04	6-7	>999
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.09	6-7	>999
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.01	6	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 67 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.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 8=0-3-8, 6=0-3-8
Max Horz 8=295(LC 9)
Max Uplift 8=88(LC 12), 6=131(LC 12)
Max Grav 8=629(LC 1), 6=552(LC 1)

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

TOP CHORD 2-3=-614/131, 2-8=-575/208
BOT CHORD 7-8=-459/407, 6-7=-286/471
WEBS 3-6=-521/210, 4-6=-364/413, 2-7=0/366

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-10-0, Exterior(2E) 11-10-0 to 12-5-12 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 8 and 131 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.



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

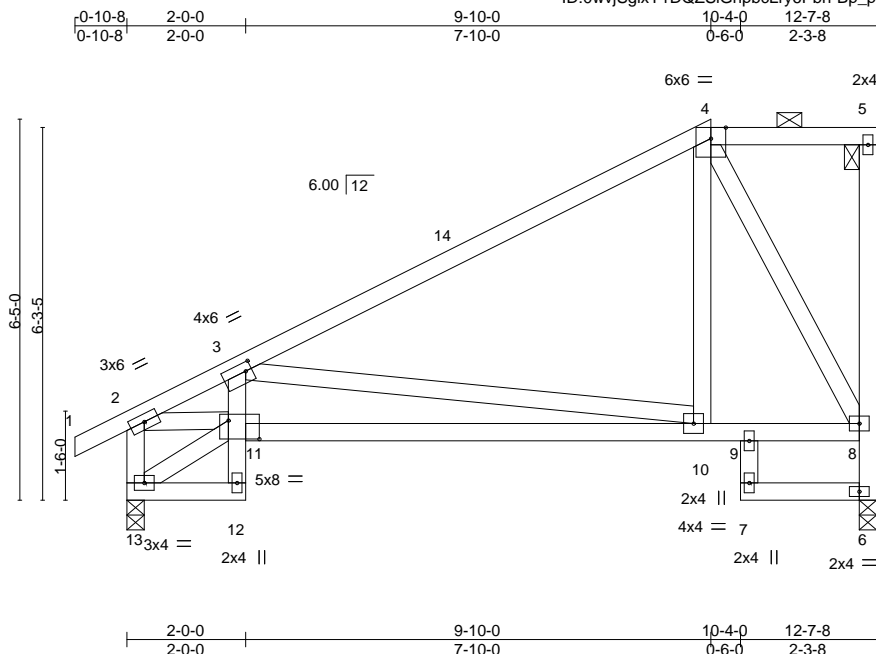
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123428
2585378	E2	Half Hip	1	1	Job Reference (optional)	

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

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ID:0wvjSgixY1DQZSIGhpbclRy6Pbn-Bp_pitK2AMTWI8jA7GpqYSNo3tUrN40iEyzCduy67S8



Scale = 1:38.8

Plate Offsets (X,Y)--		[3:0-1-4,0-1-12], [11:0-6-4,0-3-12]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.56
TCDL 10.0	Lumber DOL	1.15	BC 0.49
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.99
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.09 10-11 >999 240
			Vert(CT) -0.19 10-11 >774 180
			Horz(CT) 0.05 6 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 68 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.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 13=0-3-8, 6=0-3-8
Max Horz 13=254(LC 9)
Max Uplift 13=94(LC 12), 6=104(LC 9)
Max Grav 13=629(LC 1), 6=552(LC 1)

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

TOP CHORD 2-3=-926/437, 3-4=-459/104, 6-8=-536/231, 2-13=-552/222
BOT CHORD 10-11=-881/1199, 9-10=-210/325, 8-9=-222/359
WEBS 4-10=0/357, 4-8=-621/276, 3-10=-903/677, 11-13=-305/235, 2-11=-386/867

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-10-4, Interior(1) 1-10-4 to 9-10-0, Exterior(2E) 9-10-0 to 12-5-12 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 6 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 94 lb uplift at joint 13 and 104 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.



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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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Job 2585378	Truss E3	Truss Type Half Hip	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123429
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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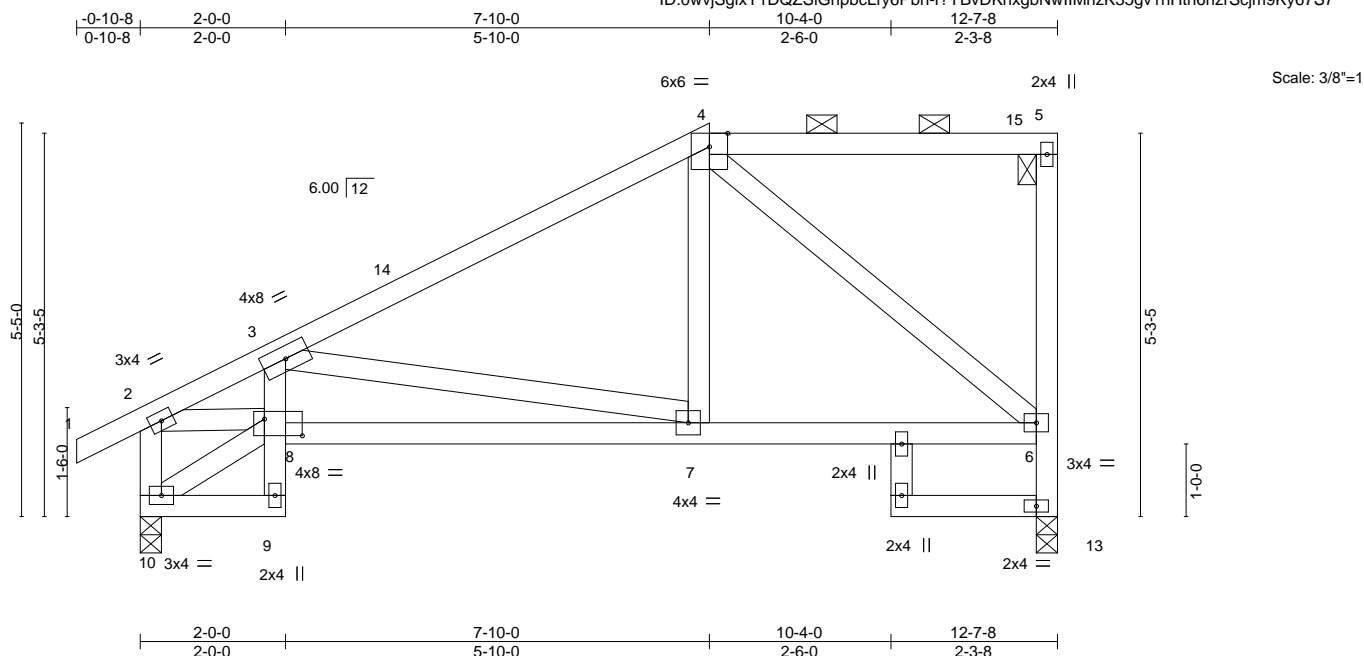


Plate Offsets (X,Y)--		[8:0-6-4,0-2-12]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.30	Vert(LL)	-0.03	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.32	Vert(CT)	-0.07	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr YES		WB	0.37	Horz(CT)	0.04	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 64 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.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 10=0-3-8, 13=0-3-8
Max Horz 10=216(LC 11)
Max Uplift 10=-93(LC 12), 13=-108(LC 9)
Max Grav 10=629(LC 1), 13=552(LC 1)

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

TOP CHORD 2-3=-890/440, 3-4=-595/140, 6-13=-552/184, 2-10=-570/245
BOT CHORD 7-8=-772/1013, 6-7=-266/442
WEBS 3-7=-579/514, 4-7=-12/290, 4-6=-559/253, 8-10=-282/204, 2-8=-367/791

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-10-4, Interior(1) 1-10-4 to 7-10-0, Exterior(2R) 7-10-0 to 12-0-15, Interior(1) 12-0-15 to 12-5-12 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 10 and 108 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.
- 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.



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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123430
2585378	E4	Half Hip	1	1	Job Reference (optional)	

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

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ID:0wvjSgixY1DQZSlGhpbclry6Pbn-7C5a7ZLjizjEYStYEHrletS8nhClr54?hGSJimmy67S6

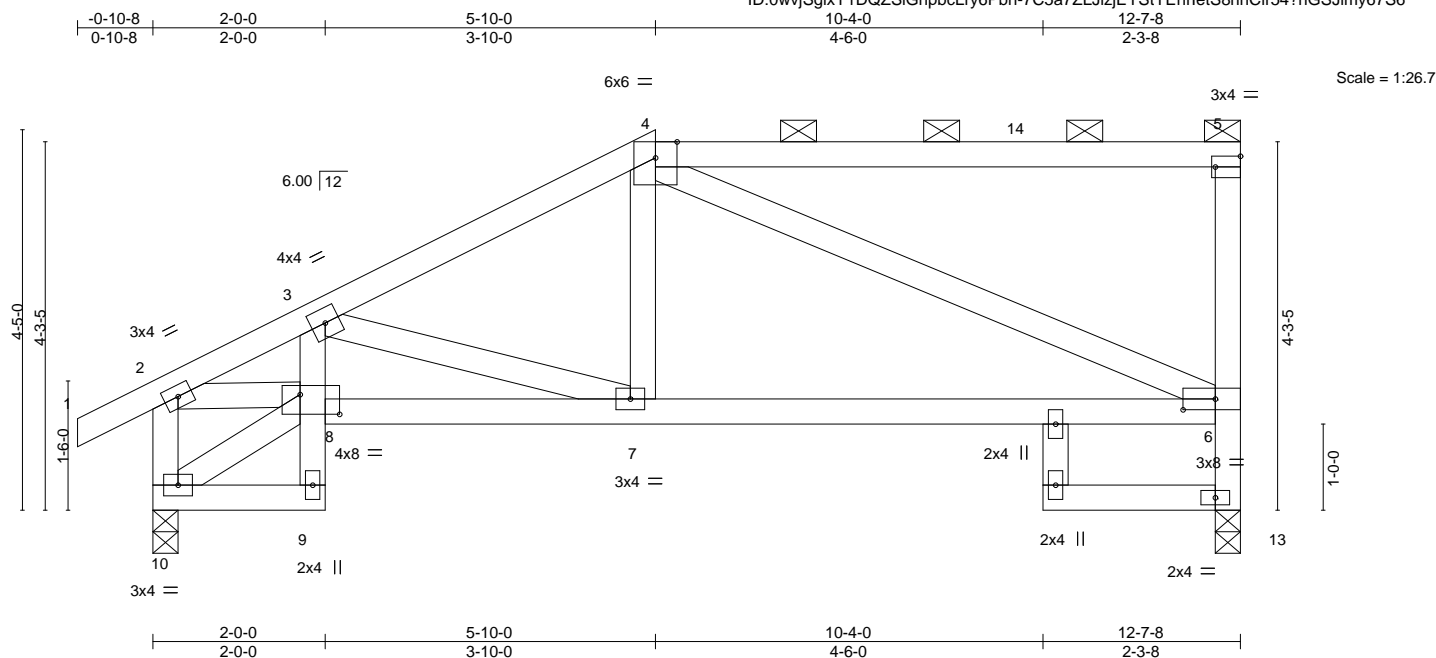


Plate Offsets (X,Y)--		[5:Edge,0-1-8], [6:0-4-8,0-1-8], [8:0-5-8,0-2-12]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.54	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.33	Vert(LL) -0.05 6-7 >999 240
BCLL 0.0 *	Lumber DOL 1.15	WB 0.57	Vert(CT) -0.11 6-7 >999 180
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.04 13 n/a n/a
	Code IRC2018/TPI2014		
			PLATES MT20
			GRIP 197/144
			Weight: 60 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.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 10=0-3-8, 13=0-3-8
Max Horz 10=175(LC 11)
Max Uplift 10=85(LC 12), 13=110(LC 9)
Max Grav 10=629(LC 25), 13=552(LC 1)

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

TOP CHORD 2-3=-851/423, 3-4=-748/185, 6-13=-552/148, 2-10=-583/258
BOT CHORD 7-8=-636/824, 6-7=-303/627
WEBS 3-7=-268/345, 4-7=-2/266, 4-6=-601/251, 8-10=-254/165, 2-8=-329/723

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-10-4, Interior(1) 1-10-4 to 5-10-0, Exterior(2R) 5-10-0 to 10-0-15, Interior(1) 10-0-15 to 12-5-12 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 10 and 110 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.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 28, 2020

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123431
2585378	E5	Half Hip Girder	1	1	Job Reference (optional)	

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

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ID:0wvjsGixY1DQZSIGHpbclry6Pbn-bOfyKvMxTHr59cSloOMXA5?PF5Xgac08wwCsECy67S5

-0-10-8	2-0-0	3-10-0	7-1-0	10-4-0	12-7-8
0-10-8	2-0-0	1-10-0	3-3-0	3-3-0	2-3-8

Scale = 1:26.3

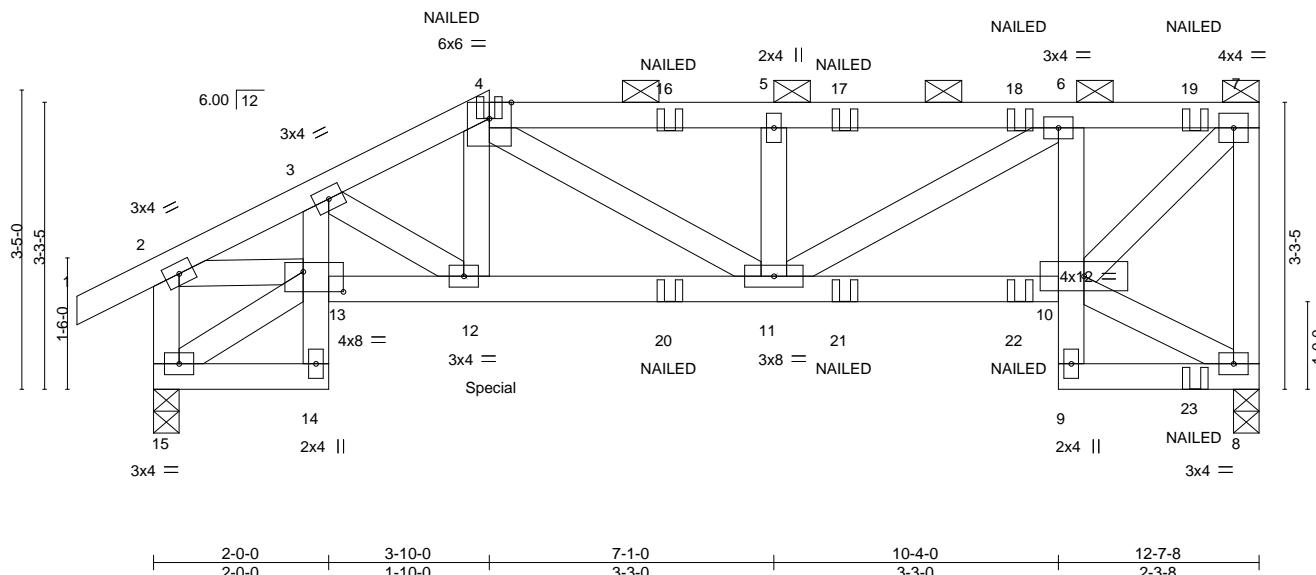


Plate Offsets (X,Y)--	[13:0-5-8,0-2-12]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	0.04 11-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.06 11-12	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.27	Horz(CT)	0.05 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 63 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 5-1-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-0-4 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-0-1 oc bracing: 12-13
8-3-10 oc bracing: 11-12.

REACTIONS.

(size) 8=0-3-8, 15=0-3-8
Max Horz 15=129(LC 5)
Max Uplift 8=299(LC 5), 15=266(LC 8)
Max Grav 8=821(LC 1), 15=882(LC 1)

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

TOP CHORD 2-3=-1291/510, 3-4=-1302/504, 4-5=-1309/499, 5-6=-1306/497, 6-7=-706/260, 7-8=-769/324, 2-15=-828/292
BOT CHORD 12-13=-550/1176, 11-12=-510/1152, 10-11=-324/746, 6-10=-582/265
WEBS 5-11=-317/155, 6-11=-259/650, 7-10=-392/970, 2-13=-411/1104

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 299 lb uplift at joint 8 and 266 lb uplift at joint 15.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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) 219 lb down and 141 lb up at 3-10-0 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 4-7=-70, 14-15=-20, 10-13=-20, 8-9=-20



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Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123431
2585378	E5	Half Hip Girder	1	1	Job Reference (optional)	

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

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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 4=-31(B) 12=-219(B) 16=-31(B) 17=-31(B) 18=-31(B) 19=-57(B) 20=-32(B) 21=-32(B) 22=-32(B) 23=-25(B)

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AS NOTED ON PLANS REVIEW
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LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123432
2585378	F1	Common	2	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:29 2020 Page 1

ID:0wvjSgixY1DQZSIghpbCLry6Pbn-3aDKYFNZEbzyn1xM5tmjlXZ?VvGJ7nH8axQmfy67S4



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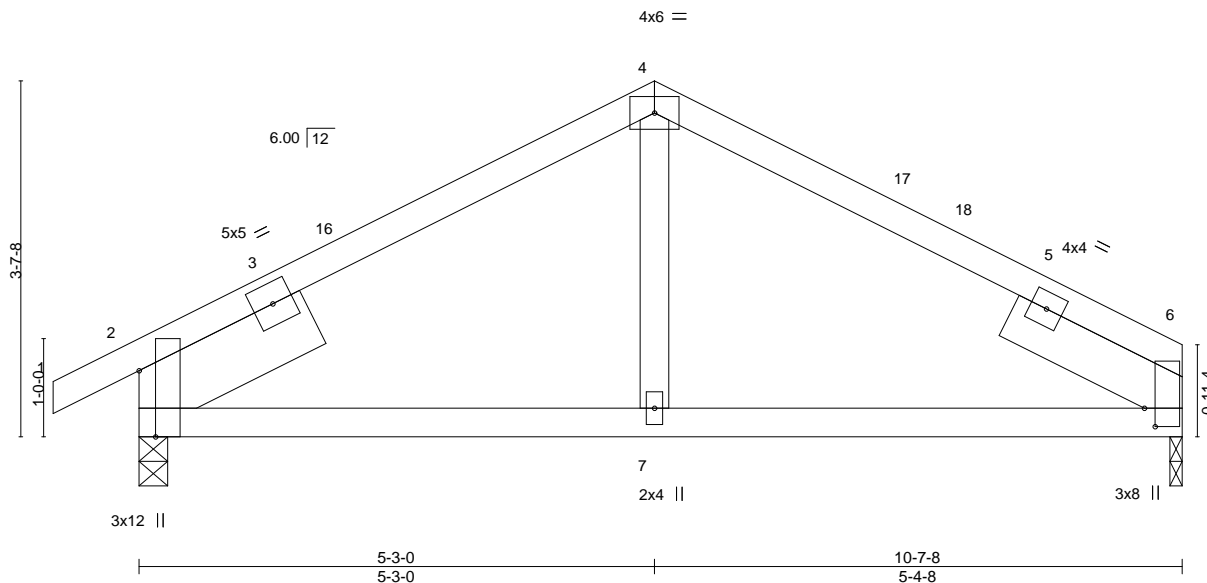


Plate Offsets (X,Y)--		[2:0-8-1,Edge], [6:0-2-4,0-1-5]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.03	7-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04	7-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 40 lb FT = 20%		

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x8 SP 2400F 2.0E 2-0-0, Right 2x6 SPF No.2 2-0-0

BRACING-

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

REACTIONS.

(size) 6=0-1-8, 2=0-3-8
 Max Horz 2=61(LC 16)
 Max Uplift 6=-58(LC 13), 2=-77(LC 12)
 Max Grav 6=476(LC 1), 2=542(LC 1)

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

TOP CHORD 2-4=-528/239, 4-6=-497/242
 BOT CHORD 2-7=-124/424, 6-7=-124/424

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-3-0, Exterior(2R) 5-3-0 to 8-3-0, Interior(1) 8-3-0 to 10-7-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 6 and 77 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.



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 LEE'S SUMMIT, MISSOURI
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123433
2585378	F2	Roof Special	2	1	Job Reference (optional)	

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

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Scale: 1/2"=1'

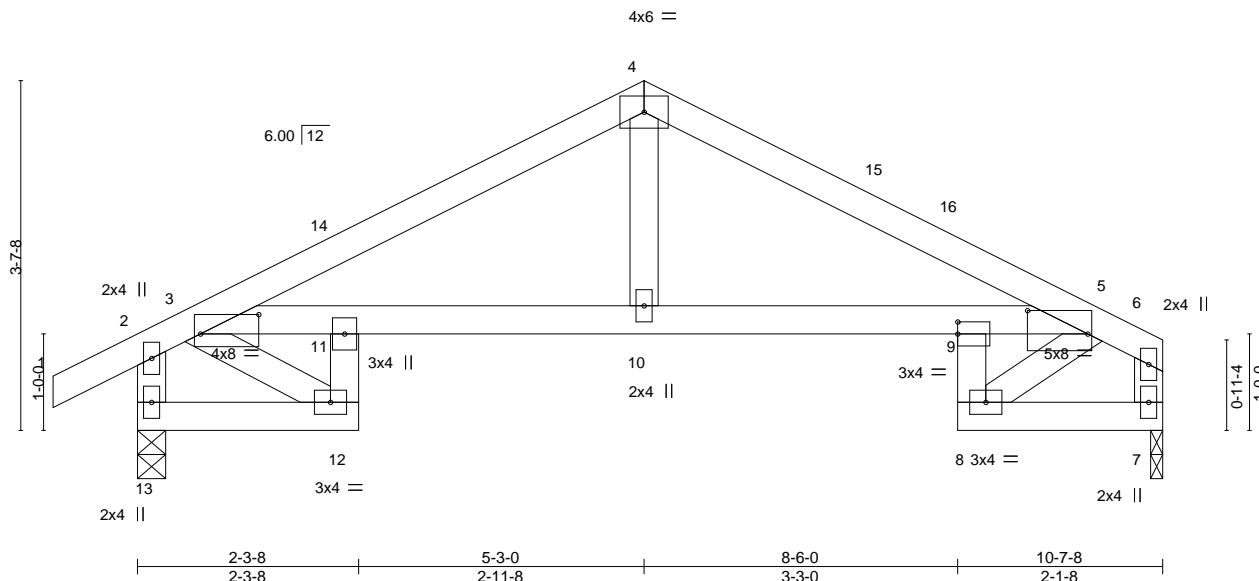


Plate Offsets (X,Y)-- [3:0-7-4,0-2-7], [5:0-7-8,0-2-15], [9:0-0-0,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.43	Vert(LL)	-0.05 9-10 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.10 9-10 >999 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.07 7 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				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.
BOT CHORD Rigid ceiling directly applied. Except:
10-0-0 oc bracing: 9-10

REACTIONS.

(size) 13=0-3-8, 7=0-1-8
Max Horz 13=62(LC 16)
Max Uplift 13=78(LC 12), 7=56(LC 13)
Max Grav 13=540(LC 1), 7=461(LC 1)

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

TOP CHORD 3-4=-742/279, 4-5=-737/294
BOT CHORD 3-11=-123/510, 10-11=-177/623, 9-10=-177/623, 5-9=-134/512
WEBS 2-13=-520/243, 6-7=-434/176, 4-10=-12/278

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-3-0, Exterior(2R) 5-3-0 to 8-3-0, Interior(1) 8-3-0 to 10-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 13 and 56 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.



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Chesterfield, MO 63017
01/13/2021

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

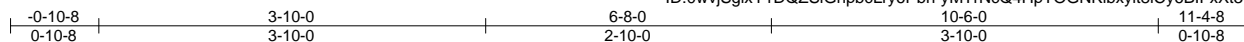
Job 2585378	Truss F4	Truss Type Hip Girder	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123435
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:33 2020 Page 1

ID:0wvjSgixY1DQZSIghpbclry6Pbn-yMTrNcQ4HpTOGNKibxyit8iCy6BIFxTt3CvdvQy67S0



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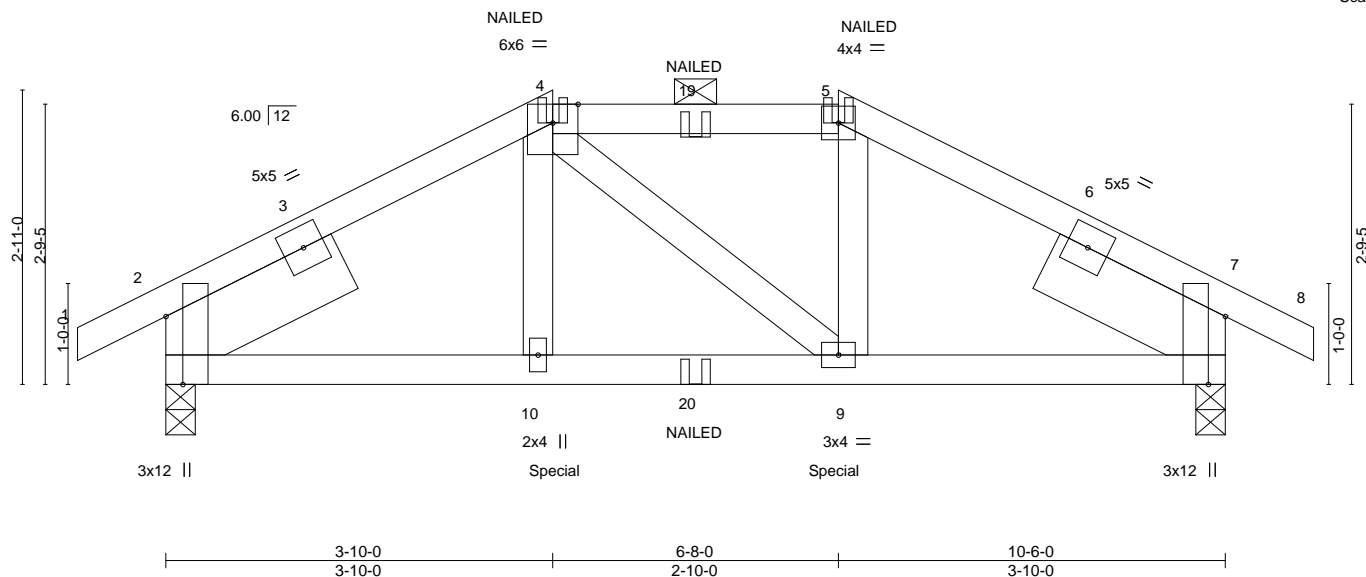


Plate Offsets (X,Y)--		[2:0-8-1,Edge], [7:0-8-1,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.44	DEFL. in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.58	Vert(LL) -0.04 9-10 >999 240
BCLL 0.0 *	Rep Stress Incr NO	WB 0.06	Vert(CT) -0.07 9-10 >999 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS	Horz(CT) 0.02 7 n/a n/a
			PLATES MT20
			GRIP 197/144
			Weight: 49 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x8 SP 2400F 2.0E 2-0-0, Right 2x8 SP 2400F 2.0E 2-0-0

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-2-5 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
 Max Horz 2=40(LC 12)
 Max Uplift 2=215(LC 8), 7=215(LC 9)
 Max Grav 2=816(LC 1), 7=816(LC 1)

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

TOP CHORD 2-4=-1006/303, 4-5=-838/288, 5-7=-1007/303
 BOT CHORD 2-10=-237/850, 9-10=-236/837, 7-9=-210/851

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 215 lb uplift at joint 2 and 215 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.
- 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) 209 lb down and 90 lb up at 3-10-0, and 209 lb down and 90 lb up at 6-7-4 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-70, 4-5=-70, 5-8=-70, 11-15=-20



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Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123435
2585378	F4	Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:33 2020 Page 2
ID:0wvjSgixY1DQZSIghpbCLry6Pbn-yMTnNcQ4HpTOGNKibxyit8iCy6BIFxXt3CvdvQy67S0

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 5=-41(F) 10=-209(F) 9=-209(F) 4=-41(F) 19=-41(F) 20=-22(F)

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123436
2585378	G1	Half Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:34 2020 Page 1

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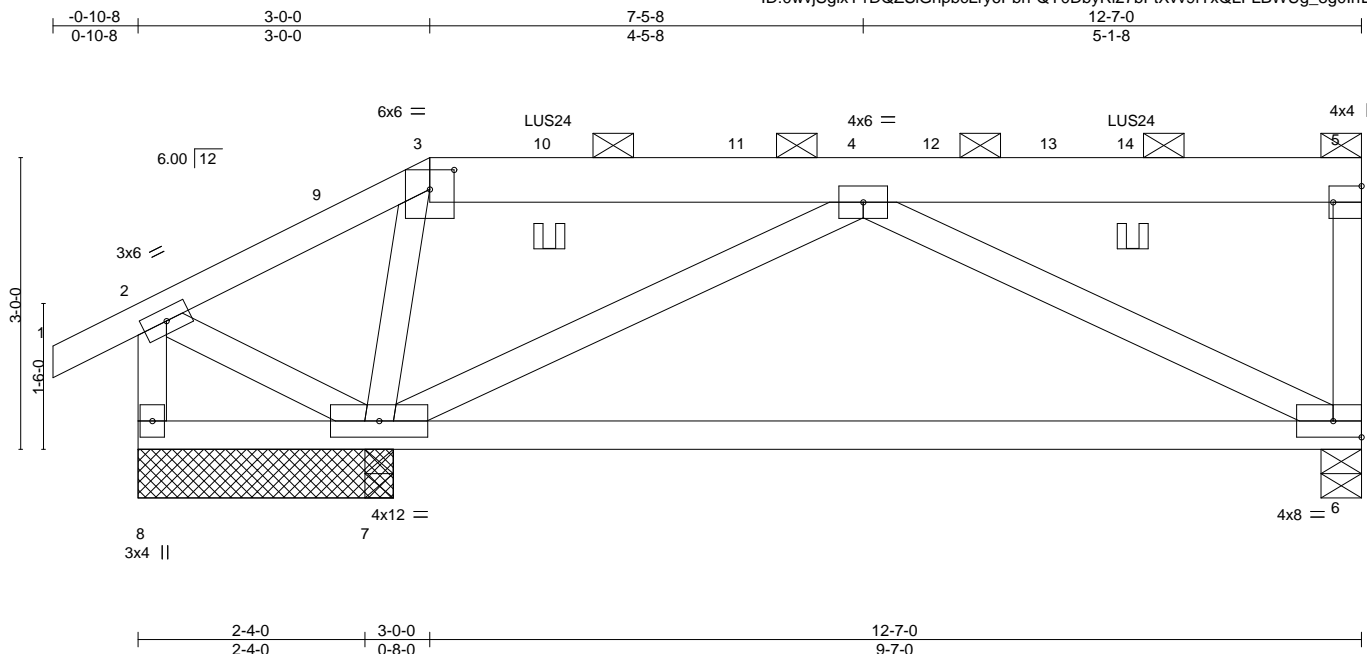


Plate Offsets (X,Y)-- [3:0-3-0,0-2-7], [5:Edge,0-3-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.21 6-7 >570 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.42 6-7 >286 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.96	Horz(CT)	0.02 6 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 58 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-5: 2x6 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.): 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

All bearings 2-7-8 except (jt=length) 6=0-5-0.
(lb) - Max Horz 8=114(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) except 6=138(LC 9), 8=448(LC 26), 7=192(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 8 except 6=1091(LC 26), 7=2012(LC 25), 7=2012(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-98/513, 3-4=-52/252, 5-6=-375/92, 2-8=-110/381
BOT CHORD 6-7=-249/1281
WEBS 4-7=-1723/267, 4-6=-1335/272, 3-7=-824/177, 2-7=-396/214

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-0-0, Exterior(2R) 3-0-0 to 7-5-8, Interior(1) 7-5-8 to 12-5-4 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 6, 448 lb uplift at joint 8 and 192 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.
- 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 4-2-12 from the left end to 10-2-12 to connect truss(es) to back face of top chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 391 lb down and 95 lb up at 6-2-12, and 391 lb down and 95 lb up at 8-2-12 on top 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

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123436
2585378	G1	Half Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:34 2020 Page 2
ID:0wvjSgixY1DQZSIGhpbclRy6Pbn-QY0DbyRi27bFtXvv9fTxQLFLBWUg_8g0lrfBRsy67S?

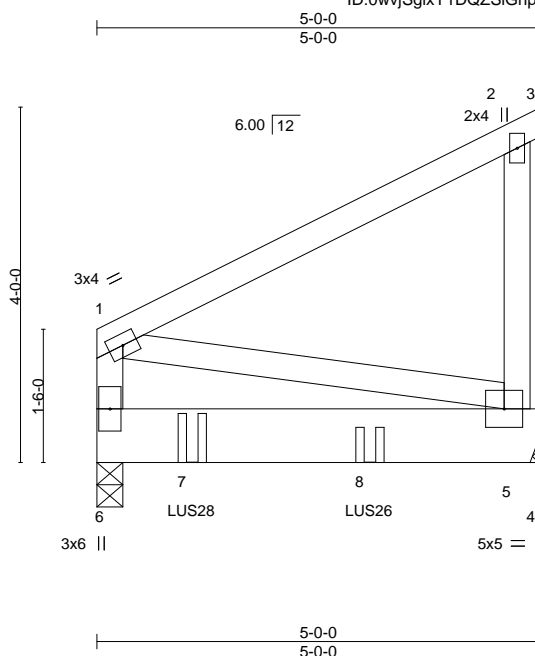
LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-5=-70, 6-8=-20
Concentrated Loads (lb)
Vert: 10=-406(B) 11=-391 12=-391 14=-406(B)



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Chesterfield, MO 63017
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LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.03 5-6 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.05 5-6 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.02	Horz(CT) -0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 31 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-0-0 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=140(LC 5)
Max Uplift 6=-376(LC 8), 5=-227(LC 8)
Max Grav 6=1379(LC 1), 5=988(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCdL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 376 lb uplift at joint 6 and 227 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 1-0-14 from the left end to connect truss(es) to back face of bottom chord.
- 8) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 3-0-14 from the left end to connect truss(es) to back face of bottom chord.
- 9) Fill all nail holes where hanger is in contact with lumber.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-20, 4-6=-20
Concentrated Loads (lb)
Vert: 7=-1078(B) 8=-865(B)



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021



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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	J1	Monopitch	1	1	I44123438
Job Reference (optional)					

Builders FirstSource (Valley Center),

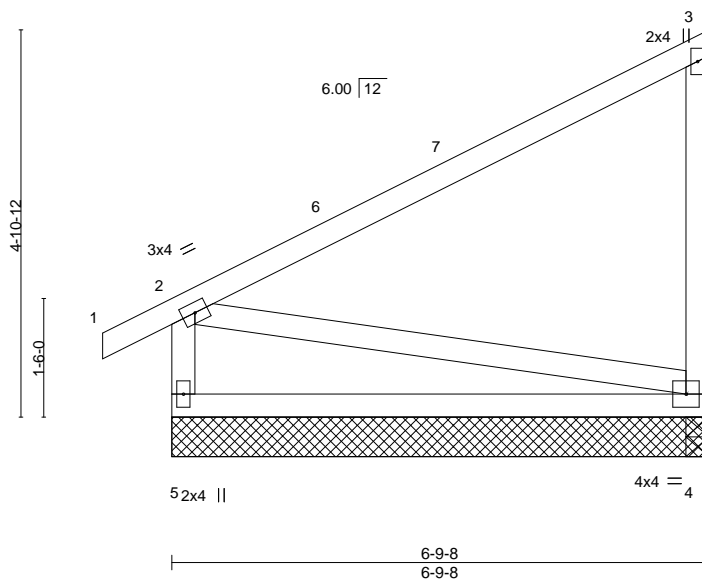
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:36 2020 Page 1

ID:0wvjSgixY1DQZSIghpbclRy6Pbn-Mx8z0eSyakrz7q3HG3VPVmKclJErSF0JI98HVly67Rz

-0-10-8 6-9-8
0-10-8 6-9-8

Scale = 1:29.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.81	Vert(LL)	-0.11	4-5	>728	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.21	4-5	>364	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 31 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 9-5-7 oc bracing.

REACTIONS.

(size) 4=6-9-8, 4=6-9-8, 5=6-9-8
Max Horz 5=193(LC 9)
Max Uplift 4=-82(LC 12), 5=-51(LC 12)
Max Grav 4=287(LC 1), 4=287(LC 1), 5=370(LC 1)

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

TOP CHORD 2-5=-305/211
BOT CHORD 4-5=-362/250
WEBS 2-4=-188/310

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-7-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 4 and 51 lb uplift at joint 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

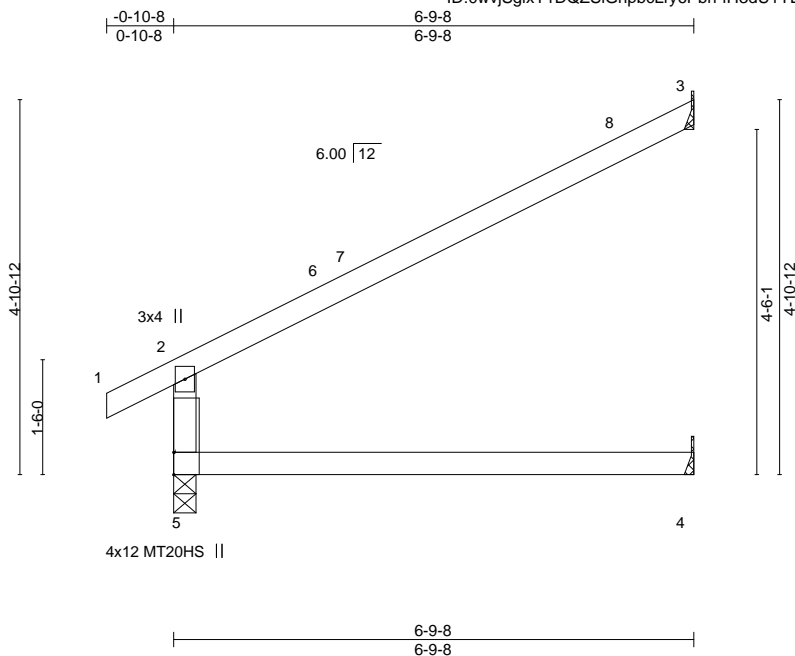
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	J2	Jack-Open	4	1	144123439
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:43 2020 Page 1

ID:0wvjSgixY1DQZSIghpbCLry6Pbn-fH3dU1YLxukzSv5dA272HF6sV8d3bSxLMIK9Fry67Rs



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.62	Vert(LL)	0.13 4-5	>630	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.49	Vert(CT)	-0.19 4-5	>413	180	MT20HS	148/108
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.15 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
									Weight: 19 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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, 3=Mechanical, 4=Mechanical
Max Horz 5=130(LC 12)
Max Uplift 5=23(LC 12), 3=115(LC 12)
Max Grav 5=373(LC 1), 3=213(LC 1), 4=123(LC 3)

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

TOP CHORD 2-5=-319/181

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 5 and 115 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.
- 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.



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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
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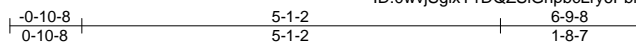
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	J3	Jack-Open	1	1	144123440
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:45 2020 Page 1

ID:0wvjSgixY1DQZSIGhpbclry6Pbn-bfBNvjZbSV_hIDF0ISAWMgCCfxl?3MReq3pGJy67Rq



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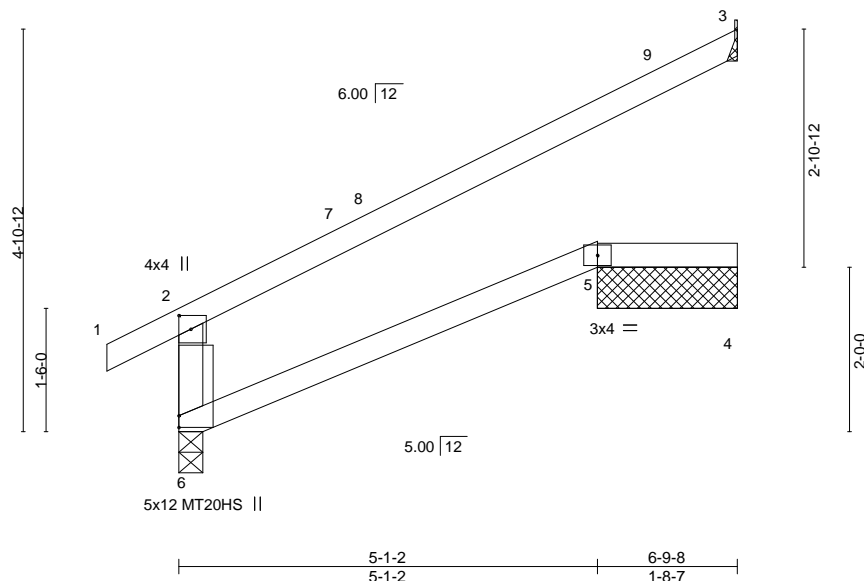


Plate Offsets (X,Y)--		[2:0-2-0,0-1-12]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) 0.06 5-6 >973 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) -0.06 5-6 >999 180	MT20HS	148/108
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.13 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		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.

All bearings Mechanical except (jt=length) 6=0-3-8, 5=1-8-7, 4=1-8-7.

(lb) - Max Horz 6=129(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 6, 5, 4 except 3=115(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 3, 3, 5, 4 except 6=331(LC 1)

FORCES.

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

TOP CHORD 2-6=-326/182

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 5, 4 except (jt=lb) 3=115.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 28, 2020

RELEASE FOR

CONSTRUCTION
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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

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

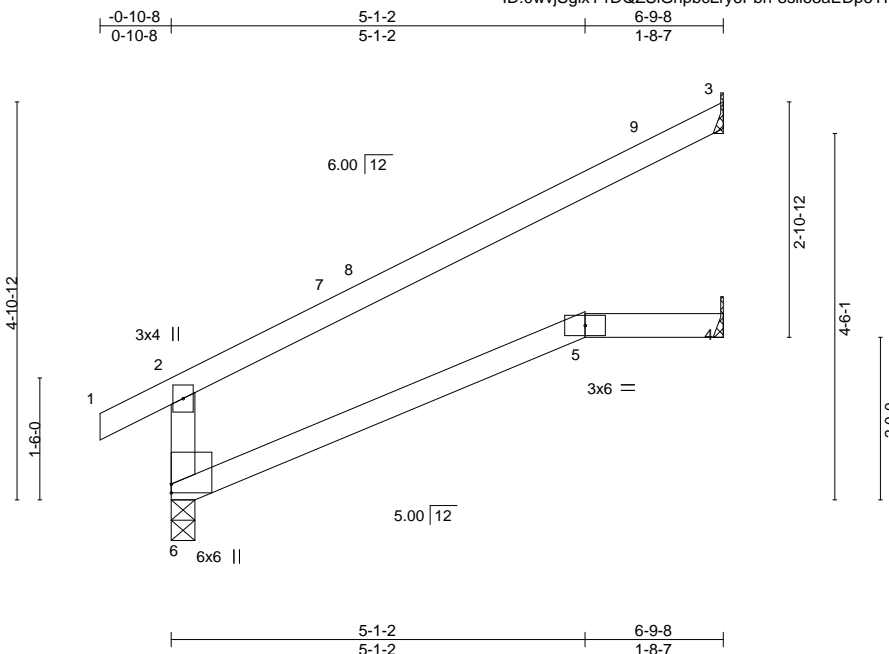
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	J4	Jack-Open	7	1	144123441
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:46 2020 Page 1

ID:0wvjSgixY1DQZSiGhpbclry6Pbn-3sll63aEDp6YKNqCrAhlvtkNfLf3opho3jZpsAy67Rp



Scale = 1:28.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.63	Vert(LL)	0.13	5-6	>591	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.20	5-6	>390	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.16	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						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=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=129(LC 12)
Max Uplift 6=22(LC 12), 3=116(LC 12)
Max Grav 6=373(LC 1), 3=214(LC 1), 4=123(LC 3)

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

TOP CHORD 2-6=318/179

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 3=116.
- 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.



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LEE'S SUMMIT, MISSOURI
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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	J5	Jack-Open	5	1	144123442
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:46 2020 Page 1

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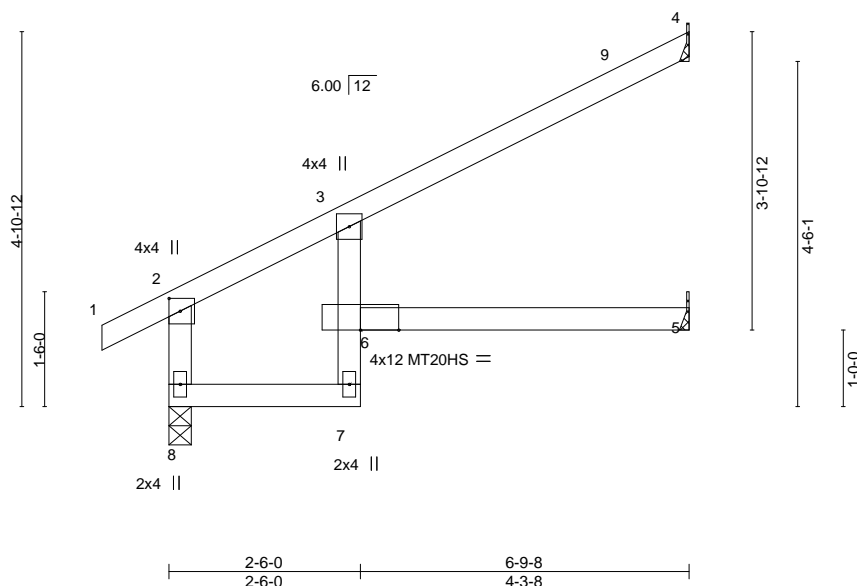


Plate Offsets (X,Y)--		[2:0-2-0,0-1-12]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d					PLATES		GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.53	Vert(LL)	0.18	5-6	>449	240	MT20		197/144	
TCDL	10.0	Lumber DOL 1.15		BC	0.50	Vert(CT)	-0.22	5-6	>366	180	MT20HS		148/108	
BCLL	0.0 *	Rep Stress Incr YES		WB	0.00	Horz(CT)	-0.10	4	n/a	n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							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) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=130(LC 12)
Max Uplift 8=-23(LC 12), 4=-93(LC 12), 5=-9(LC 12)
Max Grav 8=373(LC 1), 4=196(LC 1), 5=113(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-318/151

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-7, Interior(1) 2-3-7 to 6-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) 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) 8, 4, 5.
- 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.



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01/13/2021

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Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	J6	Jack-Open	3	1	144123443
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

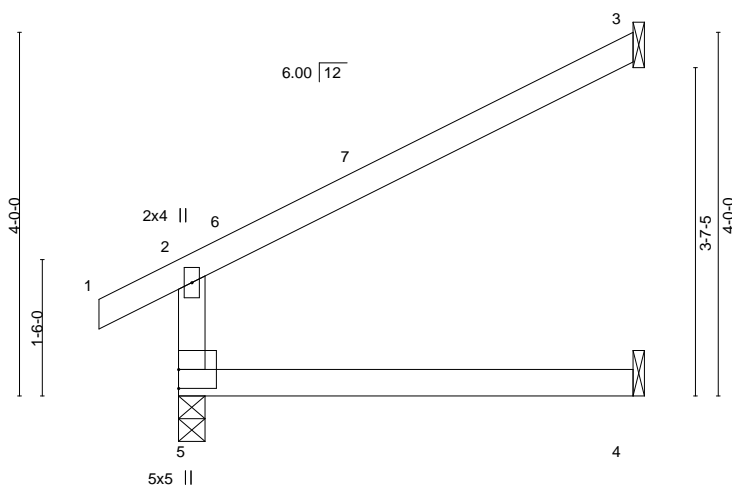
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:47 2020 Page 1

ID:0wvjSgixY1DQZSIghpbclRy6Pbn-Y2J7KPbs_7EPxWPOPtC_S5HcmI0BXGxxHNINOCy67Ro

-0-10-8
0-10-8

5-0-0
5-0-0

Scale = 1:25.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	0.05	4-5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.05	4-5	>999	180	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.08	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
									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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=98(LC 12)
Max Uplift 5=-15(LC 12), 3=-95(LC 12)
Max Grav 5=295(LC 1), 3=153(LC 1), 4=90(LC 3)

FORCES.

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

TOP CHORD 2-5=-254/163

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

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

Job 2585378	Truss J8	Truss Type Jack-Open	Qty 7	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123444
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Builders FirstSource (Valley Center),

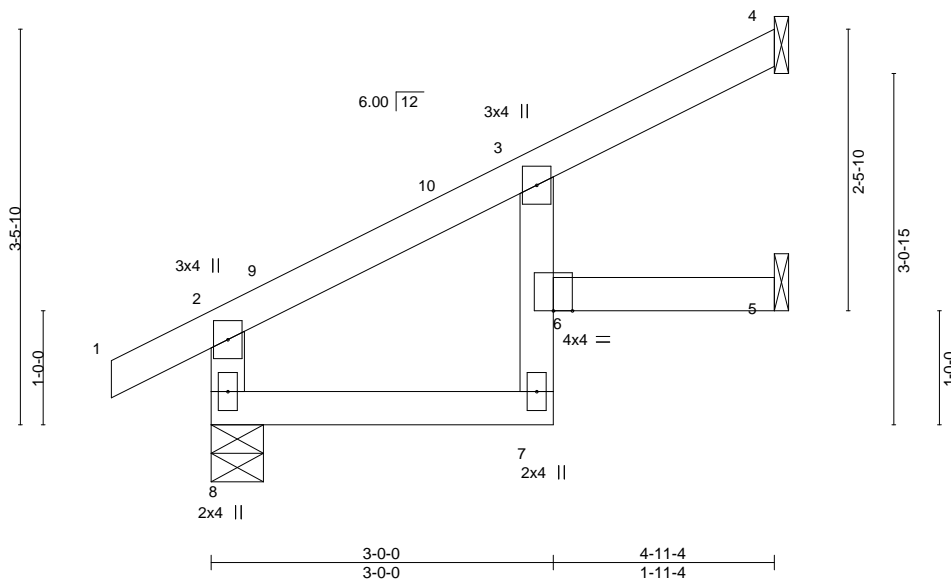
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:48 2020 Page 1

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Scale = 1:20.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	0.03	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	-0.04	6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 16 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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, 4=Mechanical, 5=Mechanical
Max Horz 8=104(LC 12)
Max Uplift 8=-25(LC 12), 4=-56(LC 12), 5=-22(LC 12)
Max Grav 8=292(LC 1), 4=120(LC 1), 5=86(LC 1)

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

TOP CHORD 2-8=-260/154

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-10-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 28, 2020

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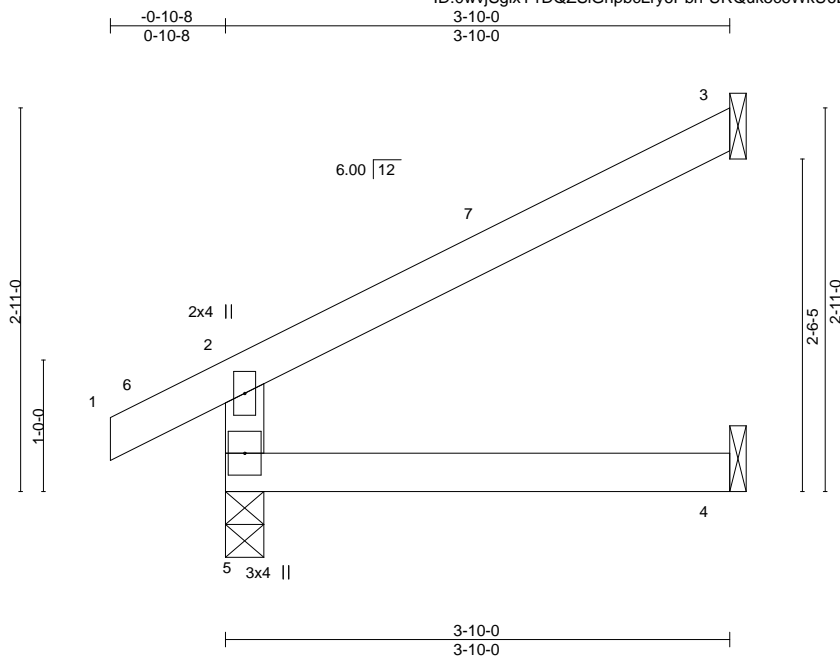
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

Job 2585378	Truss J9	Truss Type Jack-Open	Qty 3	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123445
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:49 2020 Page 1
ID:0wvjSgixY1DQZSIGHpbclry6Pbn-URQuk5c6WkU6BqZnXIESXWM?pZIF?AREIhnTSUy67Rm



Scale = 1:17.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	0.02	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.02	4-5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 11 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-0 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=81(LC 12)
Max Uplift 5=22(LC 12), 3=68(LC 12)
Max Grav 5=245(LC 1), 3=111(LC 1), 4=68(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

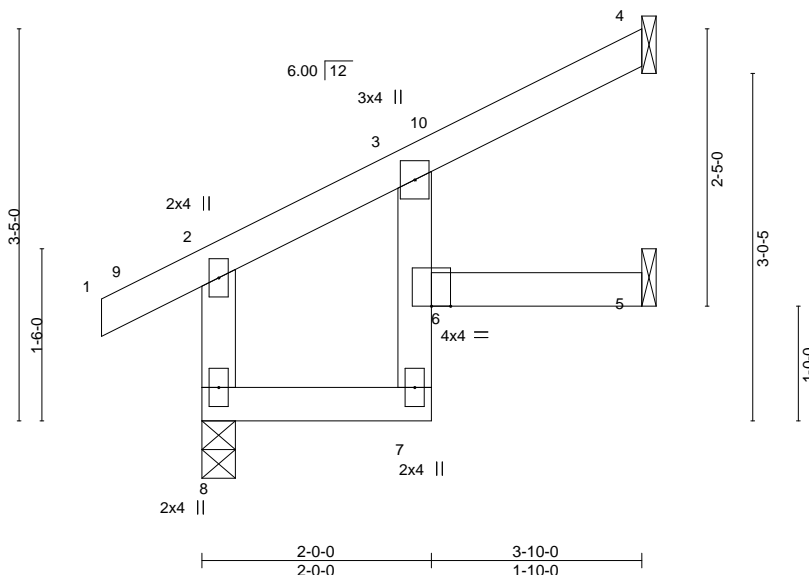
Job 2585378	Truss J10	Truss Type Jack-Open	Qty 4	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123446
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:36 2020 Page 1

ID:0wvjSgixY1DQZSIghpbclRy6Pbn-Mx8z0eSyakrz7q3HG3VPVmkmpJJJSHDJ98HVly67Rz

-0-10-8 2-0-0 3-10-0
0-10-8 2-0-0 1-10-0

Scale = 1:20.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	0.02	6	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.02	7	>999	180	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						
									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 3-10-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=82(LC 9)
Max Uplift 8=11(LC 12), 4=56(LC 12), 5=17(LC 12)
Max Grav 8=245(LC 1), 4=101(LC 1), 5=59(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 8, 56 lb uplift at joint 4 and 17 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 28, 2020

RELEASE FOR

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

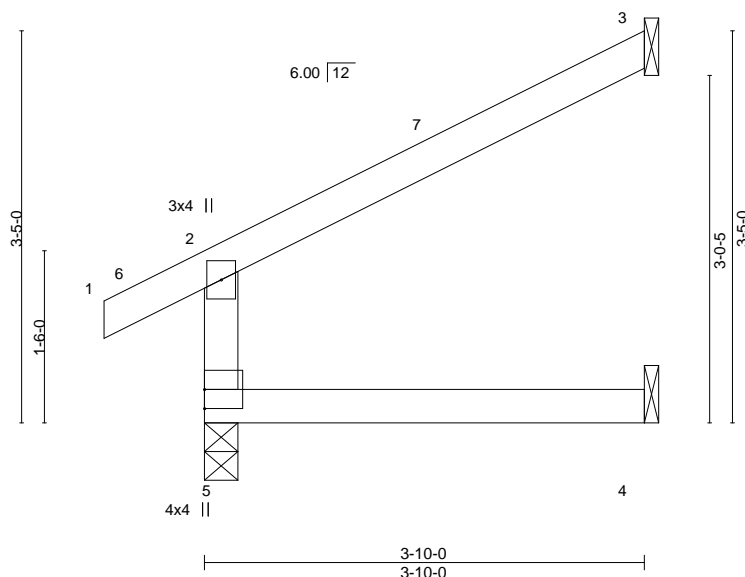
Job 2585378	Truss J11	Truss Type Jack-Open	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123447
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:37 2020 Page 1

ID:0wvjSgixY1DQZSiGhpbclRy6Pbn-q7iMD_TaL2zpk_eTqn0e2_tw7jeKBkST_ptr1By67Ry

-0-10-8 3-10-0
0-10-8 3-10-0

Scale = 1:20.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	0.02 4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.02 4-5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.05 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR					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 3-10-0 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=82(LC 9)
Max Uplift 5=11(LC 12), 3=-74(LC 12)
Max Grav 5=245(LC 1), 3=112(LC 1), 4=69(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 5 and 74 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 28, 2020

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job 2585378	Truss J12	Truss Type Jack-Open	Qty 7	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123448
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Builders FirstSource (Valley Center),

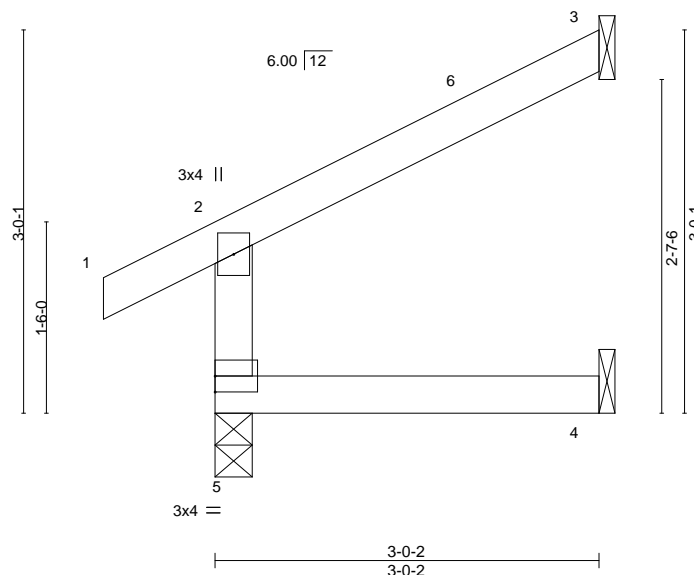
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:38 2020 Page 1

ID:0wvjSgixY1DQZSiGhpbclry6Pbn-IJGkRKUC6M5gM8DgNUYtaBP6I7?hwBicDTdOZdy67Rx

-0-10-8
0-10-8
3-0-2
3-0-2

Scale = 1:18.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	0.01	4-5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.01	4-5	>999	180	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.03	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						
								Weight: 10 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-0-2 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=72(LC 9)
Max Uplift 5=9(LC 12), 3=60(LC 12), 4=2(LC 12)
Max Grav 5=211(LC 1), 3=83(LC 1), 4=53(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-6 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 5, 60 lb uplift at joint 3 and 2 lb uplift at joint 4.
- 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.



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Chesterfield, MO 63017
01/13/2021

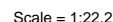
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:39 2020 Page 1
ID:0wwiSoixY1DQZSiGhpbCLv6Pbn-nVa6eaUatfDX losxC367PvG8XJkfevmS7Mv64v67Rw



LUMBER-

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=93(LC 9)
Max Uplift 8=-14(LC 12), 4=-64(LC 12), 5=-22(LC 12)
Max Grav 8=282(LC 1), 4=122(LC 1), 5=76(LC 3)

FORCES.

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCdL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-8, Interior(1) 2-3-8 to 4-7-11 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 8, 64 lb uplift at joint 4 and 22 lb uplift at joint 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 28, 2020

RELEASE FOR

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

16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021



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

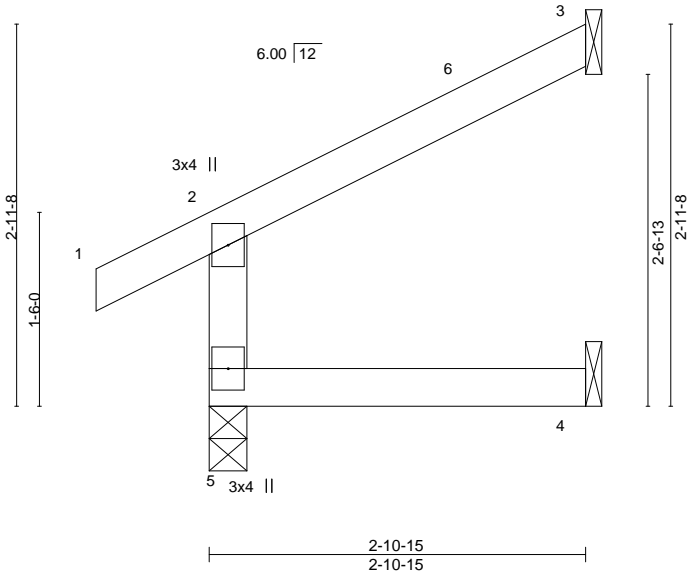
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	J14	Jack-Open	2	1	144123450
Job Reference (optional)					

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:40 2020 Page 1

ID:0wvjSgixY1DQZSIghpbclRy6Pbn-FIOUs0VTezLObSN2VvaLfcUSKwhHO5Cvgn6VeWy67Rv



Scale = 1:17.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	0.01	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.01	4-5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.03	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 9 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-15 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=71(LC 9)

Max Uplift 5=-8(LC 12), 3=-58(LC 12), 4=-2(LC 12)

Max Grav 5=207(LC 1), 3=80(LC 1), 4=51(LC 3)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-10-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

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

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 5, 58 lb uplift at joint 3 and 2 lb uplift at joint 4.

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.



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LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

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

Job 2585378	Truss J16	Truss Type Jack-Open	Qty 2	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123451
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:40 2020 Page 1

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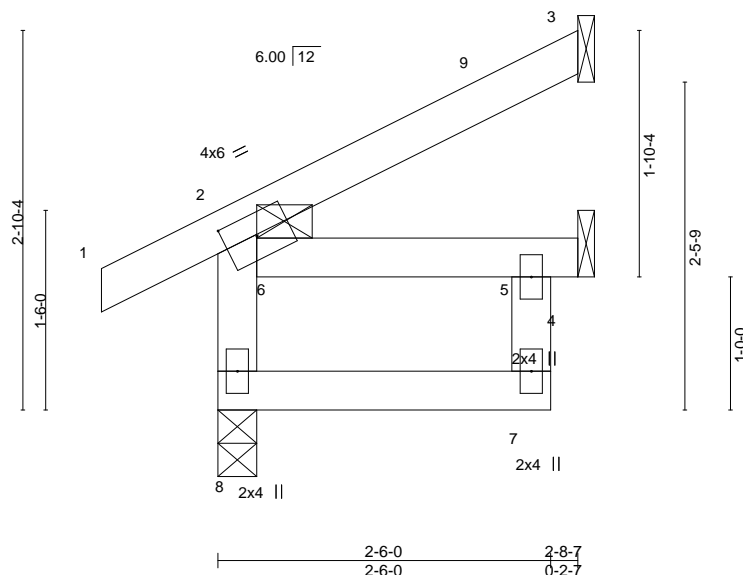


Plate Offsets (X,Y)-- [2:0-1-15,0-0-0], [2:0-2-15,0-2-0], [6:0-0-13,0-1-9]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	5	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.00	5-6	>999	180	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							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 2-8-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 8=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 8=68(LC 9)
Max Uplift 3=-44(LC 12), 4=-1(LC 12)
Max Grav 8=223(LC 1), 3=69(LC 1), 4=90(LC 3)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 3 and 1 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.



December 28, 2020

RELEASE FOR

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AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	J17	Jack-Open	2	1	I44123452

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

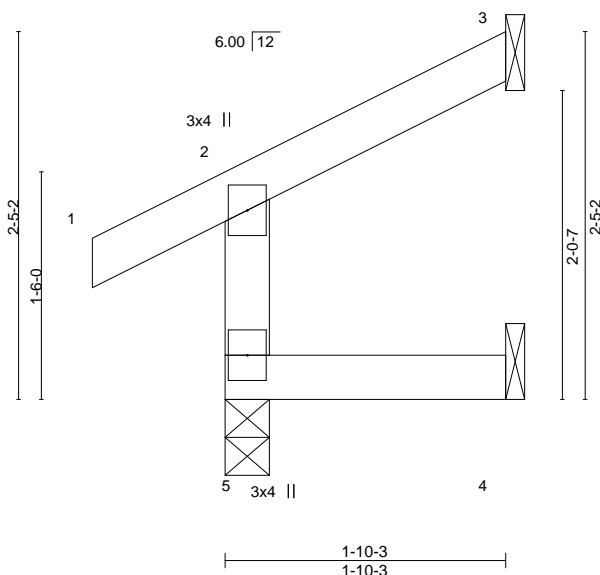
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:41 2020 Page 1

ID:0wvjSgixY1DQZSIghpbcLry6Pbn-juys3MW5PHUFDbyF3d5aCq1exK1X7YS2vRr2Ayy67Ru

-0-10-8
0-10-8

1-10-3
1-10-3

Scale = 1:15.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.00	5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 7 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-3 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=58(LC 9)
Max Uplift 5=6(LC 12), 3=39(LC 12), 4=8(LC 9)
Max Grav 5=169(LC 1), 3=41(LC 1), 4=31(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 5, 39 lb uplift at joint 3 and 8 lb uplift at joint 4.
- 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.



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LEE'S SUMMIT, MISSOURI
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123453
2585378	J18	Jack-Open	4	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

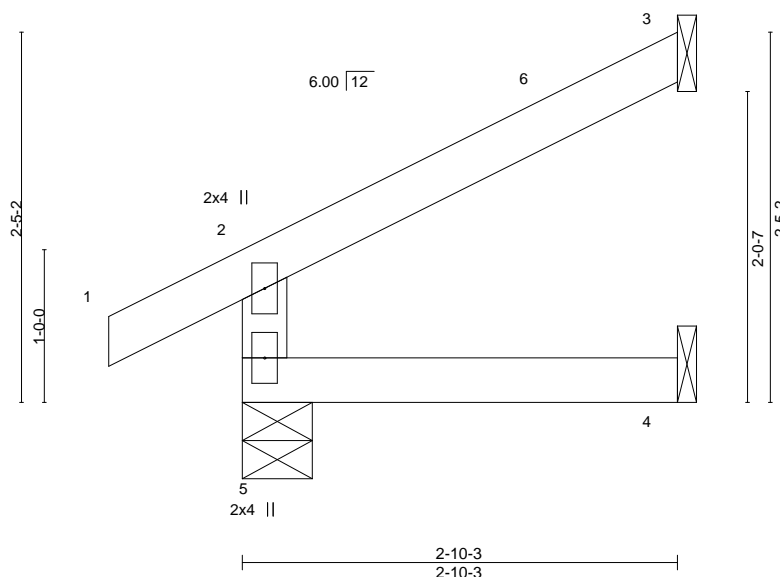
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:42 2020 Page 1

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Scale = 1:15.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	0.01	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	-0.00	4-5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 9 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-3 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=61(LC 12)

Max Uplift 5=-19(LC 12), 3=-51(LC 12)

Max Grav 5=204(LC 1), 3=77(LC 1), 4=49(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-9-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 5 and 51 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Job 2585378	Truss J19	Truss Type Jack-Open	Qty 2	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123454
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

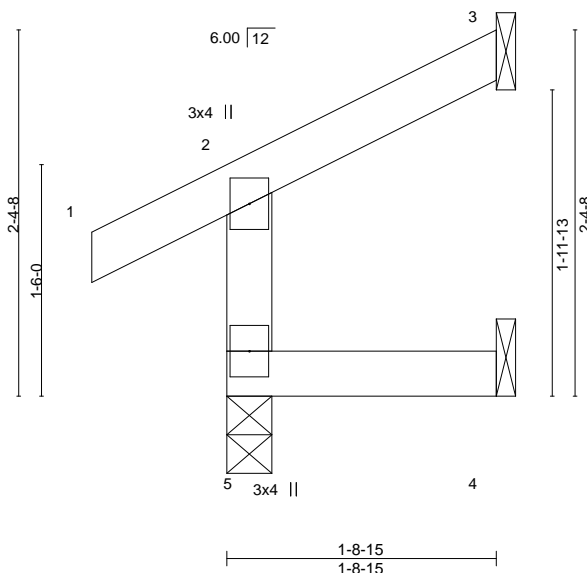
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:43 2020 Page 1

ID:0wvjSgixY1DQZSIghpbclry6Pbn-fH3dU1YLxukzSv5dA272HF6_W8j5bSxLMIK9Fry67Rs

-0-10-8
0-10-8

1-8-15
1-8-15

Scale = 1:14.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	0.00	5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.00	5	>999	180	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						
								Weight: 7 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-8-15 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=57(LC 9)
Max Uplift 5=6(LC 12), 3=37(LC 12), 4=10(LC 9)
Max Grav 5=166(LC 1), 3=36(LC 1), 4=29(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 5, 37 lb uplift at joint 3 and 10 lb uplift at joint 4.
- 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.



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

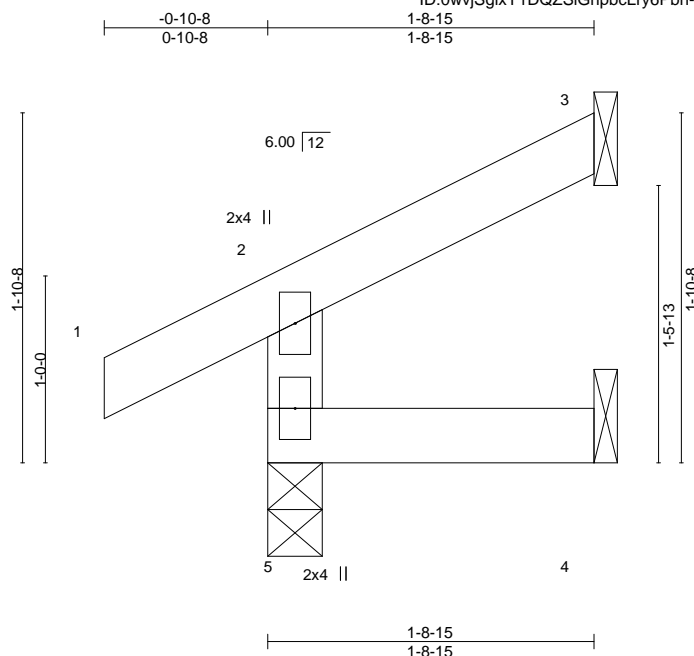
Job 2585378	Truss J20	Truss Type Jack-Open	Qty 4	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123455
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:44 2020 Page 1

ID:0wvjSgixY1DQZSIGHpbcLry6Pbn-7Td?hNYziCsQ43gqklfHqSf9tY44KvBVbP4jnHy67Rr



Scale = 1:12.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00 5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00 5	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR					Weight: 6 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-8-15 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=46(LC 9)
Max Uplift 5=-17(LC 12), 3=-31(LC 12), 4=-1(LC 12)
Max Grav 5=166(LC 1), 3=37(LC 1), 4=29(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 5, 31 lb uplift at joint 3 and 1 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

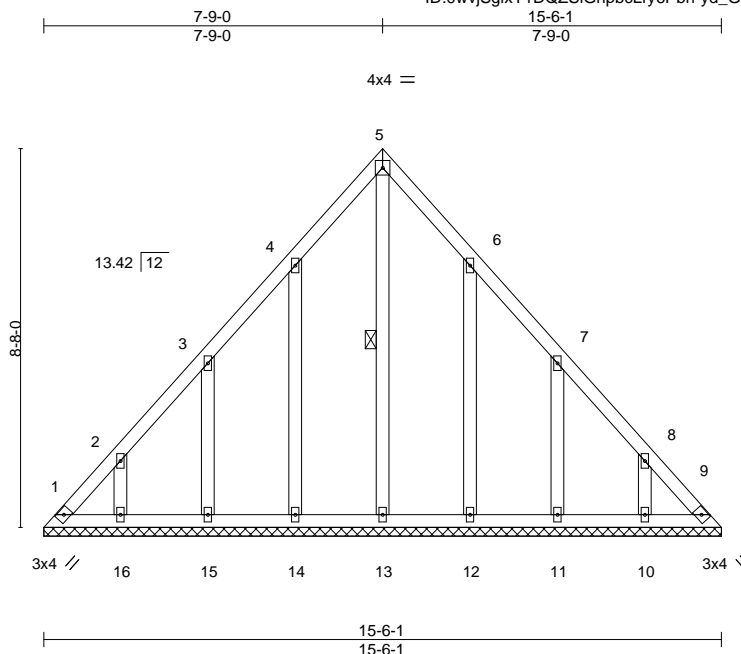
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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

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

Job 2585378	Truss L1	Truss Type GABLE	Qty 2	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123456
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:50 2020 Page 1
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Scale = 1:52.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.01	9	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
									Weight: 77 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-13

REACTIONS.

All bearings 15-6-1.
(lb) - Max Horz 1=224(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 9 except 1=108(LC 10), 14=138(LC 12), 15=139(LC 12),
16=128(LC 12), 12=136(LC 13), 11=140(LC 13), 10=128(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 16, 12, 11, 10

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=309/195, 8-9=277/192

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 7-9-0, Exterior(2R) 7-9-0 to 10-9-0, Interior(1) 10-9-0 to 15-2-2 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
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 1=108, 14=138, 15=139, 16=128, 12=136, 11=140, 10=128.
- 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.



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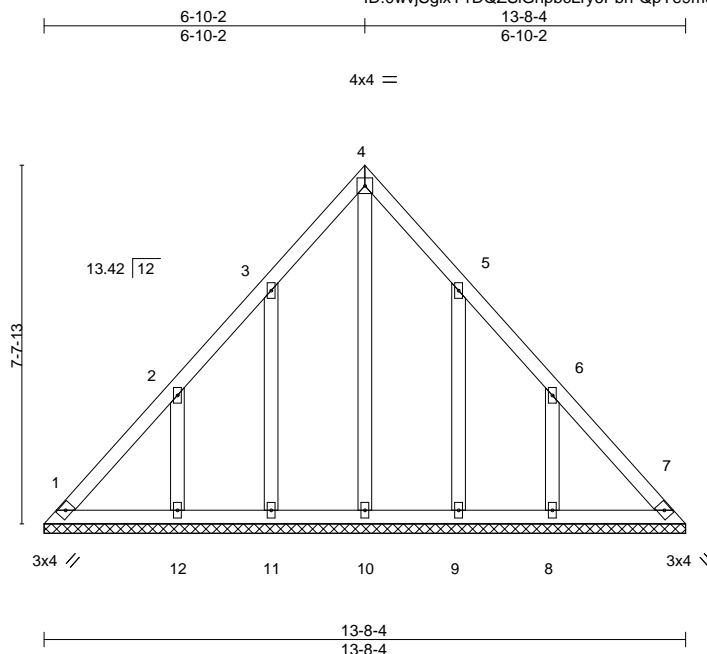
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Job 2585378	Truss L2	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123457
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

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ID:0wvjSgixY1DQZSIGHpbcLry6Pbn-QpYe9meM2LkqQ8iAejHwcxSMqMTIT2wXC?GaXNy67Rk



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	7	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
									Weight: 63 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-8-4.
(lb) - Max Horz 1=197(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 11=127(LC 12), 12=181(LC 12), 9=126(LC 13), 8=181(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 9 except 12=275(LC 19), 8=275(LC 20)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 6-10-2, Exterior(2R) 6-10-2 to 9-10-2, Interior(1) 9-10-2 to 13-4-6 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
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7 except (jt=lb) 11=127, 12=181, 9=126, 8=181.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	L3	GABLE	1	1	144123458
Job Reference (optional)					

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:52 2020 Page 1

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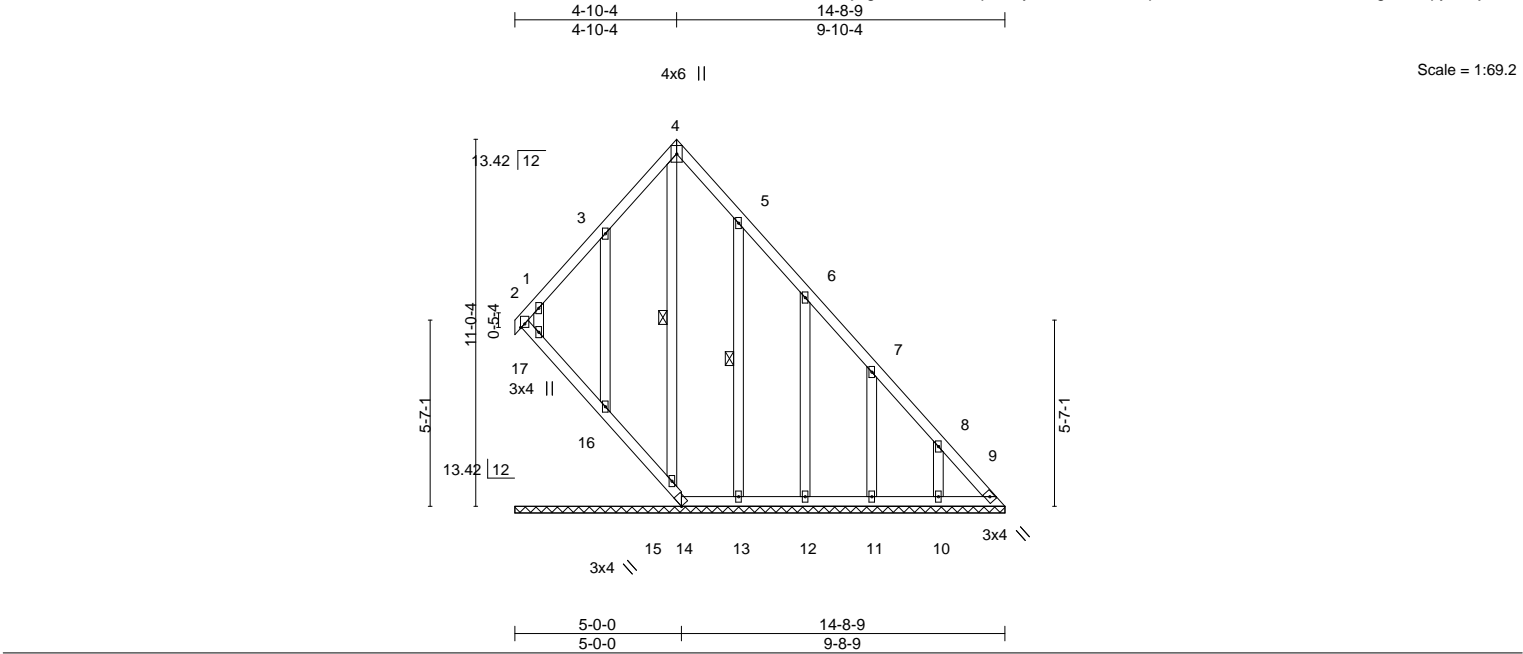


Plate Offsets (X,Y)--		[1:0-1-5,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08
TCDL 10.0	Lumber DOL	1.15	BC 0.08
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) 0.01 9 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 86 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
OTHERS 2x4 SPF No.2	6-0-0 oc bracing: 1-17.
	WEBS 1 Row at midpt 5-13, 4-15

REACTIONS. All bearings 14-8-9.

(lb) - Max Horz 1=-309(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 9, 15 except 1=-164(LC 10), 14=-337(LC 13), 10=-139(LC 13), 11=-134(LC 13), 12=-143(LC 13), 13=-124(LC 13), 16=-151(LC 12), 17=-227(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 9, 14, 10, 11, 12, 13, 16 except 1=365(LC 12), 15=339(LC 13), 17=256(LC 19)

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

TOP CHORD 1-2=-273/250, 8-9=-350/261

BOT CHORD 1-17=-301/364, 16-17=-297/395, 15-16=-296/397, 14-15=-305/438, 13-14=-190/261, 12-13=-190/261, 11-12=-190/261, 10-11=-190/261, 9-10=-190/261

WEBS 4-15=-265/187

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-11 to 3-4-11, Interior(1) 3-4-11 to 4-10-4, Exterior(2R) 4-10-4 to 7-10-4, Interior(1) 7-10-4 to 14-4-10 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
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 15 except (jt=lb) 1=164, 14=337, 10=139, 11=134, 12=143, 13=124, 16=151, 17=227.
 - 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 15, 16, 17.
 - 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.



December 28,2020

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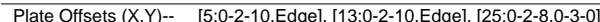
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:54 2020 Page 1
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LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-13.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SPF No.2	WEBS	1 Row at midpt 9-25, 8-26, 7-27, 6-28, 5-29, 10-24, 11-23, 12-22, 13-21

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-304/229

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-6-1, Interior(1) 3-6-1 to 8-0-5, Exterior(2R) 8-0-5 to 12-6-5, Interior(1) 12-6-5 to 23-9-4, Exterior(2R) 23-9-4 to 28-3-3, Interior(1) 28-3-3 to 31-5-10 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
- 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 25, 26, 27, 28, 29, 24, 23, 22 except (jt=lb) 1=129, 30=151, 31=134, 32=135, 20=150, 19=135, 18=135.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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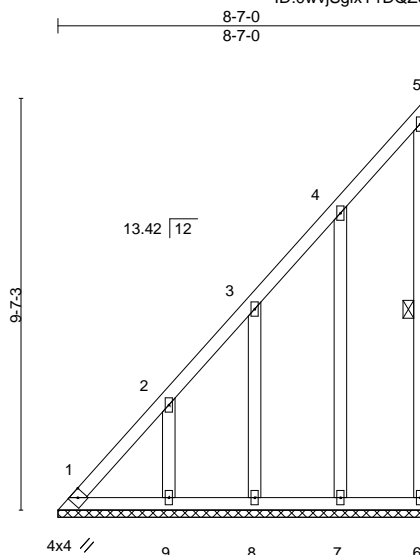
Job 2585378	Truss L5	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123460
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:55 2020 Page 1

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Scale = 1:53.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.86	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	-0.00	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
									Weight: 50 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 8-7-0.

(lb) - Max Horz 1=360(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) except 1=-140(LC 10), 6=-132(LC 11), 7=-143(LC 12), 8=-128(LC 12), 9=-166(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 6, 7, 8 except 1=293(LC 9), 9=255(LC 19)

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

TOP CHORD 1-2=-650/647, 2-3=-491/491, 3-4=-368/381

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-15 to 4-7-0, Exterior(2R) 4-7-0 to 8-5-4 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) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 140 lb uplift at joint 1, 132 lb uplift at joint 6, 143 lb uplift at joint 7, 128 lb uplift at joint 8 and 166 lb uplift at joint 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.



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01/13/2021

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

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

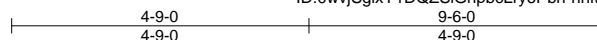
Job 2585378	Truss L6	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO I44123461
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

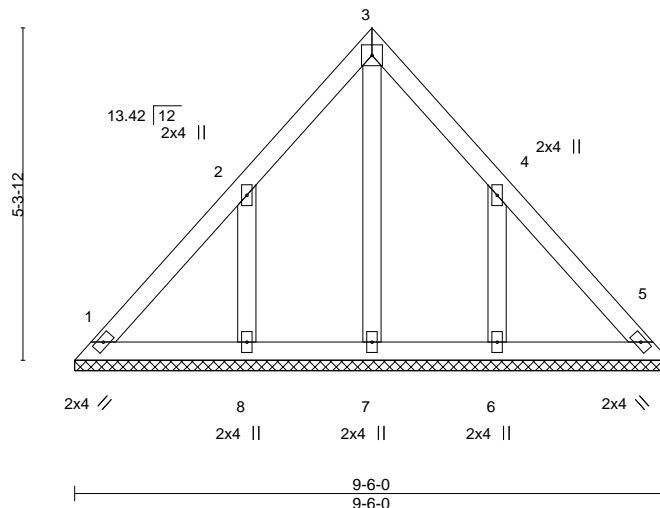
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:56 2020 Page 1

ID:0wvjSgixY1DQZSIghpbcLry6Pbn-nnMXCUIvtuM7Wvb7RGs5J_9CjNA68KZGMH_LCby67Rf



4x4 =

Scale = 1:36.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
									Weight: 37 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 9-6-0.
(lb) - Max Horz 1=133(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=182(LC 12), 6=182(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=280(LC 19), 6=280(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-256/202, 4-6=-256/202

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 4-9-0, Exterior(2R) 4-9-0 to 7-9-0, Interior(1) 7-9-0 to 9-2-2 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=182, 6=182.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 28, 2020

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
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01/13/2021

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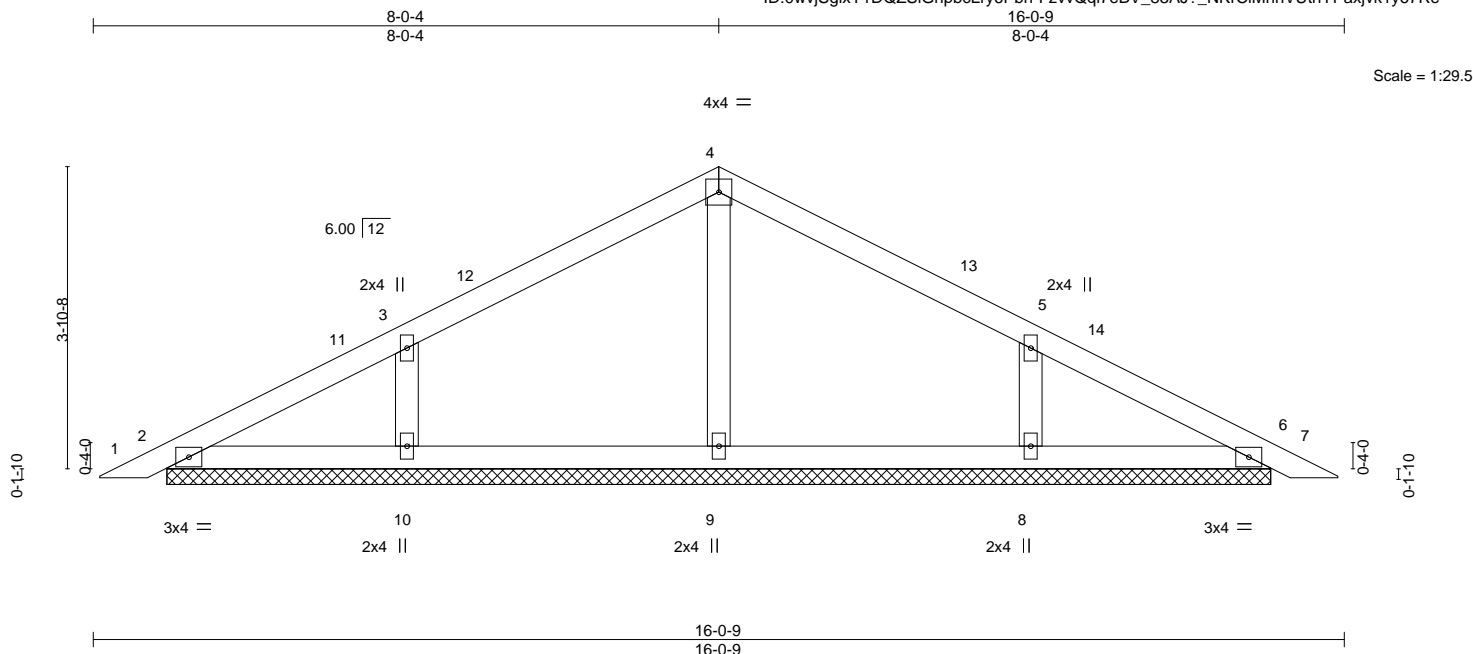
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123462
2585378	PB1	Piggyback	7	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:57 2020 Page 1
ID:0wvjSgixY1DQZSIGHpbclRy6Pbn-FzvvQqi7eBV_83AJ?_NKrCiMnnVUtnYPaxjvk1y67Re



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	0.00	6	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	0.00	7	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 43 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 14-1-14.
(lb) - Max Horz 2=67(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2 except 10=118(LC 12), 8=118(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 6, 2 except 9=312(LC 1), 10=373(LC 25), 8=373(LC 26)

FORCES.

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

WEBS

3-10=293/202, 5-8=293/202

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-11 to 3-4-11, Interior(1) 3-4-11 to 8-0-4, Exterior(2R) 8-0-4 to 11-0-4, Interior(1) 11-0-4 to 15-7-14 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2 except (jt=lb) 10=118, 8=118.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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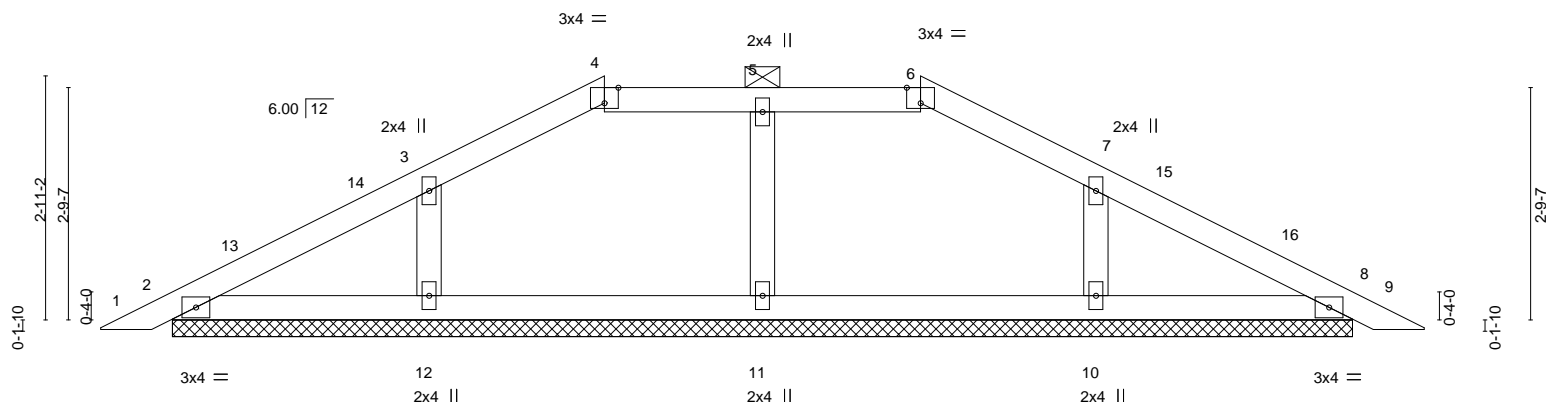
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Scale = 1:27.6



										16-0-9			
										16-0-9			
Plate Offsets (X,Y)-- [4:0-2-0,Edge], [6:0-2-0,Edge]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	0.00	9	n/r	120	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.00	9	n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	8	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 41 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 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x4 SPF No.2		

REACTIONS. All bearings 14-1-14.
(lb) - Max Horiz 2=48(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 11, 12, 10, 8, 2
Max Grav All reactions 250 lb or less at joint(s) 8, 2 except 11=292(LC 1). 12=323(LC 25). 10=323(LC 26)

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=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-11 to 3-4-11, Interior(1) 3-4-11 to 6-1-8, Exterior(2E) 6-1-8 to 9-11-0, Exterior(2R) 9-11-0 to 14-1-15, Interior(1) 14-1-15 to 15-7-14 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 12, 10, 8, 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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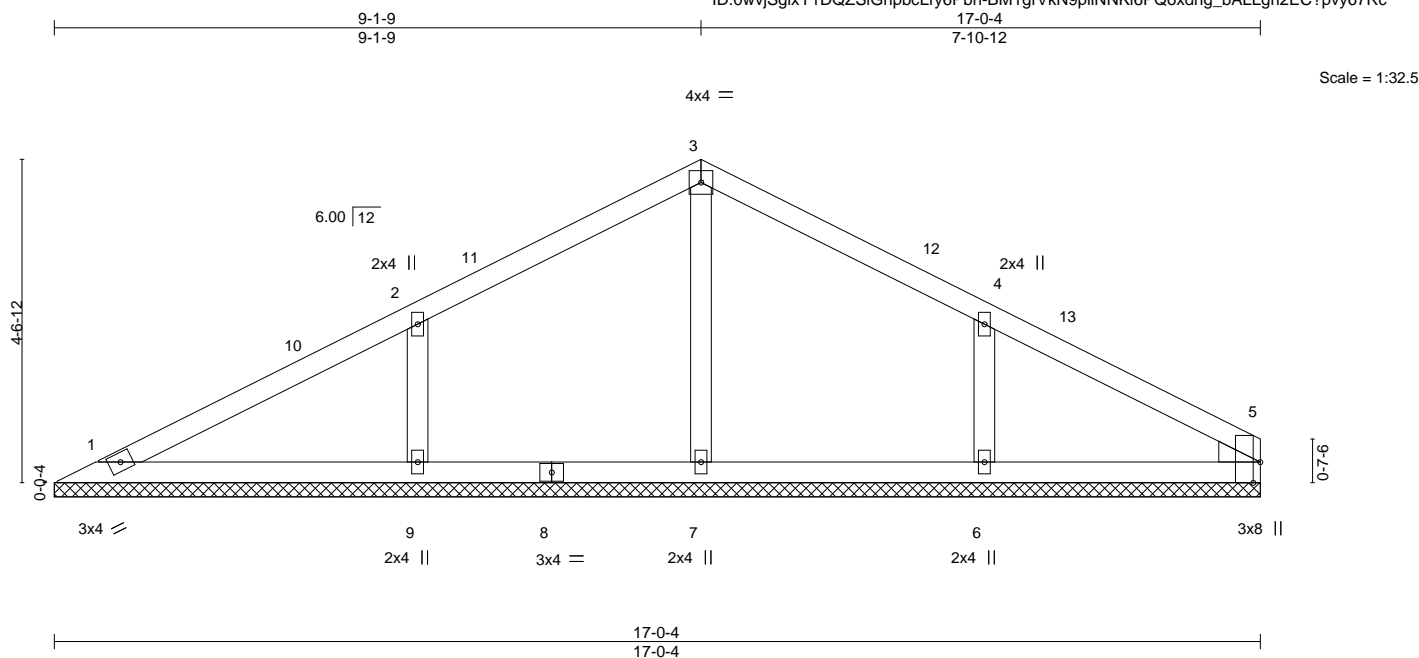


Plate Offsets (X,Y)-- [5:0-0,0,0-0], [5:0-0,0,0-4-11], [5:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 50 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

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

REACTIONS.

ONS. All bearings 17-0-4.
(lb) - Max Horz 1=75(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=143(LC 12), 6=138(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=278(LC 1), 9=463(LC 25), 6=424(LC 26)

FORCES.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-355/213. 4-6=-327/205

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 9-1-9, Exterior(2R) 9-1-9 to 12-1-9, Interior(1) 12-1-9 to 17-0-4 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=143, 6=138.
- 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.



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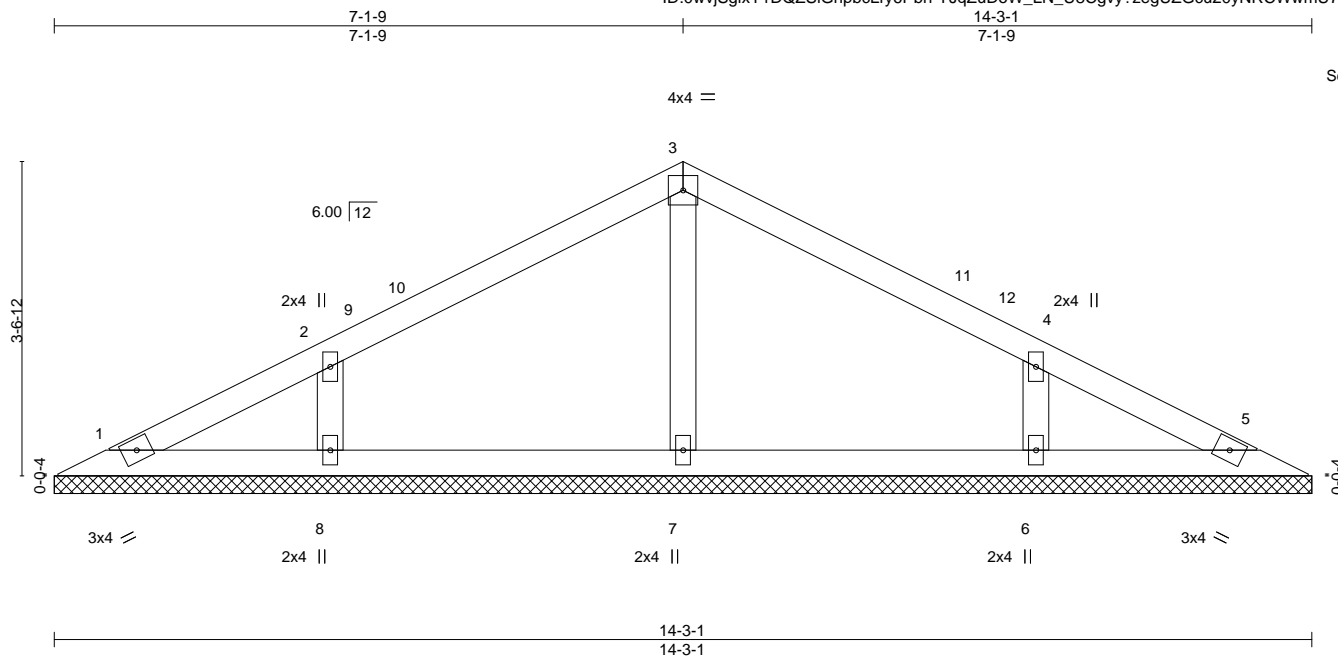
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job 2585378	Truss V2	Truss Type Valley	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123465
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:04 2020 Page 1
ID:0wvjSgixY1DQZSlGhpbclRy6Pbn-YJqZuDoW_LN_U8Cgvy?zegUZGcu20yNRCWwmU7y67RX

Scale = 1:26.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 38 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 14-3-1.
(lb) - Max Horz 1=57(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=113(LC 12), 6=113(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=319(LC 1), 8=353(LC 25), 6=353(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-281/196, 4-6=-281/196

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-1-9, Exterior(2R) 7-1-9 to 10-1-9, Interior(1) 10-1-9 to 13-7-8 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=113, 6=113.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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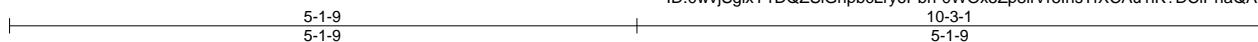
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	I44123466
2585378	V3	Valley	1	1	Job Reference (optional)	

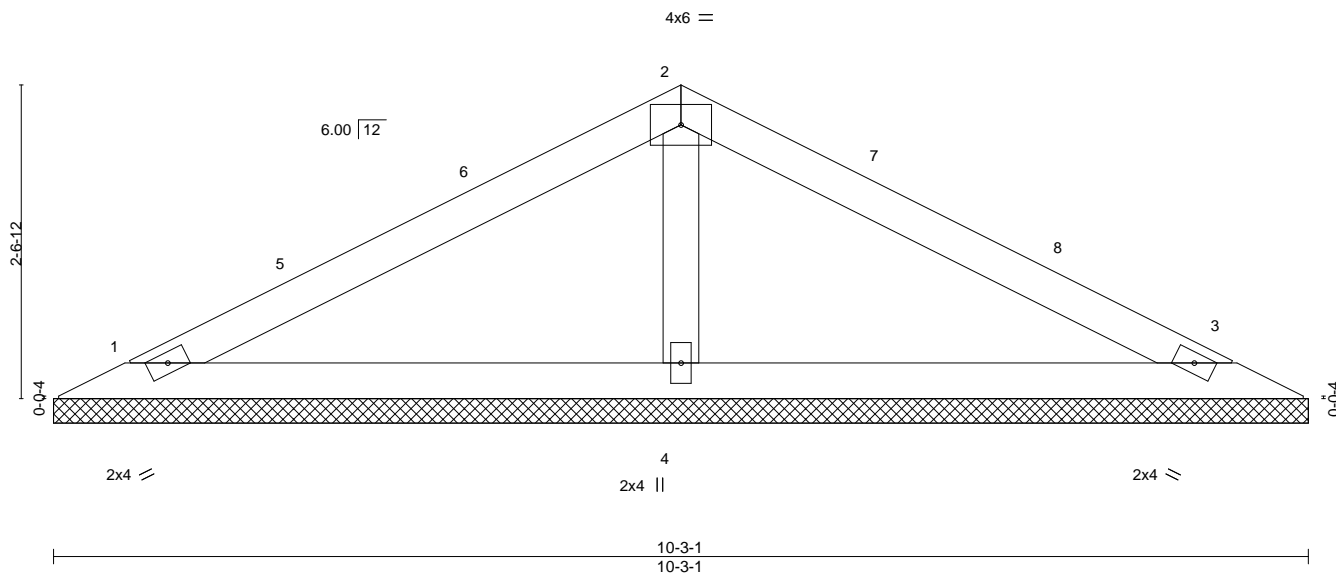
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:05 2020 Page 1

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Scale = 1:18.8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=10-3-1, 3=10-3-1, 4=10-3-1
Max Horz 1=40(LC 12)
Max Uplift 1=37(LC 12), 3=45(LC 13), 4=27(LC 12)
Max Grav 1=187(LC 25), 3=187(LC 26), 4=441(LC 1)

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

WEBS 2-4=-305/186

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-1-9, Exterior(2R) 5-1-9 to 8-1-9, Interior(1) 8-1-9 to 9-7-8 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 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.



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

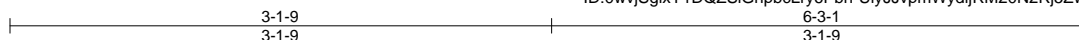
Job 2585378	Truss V4	Truss Type Valley	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123467
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Builders FirstSource (Valley Center),

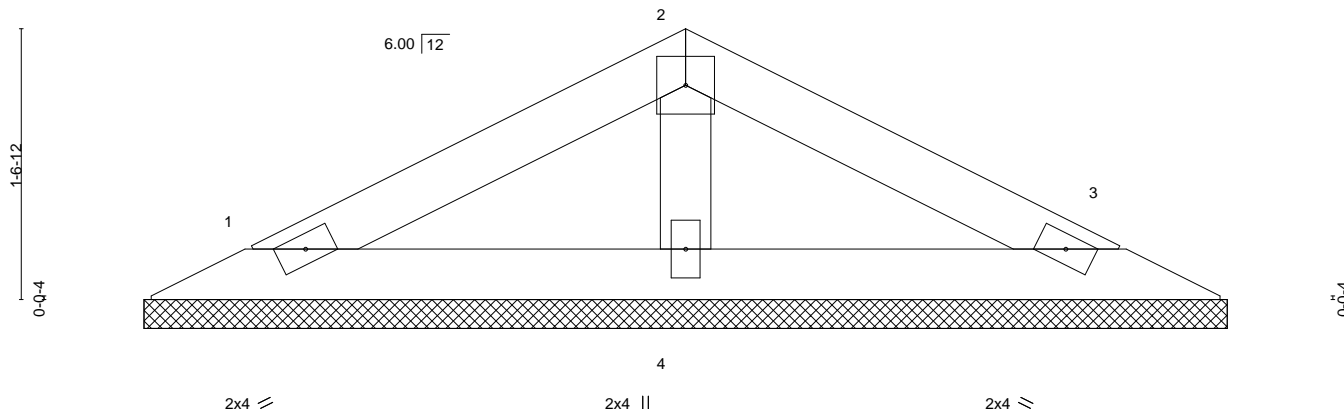
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:06 2020 Page 1

ID:0wvjSgixY1DQZSIghpbcLy6Pbn-UiyJJvpmWydijRM20N2Rj5ZwiPaEUsHkfqPtZ?y67RV



Scale = 1:13.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-3-1, 3=6-3-1, 4=6-3-1
Max Horz 1=-22(LC 13)
Max Uplift 1=-26(LC 12), 3=-30(LC 13), 4=-4(LC 12)
Max Grav 1=115(LC 1), 3=115(LC 1), 4=221(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 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.



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

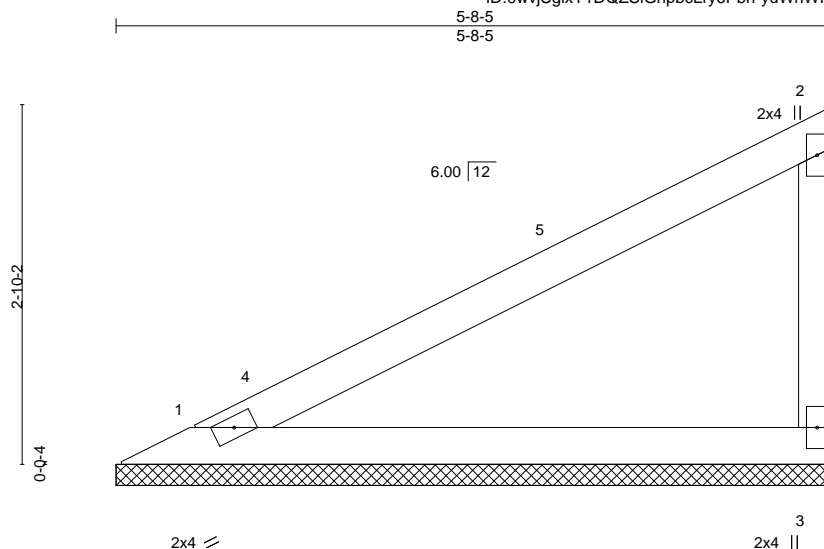
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	V5	Valley	2	1	144123468
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:07 2020 Page 1

ID:0wvjSgixY1DQZSIGhpbclry6Pbn-yuWhWFqPHGiZLbxEa4ZgFJ6?tp1NDJutuU8Q5Sy67RU



Scale = 1:18.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.47	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						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 5-8-5 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=5-8-5, 3=5-8-5

Max Horz 1=103(LC 9)

Max Uplift 1=-28(LC 12), 3=-54(LC 12)

Max Grav 1=221(LC 1), 3=221(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-6-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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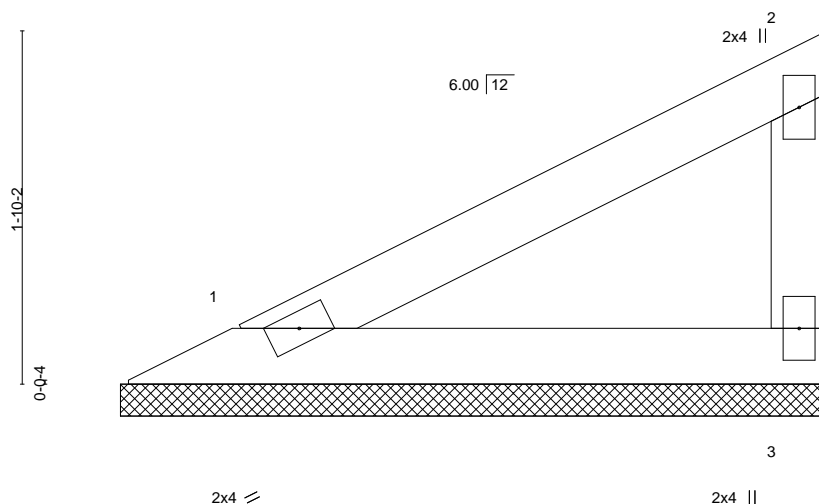
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job 2585378	Truss V6	Truss Type Valley	Qty 2	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO I44123469
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:07 2020 Page 1
ID:0wvjSgixY1DQZSIghpbCLry6Pbn-yuWhWFqPHGIZLbxEa4ZgFJ64ppv1DJutuU8Q5Sy67RU

3-8-5
3-8-5

Scale: 1"=1'



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 9 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-8-5, 3=3-8-5
Max Horz 1=61(LC 9)
Max Uplift 1=-17(LC 12), 3=-32(LC 12)
Max Grav 1=131(LC 1), 3=131(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

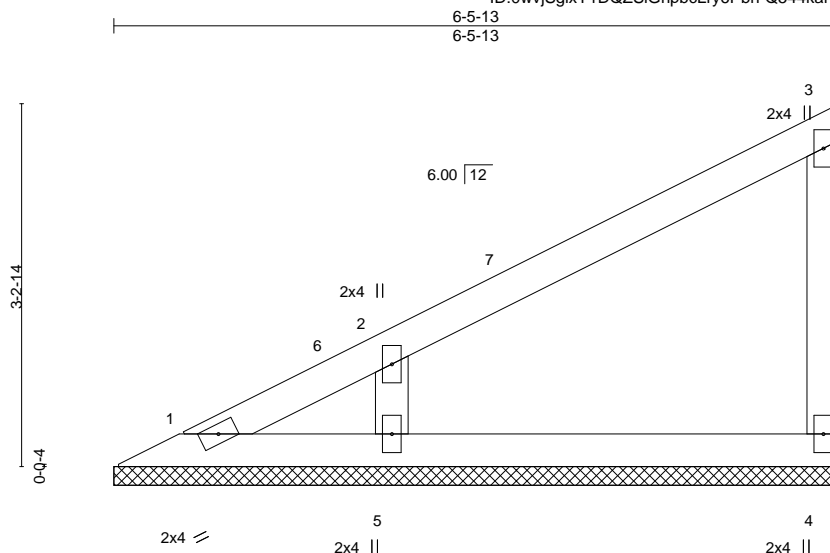
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	V9	Valley	1	1	I44123470
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:08 2020 Page 1

ID:0wvjSgixY1DQZSIghpbcLry6Pbn-Q544kar12atQyIWR8o4woWfE3DF?ymP168u_duy67RT



Scale = 1:20.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 19 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-5-13, 4=6-5-13, 5=6-5-13
Max Horz 1=119(LC 9)
Max Uplift 4=31(LC 12), 5=107(LC 12)
Max Grav 1=46(LC 9), 4=141(LC 1), 5=357(LC 1)

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

WEBS 2-5=-277/272

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-4-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=107.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 28, 2020

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DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
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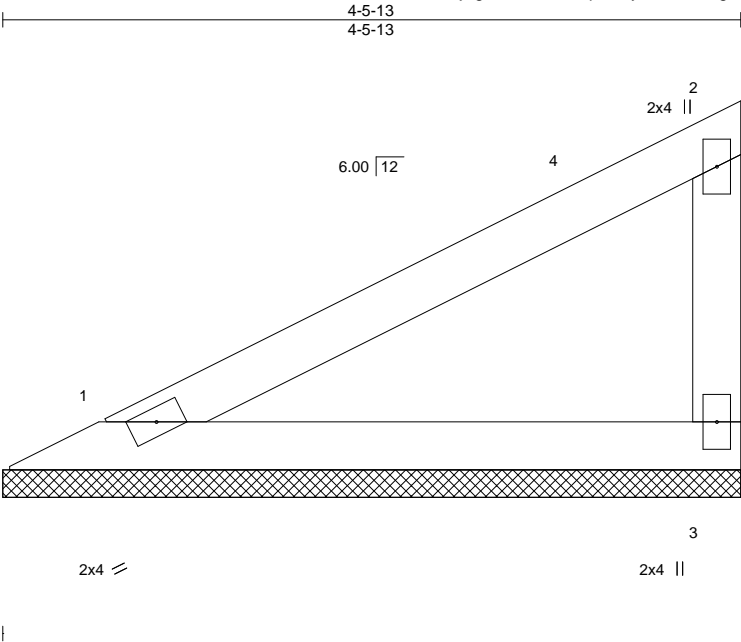
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	V10	Valley	1	1	144123471
Job Reference (optional)					

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:21:59 2020 Page 1

ID:0wvjSgixY1DQZSiGhpbCLry6Pbn-BM1grVKn9pliNNKi6PQoxdnhFbAILhvi2EC?pyv67Rc



Scale = 1:14.0

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 12 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied or 4-5-13 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) 1=4-5-13, 3=4-5-13
Max Horz 1=77(LC 9)
Max Uplift 1=-21(LC 12), 3=-41(LC 12)
Max Grav 1=167(LC 1), 3=167(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-4-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Gable requires continuous bottom chord bearing.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

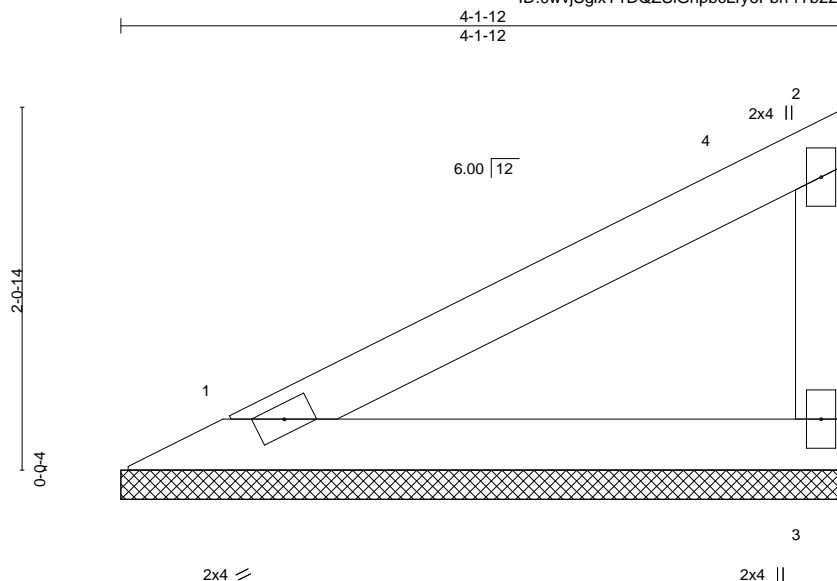
Job 2585378	Truss V11	Truss Type Valley	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123472
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:00 2020 Page 1

ID:0wvjSgixY1DQZSIghpbCLry6Pbn-fYb2rl0w6tZ?Wuug6x1TqJsi_Ww489rHuyZLMy67Rb



Scale = 1:13.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						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 4-1-12 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=4-1-12, 3=4-1-12

Max Horz 1=70(LC 9)

Max Uplift 1=-19(LC 12), 3=-37(LC 12)

Max Grav 1=152(LC 1), 3=152(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-0-0 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 28, 2020

RELEASE FOR

CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
16023 Swingley Ridge Rd
Chesterfield, MO 63017
01/13/2021

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

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

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

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

Job 2585378	Truss V12	Truss Type Valley	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123473
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Builders FirstSource (Valley Center),

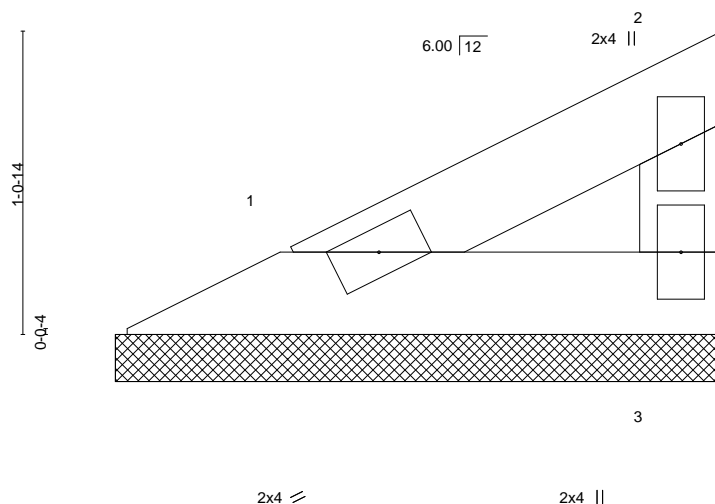
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:01 2020 Page 1

ID:0wvjSgixY1DQZSIghpbclRy6Pbn-7k9QGBlehQ?QdgT5EpSG02s4D0tfpbP?VYh6toy67Ra

2-1-12
2-1-12

Scale = 1:8.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 5 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-1-12 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=2-1-12, 3=2-1-12

Max Horz 1=29(LC 9)

Max Uplift 1=8(LC 12), 3=15(LC 12)

Max Grav 1=62(LC 1), 3=62(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

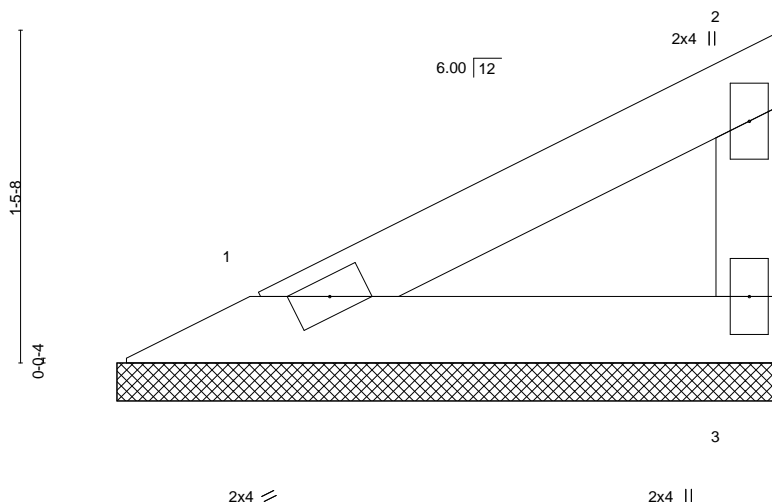
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job 2585378	Truss V13	Truss Type Valley	Qty 1	Ply 1	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO 144123474
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

ID:0wvjSgixY1DQZSIghpbcLry6Pbn-bxjoTXmGsk7GEq2HnXzVYFPEDoDUY2e8kCRfQEY67RZ
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:02 2020 Page 1

2-11-0
2-11-0

Scale = 1:10.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 7 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=2-11-0, 3=2-11-0
Max Horz 1=45(LC 9)
Max Uplift 1=12(LC 12), 3=24(LC 12)
Max Grav 1=96(LC 1), 3=96(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

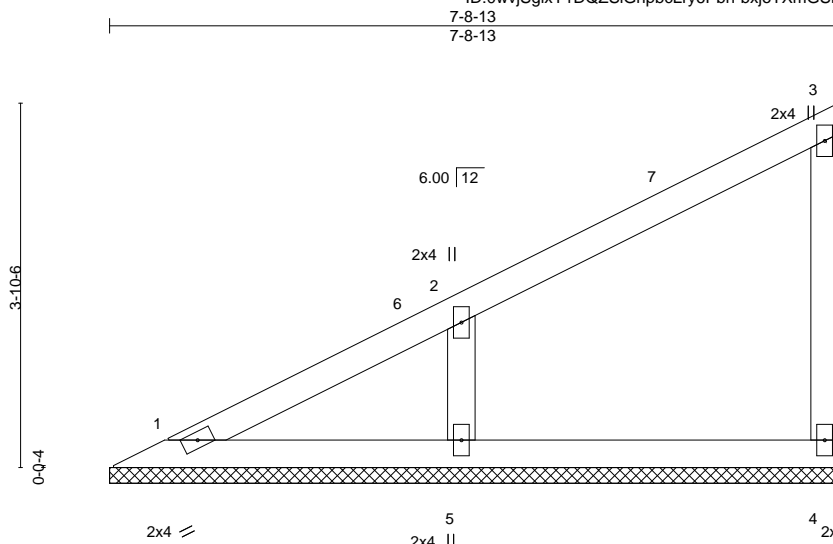
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO
2585378	V14	Valley	1	1	144123475
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:02 2020 Page 1

ID:0wvjSgixY1DQZSIghpbcLry6Pbn-bxjoTXmGsk7GEq2HnXzVYFPCFoCVY2w8kCRfQEY67RZ



Scale = 1:24.4

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-8-13, 4=7-8-13, 5=7-8-13
Max Horz 1=145(LC 9)
Max Uplift 4=26(LC 9), 5=111(LC 12)
Max Grav 1=104(LC 20), 4=137(LC 1), 5=395(LC 1)

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

TOP CHORD 1-2=-250/156
WEBS 2-5=-307/264

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-8-13, Interior(1) 3-8-13 to 7-7-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=111.
- 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.



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

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

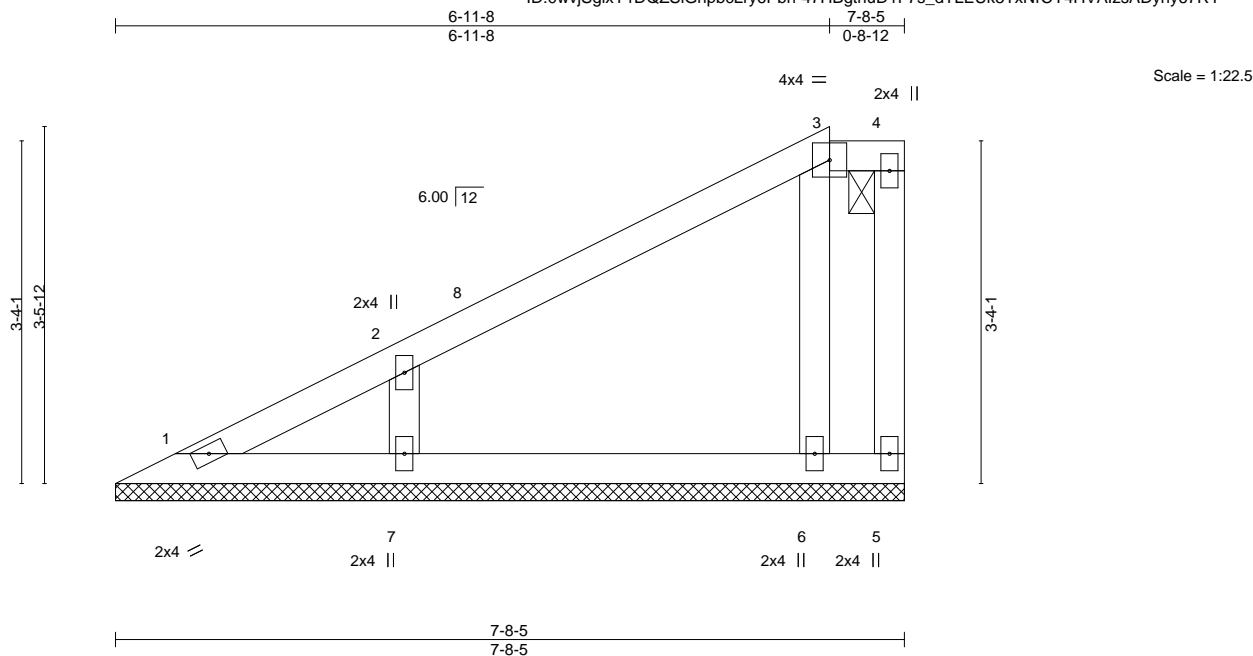
Job	Truss	Truss Type	Qty	Ply	SUMMIT/PIKEWOOD CRAFTSMAN #70/MO	144123476
2585378	V15	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Dec 23 09:22:03 2020 Page 1

ID:0wvjSgixY1DQZSIghpbclRy6Pbn-47HBgtuD1F7s_dTLEUK5TxNrCY4HVAIzsADyhy67RY



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-8-5, 5=7-8-5, 6=7-8-5, 7=7-8-5
Max Horz 1=126(LC 9)
Max Uplift 5=47(LC 3), 6=6(LC 9), 7=123(LC 12)
Max Grav 1=58(LC 20), 6=223(LC 1), 7=372(LC 1)

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

WEBS 2-7=-300/262

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-7 to 3-7-7, Interior(1) 3-7-7 to 6-11-8, Exterior(2E) 6-11-8 to 7-6-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6 except (jt=lb) 7=123.
- 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.



December 28, 2020

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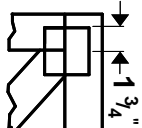
CONSTRUCTION
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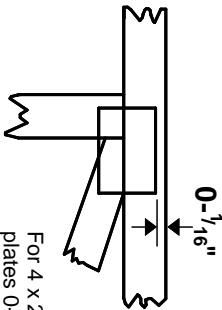
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Symbols

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- 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

4 X 4

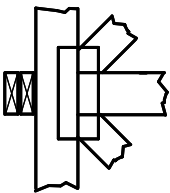
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



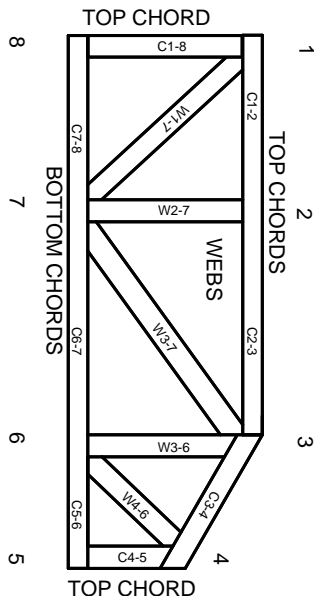
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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