



RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS BY OWNER  
UNDESIGNED DETAILS  
LET'S SUMMIT, MISSOURI

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

Re: 3016946  
SUMMIT/COBEY CREEK #13/MO

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: I49258143 thru I49258225

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

Missouri COA: Engineering 001193



December 16, 2021


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.

**Continued on page 2**

**ANSI/TPI1-19** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	A01	Hip Girder	1	3	Job Reference (optional)

I49258143

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:16 2021 Page 2  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-eBAQQLJfB\_Xv2c5h?rlwI0zE0p684Ut?NAbnDGy91hf

**NOTES-**

- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 953 lb uplift at joint 13 and 950 lb uplift at joint 2.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 5-0-0 from the left end to connect truss(es) to back face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 178 lb down and 67 lb up at 39-0-0 on top chord, and 72 lb down and 33 lb up at 24-9-4, 72 lb down and 33 lb up at 27-0-0, 72 lb down and 33 lb up at 29-3-1, 72 lb down and 33 lb up at 31-0-0, 72 lb down and 33 lb up at 33-0-0, 72 lb down and 33 lb up at 35-0-0, and 72 lb down and 33 lb up at 37-0-0, and 353 lb down and 112 lb up at 41-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-4=-70, 4-12=-70, 12-13=-70, 22-34=-20, 22-23=-20, 14-21=-20, 14-31=-20, 21-22=-20
  - Concentrated Loads (lb)
    - Vert: 18=-72 27=-79(B) 22=-80(B) 10=-89(B) 19=-72 16=-13(B) 23=-72 38=-81(B) 39=-81(B) 40=-81(B) 41=-81(B) 42=-81(B) 43=-81(B) 44=-81(B) 45=-81(B) 46=-89(B) 47=-89(B) 48=-89(B) 49=-89(B) 50=-89(B) 51=-89(B) 52=-145(B) 54=-343(B) 55=-80(B) 56=-80(B) 57=-80(B) 58=-80(B) 59=-80(B) 60=-80(B) 61=-80(B) 62=-72 63=-72 64=-72 65=-72 66=-353(B)

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258144
3016946	A02	Hip	1	1	Job Reference (optional)	

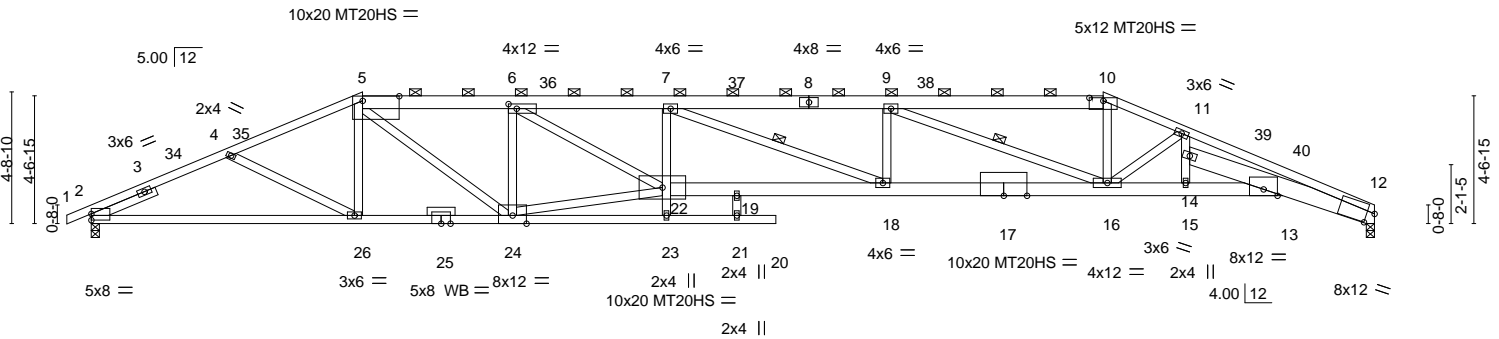
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:19 2021 Page 1

ID:tnOHGeVPJTyi41JASwyTKzhfUX-2mrZ2MMXUvUv3qGgzrdvfbk\_18OHjUR38qSqby91hc

0-10-8	5-0-2	9-8-11	15-1-3	17-1-10	20-7-7	24-6-8	28-6-4	30-4-14	36-3-5	39-2-12	42-8-8	46-0-0
0-10-8	5-0-2	4-8-10	5-4-8	2-0-6	3-5-13	3-11-1	3-11-12	1-10-10	5-10-6	2-11-7	3-5-12	3-3-8

Scale = 1:82.6



	9-8-11	15-1-3	17-1-10	20-7-7	22-11-15	24-6-8	28-6-4	30-4-14	36-3-5	39-2-12	42-8-8	46-0-0
	9-8-11	5-4-8	2-0-6	3-5-13	2-4-8	1-6-9	3-11-12	1-10-10	5-10-6	2-11-7	3-5-12	3-3-8
Plate Offsets (X,Y)--	[2:0-0-0,0-2-11], [5:1-3-12,0-2-0], [6:0-3-8,0-2-0], [10:0-6-0,0-1-5], [12:0-3-3,0-4-14]											

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.99	Vert(LL)	-0.80	20	>686	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-1.51	20	>366	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.43	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 243 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
5-8: 2x6 SPF No.2, 10-12: 2x4 SPF 1650F 1.5E  
8-10: 2x6 SP 2400F 2.0E  
BOT CHORD 2x6 SPF 2100F 1.8E \*Except\*  
2-25: 2x4 SPF 1650F 1.5E, 12-14: 2x8 SP 2400F 2.0E  
20-25: 2x4 SPF No.2  
WEBS 2x4 SPF No.2 \*Except\*  
22-24: 2x4 SPF 1650F 1.5E  
OTHERS 2x4 SPF No.2  
SLIDER Left 2x4 SPF No.2 2-6-0

#### REACTIONS.

(size) 12=0-3-8, 2=0-3-8  
Max Horz 2=72(LC 16)  
Max Uplift 12=273(LC 13), 2=291(LC 12)  
Max Grav 12=2084(LC 1), 2=2145(LC 1)

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

TOP CHORD 2-4=-4127/597, 4-5=-4049/605, 5-6=-5046/814, 6-7=-7481/1176, 7-9=-7381/1151,  
9-10=-4931/741, 10-11=-5402/795, 11-12=-6270/865  
BOT CHORD 2-26=-528/3717, 24-26=-487/3726, 19-22=-1094/7545, 18-19=-1094/7547,  
16-18=-1052/7381, 15-16=-742/5748, 13-15=-744/5741, 12-13=-735/5669  
WEBS 4-26=-16/257, 10-16=-192/1680, 7-22=-447/160, 6-24=-1860/357, 5-24=-310/1793,  
22-24=-710/4969, 6-22=-413/2755, 9-18=-12/451, 9-16=-2757/457, 7-18=-321/235,  
11-14=-77/719, 11-16=-934/191

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-8-11, Interior(1) 3-8-11 to 9-8-11, Exterior(2R) 9-8-11 to 16-2-12, Interior(1) 16-2-12 to 36-3-5, Exterior(2R) 36-3-5 to 42-9-6, Interior(1) 42-9-6 to 46-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 273 lb uplift at joint 12 and 291 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.

Continued on page 2

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

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

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

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



December 16, 2021



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	A02	Hip	1	1	I49258144

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:19 2021 Page 2  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-2mrZ2MMXUvvUv3qGgzrdvfbk\_18OHjUR38qSqby91hc

- NOTES-**
- 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.

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	149258145
3016946	A03	Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:21 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-?9zJT2No?W9C8NzfOot5\_4h7wqp6lc6kWSJYuUy91ha

0-10-8	6-2-8	12-1-8	18-4-0	24-6-8	29-2-8	33-10-8	38-3-8	42-8-8	46-0-0
0-10-8	6-2-8	5-11-0	6-2-8	6-2-8	4-8-0	4-8-0	4-5-0	4-5-0	3-3-8

Scale = 1:82.7

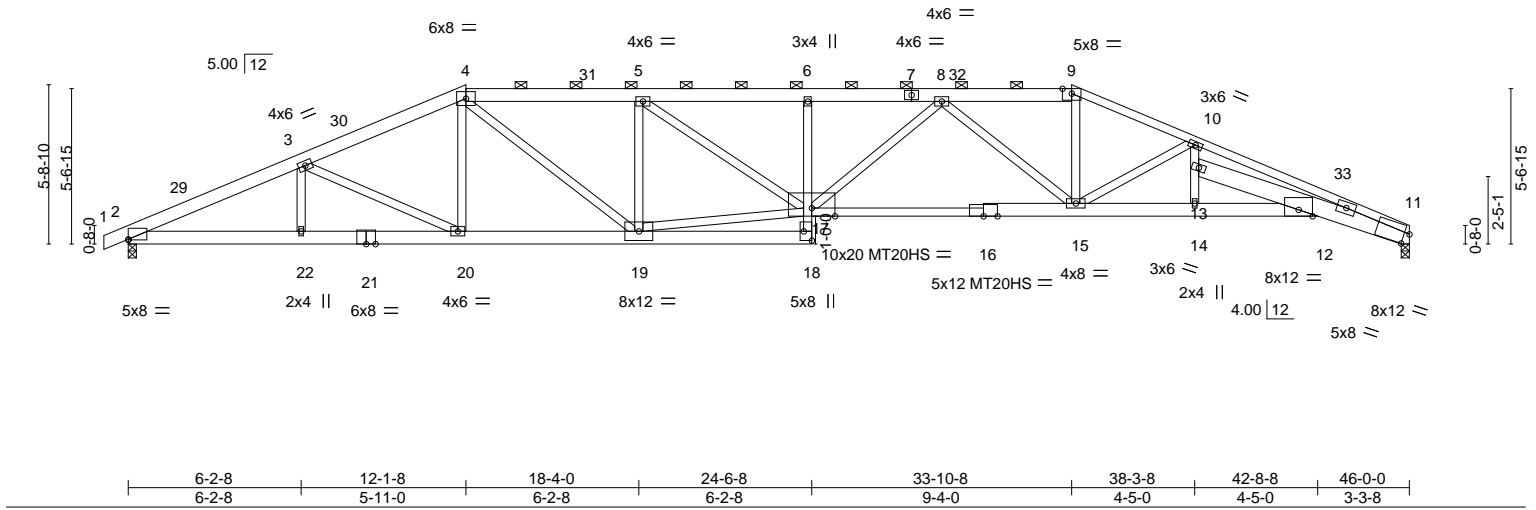


Plate Offsets (X,Y)-- [2:0-0-0,0-0-4], [11:0-2-3,0-4-14], [18:Edge,0-3-8]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.77	Vert(LL)	-0.56 15-17	>988	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-1.06 15-17	>519	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.99	Horz(CT)	0.37 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 252 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SPF No.2 \*Except\*  
9-11: 2x4 SPF 1650F 1.5E  
BOT CHORD 2x6 SPF No.2 \*Except\*  
6-18: 2x4 SPF No.2, 16-17: 2x4 SPF 1650F 1.5E  
11-13: 2x8 SP 2400F 2.0E, 12-16: 2x6 SPF 2100F 1.8E  
WEBS 2x4 SPF No.2

#### REACTIONS.

(size) 11=0-3-8, 2=0-3-8  
Max Horz 2=92(LC 12)  
Max Uplift 11=-245(LC 9), 2=-269(LC 8)  
Max Grav 11=2069(LC 1), 2=2132(LC 1)

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

TOP CHORD 2-3=-4378/561, 3-4=-3973/586, 4-5=-4472/712, 5-6=-5603/867, 6-8=-5660/871,  
8-9=-4329/618, 9-10=-4779/660, 10-11=-5935/778  
BOT CHORD 2-22=-480/3955, 20-22=-480/3955, 19-20=-447/3626, 18-19=-95/518, 6-17=-378/131,  
15-17=-696/5251, 14-15=-656/5425, 12-14=-656/5406, 11-12=-651/5340  
WEBS 3-20=-373/176, 4-20=-29/380, 4-19=-208/1246, 5-19=-1281/276, 8-17=-76/665,  
8-15=-1335/285, 9-15=-177/1578, 10-15=-1212/246, 10-13=-68/709, 17-19=-512/4025,  
5-17=-190/1371

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-1-8, Exterior(2R) 12-1-8 to 16-4-7, Interior(1) 16-4-7 to 33-10-8, Exterior(2R) 33-10-8 to 38-3-12, Interior(1) 38-3-12 to 46-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 245 lb uplift at joint 11 and 269 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258146
3016946	A04	Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:23 2021 Page 1

ID:tnOHGeVPJT41JASwyTKzhfUX-xY53ukP2X7PwOg71vpwZ4VmrWeUJDYJ1\_mofzMy91hY

-0-10-8	7-4-14	14-6-5	19-6-6	24-6-8	31-5-11	37-1-2	42-8-8	46-0-0
0-10-8	7-4-14	7-1-6	5-0-2	5-0-2	6-11-3	5-7-6	5-7-6	3-3-8

Scale = 1:84.1

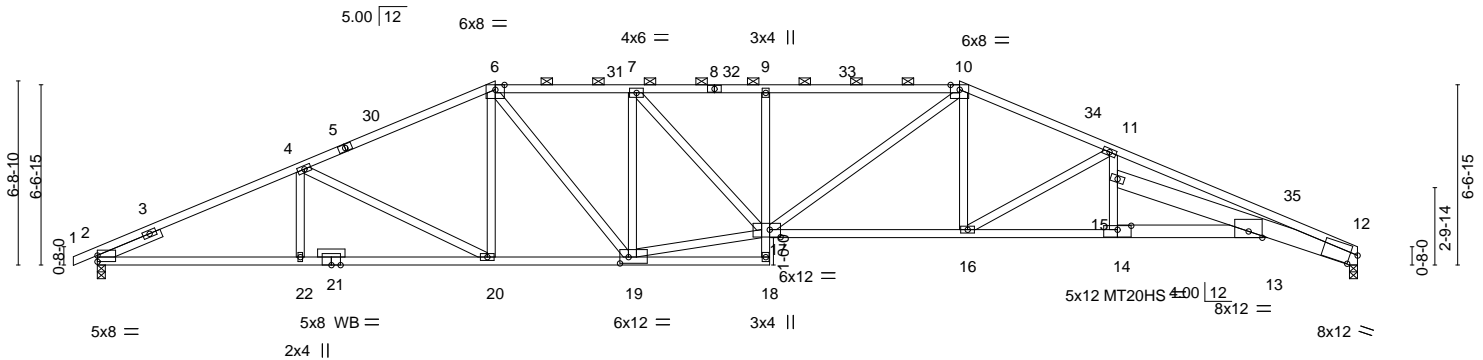


Plate Offsets (X,Y)--	[2:0-0-0,0-2-11], [12:0-3-3,0-4-14], [14:0-6-0,0-1-12], [17:0-4-12,0-3-4], [19:0-3-12,0-2-12]
-----------------------	---

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.93	Vert(LL) -0.57	16-17	>963	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 1.00	Vert(CT) -1.08	16-17	>510	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.88	Horz(CT) 0.41	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 222 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E \*Except\*  
6-8: 2x4 SPF No.2  
BOT CHORD 2x4 SPF 1650F 1.5E \*Except\*  
9-18,18-21: 2x4 SPF No.2, 12-15: 2x8 SP 2400F 2.0E  
13-14: 2x6 SPF 2100F 1.8E  
WEBS 2x4 SPF No.2  
OTHERS 2x4 SPF No.2  
SLIDER Left 2x4 SPF No.2 2-6-0

#### BRACING-

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

#### REACTIONS.

(size) 12=0-3-8, 2=0-3-8  
Max Horz 2=105(LC 12)  
Max Uplift 12=276(LC 13), 2=293(LC 12)  
Max Grav 12=2069(LC 1), 2=2132(LC 1)

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

TOP CHORD 2-4=-4145/555, 4-6=-3645/503, 6-7=-3710/562, 7-9=-4495/655, 9-10=-4539/664,  
10-11=-4298/576, 11-12=-5463/704  
BOT CHORD 2-22=-530/3743, 20-22=-530/3743, 19-20=-358/3283, 9-17=-494/166, 16-17=-394/3892,  
14-16=-539/4935, 13-14=-530/4914, 12-13=-556/4870  
WEBS 4-20=-531/190, 6-20=-35/412, 6-19=-136/858, 7-19=-1224/225, 17-19=-383/3574,  
7-17=-185/1157, 10-17=-175/1002, 10-16=-67/719, 11-16=-1174/258, 11-15=-28/584

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-6-5, Exterior(2R) 14-6-5 to 18-9-3, Interior(1) 18-9-3 to 31-5-11, Exterior(2R) 31-5-11 to 35-8-10, Interior(1) 35-8-10 to 46-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 276 lb uplift at joint 12 and 293 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.



December 16, 2021

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

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/COBEY CREEK #13/MO	149258147
3016946	A05	Hip	1	1	Job Reference (optional)	

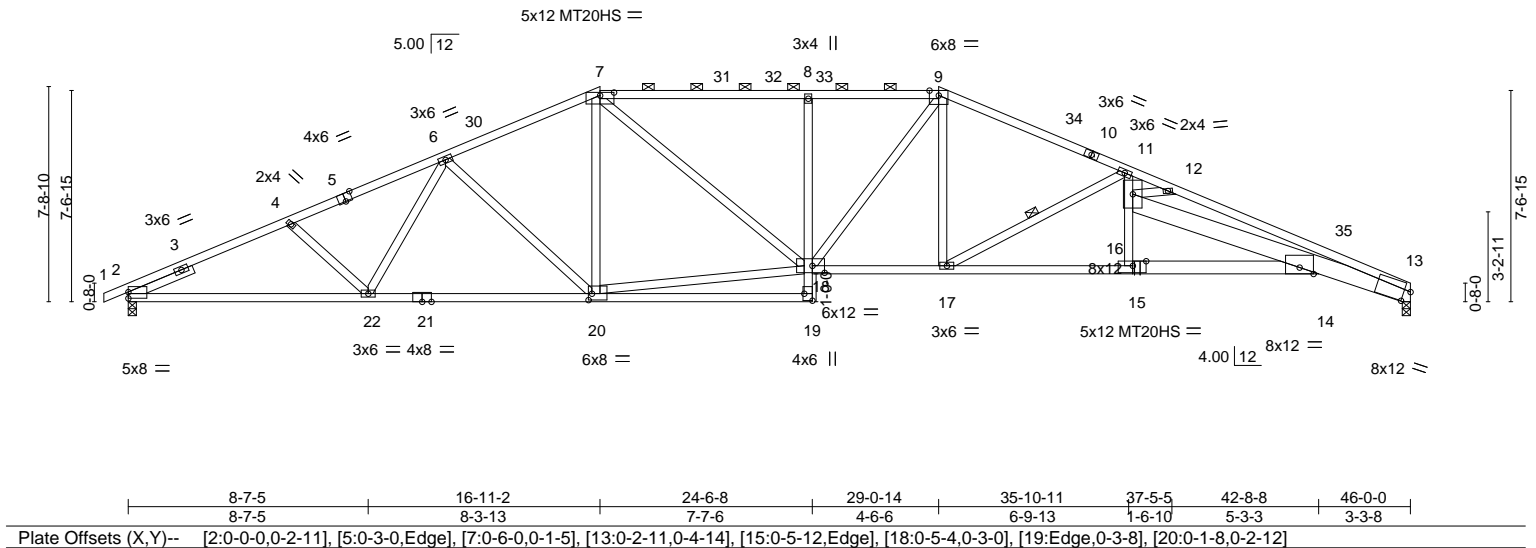
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:27 2021 Page 1

ID:tnOHGeVPJTy41JASwyTKzhfUX-pJKak5SZbMvLslRp8f\_VELw65Fs29P3dvNmt67y91hU

0-10-8	5-10-1	11-4-9	16-11-2	24-6-8	29-0-14	35-10-11	37-5-5	42-8-8	46-0-0
0-10-8	5-10-1	5-6-9	5-6-9	7-7-6	4-6-6	6-9-13	1-6-10	5-3-3	3-3-8

Scale = 1:82.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.92	Vert(LL) -0.52	17-18	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.95	Vert(CT) -0.94	17-18	>587	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.70	Horz(CT) 0.39	13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 229 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E \*Except\*  
5-7: 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2 \*Except\*  
2-21,15-18: 2x4 SPF 1650F 1.5E, 13-16: 2x8 SP 2400F 2.0E  
14-15: 2x6 SPF 2100F 1.8E  
WEBS 2x4 SPF No.2  
SLIDER Left 2x4 SPF No.2 2-6-0

REACTIONS. (size) 2=0-3-8, 13=0-3-8  
Max Horz 2=121(LC 16)  
Max Uplift 2=290(LC 12), 13=273(LC 13)  
Max Grav 2=2132(LC 1), 13=2069(LC 1)

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

TOP CHORD 2-4=4140/567, 4-6=3963/536, 6-7=3388/459, 7-8=3797/522, 8-9=3798/520,  
9-11=3909/496, 11-12=5070/658, 12-13=5736/791  
BOT CHORD 2-22=567/3734, 20-22=451/3494, 8-18=546/177, 17-18=280/3521, 15-17=468/4630,  
14-15=466/4637, 14-16=193/758, 13-14=647/5143  
WEBS 6-22=28/330, 6-20=603/198, 7-20=27/334, 18-20=320/2858, 7-18=182/1084,  
9-18=145/679, 9-17=76/726, 11-17=1239/270, 15-16=0/304, 11-16=83/853,  
12-16=641/175

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-11-2, Exterior(2R) 16-11-2 to 21-2-0, Interior(1) 21-2-0 to 29-0-14, Exterior(2R) 29-0-14 to 33-3-13, Interior(1) 33-3-13 to 46-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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 290 lb uplift at joint 2 and 273 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.

**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



December 16,2021



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258148
3016946	B01	Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:29 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-miSK9nTp7z936bbBG31zJm0UA3ZNdG3vMhFzA0y91hS

5-9-11	11-3-14	18-8-2	24-0-4	29-4-6	34-8-8	38-0-0	38-10-8
5-9-11	5-6-3	7-4-3	5-4-2	5-4-2	5-4-2	3-3-8	0-10-8

Scale = 1:67.5

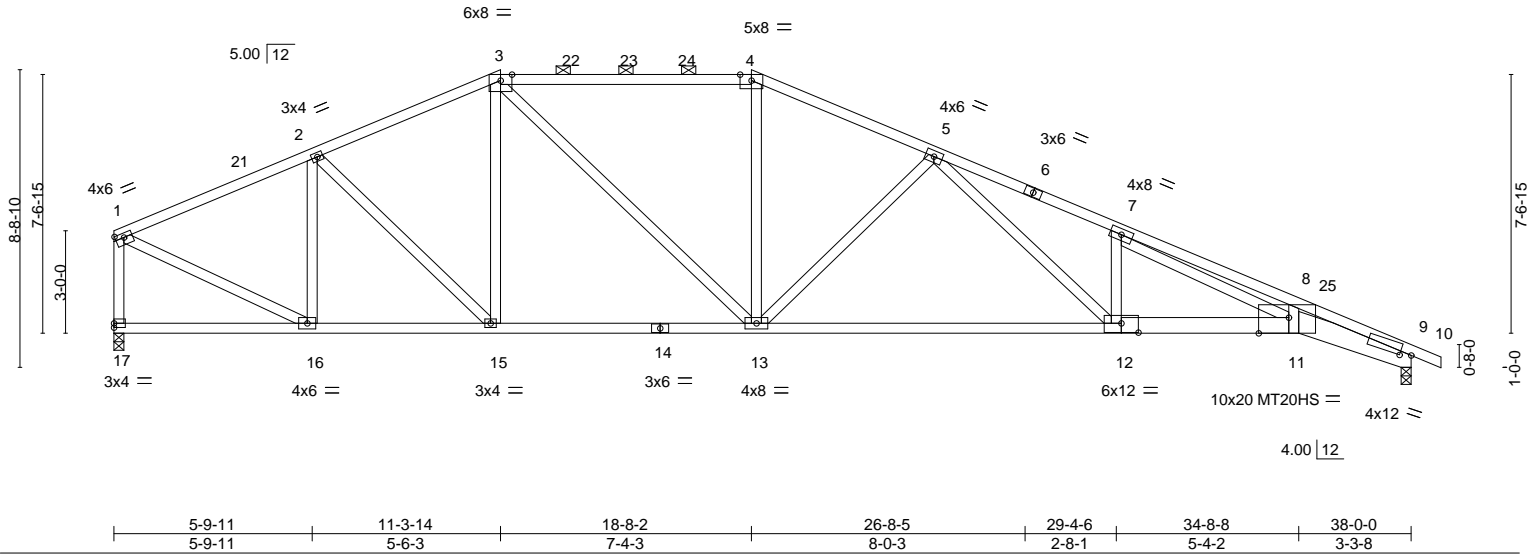


Plate Offsets (X,Y)-- [1:0-3-0,0-1-8], [9:0-3-15,0-1-2], [11:0-10-10,Edge], [12:0-6-0,0-3-4]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.82	Vert(LL) -0.38	11-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.75	12-13	>603	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.86	Horz(CT) 0.23	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 179 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2 *Except* 3-4,6-10: 2x4 SPF 1650F 1.5E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-2-12 max.): 3-4.
BOT CHORD 2x4 SPF No.2 *Except* 9-11: 2x8 SP 2400F 2.0E, 11-12: 2x6 SPF 2100F 1.8E 12-14: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	

**REACTIONS.** (size) 17=0-3-8, 9=0-3-8  
Max Horz 17=-159(LC 13)  
Max Uplift 17=-190(LC 12), 9=-267(LC 13)  
Max Grav 17=1703(LC 1), 9=1765(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1853/273, 2-3=-2076/340, 3-4=-2246/379, 4-5=-2497/379, 5-7=-4432/687,  
7-8=-6041/921, 8-9=-6107/866, 1-17=-1643/237  
BOT CHORD 15-16=-140/1645, 13-15=-95/1861, 12-13=-258/2898, 11-12=-436/4006, 9-11=-754/5656  
WEBS 2-16=-670/142, 2-15=-40/429, 3-13=-151/665, 4-13=-9/483, 5-13=-908/258,  
1-16=-207/1766, 7-12=-690/226, 5-12=-249/1540, 7-11=-351/1770

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-11-6, Interior(1) 3-11-6 to 11-3-14, Exterior(2R) 11-3-14 to 16-8-6, Interior(1) 16-8-6 to 18-8-2, Exterior(2R) 18-8-2 to 24-0-4, Interior(1) 24-0-4 to 38-10-8 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.
  - Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 17 and 267 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.



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258149
3016946	B02	Hip	1	1	Job Reference (optional)	

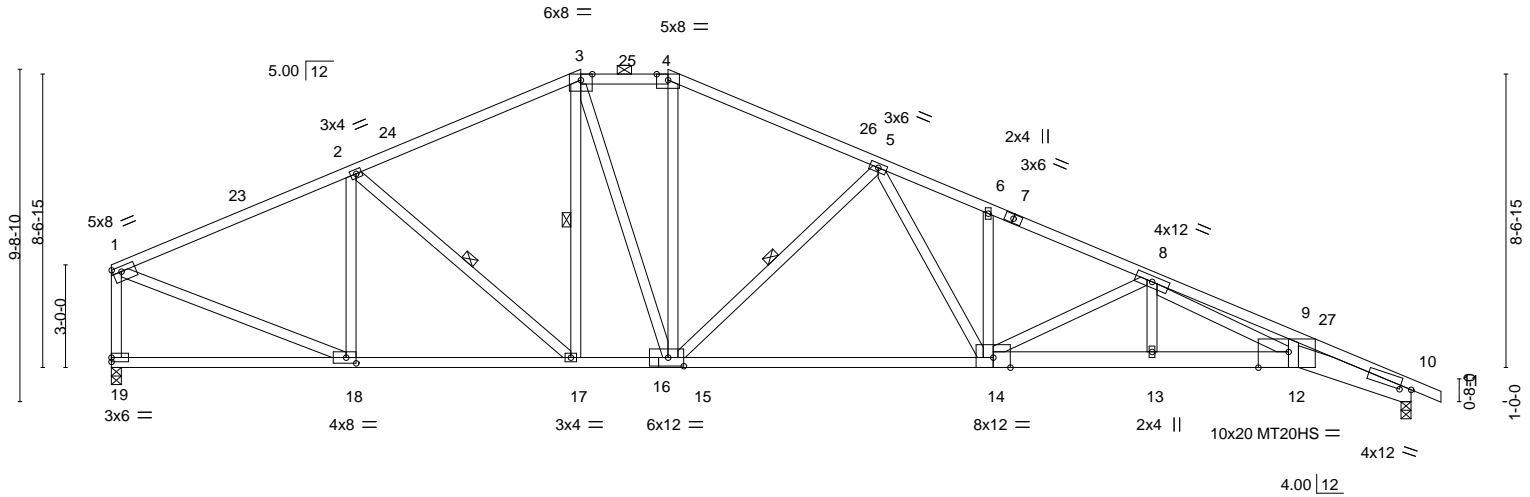
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:32 2021 Page 1

ID:tnOHGeVPJTty41JASwyTKzhfUX-AG8TnpWhQuYez3JmxCagxOe0nGa0qgwM2fTenLy91hP

7-0-2	13-8-11	16-3-5	22-5-1	25-5-14	28-6-12	30-5-2	34-8-8	38-0-0	38-10-8
7-0-2	6-8-10	2-6-10	6-1-12	3-0-14	3-0-14	1-10-6	4-3-6	3-3-8	0-10-8

Scale = 1:67.4



7-0-2	13-8-11	16-3-5	25-5-14	30-5-2	34-8-8	38-0-0
7-0-2	6-8-10	2-6-10	9-2-10	4-11-4	4-3-6	3-3-8

Plate Offsets (X,Y)-- [1:0-3-0,0-1-12], [10:0-3-15,0-1-2], [12:0-10-10,Edge], [16:0-5-8,0-3-0], [18:0-3-8,0-2-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.32	14-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.84	Vert(CT) -0.67	14-15	>675	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.66	Horz(CT) 0.21	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 194 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 7-11: 2x4 SPF 1650F 1.5E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-0-0 max.): 3-4.
BOT CHORD 2x4 SPF No.2 *Except* 10-12: 2x8 SP 2400F 2.0E, 12-14: 2x6 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 2-17, 3-17, 5-15

**REACTIONS.** (size) 19=0-3-8, 10=0-3-8  
Max Horz 19=-175(LC 13)  
Max Uplift 19=-187(LC 12), 10=-264(LC 13)  
Max Grav 19=1703(LC 1), 10=1765(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-2004/278, 2-3=-2038/332, 3-4=-1922/340, 4-5=-2168/343, 5-6=-3486/542,  
6-8=-3534/487, 8-9=-6037/871, 9-10=-6135/832, 1-19=-1635/232  
BOT CHORD 17-18=-156/1775, 15-17=-67/1794, 14-15=-195/2683, 13-14=-522/4374, 12-13=-522/4379,  
10-12=-719/5677  
WEBS 2-18=-541/141, 3-15=-130/581, 4-15=-57/488, 5-15=-1051/274, 5-14=-164/1031,  
1-18=-200/1831, 8-13=-40/485, 8-14=-1349/285, 8-12=-214/1380

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-11-6, Interior(1) 3-11-6 to 13-8-11, Exterior(2E) 13-8-11 to 16-3-5, Exterior(2R) 16-3-5 to 21-7-13, Interior(1) 21-7-13 to 38-10-8 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.
  - Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 187 lb uplift at joint 19 and 264 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 16, 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

**MiTek**  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	B03	Roof Special	2	1	149258150

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:33 2021 Page 1

ID:tnOHGeVPJTyi41JASwyTKzhfUX-eTir\_9WJACgVaDuyVv5vUcABSgvtZ9RVHJDBJny91hO

Job Reference (optional)

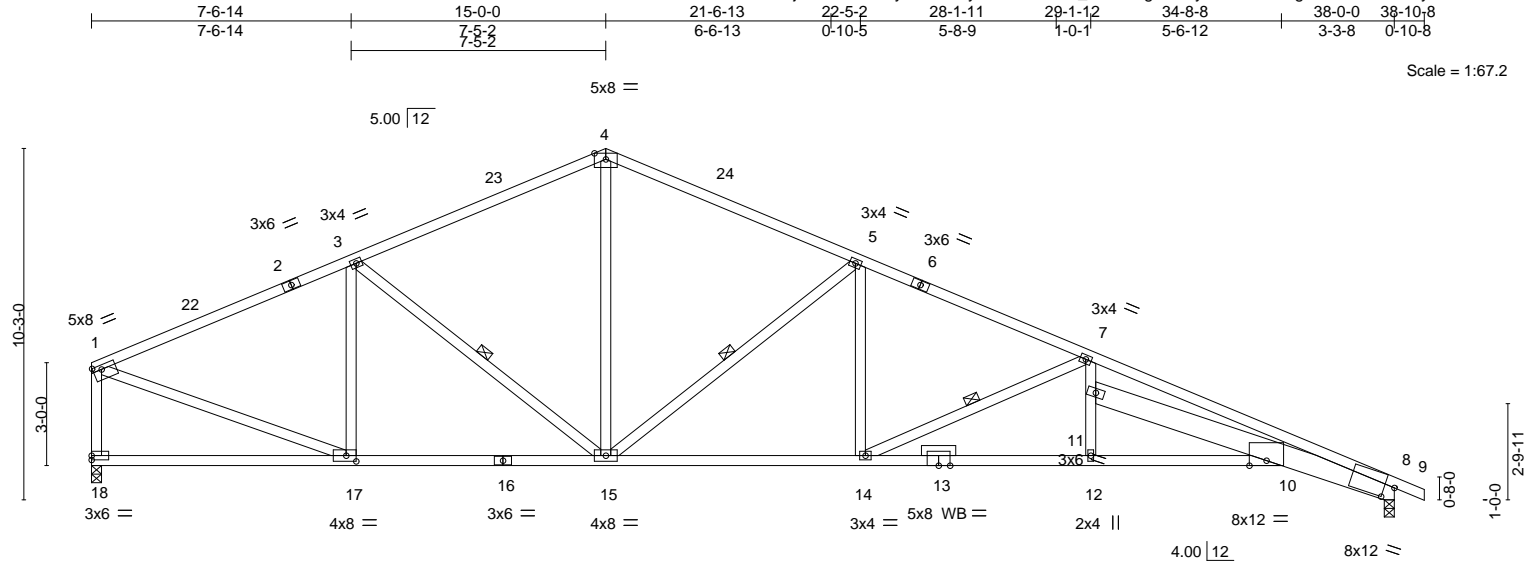


Plate Offsets (X,Y)--	[1:0-3-0,0-1-8], [8:0-3-7,0-4-6], [17:0-3-8,0-2-0]
-----------------------	--

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.73	Vert(LL) -0.36	10-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.92	Vert(CT) -0.65	10-11	>694	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.52	Horz(CT) 0.25	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 184 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2 *Except* 6-9: 2x4 SPF 1650F 1.5E	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 8-11: 2x8 SP 2400F 2.0E, 10-13: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-15, 5-15, 7-14
OTHERS 2x4 SPF No.2	

<b>REACTIONS.</b>	(size) 18=0-3-8, 8=0-3-8
	Max Horz 18=-184(LC 13)
	Max Uplift 18=-185(LC 12), 8=-262(LC 13)
	Max Grav 18=1703(LC 1), 8=1765(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-3=-2055/272, 3-4=-2007/322, 1-18=-1629/227, 4-5=-2003/329, 5-7=-3045/431, 7-8=-4397/606
BOT CHORD	15-17=-164/1814, 14-15=-188/2728, 12-14=-432/3895, 10-12=-423/3838, 10-11=-51/318, 8-10=-458/3922
WEBS	3-17=-494/136, 3-15=-270/162, 4-15=-110/971, 1-17=-193/1840, 5-14=-50/666, 5-15=-1242/301, 7-11=-12/554, 7-14=-1281/269

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 38-10-8 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - Bearing at joint(s) 8 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 185 lb uplift at joint 18 and 262 lb uplift at joint 8.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 16, 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

**MiTek**  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	C02	HIP	1	1	149258152

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:38 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-?QVksaS?klnh\_nwHSh4Bfu07hcZEKzEQbwy??y91hJ

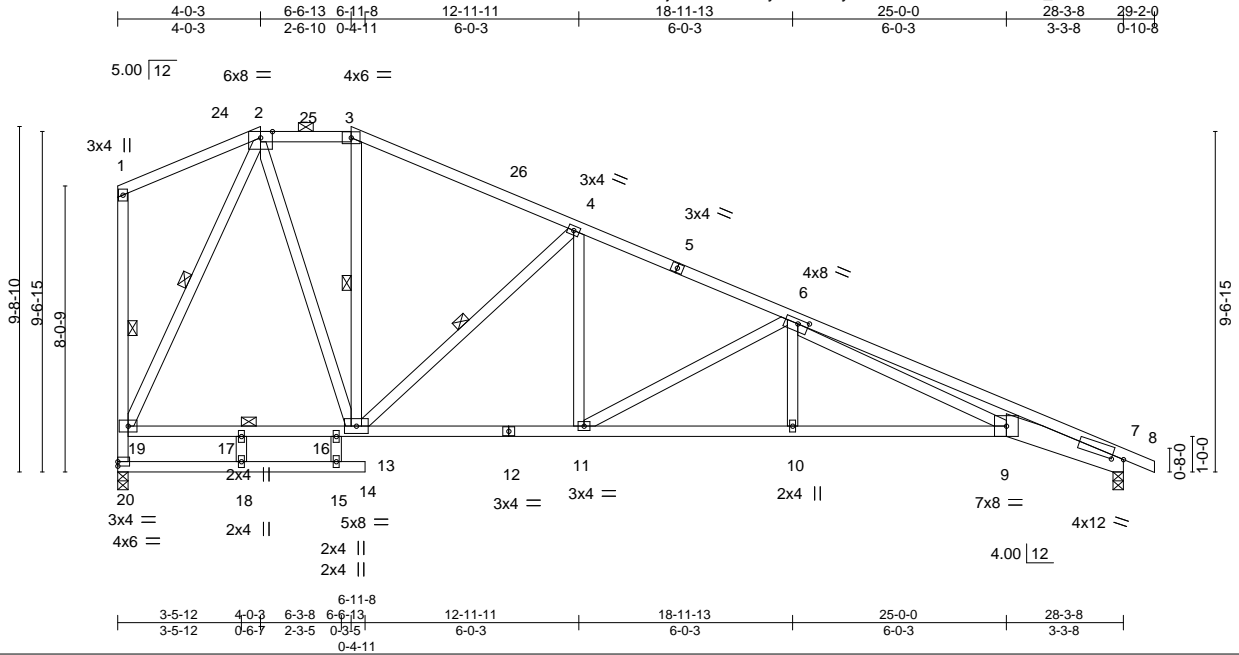


Plate Offsets (X,Y)-- [6:0-3-10,0-1-8], [7:0-3-15,0-1-2]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.87	Vert(LL) -0.30	9-10	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.96	Vert(CT) -0.57	9-10	>598	180			
BCLL 0.0	Rep Stress Incr YES		WB 0.88	Horz(CT) 0.20	7	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS							
									Weight: 156 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
5-8: 2x4 SPF 1650F 1.5E  
BOT CHORD 2x4 SPF No.2 \*Except\*  
7-9: 2x8 SP 2400F 2.0E  
WEBS 2x4 SPF No.2

#### REACTIONS.

(size) 20=0-3-8, 7=0-3-8  
Max Horz 20=-305(LC 10)  
Max Uplift 20=-177(LC 13), 7=-209(LC 13)  
Max Grav 20=1278(LC 1), 7=1332(LC 1)

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

TOP CHORD 2-3=-799/209, 3-4=-952/201, 4-6=-1810/285, 6-7=-4981/758, 19-20=-1235/198  
BOT CHORD 17-19=0/512, 16-17=0/512, 13-16=0/512, 11-13=-50/1593, 10-11=-261/2555,  
9-10=-261/2557, 7-9=-613/4651  
WEBS 4-13=-1079/266, 4-11=-65/628, 6-11=-1095/241, 6-10=0/290, 2-19=-1187/201,  
2-13=-168/965, 6-9=-369/2252

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; 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 4-0-3, Exterior(2E) 4-0-3 to 6-6-13, Exterior(2R) 6-6-13 to 10-9-11, Interior(1) 10-9-11 to 29-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 177 lb uplift at joint 20 and 209 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.



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017







Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	149258154
3016946	C04	Half Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:41 2021 Page 1

ID:tnOHGeVPJT41JASwyTKzhfUX-P?BtgudLfgMYRVVzbEnolWcOuelRk9h7Z9ccJy91hG

5-9-15 5-9-15 11-4-6 5-6-7 16-10-15 5-6-9 22-5-7 5-6-9 28-3-8 5-10-1 29-2-0 0-10-8

Scale = 1:49.0

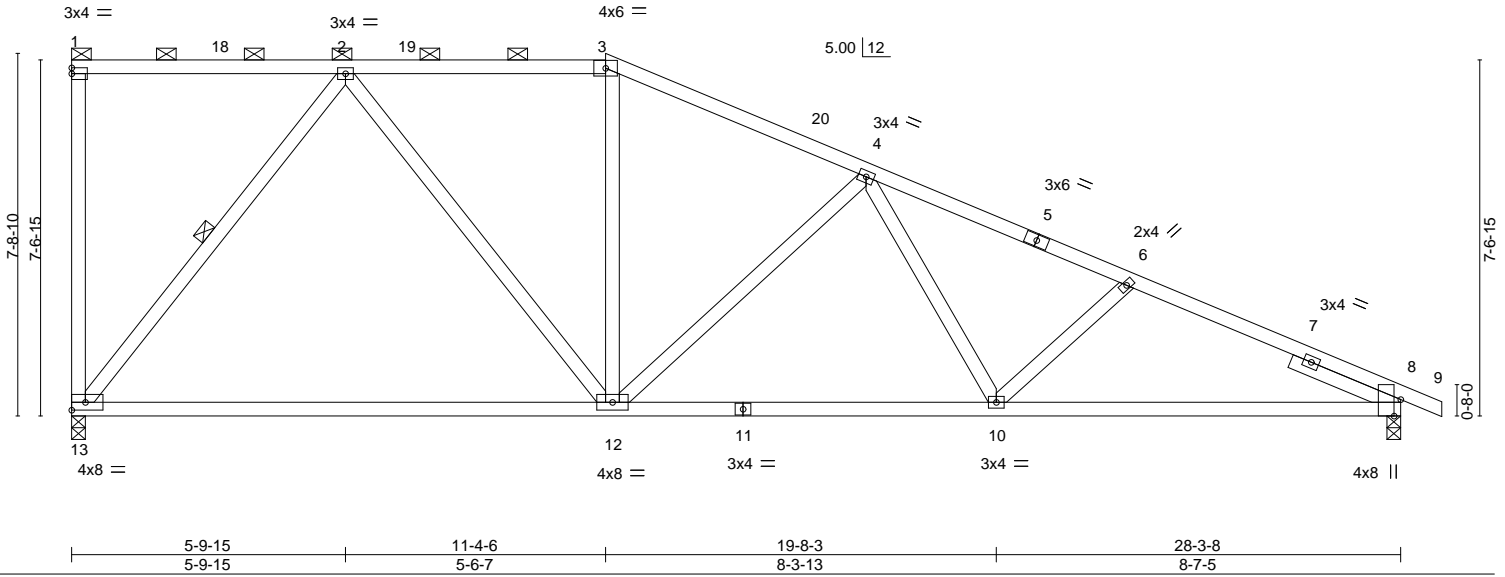


Plate Offsets (X,Y)-- [8:0-4-3,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL)	-0.43	12-13	>780	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.88	12-13	>385	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.06	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 125 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2  
SLIDER Right 2x4 SPF No.2 2-6-0

#### REACTIONS.

(size) 13=0-3-8, 8=0-3-8  
Max Horz 13=-287(LC 10)  
Max Uplift 13=-202(LC 8), 8=-192(LC 13)  
Max Grav 13=1266(LC 1), 8=1329(LC 1)

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

TOP CHORD 2-3=-1217/232, 3-4=-1393/229, 4-6=-2115/311, 6-8=-2329/347  
BOT CHORD 12-13=0/796, 10-12=-113/1712, 8-10=-247/2100  
WEBS 2-13=-1250/247, 2-12=-99/681, 4-12=-681/224, 4-10=-48/384, 6-10=-289/153

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 11-4-6, Exterior(2R) 11-4-6 to 15-7-5, Interior(1) 15-7-5 to 29-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 202 lb uplift at joint 13 and 192 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	C05	Half Hip	1	1	149258155

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:42 2021 Page 1  
ID:tnOHGeVPJTyi41JASwyTKzhfUX-tCkFIEdz3zoD9b4hWim0LV2kKI0UAE8qLDu98my91hF

Job Reference (optional)

2-1-8 7-11-6 13-9-3 17-5-8 21-5-12 23-3-5 24-4-8 25-6-0 28-3-8 29-2-0  
2-1-8 5-9-14 5-9-14 3-8-5 4-0-4 1-9-9 1-1-3 1-1-8 2-9-8 0-10-8

Scale = 1:49.7

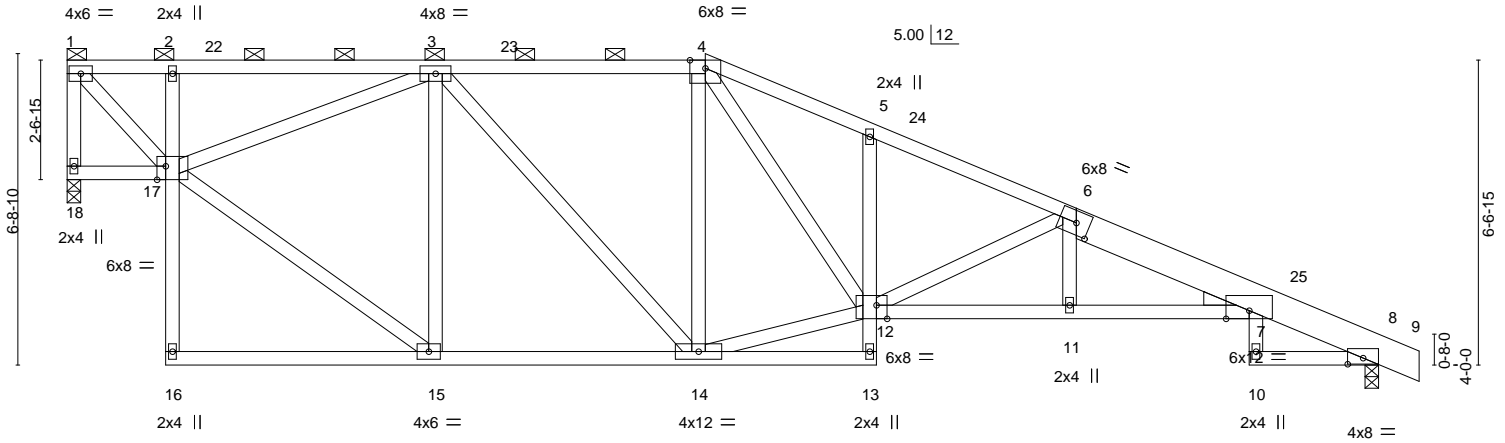


Plate Offsets (X,Y)--	[6:0-3-8,0-3-0], [8:0-4-0,0-1-9], [12:0-2-12,Edge], [17:0-2-4,Edge]
-----------------------	---

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.66	Vert(LL) -0.26	7-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.47	7-11	>721	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.49	Horz(CT) 0.15	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 158 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
6-9: 2x8 SP 2400F 2.0E  
BOT CHORD 2x4 SPF No.2 \*Except\*  
7-12: 2x4 SPF 1650F 1.5E  
WEBS 2x4 SPF No.2  
WEDGE  
Right: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and  
2-0-0 oc purlins (4-6-6 max.): 1-4.  
BOT CHORD Rigid ceiling directly applied.

#### REACTIONS.

(size) 18=0-3-8, 8=0-3-8  
Max Horz 18=-195(LC 13)  
Max Uplift 18=-182(LC 9), 8=-203(LC 13)  
Max Grav 18=1266(LC 1), 8=1329(LC 1)

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

TOP CHORD 1-18=-1200/186, 1-2=-1090/183, 2-3=-1125/197, 3-4=-1422/274, 4-5=-2335/401,  
5-6=-2410/345, 6-7=-3210/442, 7-8=-485/105  
BOT CHORD 2-17=-279/105, 14-15=-100/1180, 11-12=-344/3147, 7-11=-350/3157  
WEBS 1-17=-231/1565, 15-17=-125/1421, 3-15=-696/125, 3-14=-65/358, 4-14=-530/96,  
12-14=-86/1353, 4-12=-214/1271, 6-12=-1086/207

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 13-9-3, Exterior(2R) 13-9-3 to 18-0-2  
, Interior(1) 18-0-2 to 29-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces  
& MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 18 and 203 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	149258157
3016946	C07	Half Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:27:48 2021 Page 1

ID:tnOHGeVPJT41JASwyTKzhfUX-iL6W8HikepZNUWYrtZsQbml5j0JZx3ik8LULPy91h9

6-5-3 7-3-8 12-9-6 15-0-0 17-5-8 18-6-13 25-6-0 28-3-8 29-2-0  
6-5-3 0-10-5 5-5-14 2-2-10 2-5-8 1-1-5 6-11-3 2-9-8 0-10-8

Scale = 1:52.2

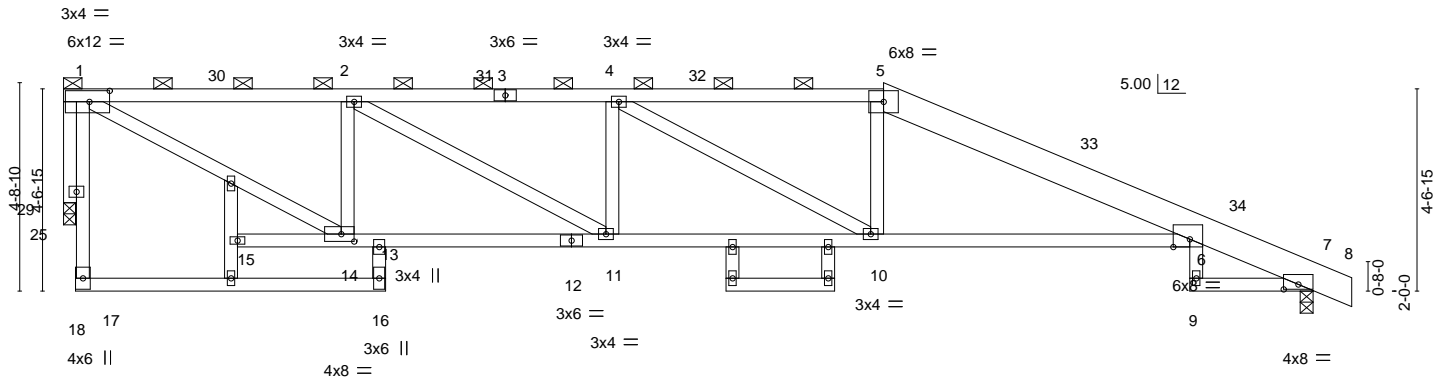


Plate Offsets (X,Y)-- [1:0-5-8,0-3-0], [6:0-4-8,Edge], [7:0-4-0,0-1-5], [14:0-3-8,0-2-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.71	Vert(LL) -0.39	6-10	>871	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.99	Vert(CT) -0.74	6-10	>456	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.52	Horz(CT) 0.32	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 141 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2 *Except* 5-8: 2x8 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-2-2 max.): 1-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied. Except: 10-0-0 oc bracing: 10-11
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	

**REACTIONS.** (size) 7=0-3-8, 29=0-3-4  
Max Horz 29=-134(LC 8)  
Max Uplift 7=-215(LC 13), 29=-189(LC 9)  
Max Grav 7=1338(LC 1), 29=1283(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1999/332, 2-4=-2776/437, 4-5=-2599/419, 5-6=-2737/393, 6-7=-488/110  
BOT CHORD 13-14=-266/1862, 11-13=-225/1999, 10-11=-327/2776, 6-10=-262/2593  
WEBS 5-10=0/297, 4-11=-307/159, 2-14=-877/207, 1-14=-304/2123, 2-11=-186/887,  
1-29=-1297/192

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 18-6-13, Exterior(2R) 18-6-13 to 22-9-11, Interior(1) 22-9-11 to 29-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearing at joint(s) 29 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 215 lb uplift at joint 7 and 189 lb uplift at joint 29.
- 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258158
3016946	C08	Half Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:04 2021 Page 1

ID: tjnOHGeVPJTyi41JASwyTKzhfUX-EQ3ZVlumtja5o\_mwpw9AE8zVc9VFJ5B3PeDKvUy91gv

7-2-8	7-3-8	13-11-13	15-0-0	17-5-8	20-11-10	25-6-0	28-3-8	29-2-0
7-2-8	0-1-0	6-8-5	1-0-3	2-5-8	3-6-2	4-6-6	2-9-8	0-10-8

Scale = 1:52.2

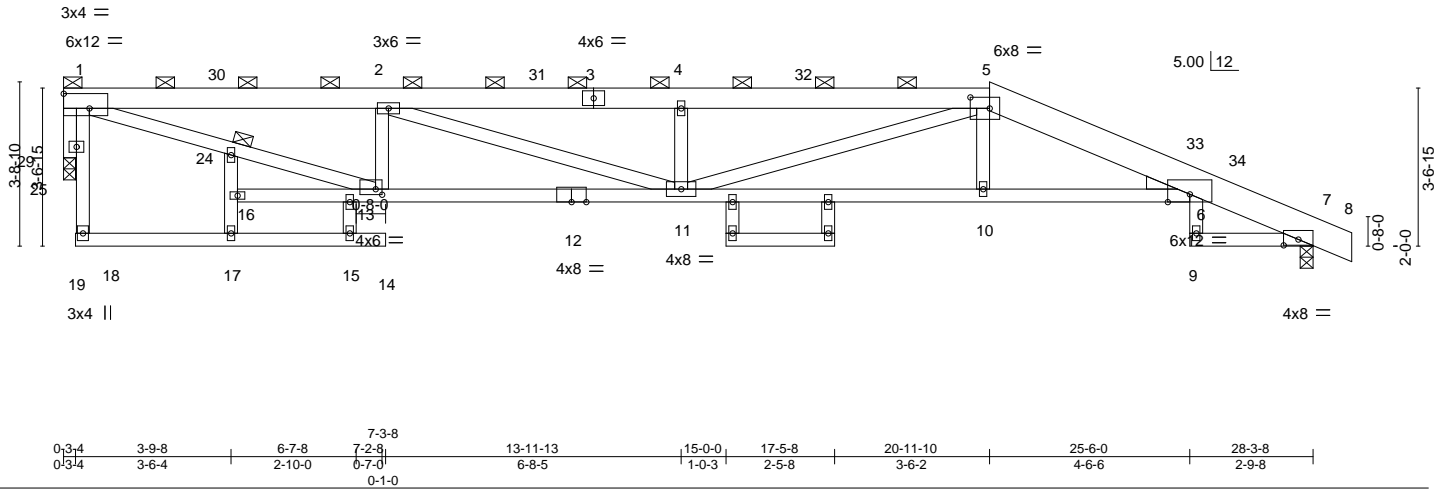


Plate Offsets (X,Y)-- [1:Edge,0-4-0], [5:0-5-4,0-3-0], [7:0-4-0,0-1-9], [13:0-1-12,0-1-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.67	Vert(LL) -0.37	11	>903	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.85	Vert(CT) -0.68	11-13	>496	180			
BCLL 0.0	Rep Stress Incr YES		WB 0.90	Horz(CT) 0.28	7	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS							
									Weight: 145 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SPF No.2 \*Except\*  
5-8: 2x8 SP 2400F 2.0E  
BOT CHORD 2x4 SPF No.2 \*Except\*  
6-12: 2x4 SPF 1650F 1.5E  
WEBS 2x4 SPF No.2  
OTHERS 2x4 SPF No.2  
WEDGE  
Right: 2x4 SP No.3

#### REACTIONS.

(size) 7=0-3-8, 29=0-3-4  
Max Horz 29=-122(LC 13)  
Max Uplift 7=-216(LC 13), 29=-210(LC 9)  
Max Grav 7=1330(LC 1), 29=1244(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-3139/571, 2-4=-4132/709, 4-5=-4132/709, 5-6=-3373/513, 6-7=-485/110  
BOT CHORD 13-16=-26/258, 11-13=-482/3139, 10-11=-423/3297, 6-10=-429/3303  
WEBS 4-11=-446/168, 5-11=-207/875, 2-13=-833/218, 1-24=-513/3151, 13-24=-503/3006,  
2-11=-252/1044, 1-29=-1284/220

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 20-11-10, Exterior(2R) 20-11-10 to 25-2-8, Interior(1) 25-2-8 to 29-2-0 zone; cantilever left and right exposed; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearing at joint(s) 29 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 216 lb uplift at joint 7 and 210 lb uplift at joint 29.
- 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



**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/COBEY CREEK #13/MO
3016946	C09	Half Hip Girder	1	2	I49258159

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Aug 16 2021 MiTek Industries, Inc.
Tue Dec 14 13:28:08 2021
Page 2
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-6CJ4L7yHxy4XHb3h2mD6O\_78jny?Fz\_fKGBY2Fy91gr

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-7=-70, 7-10=-70, 21-23=-20, 17-20=-20, 8-14=-20, 15-16=-20, 11-24=-20

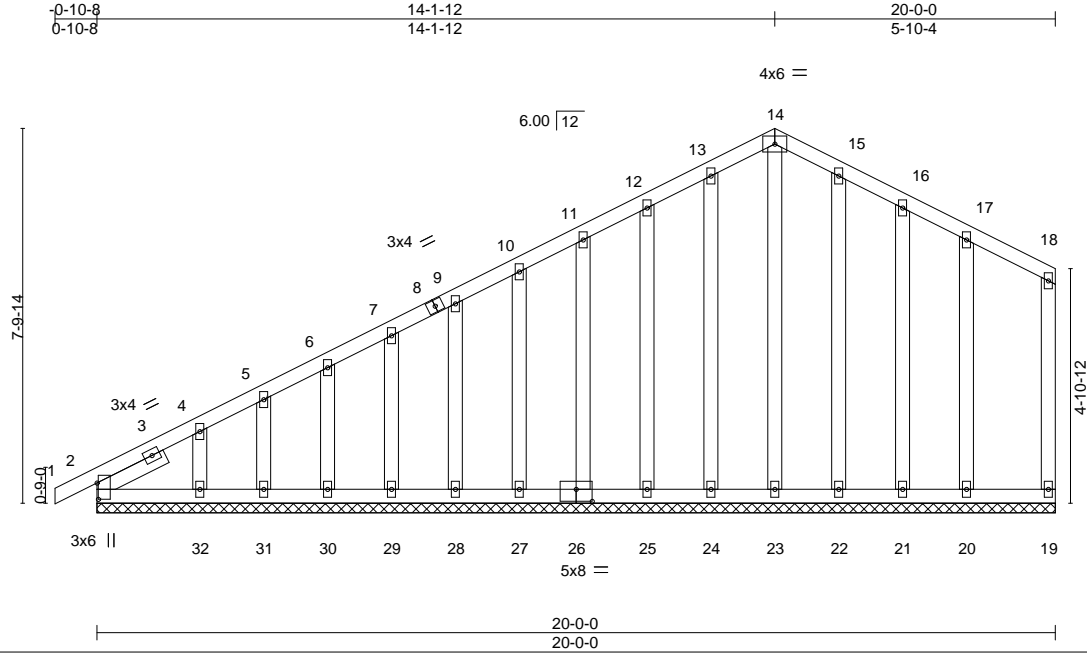
Concentrated Loads (lb)

Vert: 23=-34(F) 1=-74(F) 21=-26(F) 3=-46(F) 17=-47(F) 27=-56(F) 28=-46(F) 29=-46(F) 30=-21(F) 31=-21(F) 33=-21(F) 34=-21(F) 35=-44(F) 36=-17(F) 37=-17(F) 38=-17(F) 39=-51(F) 40=-29(F) 41=-26(F) 42=-26(F) 43=-47(F) 44=-47(F) 45=-47(F) 46=-24(F) 47=-51(F) 48=-51(F) 49=-51(F) 50=-75(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	D01	Common Supported Gable	1	1	149258160

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:11 2021 Page 1  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Xn?Dz8\_9EtS683oGj unp0dlrP\_5HSS050DQCeay91go



Scale: 1/4"=1'

Plate Offsets (X,Y)-- [2:0-4-1,0-0-5], [26:0-4-0,0-3-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.12	Vert(LL) -0.00	1	n/r	120		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.06	Vert(CT) 0.00	1	n/r	120			
BCLL 0.0	Rep Stress Incr YES		WB 0.12	Horz(CT) -0.00	19	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S							
									Weight: 126 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2  
OTHERS 2x4 SPF No.2  
SLIDER Left 2x4 SPF No.2 1-7-3

#### BRACING-

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

#### REACTIONS.

All bearings 20-0-0.

(lb) - Max Horz 2=207(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 19, 2, 26, 23, 24, 25, 27, 28, 29, 30, 31, 32, 22, 21, 20

Max Grav All reactions 250 lb or less at joint(s) 19, 2, 26, 23, 24, 25, 27, 28, 29, 30, 31, 32, 22, 21, 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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-12, Exterior(2N) 2-1-12 to 14-1-12, Corner(3R) 14-1-12 to 17-1-12, Exterior(2N) 17-1-12 to 19-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 2, 26, 23, 24, 25, 27, 28, 29, 30, 31, 32, 22, 21, 20.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	D02	Common	1	1	I49258161

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:12 2021 Page 1

ID:tnOHGeVPJTiy41JASwyTKzhfUX-?zYbAU?n?BazmCNSHbl2ZqlwoOGsBsPFFt9IB0y91gn

Job Reference (optional)

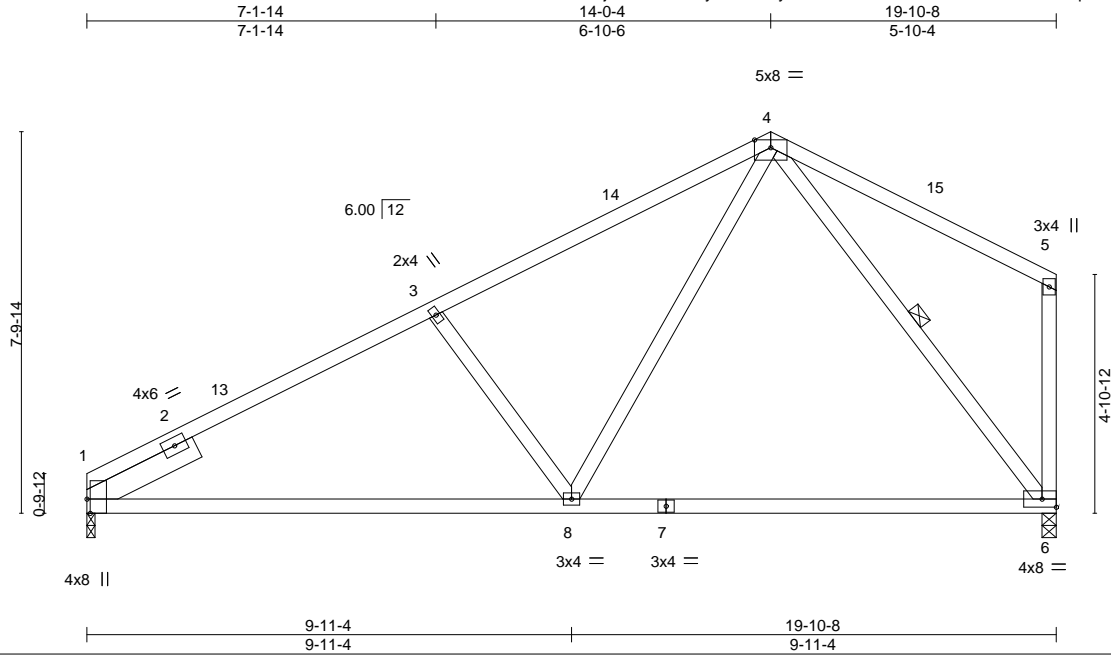


Plate Offsets (X,Y)-- [1:0-3-8,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.47	Vert(LL)	-0.20	6-8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.40	6-8	>597	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 83 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 4-6

#### REACTIONS.

(size) 1=0-2-0, 6=0-3-8  
 Max Horz 1=201(LC 11)  
 Max Uplift 1=123(LC 12), 6=107(LC 12)  
 Max Grav 1=888(LC 1), 6=888(LC 1)

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

TOP CHORD 1-3=-1207/267, 3-4=-1012/273  
 BOT CHORD 1-8=-340/1059, 6-8=-171/492  
 WEBS 3-8=-461/227, 4-8=-117/668, 4-6=-747/213

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 14-0-4, Exterior(2R) 14-0-4 to 17-0-4, Interior(1) 17-0-4 to 19-8-12 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=123, 6=107.
- This truss 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 16, 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



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	D03	Common	2	1	I49258162

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:14 2021 Page 1

ID:tnOHGeVPJTyi41JASwyTKzhfUX-xMgLBa01Xoqg?WXrO0KWeFNHByKfluXiBesFvy91gl

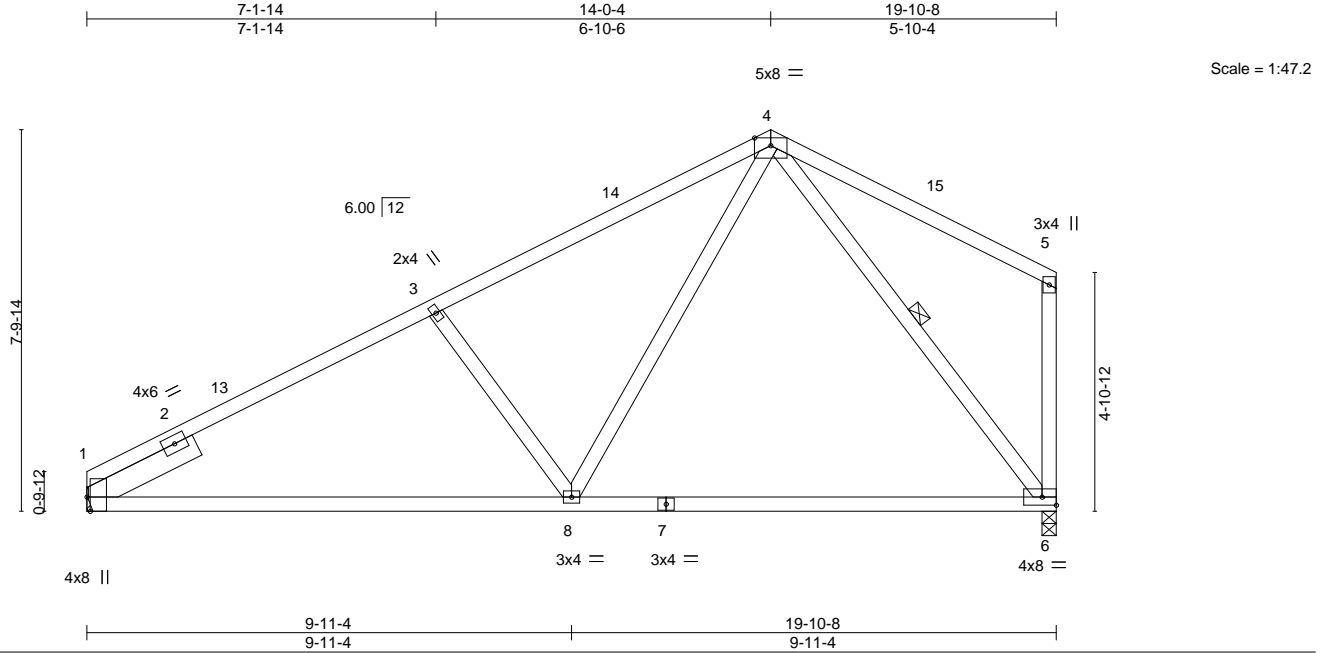


Plate Offsets (X,Y)-- [1:0-3-8,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.47	Vert(LL) -0.20	6-8	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.74	Vert(CT) -0.40	6-8	>597	180			
BCLL 0.0	Rep Stress Incr YES		WB 0.30	Horz(CT) 0.02	6	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 83 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 4-6

#### REACTIONS.

(size) 1=Mechanical, 6=0-3-8  
Max Horz 1=201(LC 11)  
Max Uplift 1=123(LC 12), 6=107(LC 12)  
Max Grav 1=888(LC 1), 6=888(LC 1)

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

TOP CHORD 1-3=-1207/267, 3-4=-1012/273  
BOT CHORD 1-8=-340/1059, 6-8=-171/492  
WEBS 3-8=-461/227, 4-8=-117/668, 4-6=-747/213

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 14-0-4, Exterior(2R) 14-0-4 to 17-0-4, Interior(1) 17-0-4 to 19-8-12 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=123, 6=107.
- This truss 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 16, 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**



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	D04	Roof Special Girder	1	2	I49258163

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Aug 16 2021
MiTek Industries, Inc.
Tue Dec 14 13:28:17 2021
Page 2

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-MxMUDC2wpjDFs\_FQ49uDGu?h1PvIs\_u\_O9tWsEy91gi

- NOTES-**
- 11) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 9-10-4 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg.to the left, 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 2-12d (0.148"x3.25") toe-nails per NDS guidlines.

**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, 5-8=-70, 8-9=-70, 15-17=-20, 10-14=-20

Concentrated Loads (lb)

Vert: 3=-33(B) 15=-1126(B) 16=-247(B) 20=-84(B) 21=-84(B) 22=-80(B) 23=-80(B)



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	D05	Roof Special	1	1	149258164

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:19 2021 Page 1

ID: tjnOHGeVPJTy41JASwyTKzhfUX-IJTEet4ALKTz6HPoBawhLJ451Cc8KvrGsTMdx6y91gg

0-10-8 6-6-0 10-0-0 14-6-0 19-3-14 24-1-12 30-0-0  
0-10-8 6-6-0 3-6-0 4-6-0 4-9-14 4-9-14 5-10-4

4x6 =

Scale = 1:61.3

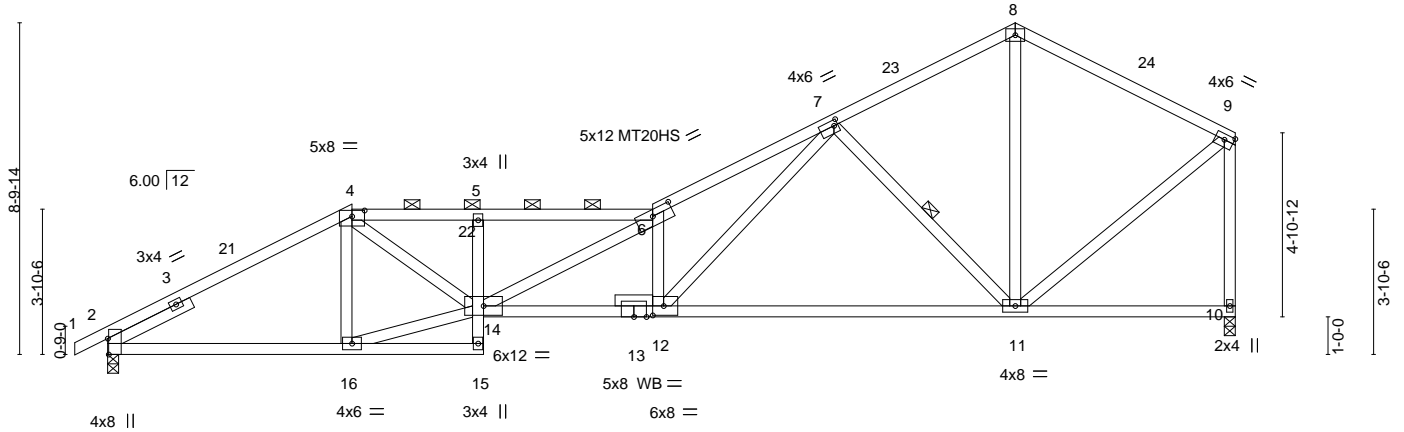


Plate Offsets (X,Y)--	[2:0-5-1,Edge], [4:0-4-0,0-1-15], [6:0-6-8,0-2-0], [7:0-1-4,0-1-12], [9:Edge,0-1-12], [12:0-3-8,0-3-0]
-----------------------	--

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.53	Vert(LL) -0.29	12-14	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.96	Vert(CT) -0.60	11-12	>598	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.71	Horz(CT) 0.13	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 138 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-9-1 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 7-11

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
Max Horz 2=227(LC 9)  
Max Uplift 2=230(LC 12), 10=182(LC 12)  
Max Grav 2=1406(LC 1), 10=1343(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-2177/363, 4-5=-3404/607, 5-6=-3474/625, 6-7=-4282/730, 7-8=-1040/222, 8-9=-1048/215, 9-10=-1304/211  
BOT CHORD 2-16=-398/1884, 5-14=-394/122, 12-14=-656/3859, 11-12=-327/1802  
WEBS 4-16=-444/144, 14-16=-390/1760, 4-14=-306/1906, 6-14=-445/12, 6-12=-1962/432, 8-11=-96/554, 9-11=-147/1079, 7-11=-1371/345, 7-12=-487/2883

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; 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 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 24-1-12, Exterior(2R) 24-1-12 to 27-1-12, Interior(1) 27-1-12 to 29-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=230, 10=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.
  - 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 16, 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

**MiTek**  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	D07	Roof Special	1	1	149258166

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:26 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-bfPu6H9ZiULzRMR85YYK7ntHv11CT4clT3YVgDy91gZ

-0-10-8 5-0-12 9-10-0 17-10-0 24-1-12 30-0-0  
0-10-8 5-0-12 4-9-4 8-0-0 6-3-12 5-10-4

5x8 =

Scale = 1:59.3

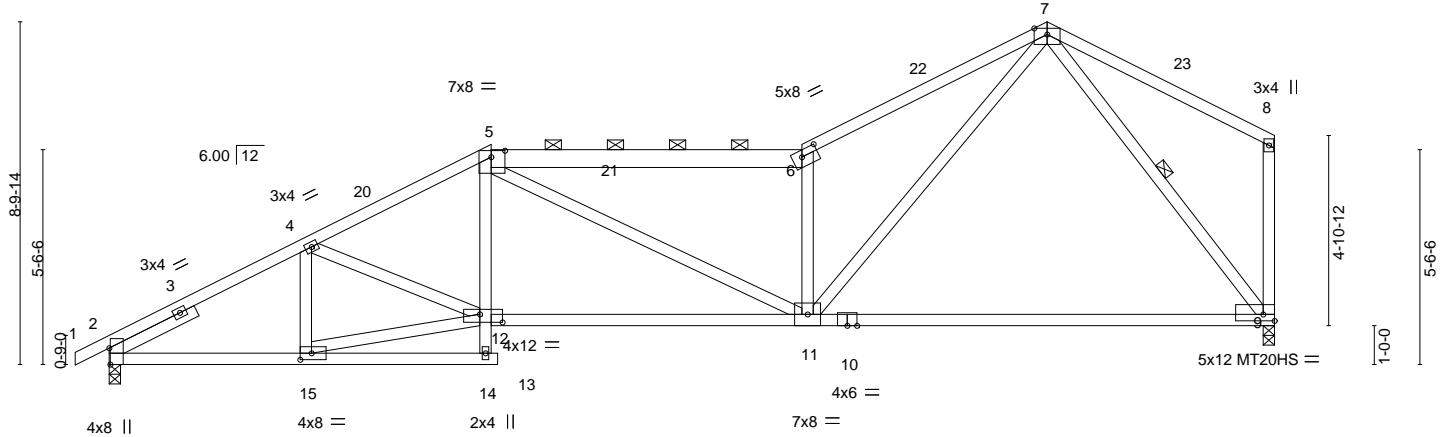


Plate Offsets (X,Y)-- [2:0-5-1,Edge], [5:0-4-4,0-2-0], [6:0-5-0,0-2-0], [9:Edge,0-2-0], [12:0-7-0,0-2-8], [15:0-3-8,0-2-0]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.62	Vert(LL) -0.48	9-11	>751	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.80	Vert(CT) -0.98	9-11	>364	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.70	Horz(CT) 0.09	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 142 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
5-6: 2x6 SPF No.2  
BOT CHORD 2x4 SPF No.2 \*Except\*  
10-12: 2x4 SPF 1650F 1.5E  
WEBS 2x4 SPF No.2  
SLIDER Left 2x4 SPF No.2 2-6-0

#### REACTIONS.

(size) 2=0-3-8, 9=0-3-8  
Max Horz 2=227(LC 9)  
Max Uplift 2=228(LC 12), 9=181(LC 12)  
Max Grav 2=1410(LC 1), 9=1345(LC 1)

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

TOP CHORD 2-4=-2186/361, 4-5=-2408/443, 5-6=-2347/392, 6-7=-2673/511  
BOT CHORD 2-15=-411/1889, 11-12=-434/2128, 9-11=-184/828  
WEBS 6-11=-1671/410, 5-12=-52/427, 5-11=-6/255, 4-15=-364/137, 12-15=-411/1883,  
4-12=-47/262, 7-9=-1278/253, 7-11=-424/2306

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; 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 9-10-0, Exterior(2R) 9-10-0 to 12-10-0, Interior(1) 12-10-0 to 24-1-12, Exterior(2R) 24-1-12 to 27-1-12, Interior(1) 27-1-12 to 29-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=228, 9=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.
- 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 16, 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:28 2021 Page 1  
 ID: tjnOHGeVPJTyi41JASwyTKzhfUX-X2WeXyBpE5bhghbXDyaoCCyflrgkx?lbwN1bl5y91gX  
 0-10-8 5-1-12 10-0-0 11-6-0 19-6-0 24-1-12 30-0-0  
 0-10-8 5-1-12 4-10-4 1-6-0 8-0-0 4-7-12 5-10-4



<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SPF No.2 *Except* 6-7: 2x6 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-6-0 max.): 6-7.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt
SLIDER	Left 2x4 SPF No.2 2-6-0		6-11, 8-10

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

TOP CHORD	2-4=-2176/365, 4-5=-2348/428, 5-6=-2251/456, 6-7=-1832/326, 7-8=-2091/421
BOT CHORD	2-15=-414/1883, 11-13=-386/1882, 10-11=-180/829
WEBS	7-11=-1358/348, 6-13=-101/577, 8-11=-355/1876, 8-10=-1296/237, 4-15=-368/128, 13-15=-382/1872

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=4.2psf; h=15ft; 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 11-6-0, Exterior(2R) 11-6-0 to 14-6-0, Interior(1) 14-6-0 to 24-1-12, Exterior(2R) 24-1-12 to 27-1-12, Interior(1) 27-1-12 to 29-10-4 zone; cantilever left and right exposed end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=230, 10=182.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 16, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258168
3016946	D09	Roof Special	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:30 2021 Page 1

ID:tnOHGeVPJTyi41JASwyTKzhfUX-TReOyeD4lJrPwzlwKNdGHd1\_reMBPvKuOhWip\_y91gV

-0-10-8	5-1-12	10-0-0	11-4-12	19-4-12	24-1-12	30-0-0
0-10-8	5-1-12	4-10-4	1-4-12	8-0-0	4-9-0	5-10-4

5x8 ==

Scale = 1:61.3

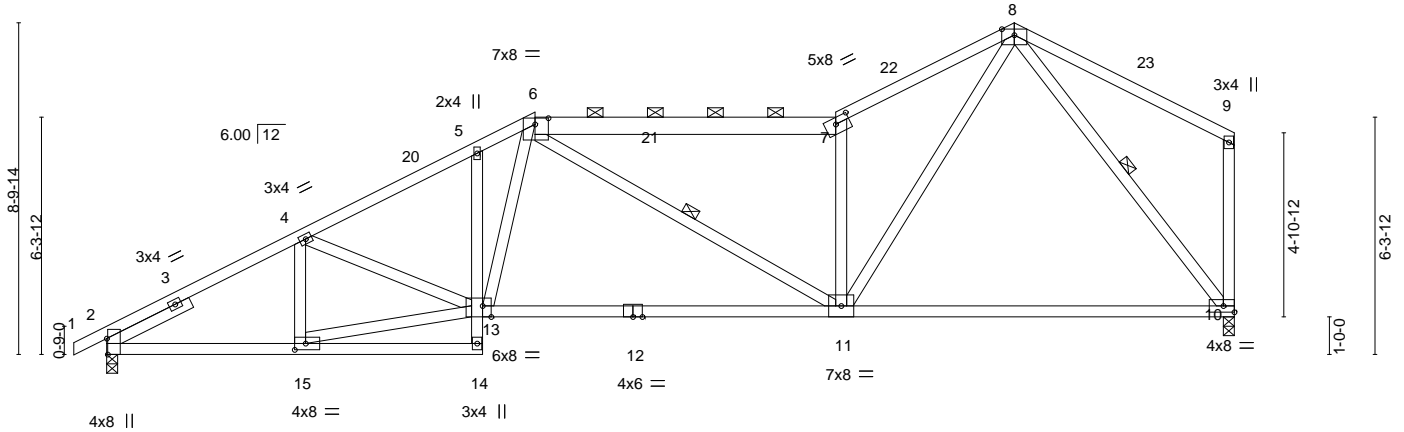


Plate Offsets (X,Y)--	[2:0-5-1,Edge], [6:0-4-4,0-2-0], [7:0-4-8,0-2-0], [13:0-2-12,Edge], [15:0-3-8,0-2-0]
-----------------------	--

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) -0.26	10-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.93	Vert(CT) -0.53	10-11	>677	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.66	Horz(CT) 0.09	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 148 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
6-7: 2x6 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2  
SLIDER Left 2x4 SPF No.2 2-6-0

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-11 max.): 6-7.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 6-11, 8-10

#### REACTIONS.

(size) 2=0-3-8, 10=0-3-8  
Max Horz 2=227(LC 9)  
Max Uplift 2=230(LC 12), 10=182(LC 12)  
Max Grav 2=1406(LC 1), 10=1343(LC 1)

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

TOP CHORD 2-4=-2176/365, 4-5=-2348/428, 5-6=-2245/454, 6-7=-1860/330, 7-8=-2123/426  
BOT CHORD 2-15=-414/1883, 11-13=-389/1896, 10-11=-181/829  
WEBS 7-11=-1375/352, 6-13=-97/557, 8-11=-359/1898, 8-10=-1294/239, 4-15=-367/129, 13-15=-384/1868

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 11-4-12, Exterior(2R) 11-4-12 to 14-4-12, Interior(1) 14-4-12 to 24-1-12, Exterior(2R) 24-1-12 to 27-1-12, Interior(1) 27-1-12 to 29-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=230, 10=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.
- 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017







Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	D11	Roof Special	1	1	149258170

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:32 2021 Page 1

ID:tnOHGeVPJTiy41JASwyTKzhfUX-Ppm9NKEKH579HviSofkN27HYS6StqaBr??pusy91gT

0-10-8 4-2-2 8-0-12 10-0-0 16-0-12 20-1-4 24-1-12 30-0-0  
0-10-8 4-2-2 3-10-10 1-11-4 6-0-12 4-0-8 4-0-8 5-10-4

4x6 =

Scale = 1:61.7

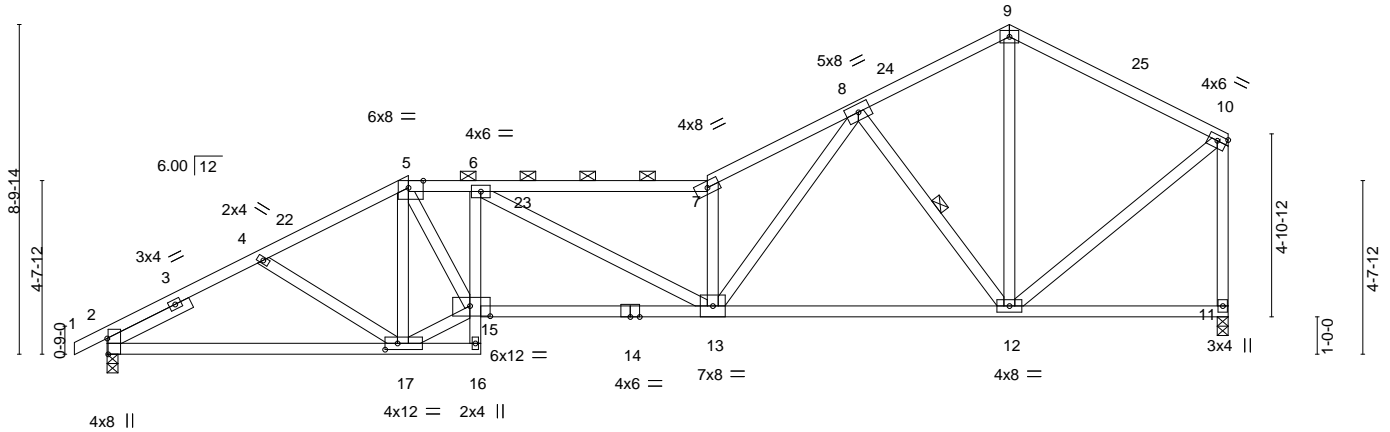


Plate Offsets (X,Y)-- [2:0-5-1,Edge], [5:0-4-12,Edge], [10:Edge,0-1-12], [15:0-6-8,0-3-4], [17:0-4-0,0-2-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) -0.21	13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.68	Vert(CT) -0.39	12-13	>927	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.11	11	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  
SLIDER Left 2x4 SPF No.2 2-6-0

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-6-11 max.): 5-7.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 8-12

#### REACTIONS.

(size) 2=0-3-8, 11=0-3-8  
Max Horz 2=227(LC 9)  
Max Uplift 2=230(LC 12), 11=182(LC 12)  
Max Grav 2=1406(LC 1), 11=1343(LC 1)

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

TOP CHORD 2-4=-2164/384, 4-5=-2057/355, 5-6=-2684/505, 6-7=-2975/493, 7-8=-3324/590,  
8-9=-1015/228, 9-10=-1043/217, 10-11=-1297/217  
BOT CHORD 2-17=-436/1867, 6-15=-529/127, 13-15=-529/2751, 12-13=-296/1606  
WEBS 5-17=-827/200, 15-17=-362/1946, 5-15=-324/1770, 6-13=-4/251, 7-13=-1814/382,  
8-13=-399/2229, 8-12=-1267/313, 9-12=-107/566, 10-12=-153/1069

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-0-12, Exterior(2R) 8-0-12 to 11-0-12, Interior(1) 11-0-12 to 24-1-12, Exterior(2R) 24-1-12 to 27-1-12, Interior(1) 27-1-12 to 29-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=230, 11=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.
- 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 16, 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



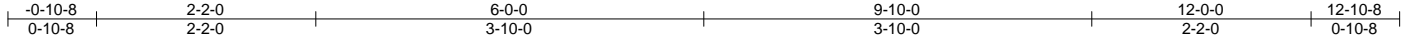
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	D12	Hip Girder	1	1	I49258171

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:34 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-MCtvo0GapMrPb3hZDhCSTCkFFruLqvUJIUwyly91gR



Scale = 1:22.8

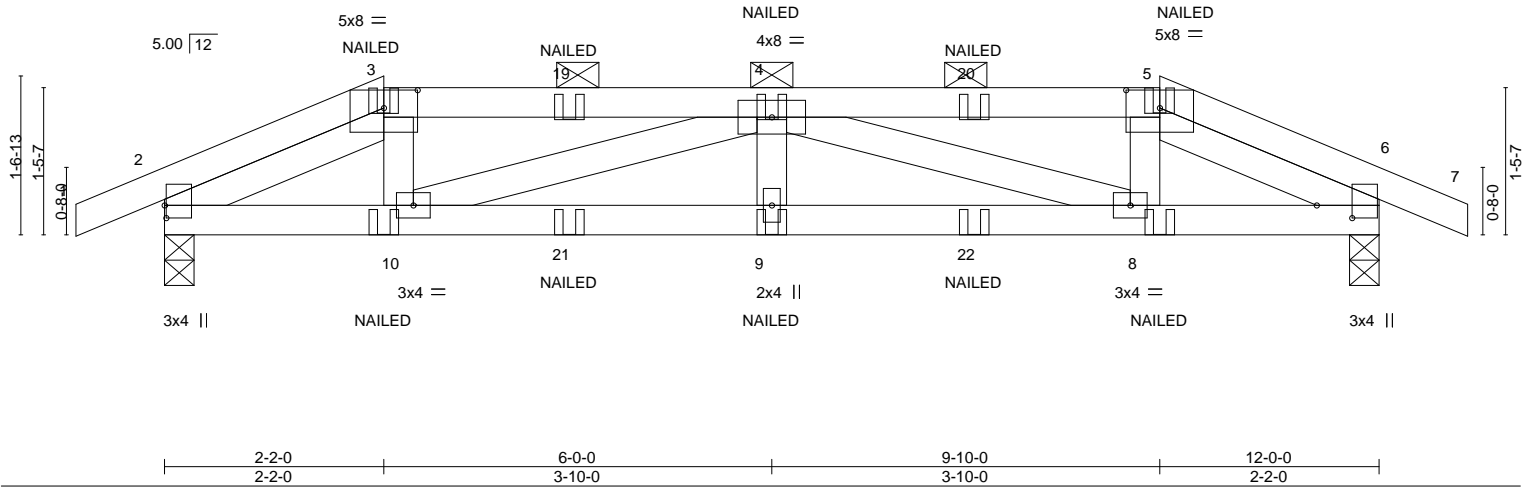


Plate Offsets (X,Y)--		[2:0-1-8,0-0-3], [3:0-4-0,0-2-2], [5:0-4-0,0-2-2], [6:0-1-8,0-4-3]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>
TCLL 25.0	Plate Grip DOL 1.15	TC 0.21	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.43	Vert(LL) -0.04 9 >999 240
BCLL 0.0	Rep Stress Incr NO	WB 0.17	Vert(CT) -0.08 9 >999 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS	Horz(CT) 0.02 6 n/a n/a
		<b>PLATES</b>	<b>GRIP</b>
		MT20	197/144
		Weight: 47 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2  
SLIDER Left 2x4 SPF No.2 2-4-7, Right 2x4 SPF No.2 2-4-7

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=-18(LC 34)  
Max Uplift 2=-104(LC 8), 6=-104(LC 9)  
Max Grav 2=599(LC 1), 6=599(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-314/68, 3-4=-830/144, 4-5=-830/144, 5-6=-314/67  
BOT CHORD 2-10=-121/800, 9-10=-234/1421, 8-9=-234/1421, 6-8=-115/800  
WEBS 4-10=-641/126, 4-8=-641/126

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=104, 6=104.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 11-15=-20  
Concentrated Loads (lb)  
Vert: 10=1(B) 9=0(B) 8=1(B) 21=0(B) 22=0(B)



December 16, 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



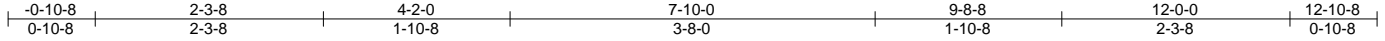
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258172
3016946	D13	Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:35 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-qQRH?MGCaFui0ldt7xCR\_hlvRf9q4JGdXyETVBy91gQ



Scale = 1:23.1

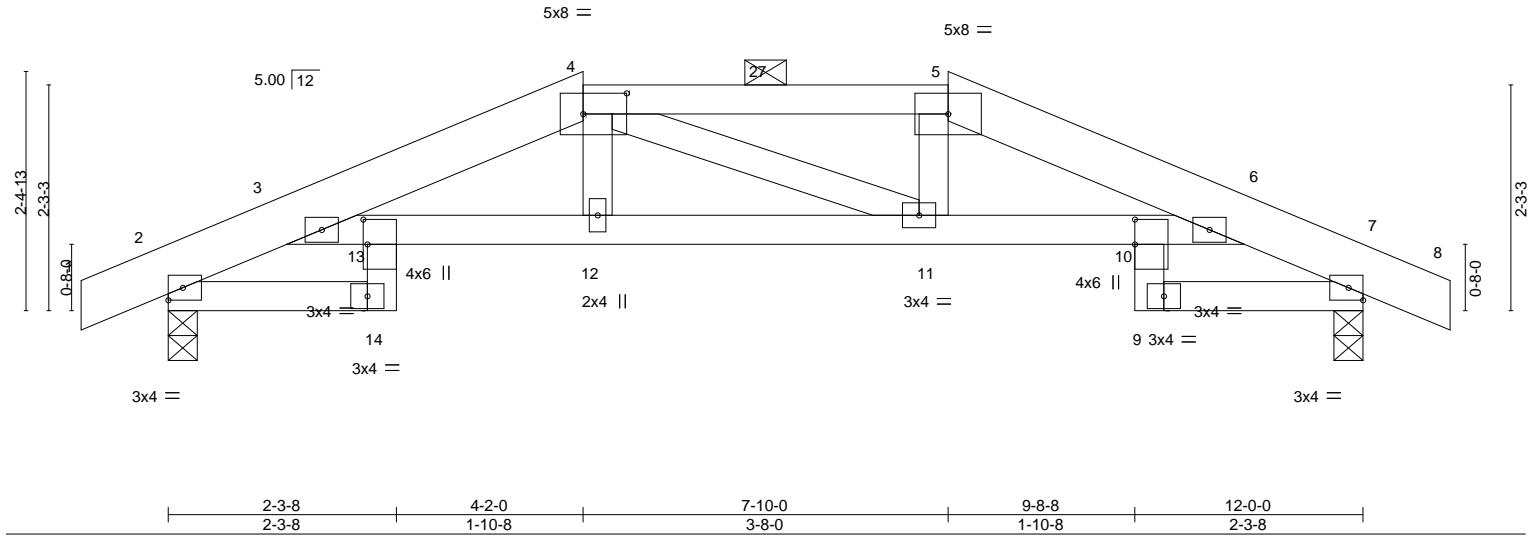


Plate Offsets (X,Y)-- [4:0-5-4,0-2-8], [10:0-3-0,0-0-0], [13:0-3-0,0-0-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.04	12-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.07	12-13	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.05	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 48 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x6 SPF No.2 \*Except\*  
4-5: 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except  
2-0-0 oc purlins (5-3-8 max.): 4-5.  
BOT CHORD Rigid ceiling directly applied. Except:  
10-0-0 oc bracing: 10-11

#### REACTIONS.

(size) 2=0-3-8, 7=0-3-8  
Max Horz 2=-33(LC 13)  
Max Uplift 2=-89(LC 12), 7=-89(LC 13)  
Max Grav 2=601(LC 1), 7=601(LC 1)

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

TOP CHORD 3-16=-501/166, 3-4=-1226/351, 4-5=-1171/355, 5-6=-1227/349, 6-7=-501/166  
BOT CHORD 2-14=-85/311, 3-13=-179/846, 12-13=-265/1157, 11-12=-264/1171, 10-11=-264/1158,  
6-10=-178/846, 7-9=-86/312

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-10-11, Interior(1) 1-10-11 to 4-2-0, Exterior(2E) 4-2-0 to 7-10-0, Exterior(2R) 7-10-0 to 12-0-0, Interior(1) 12-0-0 to 12-10-8 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 16, 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

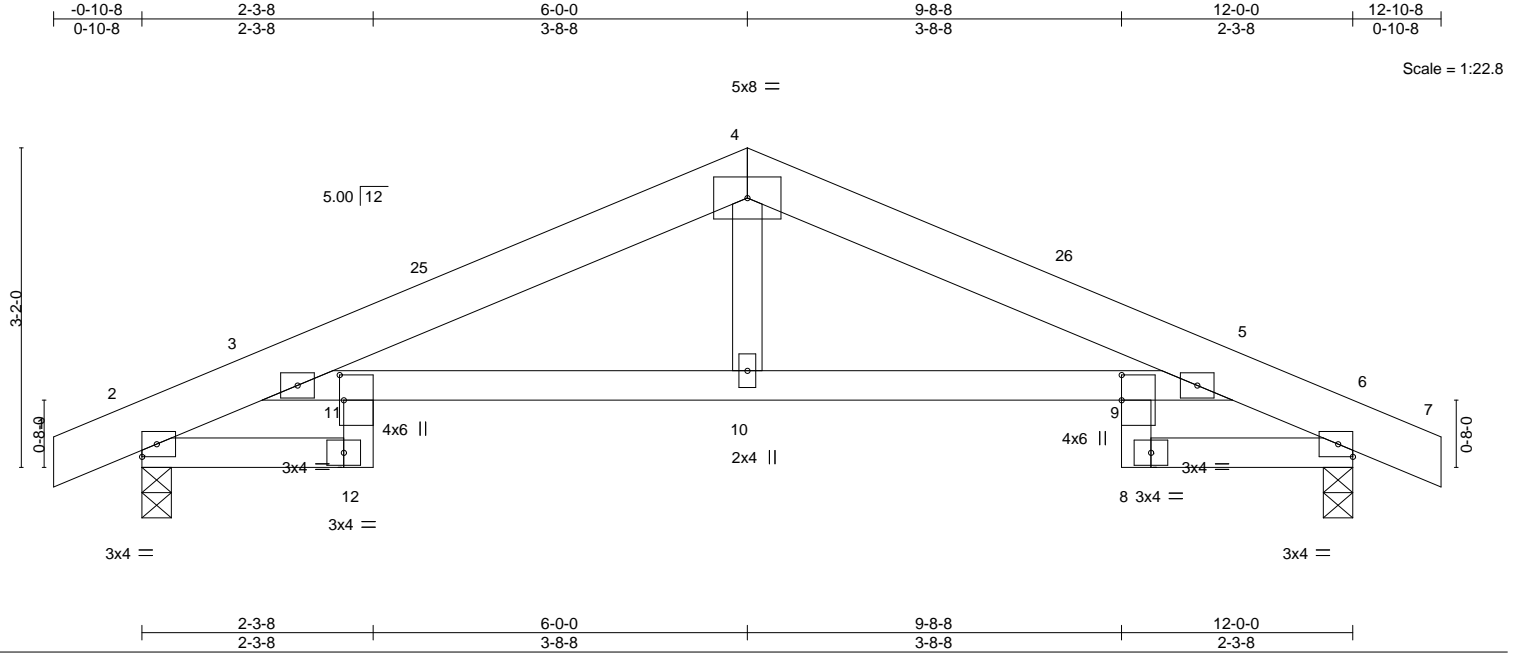


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258173
3016946	D15	Roof Special	2	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:36 2021 Page 1  
ID:tjnOHGeVPJTiy41JASwyTKzhfUX-la?gDhHrLZcZeuC3hekGxuH3Y3VcpmDnmcz01dy91gP



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.05	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.10				
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.06				
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							
								Weight: 46 lb		FT = 20%	

#### LUMBER-

TOP CHORD 2x6 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) 2=0-3-8, 6=0-3-8  
Max Horz 2=45(LC 16)  
Max Uplift 2=-86(LC 12), 6=-86(LC 13)  
Max Grav 2=601(LC 1), 6=601(LC 1)

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

TOP CHORD 3-14=507/176, 3-4=1002/311, 4-5=1002/312, 5-6=507/177  
BOT CHORD 2-12=97/319, 3-11=-111/606, 10-11=-195/925, 9-10=-195/925, 5-9=-113/606,  
6-8=-96/319  
WEBS 4-10=5/251

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-10-11, Interior(1) 1-10-11 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	149258174
3016946	D16	Common	1	1	Job Reference (optional)	

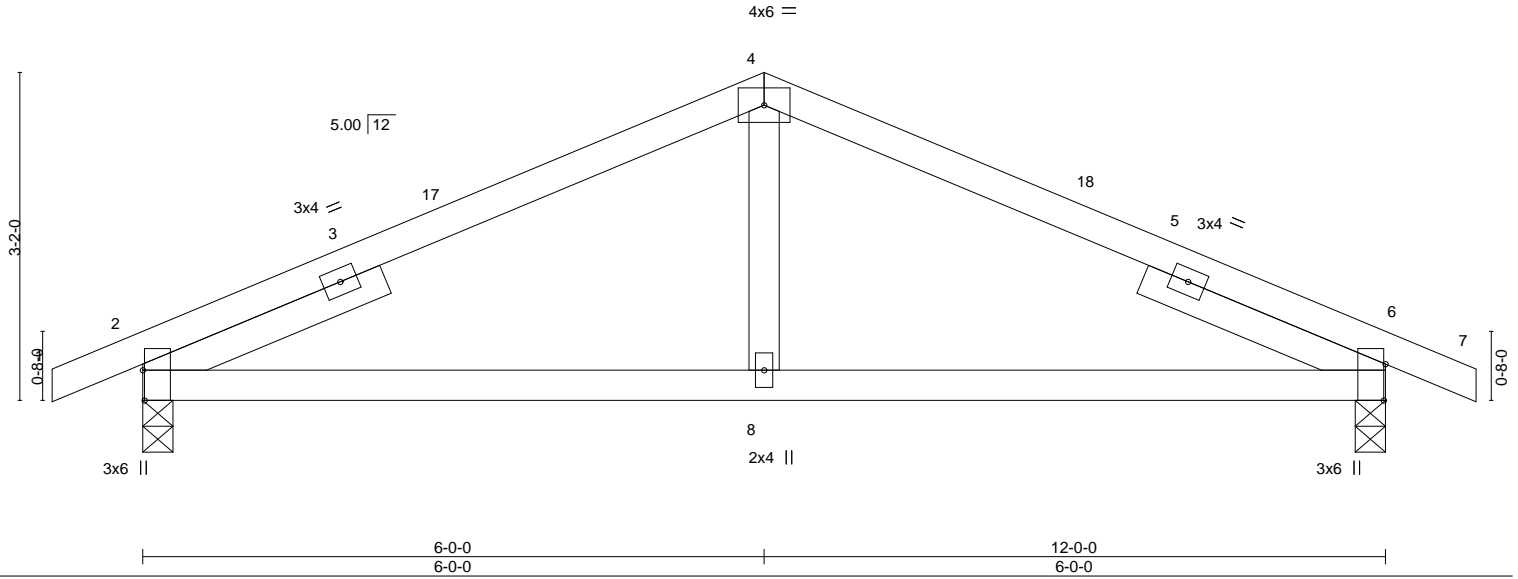
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:37 2021 Page 1

ID: tjnOHGeVPJTyi41JASwyTKzhfUX-mnZ2Q1IT6skQG2nGFLFv46qExTvbyYDVw?GjaZ4y91gO

0-10-8 0-10-8 6-0-0 6-0-0 12-0-0 6-0-0 12-10-8 0-10-8

Scale = 1:22.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.04 8-15 >999 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.06 8-15 >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 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

#### BRACING-

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

#### REACTIONS.

(size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-45(LC 13)  
 Max Uplift 2=-86(LC 12), 6=-86(LC 13)  
 Max Grav 2=601(LC 1), 6=601(LC 1)

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

TOP CHORD 2-4=-700/255, 4-6=-700/255  
 BOT CHORD 2-8=-137/638, 6-8=-137/638

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 16, 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



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	E01	Roof Special Girder	1	1	I49258175

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:38 2021 Page 1

ID:tnOHGeVPJTty41JASwyTKzhfUX-Ez7QdNJ5tAsGtCMSo3m8cJNR0tGdHer3DwS76WY91gN

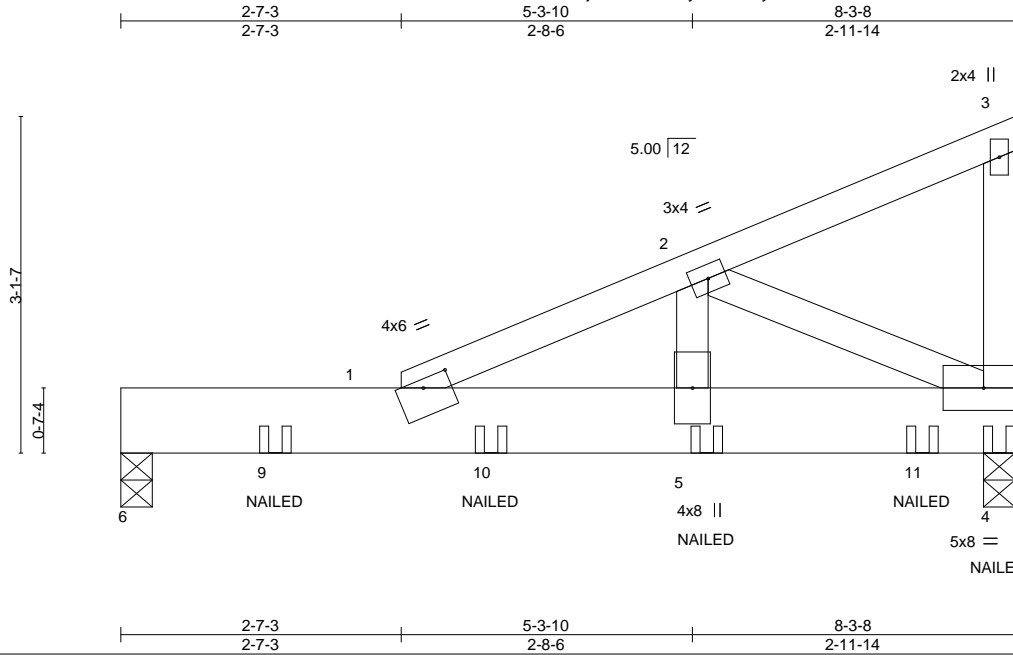


Plate Offsets (X,Y)-- [1:0-3-0,0-0-15]

LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) -0.04	7	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) -0.06	7	>999	180			
BCLL 0.0	Rep Stress Incr NO	WB 0.18	Horz(CT) 0.00	4	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 39 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 5-9-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 4=0-3-8, 6=0-3-8  
Max Horz 6=102(LC 5)  
Max Uplift 4=123(LC 8), 6=28(LC 8)  
Max Grav 4=760(LC 1), 6=569(LC 1)

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

TOP CHORD 1-2=-928/122  
BOT CHORD 1-5=-125/847, 4-5=-125/847  
WEBS 2-5=-43/530, 2-4=-914/159

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 4=123.
- 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.
- 5) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-70, 1-6=-90, 1-4=-20  
Concentrated Loads (lb)  
Vert: 4=-138(F) 5=-122(F) 9=-97(F) 10=-124(F) 11=-128(F)



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	E02	Monopitch	1	1	149258176

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:39 2021 Page 1

ID:tpjOHGeVPJTyi41JASwyTKzhfUX-i9horjKjeU\_7VMxeMmHN9XvTSGUr07CDSaCheyy91gM

-0-10-8 2-8-5 3-5-14 1-11-13 0-1-8

Scale = 1:24.5

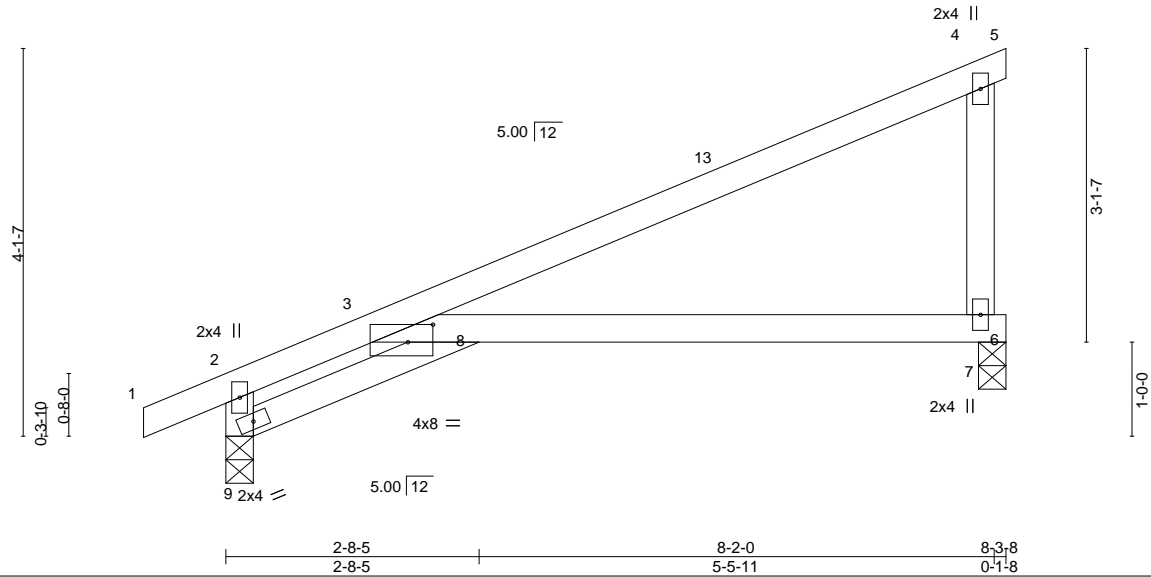


Plate Offsets (X,Y)-- [8:0-3-3,0-2-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.76	Vert(LL)	-0.24	7-8	>395	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.76	Vert(CT)	-0.45	7-8	>211	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.16	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 25 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 7=0-3-8, 9=0-3-8  
Max Horz 9=131(LC 12)  
Max Uplift 7=100(LC 12), 9=51(LC 12)  
Max Grav 7=361(LC 1), 9=430(LC 1)

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

TOP CHORD 2-9=405/231

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-2, Interior(1) 2-3-2 to 8-3-8 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 9.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	E03	Half Hip	1	1	149258177

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:40 2021 Page 1

ID:tnOHGeVPJTty41JASwyTKzhfUX-AMFA23KLPn6\_7WWrwUochkSiYgw2IYwMhExEAPy91gL

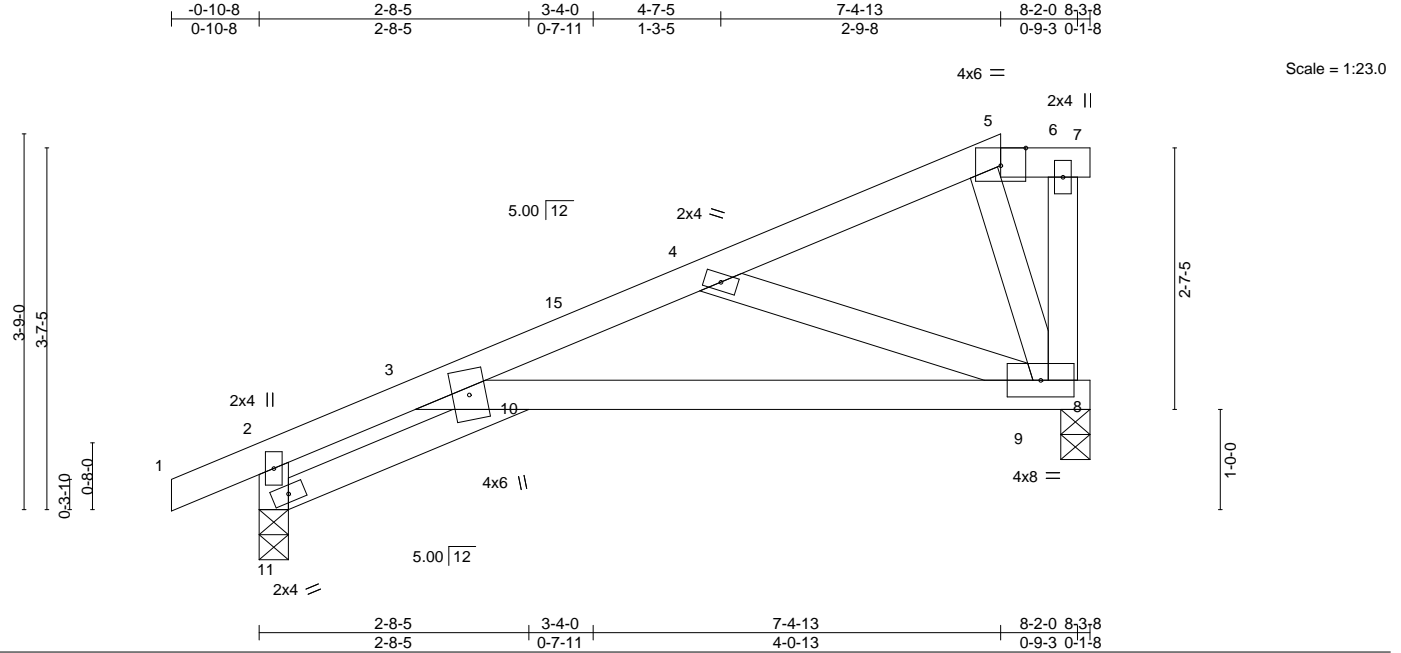


Plate Offsets (X,Y)-- [5:0-3-0,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.48	Vert(LL)	-0.06	9-10	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.14	9-10	>657	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.06	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 31 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF No.2 \*Except\*  
1-5: 2x4 SPF 1650F 1.5E  
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: 5-7.  
BOT CHORD Rigid ceiling directly applied.

#### REACTIONS.

(size) 9=0-3-8, 11=0-3-8  
Max Horz 11=114(LC 12)  
Max Uplift 9=82(LC 12), 11=55(LC 12)  
Max Grav 9=376(LC 1), 11=415(LC 1)

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

TOP CHORD 2-11=390/207, 3-4=545/208  
BOT CHORD 3-10=135/546, 9-10=300/546  
WEBS 4-9=574/311

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-2, Interior(1) 2-3-2 to 7-4-13, Exterior(2E) 7-4-13 to 8-3-8 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:42 2021 Page 1  
 ID: tjnOHGeVPJTiy41JASwyTKzhfUX-7kMxTlMbxPMiMpgD1vq4nX25UbmDuf8YQLFHy91gJ  
 -0-10-8 2-8-5 5-0-0 8-3-8  
 0-10-8 2-8-5 2-3-11 3-3-8



**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/TPH Quality Criteria, DSB-89 and BCSI Building Components**.

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



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	E04	HALF HIP GIRDER	1	2	I49258178

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

8.430 s Aug 16 2021
MiTek Industries, Inc.
Tue Dec 14 13:28:42 2021
Page 2
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-7kMxTIMbxPMiMpgD1vq4n9X25UbmDUbf8YQLFHy91gJ

**LOAD CASE(S)** Standard
 

Uniform Loads (plf)
 

Vert: 1-2=-70, 2-4=-70, 4-5=-70, 8-9=-20, 6-8=-20

 Concentrated Loads (lb)
 

Vert: 4=-47(B) 5=-57(B) 6=-49(B) 7=-64(B) 13=-30(B) 14=-41(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258179
3016946	J01	Diagonal Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:43 2021 Page 1  
ID:tnOHGeVPJTyi41JASwyTKzhfUX-bxwJh5NEhiUZ\_zFQbcMJN4Ekuv2yxepNCAunjy91gl

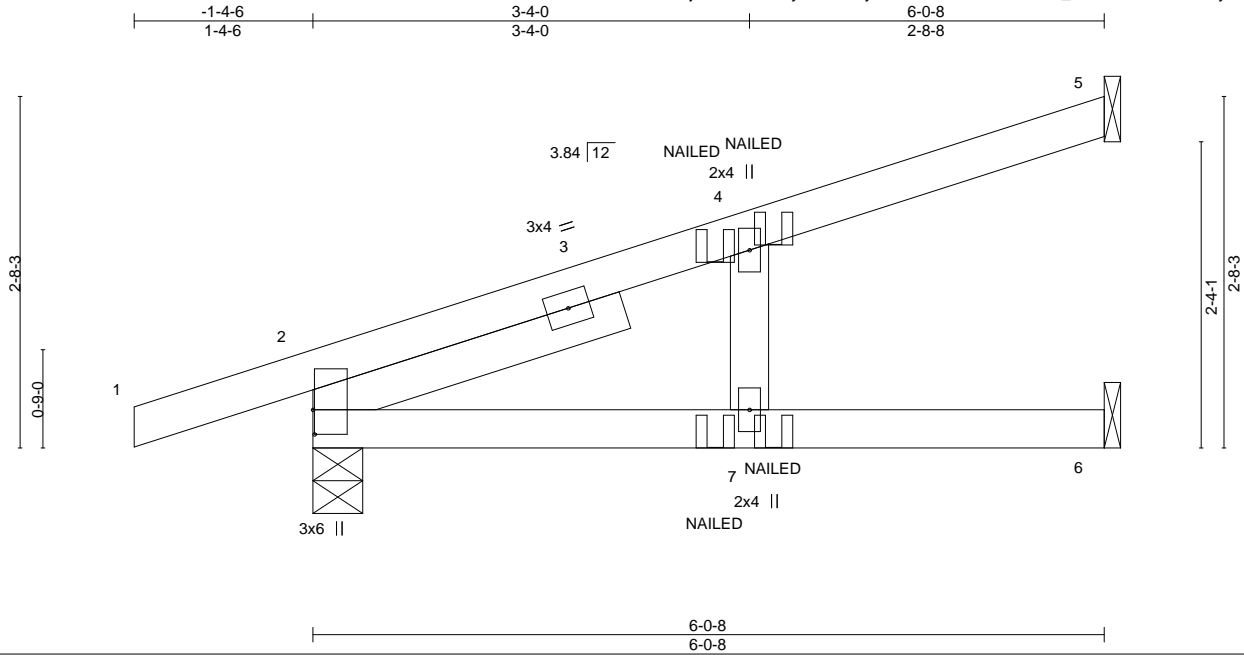


Plate Offsets (X,Y)-- [2:0-2-4,0-0-2]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.08	7	>853	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.49	Vert(CT)	-0.16	7-10	>463	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.01	Horz(CT)	0.03	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 20 lb	FT = 20%

#### LUMBER-

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

#### 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) 5=Mechanical, 2=0-4-9, 6=Mechanical  
Max Horz 2=91(LC 4)  
Max Uplift 5=-49(LC 8), 2=-87(LC 4), 6=-14(LC 8)  
Max Grav 5=151(LC 1), 2=376(LC 1), 6=108(LC 1)

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

TOP CHORD 2-4=-352/88

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left 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) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-5=-70, 6-8=-20  
Concentrated Loads (lb)  
Vert: 7=-1(F=-1, B=0)



December 16, 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

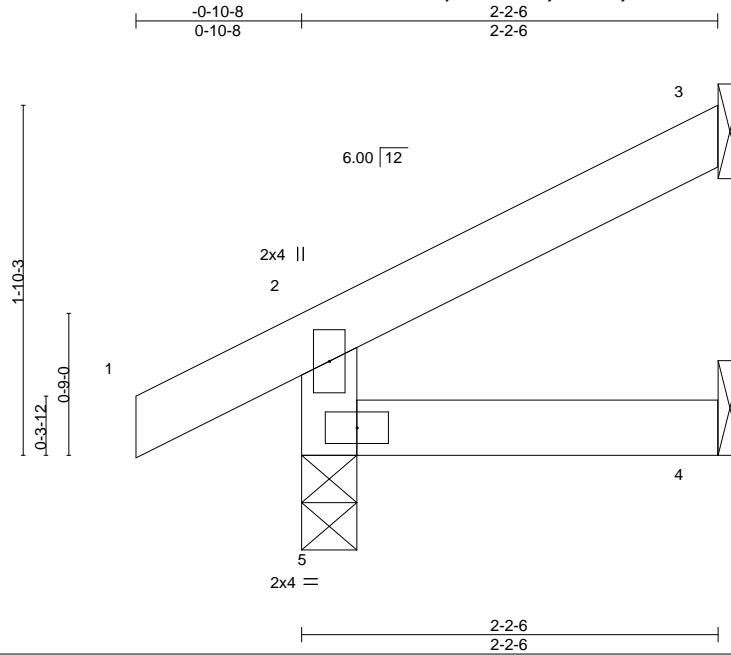


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J02	Jack-Open	1	1	149258180

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:44 2021 Page 1  
ID: tjnOHGeVPJTiy41JASwyTKzhfUX-37UhuQNsS0cQc7pc9KtYsadUwHMIhO4ycsvRJAY91gH



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.07	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR						
	Code IRC2018/TPI2014						Weight: 7 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-6 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
Max Horz 5=46(LC 12)  
Max Uplift 3=-31(LC 12), 5=-21(LC 12)  
Max Grav 3=53(LC 1), 4=36(LC 3), 5=179(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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 16, 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**



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258181
3016946	J03	Jack-Open Girder	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:45 2021 Page 1  
ID:tnOHGeVPJT41JASwyTKzhfUX-XJ236mOUDKKHDOoj1OnOn9eThg\_Qq15qWf?rcy91gG



Scale = 1:19.2

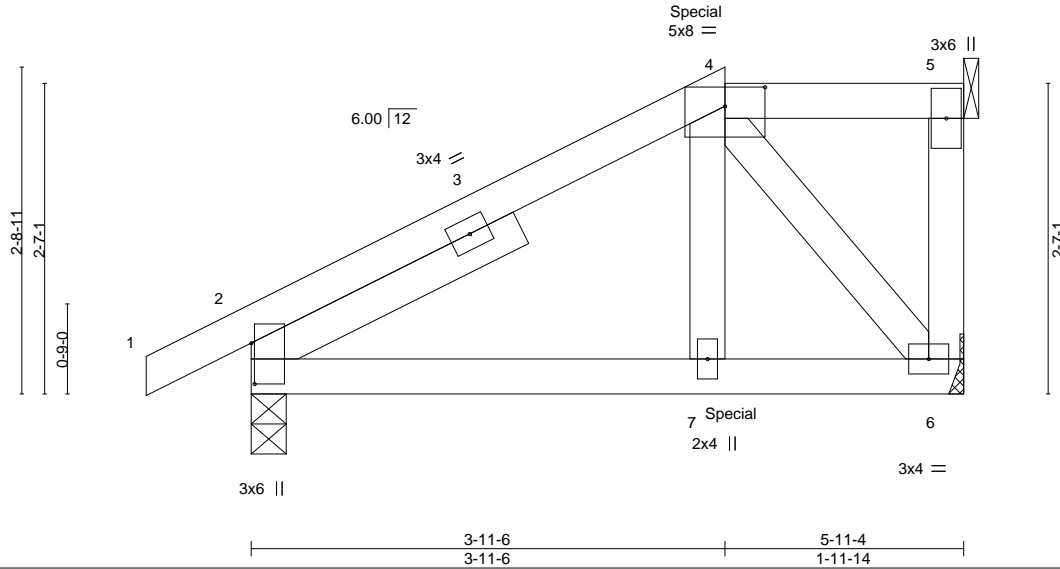


Plate Offsets (X,Y)-- [2:0-4-1,0-0-5], [4:0-4-0,0-1-15]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.15	Vert(LL) -0.01	7-10	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.14	Vert(CT) -0.01	7-10	>999	180			
BCLL 0.0	Rep Stress Incr NO		WB 0.08	Horz(CT) -0.00	2	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 26 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except 2-0-0 oc purlins: 4-5.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 6=Mechanical, 5=Mechanical  
Max Horz 2=83(LC 8)  
Max Uplift 2=-78(LC 8), 6=-99(LC 8), 5=-23(LC 4)  
Max Grav 2=412(LC 1), 6=363(LC 1), 5=65(LC 1)

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

TOP CHORD 2-4=-323/76  
BOT CHORD 2-7=-88/293, 6-7=-86/279  
WEBS 4-6=-452/139

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left 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.
- Refer to girder(s) for truss to truss connections.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 169 lb down and 118 lb up at 3-11-6 on top chord, and 143 lb down and 71 lb up at 3-11-6 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, 6-8=-20  
Concentrated Loads (lb)  
Vert: 4=-114(F) 7=-143(F)



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

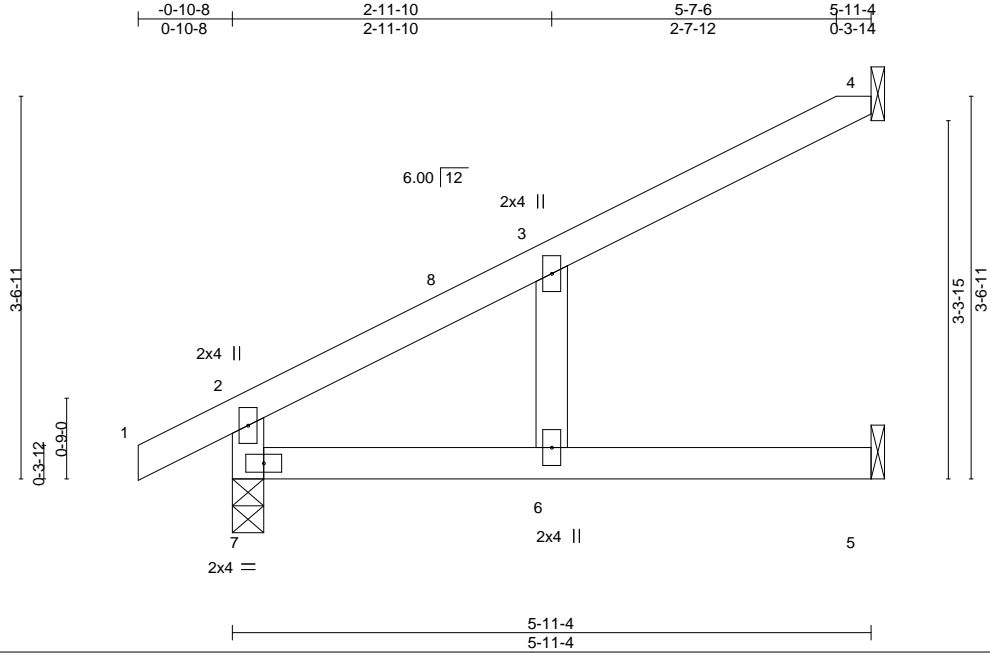
Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J04	Half Hip	1	1	I49258182

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:46 2021 Page 1

ID:tnOHGeVPJTiy41JASwyTKzhfUX-?WcRJ6P6\_ds8Rz\_Gkv0x?imW5yr9IGF3AOYO2y91gF



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.32	Vert(LL) 0.09	6	>770	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.42	Vert(CT) -0.14	6	>492	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.04	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 18 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) 4=Mechanical, 5=Mechanical, 7=0-3-8  
Max Horz 7=114(LC 12)  
Max Uplift 4=-64(LC 12), 5=-17(LC 12), 7=-32(LC 12)  
Max Grav 4=153(LC 1), 5=99(LC 1), 7=336(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-10-8 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 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) 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J05	Jack-Open	8	1	I49258183

Builders FirstSource (Valley Center),

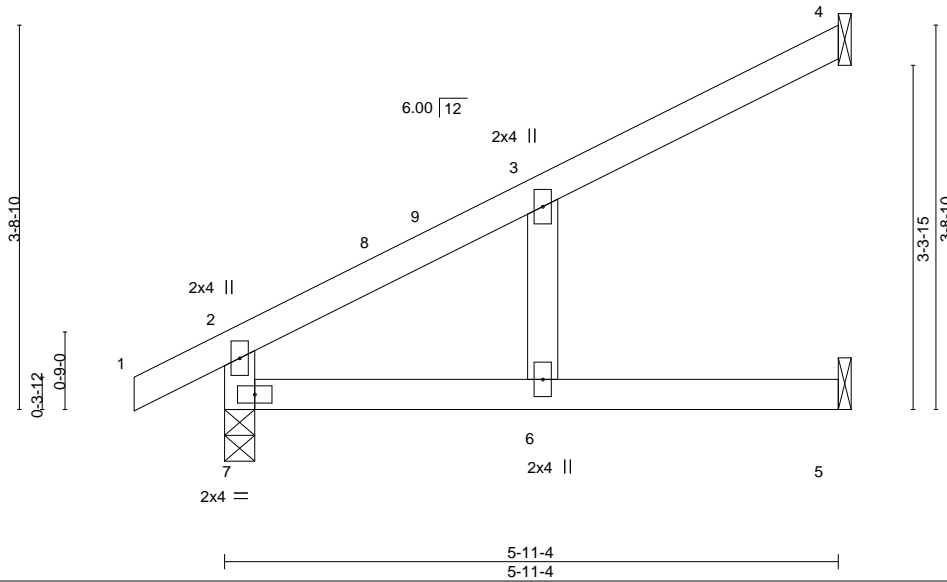
Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:47 2021 Page 1

ID: tjnOHGeVPJTyi41JASwyTKzhfUX-TiAqWSQkix\_?TbYBqSQFUCFxoVH4ulUOlq86wVvy91gE



Scale = 1:22.3



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 0.31	Vert(LL)	0.10	6	>697	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.14	6	>492	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.04	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 18 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) 4=Mechanical, 5=Mechanical, 7=0-3-8  
Max Horz 7=114(LC 12)  
Max Uplift 4=-63(LC 12), 5=-18(LC 12), 7=-32(LC 12)  
Max Grav 4=151(LC 1), 5=100(LC 1), 7=336(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-10-8 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 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) 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

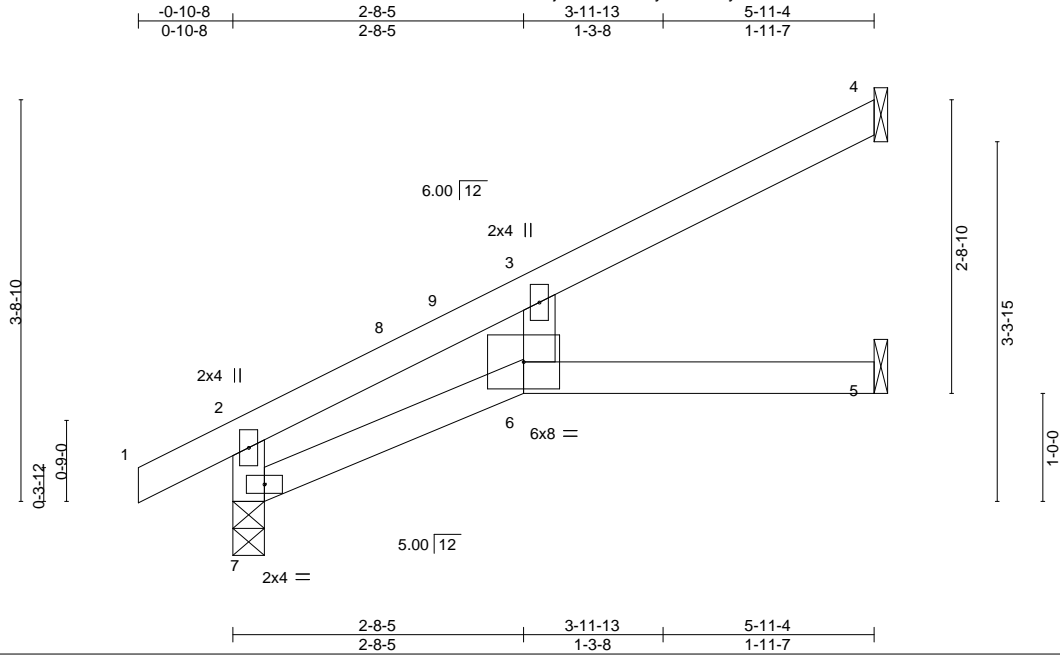
Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J06	Jack-Open	7	1	I49258184

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:48 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-xukCkoQMWF6s4k7NO9xU0Qn5ZvdZdCkYXUfSxy91gD



Scale = 1:21.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.35	Vert(LL) 0.10	6	>687	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.14	5-6	>495	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.06	5	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS							
								Weight: 17 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8  
Max Horz 7=114(LC 12)  
Max Uplift 4=-69(LC 12), 5=-13(LC 12), 7=-31(LC 12)  
Max Grav 4=159(LC 1), 5=96(LC 3), 7=336(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-10-8 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 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) 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J07	Half Hip	1	1	I49258185

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:48 2021 Page 1

ID:tnOHGeVPJTyi41JASwyTKzhfUX-xukCkoQMWF6s4k7NO9xU0Qn1DviZdCUYXUfSxy91gD

-0-10-8 2-8-5 5-7-6 5-11-4  
0-10-8 2-8-5 2-11-1 0-3-14

Scale = 1:21.8

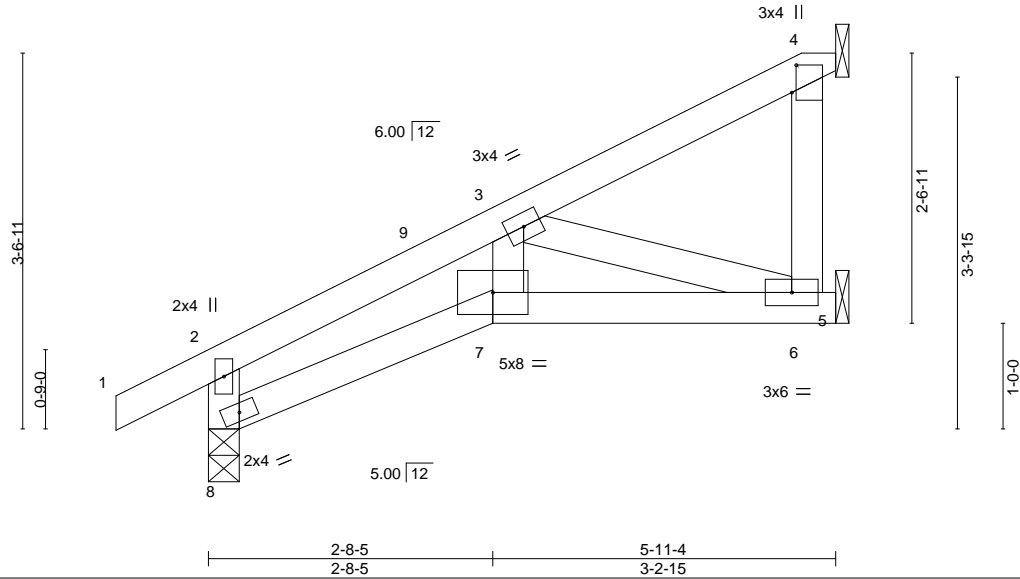


Plate Offsets (X,Y)-- [4:0-3-2,0-0-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.63	Vert(LL)	-0.14	7	>472	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.25	7	>267	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.10	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						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.  
BOT CHORD Rigid ceiling directly applied.

#### REACTIONS.

(size) 6=Mechanical, 4=Mechanical, 8=0-3-8  
Max Horz 8=117(LC 12)  
Max Uplift 6=19(LC 12), 4=58(LC 12), 8=30(LC 12)  
Max Grav 6=65(LC 3), 4=215(LC 1), 8=326(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=301/200

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-8-0 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4, 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) 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.
- 8) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



December 16, 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

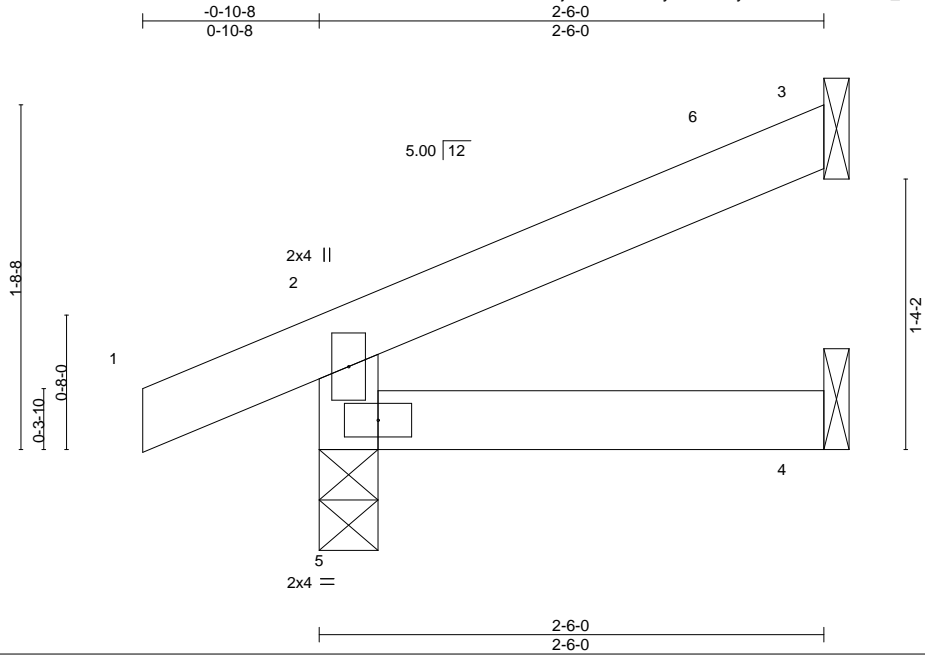


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258186
3016946	J08	Jack-Open	2	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:49 2021 Page 1  
ID:tjnOHGeVPJTiy41JASwyTKzhfUX-Q5Hax8R\_HYFjiuiZytSjZdKkgI3TMfJh8dC\_Ny91gC



Scale = 1:11.4

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 0.07	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-5	>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: 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 2-6-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
Max Horz 5=43(LC 12)  
Max Uplift 3=-32(LC 12), 5=-29(LC 8)  
Max Grav 3=65(LC 1), 4=42(LC 3), 5=191(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-5-4 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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 16, 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**



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

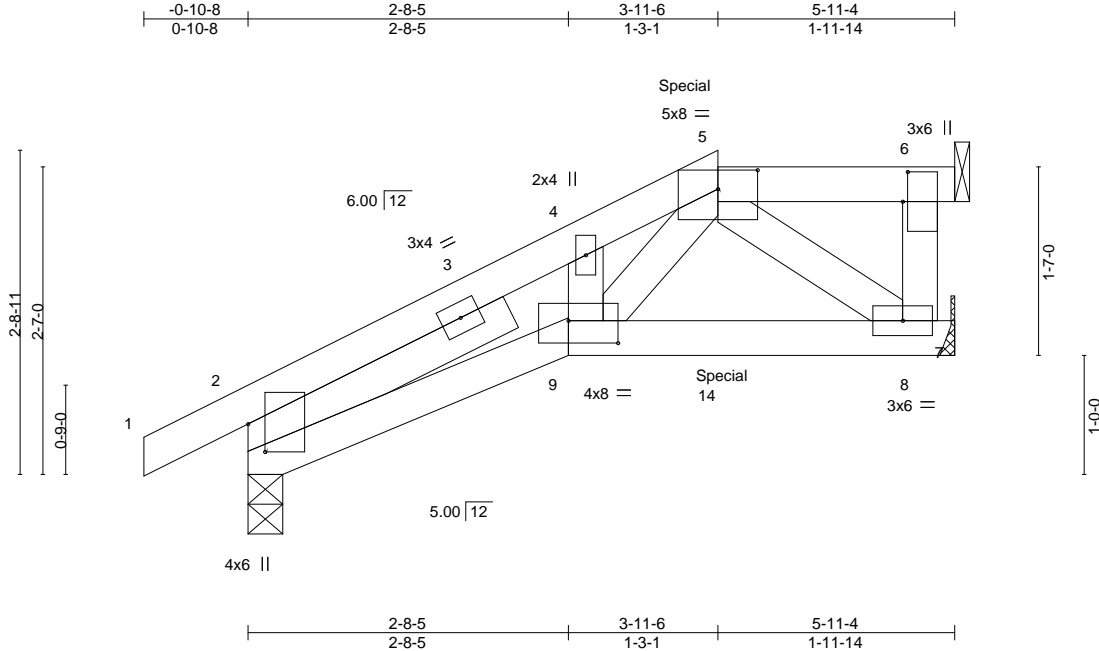


Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258187
3016946	J09	Half Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:50 2021 Page 1

ID:tnOHGeVPJTiy41JASwyTKzhfUX-uHry9USd2sNaK2HmVa\_y5rsVwiKz541r\_oMmXpy91gB



Scale = 1:19.4

Plate Offsets (X,Y)--		[2:0-2-13,0-1-11], [5:0-4-0,0-1-15], [6:0-3-0,0-0-8], [9:0-5-0,0-2-4]	
LOADING (psf)	SPACING-	CSL	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.10	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.34	Vert(LL) -0.02 8-9 >999 240
BCLL 0.0	Rep Stress Incr NO	WB 0.10	Vert(CT) -0.03 8-9 >999 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	Horz(CT) 0.01 8 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 24 lb FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 5-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 6=Mechanical, 8=Mechanical, 2=0-3-8  
Max Horz 2=68(LC 5)  
Max Uplift 6=-21(LC 4), 8=-92(LC 8), 2=-78(LC 8)  
Max Grav 6=59(LC 1), 8=373(LC 1), 2=396(LC 1)

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

TOP CHORD 2-4=-738/212, 4-5=-688/223  
BOT CHORD 2-9=-206/697, 8-9=-111/358  
WEBS 5-9=-137/401, 5-8=-456/137

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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.
- Refer to girder(s) for truss to truss connections.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 182 lb down and 108 lb up at 3-11-6 on top chord, and 126 lb down and 74 lb up at 3-11-6 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



December 16, 2021

Continued on page 2

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

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

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J09	Half Hip Girder	1	1	I49258187
Job Reference (optional)					

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

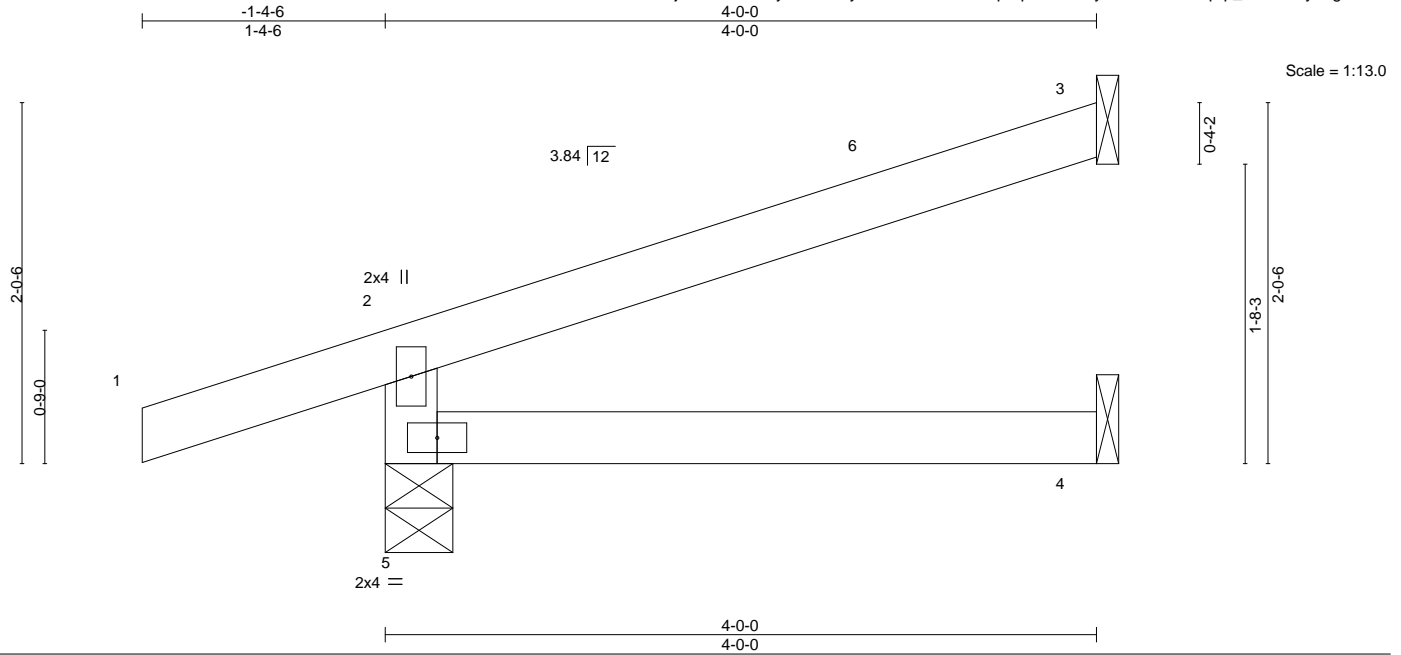
8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:50 2021 Page 2  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-uHry9USd2sNaK2HmVa\_y5rsVwiKz541r\_oMmXpy91gB

**LOAD CASE(S)** Standard  
Uniform Loads (plf)  
Vert: 1-5=-70, 5-6=-70, 9-10=-20, 7-9=-20  
Concentrated Loads (lb)  
Vert: 5=-127(B) 14=-126(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J10	Jack-Open	1	1	149258188

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:51 2021 Page 1  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-MTPKMqTFpAVQxCsy3lVBe2Pfc6kiqYp\_DS6J3Gy91gA



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/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 0.12	Vert(CT) -0.02	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-AS							

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical  
Max Horz 5=61(LC 8)  
Max Uplift 5=-84(LC 8), 3=-46(LC 12)  
Max Grav 5=298(LC 1), 3=111(LC 1), 4=69(LC 3)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-261/212

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-4-6 to 2-10-8, Exterior(2R) 2-10-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 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 16, 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

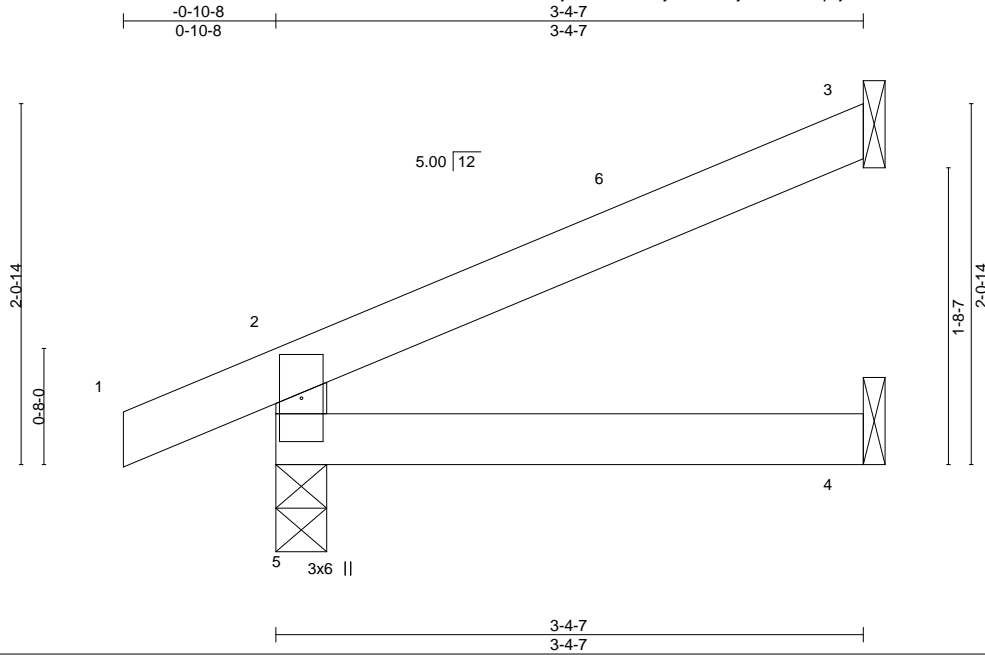


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J11	Jack-Open	1	1	I49258189

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:52 2021 Page 1  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-qfzjaAUtaTdHZMR8d?0QBgyqwW4VZ?27R6rtbiy91g9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.13	Vert(LL) 0.01	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT) -0.01	4-5	>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: 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 3-4-7 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=56(LC 12)  
Max Uplift 5=-32(LC 12), 3=-44(LC 12)  
Max Grav 5=225(LC 1), 3=95(LC 1), 4=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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-3-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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

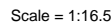


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:54 2021 Page 1  
 ID:tnOHGeVPJTyi41JASwyTKzhfUX-m25T\_rV765t?ofaXkQ2uGh1BpJkD1vYQvQKZgby91g7  
 -0-10-8 2-9-8 3-11-4  
 0-10-8 2-9-8 1-1-12



<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-11-4 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		

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-8 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) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 8.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 2021



**WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f, 56f, 57f, 58f, 59f, 60f, 61f, 62f, 63f, 64f, 65f, 66f, 67f, 68f, 69f, 70f, 71f, 72f, 73f, 74f, 75f, 76f, 77f, 78f, 79f, 80f, 81f, 82f, 83f, 84f, 85f, 86f, 87f, 88f, 89f, 90f, 91f, 92f, 93f, 94f, 95f, 96f, 97f, 98f, 99f, 100f, 101f, 102f, 103f, 104f, 105f, 106f, 107f, 108f, 109f, 110f, 111f, 112f, 113f, 114f, 115f, 116f, 117f, 118f, 119f, 120f, 121f, 122f, 123f, 124f, 125f, 126f, 127f, 128f, 129f, 130f, 131f, 132f, 133f, 134f, 135f, 136f, 137f, 138f, 139f, 140f, 141f, 142f, 143f, 144f, 145f, 146f, 147f, 148f, 149f, 150f, 151f, 152f, 153f, 154f, 155f, 156f, 157f, 158f, 159f, 160f, 161f, 162f, 163f, 164f, 165f, 166f, 167f, 168f, 169f, 170f, 171f, 172f, 173f, 174f, 175f, 176f, 177f, 178f, 179f, 180f, 181f, 182f, 183f, 184f, 185f, 186f, 187f, 188f, 189f, 190f, 191f, 192f, 193f, 194f, 195f, 196f, 197f, 198f, 199f, 200f, 201f, 202f, 203f, 204f, 205f, 206f, 207f, 208f, 209f, 210f, 211f, 212f, 213f, 214f, 215f, 216f, 217f, 218f, 219f, 220f, 221f, 222f, 223f, 224f, 225f, 226f, 227f, 228f, 229f, 230f, 231f, 232f, 233f, 234f, 235f, 236f, 237f, 238f, 239f, 240f, 241f, 242f, 243f, 244f, 245f, 246f, 247f, 248f, 249f, 250f, 251f, 252f, 253f, 254f, 255f, 256f, 257f, 258f, 259f, 260f, 261f, 262f, 263f, 264f, 265f, 266f, 267f, 268f, 269f, 270f, 271f, 272f, 273f, 274f, 275f, 276f, 277f, 278f, 279f, 280f, 281f, 282f, 283f, 284f, 285f, 286f, 287f, 288f, 289f, 290f, 291f, 292f, 293f, 294f, 295f, 296f, 297f, 298f, 299f, 300f, 301f, 302f, 303f, 304f, 305f, 306f, 307f, 308f, 309f, 310f, 311f, 312f, 313f, 314f, 315f, 316f, 317f, 318f, 319f, 320f, 321f, 322f, 323f, 324f, 325f, 326f, 327f, 328f, 329f, 330f, 331f, 332f, 333f, 334f, 335f, 336f, 337f, 338f, 339f, 340f, 341f, 342f, 343f, 344f, 345f, 346f, 347f, 348f, 349f, 350f, 351f, 352f, 353f, 354f, 355f, 356f, 357f, 358f, 359f, 360f, 361f, 362f, 363f, 364f, 365f, 366f, 367f, 368f, 369f, 370f, 371f, 372f, 373f, 374f, 375f, 376f, 377f, 378f, 379f, 380f, 381f, 382f, 383f, 384f, 385f, 386f, 387f, 388f, 389f, 390f, 391f, 392f, 393f, 394f, 395f, 396f, 397f, 398f, 399f, 400f, 401f, 402f, 403f, 404f, 405f, 406f, 407f, 408f, 409f, 410f, 411f, 412f, 413f, 414f, 415f, 416f, 417f, 418f, 419f, 420f, 421f, 422f, 423f, 424f, 425f, 426f, 427f, 428f, 429f, 430f, 431f, 432f, 433f, 434f, 435f, 436f, 437f, 438f, 439f, 440f, 441f, 442f, 443f, 444f, 445f, 446f, 447f, 448f, 449f, 450f, 451f, 452f, 453f, 454f, 455f, 456f, 457f, 458f, 459f, 460f, 461f, 462f, 463f, 464f, 465f, 466f, 467f, 468f, 469f, 470f, 471f, 472f, 473f, 474f, 475f, 476f, 477f, 478f, 479f, 480f, 481f, 482f, 483f, 484f, 485f, 486f, 487f, 488f, 489f, 490f, 491f, 492f, 493f, 494f, 495f, 496f, 497f, 498f, 499f, 500f, 501f, 502f, 503f, 504f, 505f, 506f, 507f, 508f, 509f, 510f, 511f, 512f, 513f, 514f, 515f, 516f, 517f, 518f, 519f, 520f, 521f, 522f, 523f, 524f, 525f, 526f, 527f, 528f, 529f, 530f, 531f, 532f, 533f, 534f, 535f, 536f, 537f, 538f, 539f, 540f, 541f, 542f, 543f, 544f, 545f, 546f, 547f, 548f, 549f, 550f, 551f, 552f, 553f, 554f, 555f, 556f, 557f, 558f, 559f, 560f, 561f, 562f, 563f, 564f, 565f, 566f, 567f, 568f, 569f, 570f, 571f, 572f, 573f, 574f, 575f, 576f, 577f, 578f, 579f, 580f, 581f, 582f, 583f, 584f, 585f, 586f, 587f, 588f, 589f, 590f, 591f, 592f, 593f, 594f, 595f, 596f, 597f, 598f, 599f, 600f, 601f, 602f, 603f, 604f, 605f, 606f, 607f, 608f, 609f, 610f, 611f, 612f, 613f, 614f, 615f, 616f, 617f, 618f, 619f, 620f, 621f, 622f, 623f, 624f, 625f, 626f, 627f, 628f, 629f, 630f, 631f, 632f, 633f, 634f, 635f, 636f, 637f, 638f, 639f, 640f, 641f, 642f, 643f, 644f, 645f, 646f, 647f, 648f, 649f, 650f, 651f, 652f, 653f, 654f, 655f, 656f, 657f, 658f, 659f, 660f, 661f, 662f, 663f, 664f, 665f, 666f, 667f, 668f, 669f, 670f, 671f, 672f, 673f, 674f, 675f, 676f, 677f, 678f, 679f, 680f, 681f, 682f, 683f, 684f, 685f, 686f, 687f, 688f, 689f, 690f, 691f, 692f, 693f, 694f, 695f, 696f, 697f, 698f, 699f, 700f, 701f, 702f, 703f, 704f, 705f, 706f, 707f,**

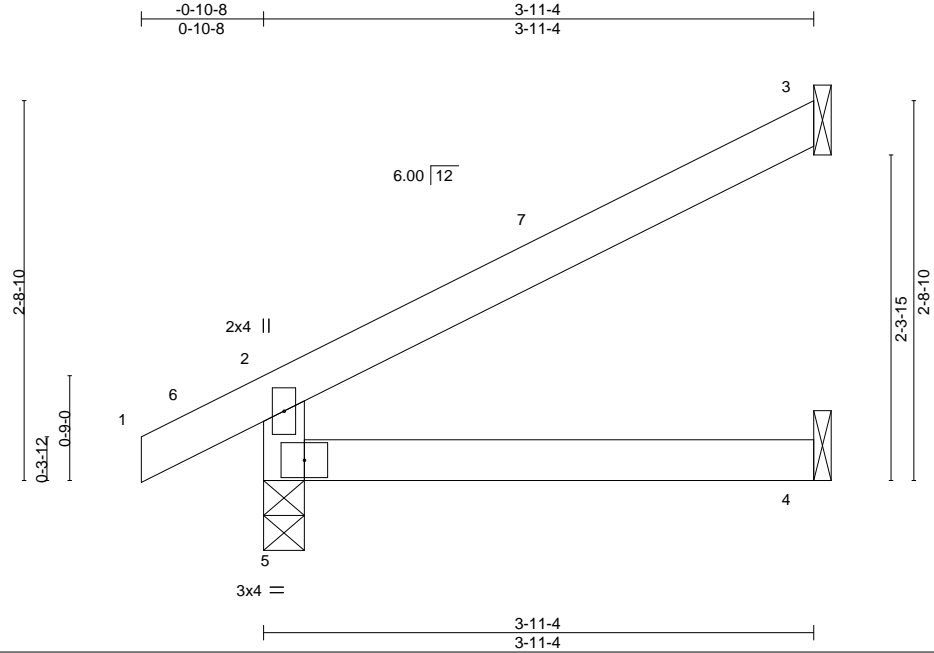


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J14	Jack-Open	1	1	I49258192

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:55 2021 Page 1  
ID:tnOHGeVPJT41JASwyTKzhfUX-EEfrCBWtO?sQp9jl7Z7ouaKAj4LmMoa844XC1y91g6



Scale = 1:16.5

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 0.20	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.02	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: 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 3-11-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
Max Horz 5=78(LC 12)  
Max Uplift 3=-58(LC 12), 5=-26(LC 12)  
Max Grav 3=114(LC 1), 4=70(LC 3), 5=249(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-8 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) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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 16, 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**

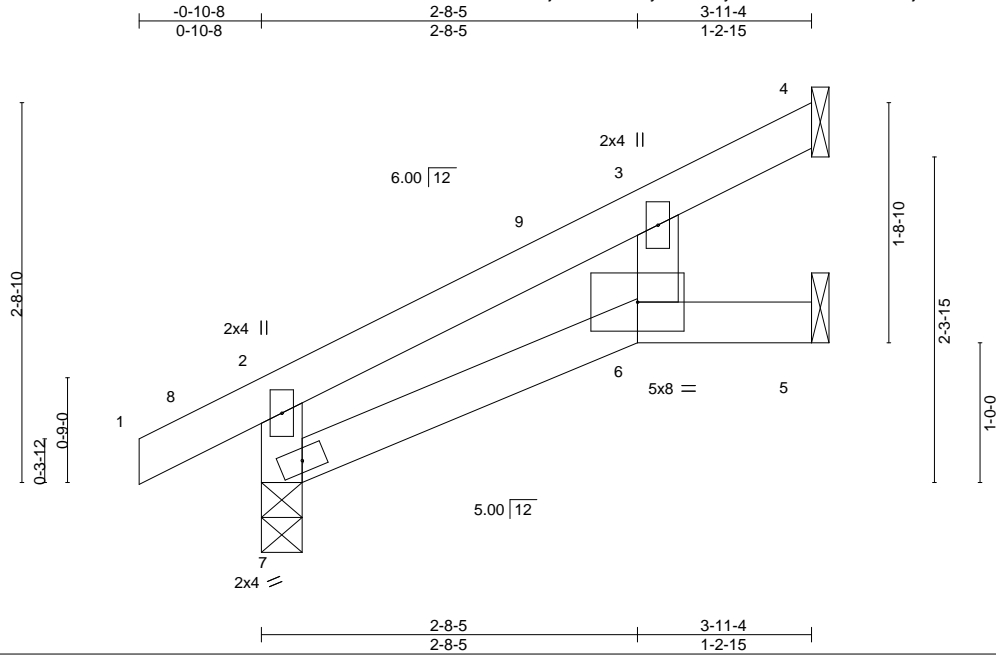


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J15	Jack-Open	4	1	I49258193

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:56 2021 Page 1  
ID:tjnOHGeVPJTty41JASwyTKzhfUX-iRDDPXXNei7j2zkvsr4ML66WQ7QfVpsjMkp4kTy91g5



Scale = 1:16.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.16	Vert(LL) 0.02	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.02	6-7	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.01	Horz(CT) -0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP					Weight: 12 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8  
Max Horz 7=77(LC 12)  
Max Uplift 4=-36(LC 12), 5=-19(LC 12), 7=-25(LC 12)  
Max Grav 4=91(LC 1), 5=67(LC 1), 7=249(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-8 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) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 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.



December 16, 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**

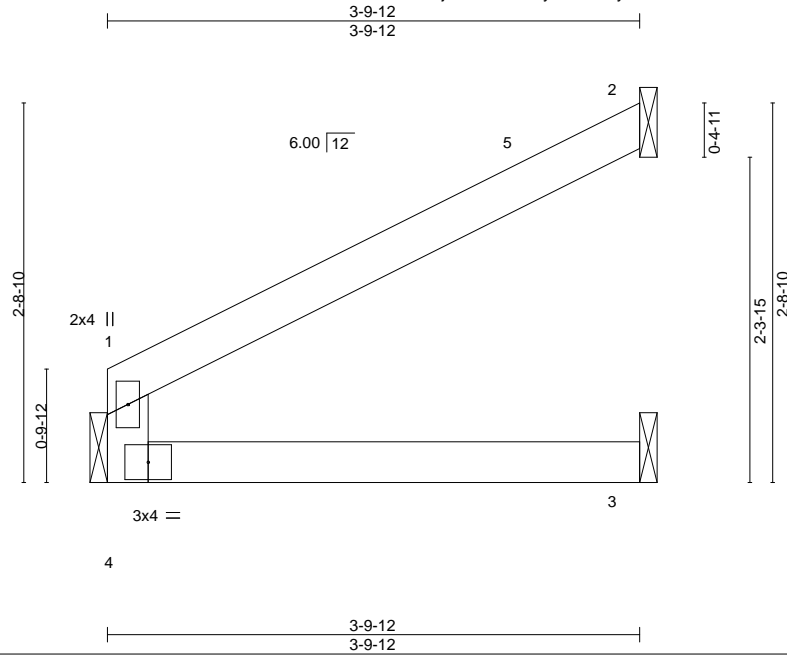


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J16	Jack-Open	5	1	I49258194

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:56 2021 Page 1  
ID: tjnOHGeVPJTyi41JASwyTKzhfUX-iRDDPXXNei7j2zkvsr4ML66Vr7QYVp2jMkp4kTy91g5



Scale = 1:16.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.20	Vert(LL)	-0.01	3-4	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT)	-0.02	3-4	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.01	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-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 3-9-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 2=Mechanical, 3=Mechanical, 4=Mechanical  
Max Horz 4=59(LC 12)  
Max Uplift 2=-58(LC 12), 4=-3(LC 12)  
Max Grav 2=116(LC 1), 3=69(LC 3), 4=162(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=4.2psf; h=15ft; 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 3-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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**



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258195
3016946	J17	Jack-Open	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:57 2021 Page 1  
ID:tnOHGeVPJTyi41JASwyTKzhfUX-BdmcdtX0O0Faf7J6QYcbtJfe?XiyEGysbNZeGwy91g4

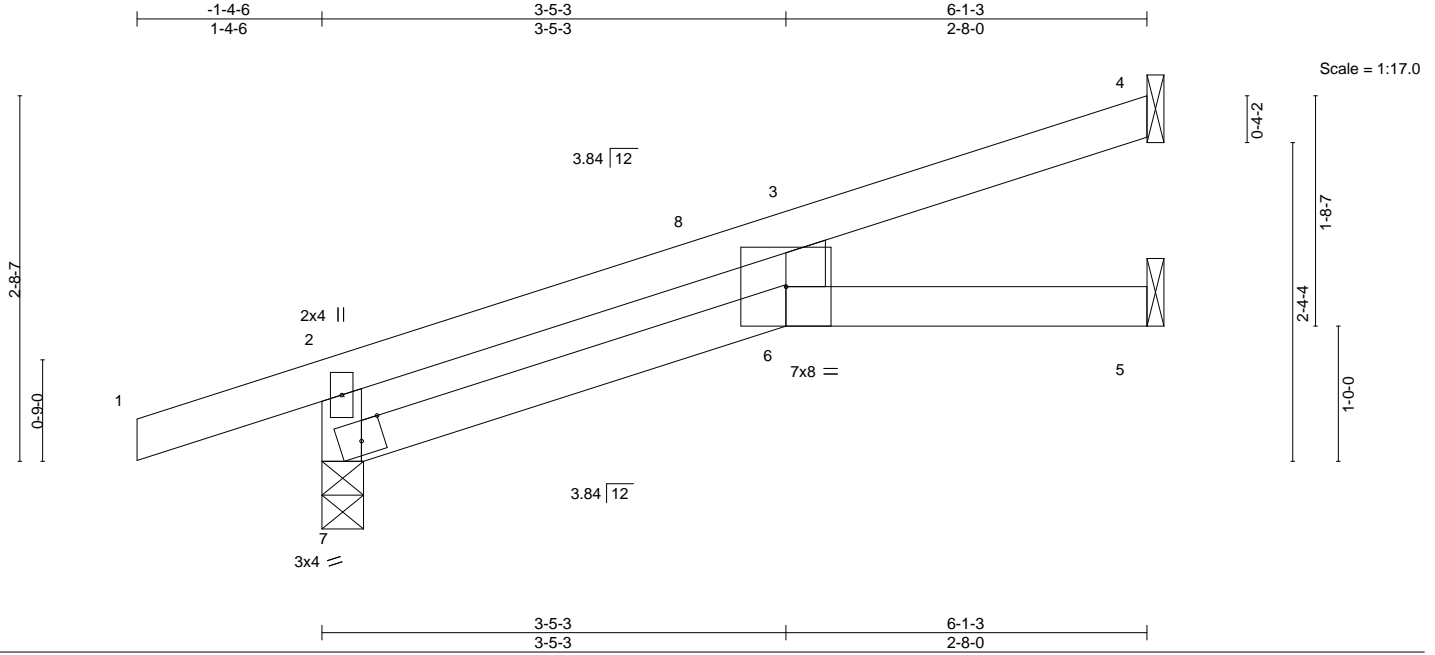


Plate Offsets (X,Y)-- [7:0-2-0,Edge]		3-5-3		6-1-3	
		3-5-3		2-8-0	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc) l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	0.10 6-7 >688 240
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.14 6-7 >506 180
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.04 5 n/a n/a
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS		
				<b>PLATES</b>	<b>GRIP</b>
				MT20	197/144
				Weight: 17 lb	FT = 20%

#### LUMBER-

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

#### REACTIONS.

(size) 7=0-3-11, 4=Mechanical, 5=Mechanical  
Max Horz 7=85(LC 8)  
Max Uplift 7=-92(LC 8), 4=-50(LC 12), 5=-12(LC 12)  
Max Grav 7=385(LC 1), 4=156(LC 1), 5=95(LC 1)

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

TOP CHORD 2-7=-292/191

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 1-4-6 to 2-10-8, Exterior(2R) 2-10-8 to 6-0-7 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) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 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 16, 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**



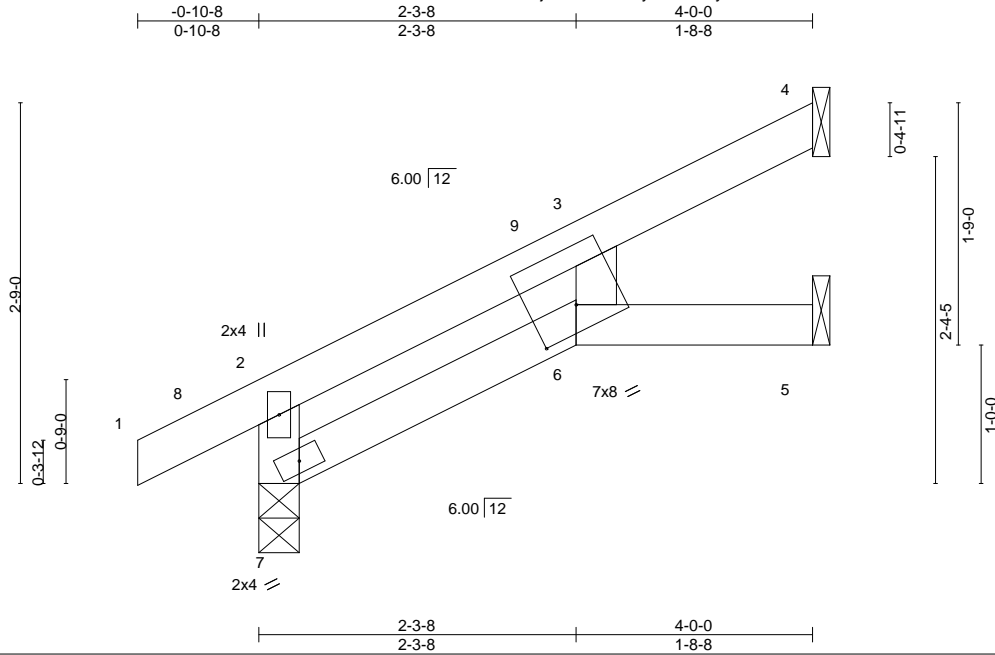
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J18	Jack-Open	2	1	I49258196

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:28:59 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-70uM2ZZGwdVlvRTUXze3zkk1uKS7iAb92h2kLoy91g2



Scale = 1:16.6

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	0.02	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.02	6	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.01	Horz(CT)	-0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						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, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

#### REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8  
Max Horz 7=78(LC 12)  
Max Uplift 4=44(LC 12), 5=13(LC 12), 7=25(LC 12)  
Max Grav 4=100(LC 1), 5=61(LC 1), 7=252(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 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) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 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) 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 16, 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



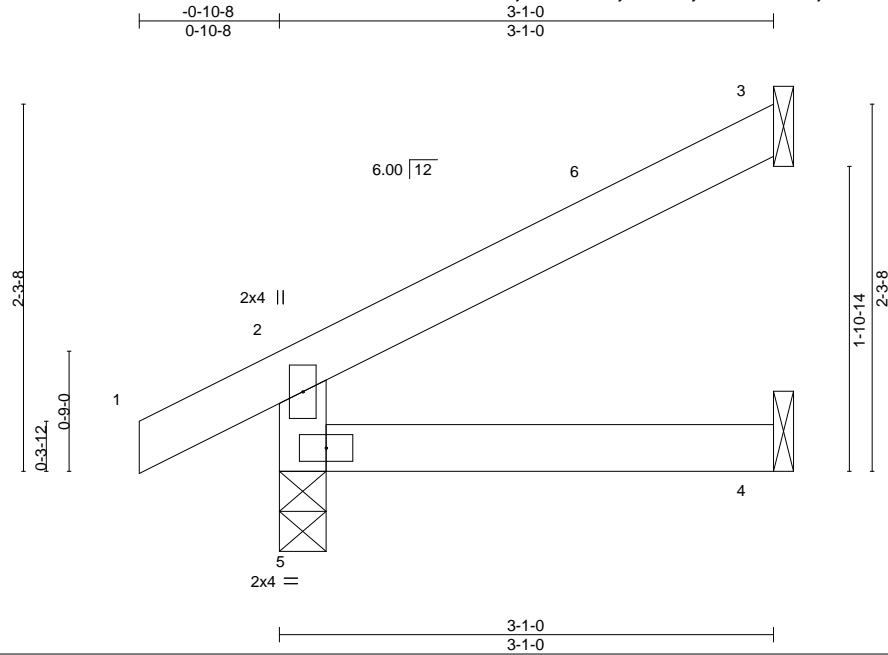
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J19	Jack-Open	1	1	I49258197

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:07 2021 Page 1  
ID:tnOHGeVPJTiy41JASwyTKzhfUX-uYNOjlfH24W9sf41?fnxHQ4PZZB2aomLux\_9cKy91fw



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	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.01	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 3-1-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
Max Horz 5=62(LC 12)  
Max Uplift 3=-45(LC 12), 5=-23(LC 12)  
Max Grav 3=85(LC 1), 4=54(LC 3), 5=214(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-0-4 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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 16, 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

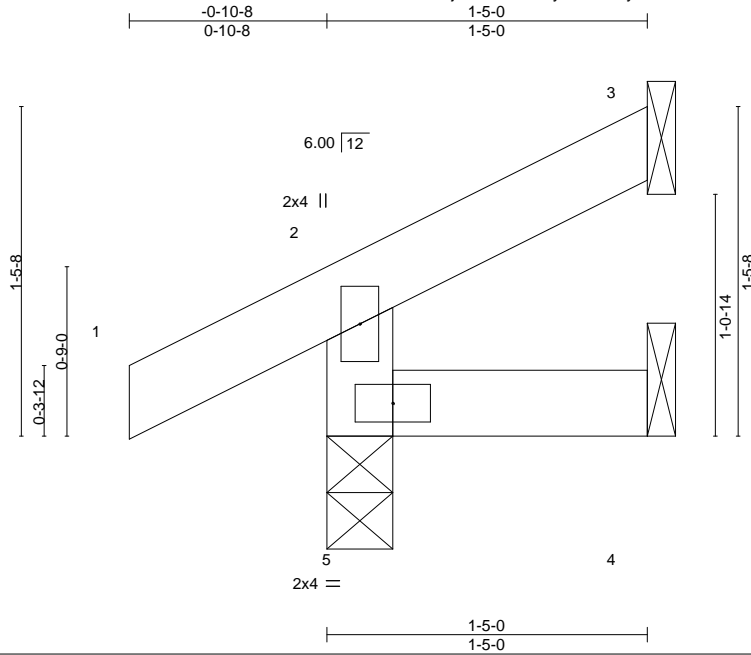


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J20	Jack-Open	1	1	I49258198

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:08 2021 Page 1  
ID: tjnOHGeVPJTyi41JASwyTKzhfUX-MkxmwegvpOe0UpfDZMIAqecaszYEJF0U7bjj8ny91fv



Scale = 1:10.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.07	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	-0.00	5	>999	180		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR						Weight: 5 lb	FT = 20%
	Code IRC2018/TPI2014								

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
Max Horz 5=33(LC 9)  
Max Uplift 3=-19(LC 12), 4=-1(LC 9), 5=-21(LC 12)  
Max Grav 3=22(LC 1), 4=22(LC 3), 5=157(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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 fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J21	Diagonal Hip Girder	1	1	I49258199

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:09 2021 Page 1  
ID:tnOHGeVPJTiy41JASwyTKzhfUX-qxV88\_hXaimt5zEP74pPNr9jLMr42gPdMFTGhDy91fu

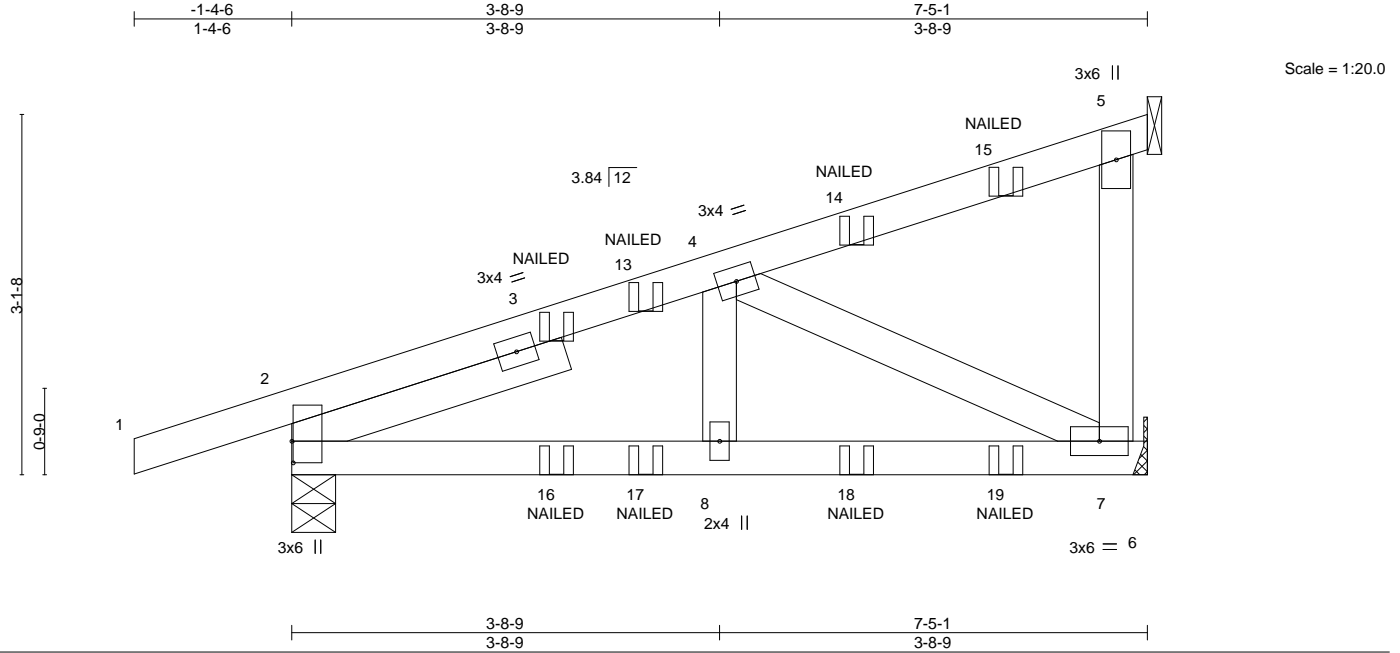


Plate Offsets (X,Y)-- [2:0-2-4,0-0-2]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	-0.01	7-8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.02	7-8	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.12	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 30 lb	FT = 20%

#### LUMBER-

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

#### 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) 2=0-4-9, 7=Mechanical, 5=Mechanical  
Max Horz 2=105(LC 4)  
Max Uplift 2=-106(LC 4), 7=-64(LC 8), 5=-51(LC 4)  
Max Grav 2=438(LC 1), 7=273(LC 1), 5=124(LC 1)

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

TOP CHORD 2-4=-419/76  
BOT CHORD 2-8=-128/413, 7-8=-128/413  
WEBS 4-7=-458/141

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5 except (jt=lb) 2=106.
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 9) 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: 1-5=-70, 6-9=-20  
Concentrated Loads (lb)  
Vert: 14=-0(F) 15=-32(B) 16=3(F) 17=-1(B) 18=-5(F) 19=-56(B)



December 16, 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



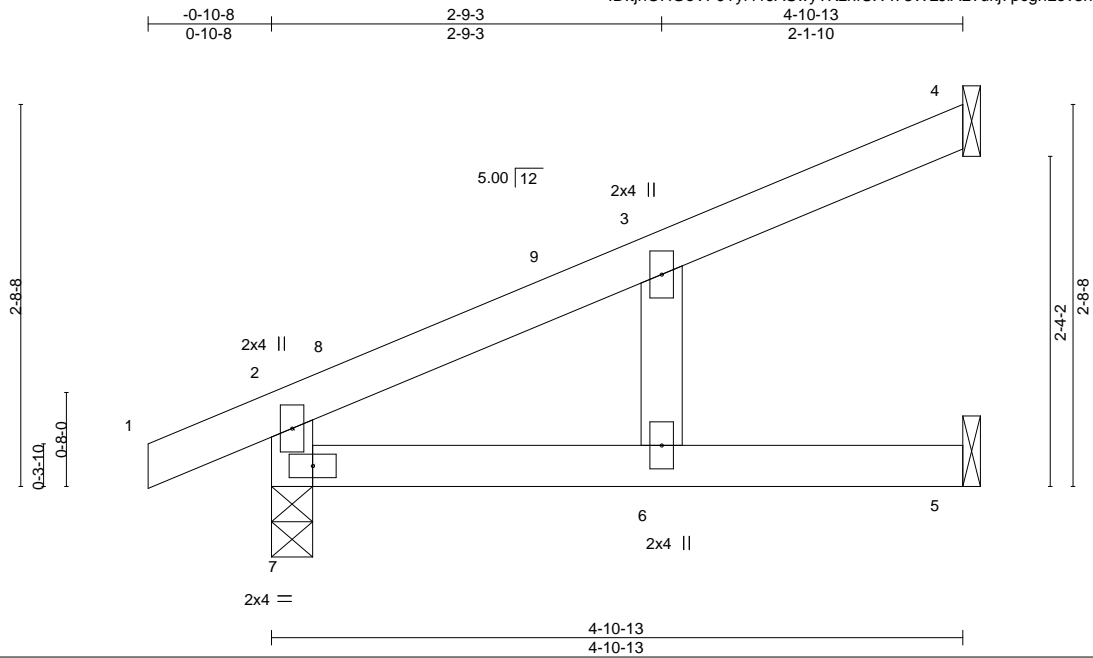
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J22	Jack-Open	1	1	I49258200

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:10 2021 Page 1  
ID:tjnOHGeVPJTiy41JASwyTKzhfUX-173WLJiAL?ukj7pcgnLev3huBmAtn8GnavCqDfy91ft



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) 0.04	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(CT) -0.06	6	>930	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.02	4	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) 4=Mechanical, 5=Mechanical, 7=0-3-8  
Max Horz 7=80(LC 12)  
Max Uplift 4=-44(LC 12), 5=-14(LC 12), 7=-38(LC 12)  
Max Grav 4=120(LC 1), 5=83(LC 1), 7=290(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-10-1 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 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) 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 16, 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



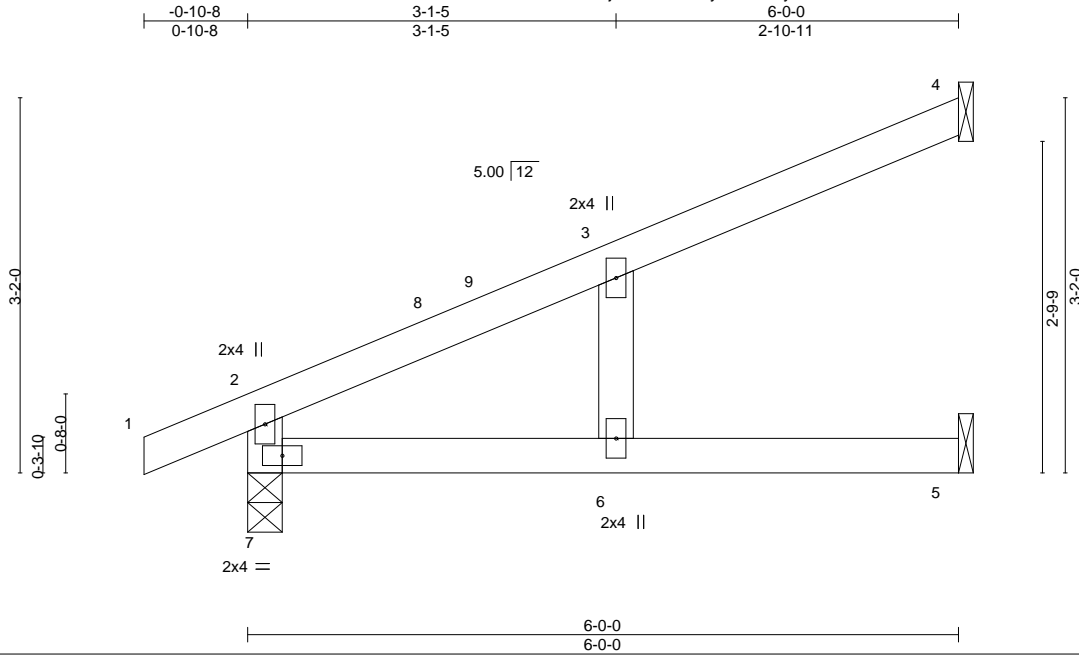
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J23	Jack-Open	2	1	I49258201

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:11 2021 Page 1  
ID:tnOHGeVPJTiy41JASwyTKzhfUX-mJduZfio5JObLHOoEUstSGE19AUfWbSwpZyNI6y91fs



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.32	Vert(LL)	0.09	6	>768	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.14	6	>482	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.03	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 17 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8  
Max Horz 7=96(LC 12)  
Max Uplift 4=-57(LC 12), 5=-14(LC 12), 7=-43(LC 12)  
Max Grav 4=154(LC 1), 5=100(LC 1), 7=338(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 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) 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017





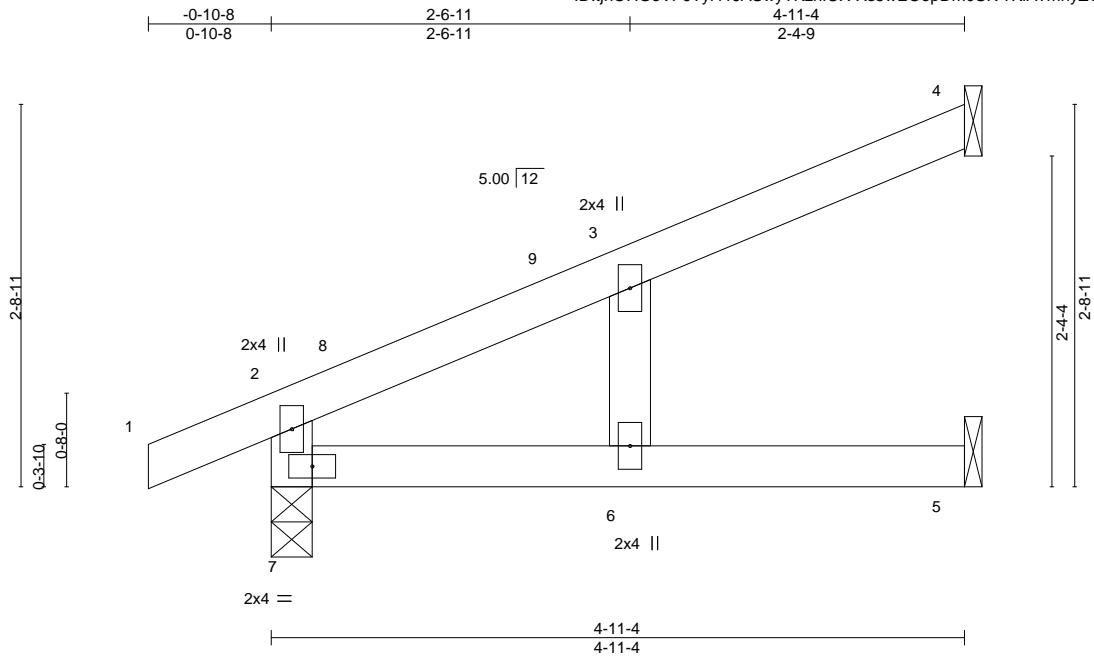
Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J25	Jack-Open	1	1	I49258203

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:19 2021 Page 1

ID:tnOHGeVPJTiy41JASwyTKzhfUX-Xs5wEOpDm0SIV?KiA?mnyZQyOExODT6fpuo1ey91fk



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.21	Vert(LL) 0.04	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(CT) -0.06	6	>906	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.02	4	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) 4=Mechanical, 5=Mechanical, 7=0-3-8  
Max Horz 7=80(LC 12)  
Max Uplift 4=-47(LC 12), 5=-12(LC 12), 7=-38(LC 12)  
Max Grav 4=124(LC 1), 5=81(LC 1), 7=292(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-10-8 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) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 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) 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J26	Jack-Open	1	1	I49258204

Builders FirstSource (Valley Center),

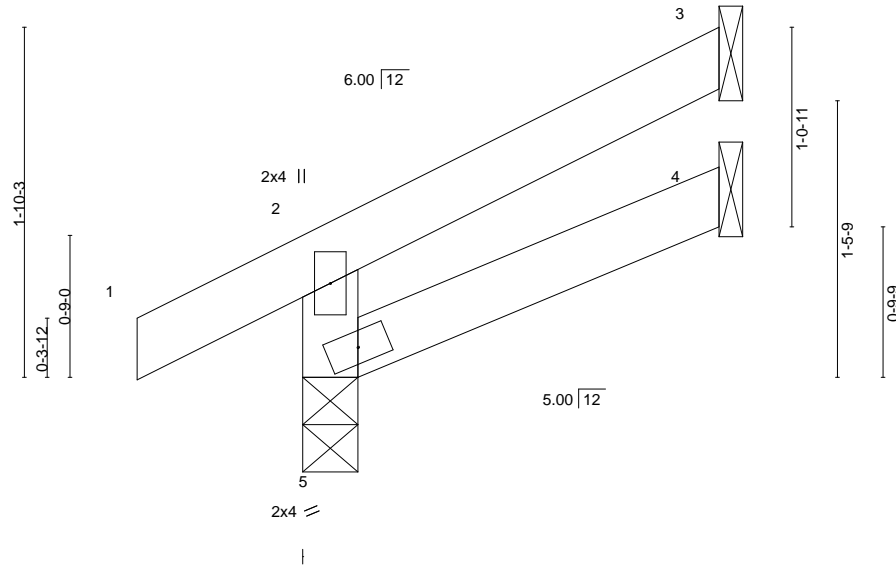
Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:29 2021 Page 1

ID: tjnOHGeVPJTyi41JASwyTKzhfUX-FniiLpw4srH1V2mFIGA6A3\_AZQjkkDayMJKO3y91fa

-0-10-8  
0-10-8  
2-2-6  
2-2-6

Scale = 1:12.2



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 0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-5	>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: 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 2-2-6 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
Max Horz 5=45(LC 12)  
Max Uplift 3=-32(LC 12), 5=-20(LC 12)  
Max Grav 3=54(LC 1), 4=36(LC 3), 5=179(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

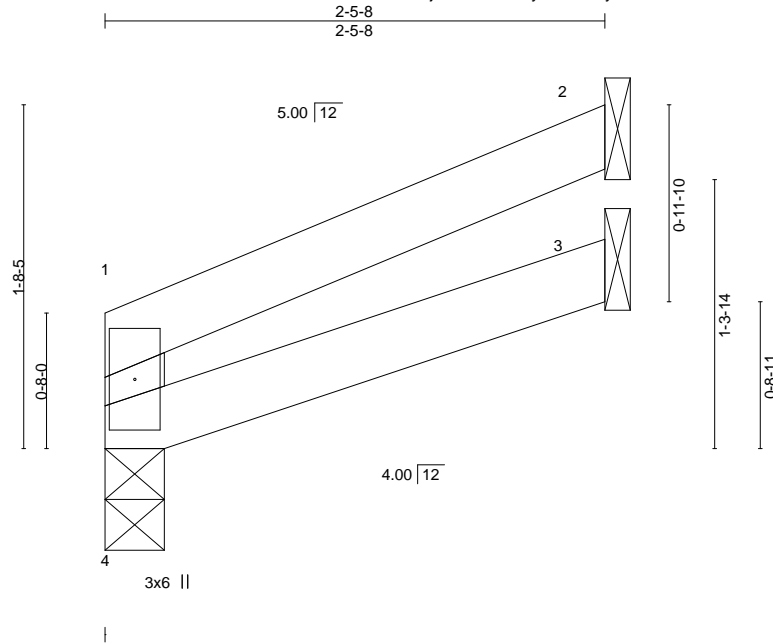
Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J27	Jack-Open	1	1	149258205

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:35 2021 Page 1

ID:tjnOHGeVPJTYi41JASwyTKzhfUX-3x3zbt?rSh1BDzDPeXHWQKEB?rm68SiSKImebjy91fU



Scale = 1:11.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.07	Vert(LL) -0.00	3-4	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) -0.00	3-4	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-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 2-5-8 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS.

(size) 4=0-3-8, 2=Mechanical, 3=Mechanical  
Max Horz 4=32(LC 9)  
Max Uplift 4=-5(LC 12), 2=-34(LC 12)  
Max Grav 4=101(LC 1), 2=73(LC 1), 3=43(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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



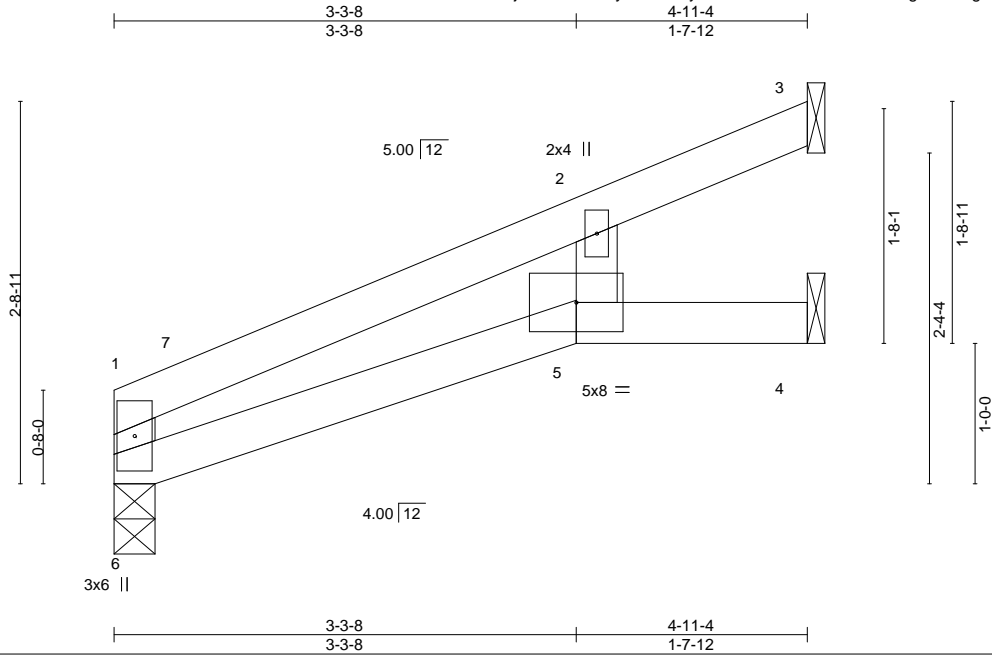
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J28	Jack-Open	1	1	149258206

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:41 2021 Page 1  
ID:tjnOHGeVPJTiy41JASwyTKzhfUX-u5REsw4c1XoKxugZ?oOwgbUABGmTYAxLjEDzpMy91fO



Scale = 1:16.4

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.24	Vert(LL) -0.04 5-6 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.02	Vert(CT) -0.07 5-6 >873 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.02 3 n/a n/a		
	Code IRC2018/TPI2014			Weight: 13 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 6=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 6=66(LC 12)  
Max Uplift 6=17(LC 12), 3=-40(LC 12), 4=-20(LC 12)  
Max Grav 6=213(LC 1), 3=125(LC 1), 4=88(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-5-4, Interior(1) 3-5-4 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) Refer to girder(s) for truss to truss connections.
- 4) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 3, 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.
- 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258207
3016946	J29	Diagonal Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:42 2021 Page 1  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-MH\_c3G4EorwBZ2FYVv9Cp0HLg58HdBUxuzWLPy91fN

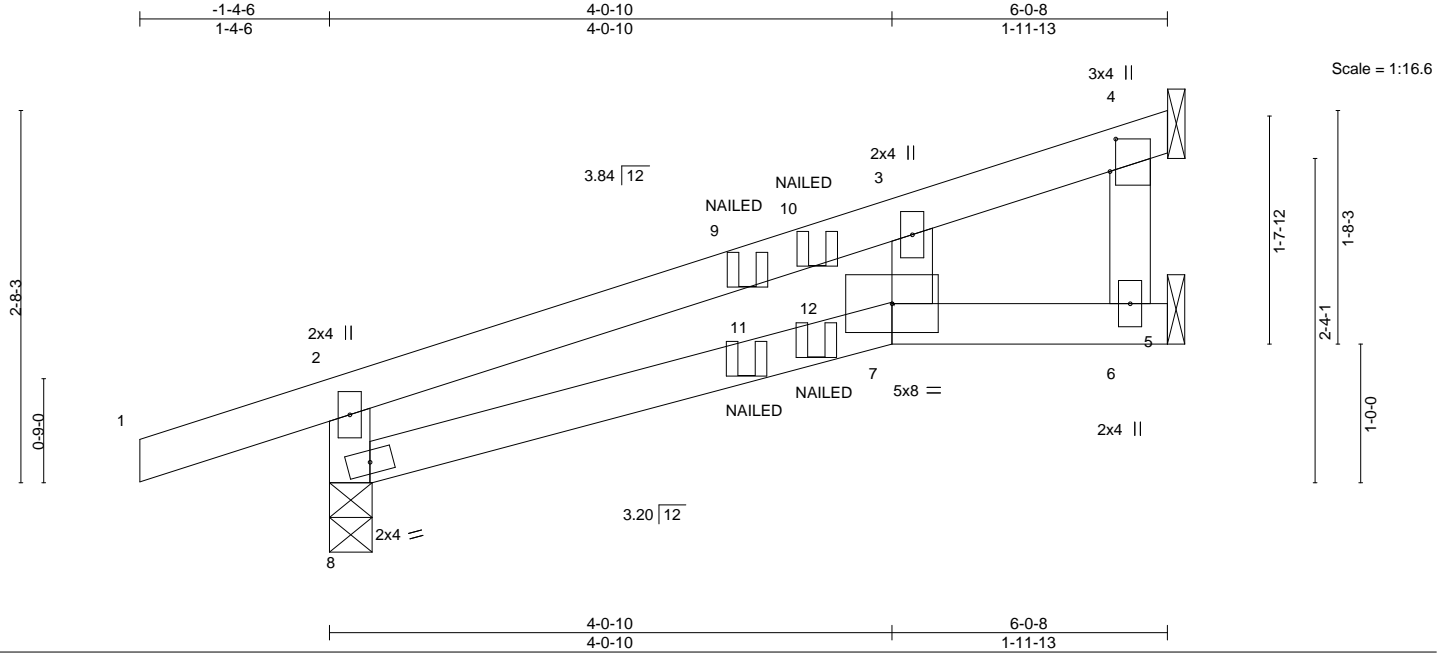


Plate Offsets (X,Y)--		[4:0-2-13,0-0-8]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.51
TCDL 10.0	Lumber DOL	1.15	BC 0.28
BCLL 0.0	Rep Stress Incr	NO	WB 0.02
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MS
			<b>DEFL.</b>
			in (loc) l/defl L/d
			Vert(LL) -0.07 7-8 >987 240
			Vert(CT) -0.12 7-8 >546 180
			Horz(CT) 0.04 4 n/a n/a
			<b>PLATES</b> <b>GRIP</b>
			MT20 197/144
			Weight: 18 lb FT = 20%

#### LUMBER-

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

#### REACTIONS.

(size) 8=0-3-11, 6=Mechanical, 4=Mechanical  
Max Horz 8=82(LC 4)  
Max Uplift 8=-91(LC 4), 6=-12(LC 8), 4=-44(LC 8)  
Max Grav 8=376(LC 1), 6=84(LC 1), 4=163(LC 1)

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

TOP CHORD 2-8=-313/103

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- "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, 7-8=-20, 5-7=-20  
Concentrated Loads (lb)  
Vert: 11=-6(B) 12=0(F)

#### BRACING-

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



December 16, 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**



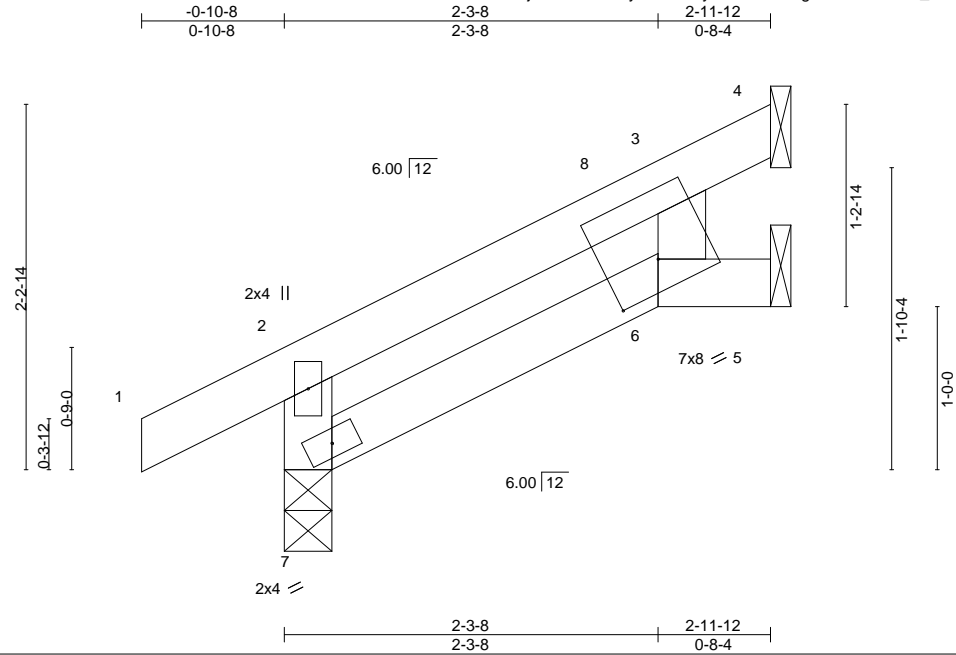
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J30	Jack-Open	1	1	I49258208

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:45 2021 Page 1

ID:tnOHGeVPJTyi41JASwyTKzhfUX\_nsglhH775mlmQV\_KEdTsqRevEt93Uz0xdrBAy7y91fK



Scale = 1:14.1

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.01	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.01	6-7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.01	Horz(CT)	-0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 10 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8  
Max Horz 7=60(LC 12)  
Max Uplift 4=-31(LC 12), 5=-12(LC 12), 7=-22(LC 12)  
Max Grav 4=69(LC 1), 5=43(LC 1), 7=209(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 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.



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

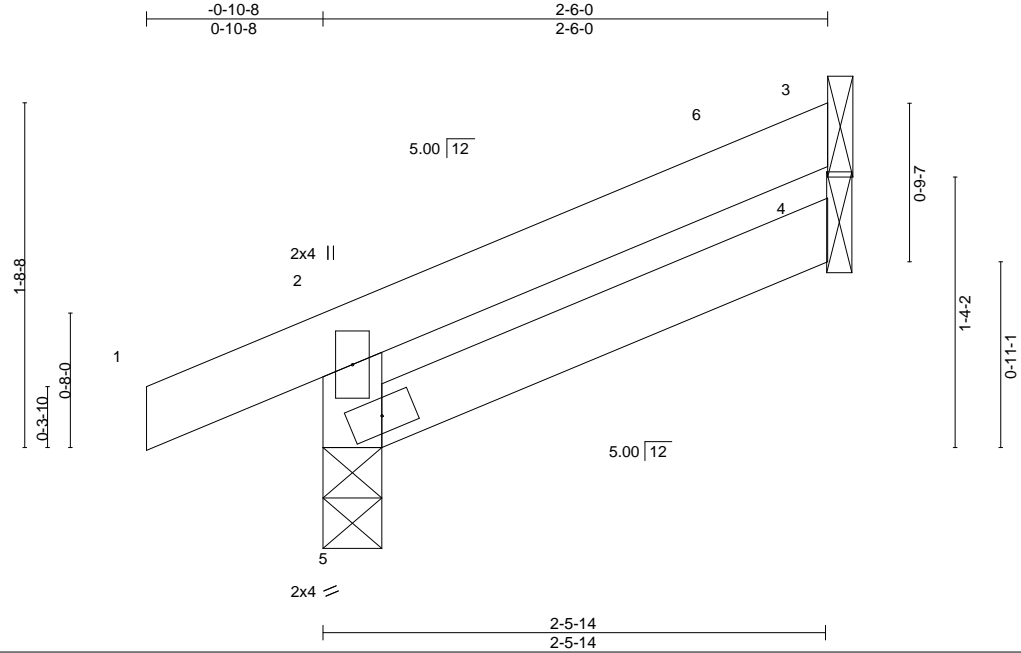


Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	J31	Jack-Open	1	1	I49258209

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:52 2021 Page 1

ID:tnOHGeVPJTiy41JASwyTKzhfUX-4CbO9hCWRvBnma0g8c5VcwR5miZBd8vzERO2IEy91fD



Scale = 1:11.4

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 0.07	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-5	>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: 8 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8  
Max Horz 5=42(LC 12)  
Max Uplift 3=-32(LC 12), 5=-28(LC 8)  
Max Grav 3=65(LC 1), 4=42(LC 3), 5=191(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-5-4 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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 16, 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



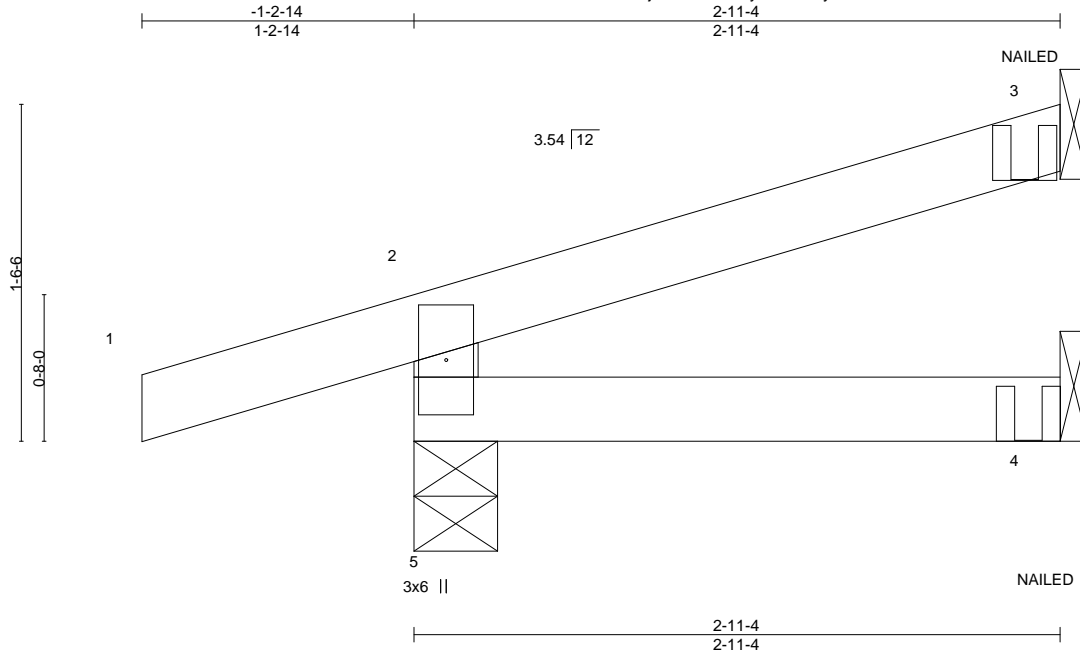
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	JD01	Jack-Open	2	1	149258210

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:53 2021 Page 1  
ID:tnOHGeVPJTyi41JASwyTKzhfUX-YP9nN0D8CDJdNkbtJck97zGf6vCMb96T57bEgy91fC



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.01	4-5	>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: 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 2-11-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical  
Max Horz 5=43(LC 8)  
Max Uplift 5=-76(LC 8), 3=-33(LC 12)  
Max Grav 5=244(LC 1), 3=74(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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



December 16, 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



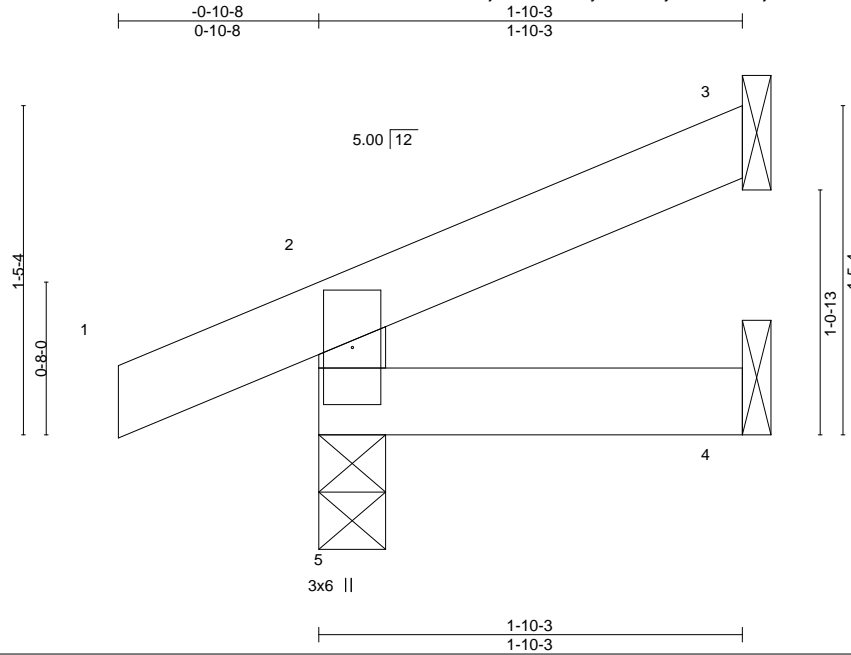
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	JD02	Jack-Open	2	1	I49258211

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:54 2021 Page 1  
ID:tnOHGeVPJTiy41JASwyTKzhfUX-0bj9aMEzXRU?uA3F07zhLWGRVF\_52PFilt9m6y91fB



Scale = 1:10.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.07	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	-0.00	5	>999		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR						
	Code IRC2018/TPI2014						Weight: 6 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-3 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=34(LC 12)  
Max Uplift 5=-31(LC 8), 3=-23(LC 12)  
Max Grav 5=169(LC 1), 3=42(LC 1), 4=30(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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**



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	JD03	Jack-Open	3	1	149258212

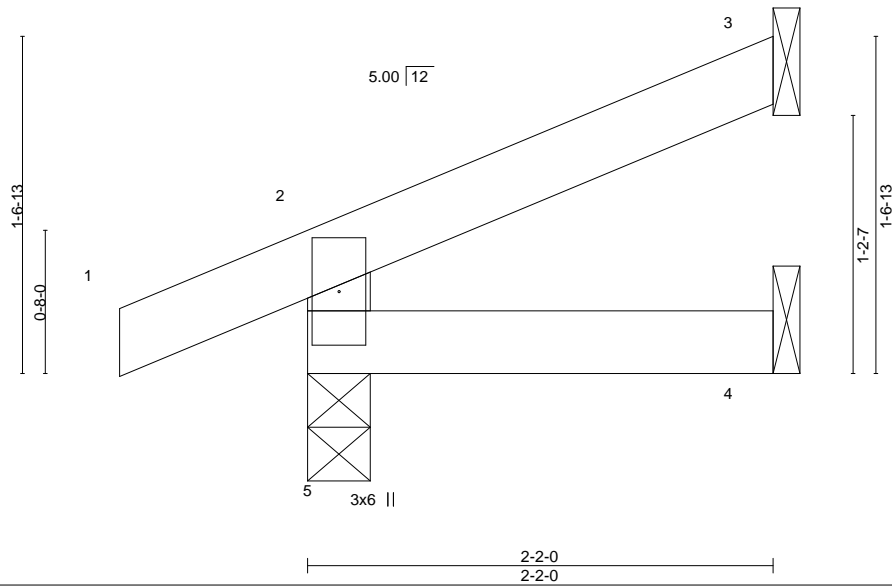
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:55 2021 Page 1

ID:tjnOHGeVPJTYi41JASwyTKzhfUX-UnHXoiEOkqZLd1fPkeCEY3c0vb6qVfPxPciJYy91fA

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



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	4-5	>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: 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 2-2-0 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=38(LC 12)  
Max Uplift 5=-30(LC 8), 3=-27(LC 12)  
Max Grav 5=178(LC 1), 3=52(LC 1), 4=35(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258213
3016946	LG1	GABLE	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:57 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-QAOhDOGeGSp3sLvex9hgJz8yhjG2lOTIOj5pNRy91f8

31-0-4

7-2-8

Scale = 1:52.7

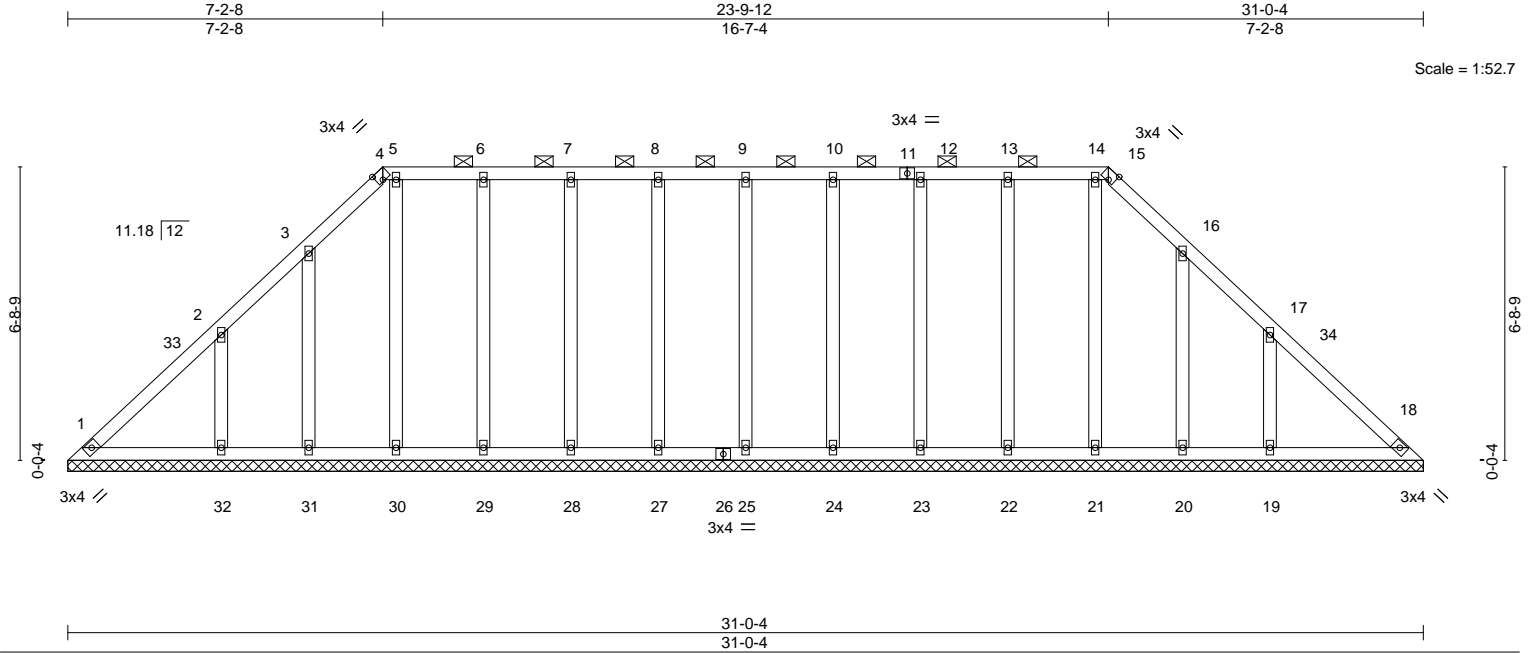


Plate Offsets (X,Y)-- [4:0-1-10,Edge], [15:0-1-10,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES		WB 0.11	Horz(CT)	0.01	18	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 155 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-15.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

All bearings 31-0-4.  
(lb) - Max Horz 1=151(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 25, 27, 28, 29, 30, 31, 24, 23, 22, 20 except 32=156(LC 12), 19=157(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 18, 25, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20 except 32=308(LC 19), 19=309(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-7 to 3-6-2, Interior(1) 3-6-2 to 7-2-8, Exterior(2R) 7-2-8 to 11-6-2, Interior(1) 11-6-2 to 23-9-12, Exterior(2R) 23-9-12 to 28-2-5, Interior(1) 28-2-5 to 30-7-13 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 25, 27, 28, 29, 30, 31, 24, 23, 22, 20 except (jt=lb) 32=156, 19=157.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 16,2021

**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



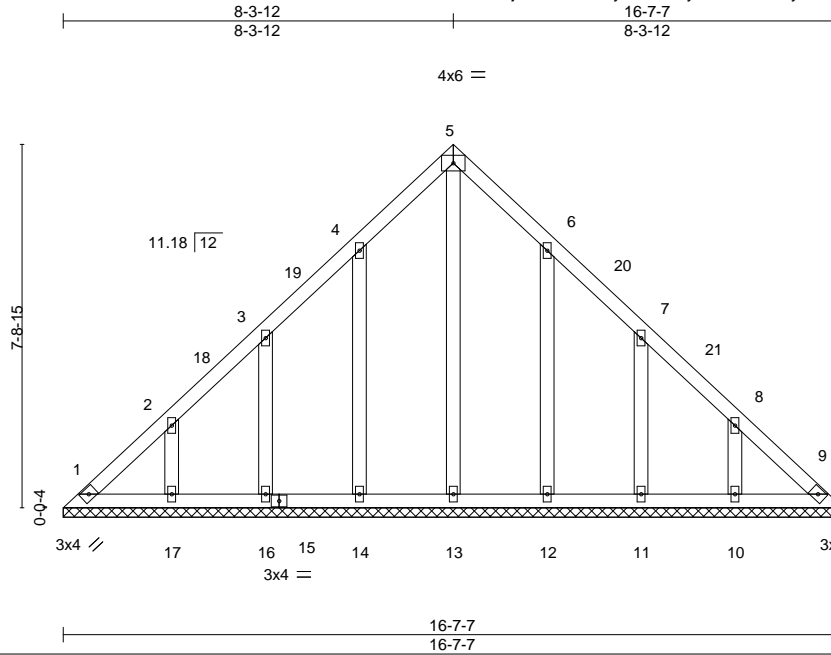
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	LG2	GABLE	1	1	I49258214

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:29:58 2021 Page 1  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-uMyfQkHG1lxwUVUqUsCvsBh8T7ck1qNrdNrMvty91f7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.15	WB 0.13	Horz(CT)	0.00	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 76 lb	FT = 20%
	Code IRC2018/TPI2014							

#### 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 16-7-7.

(lb) - Max Horz 1=173(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 14, 16, 12, 11 except 17=106(LC 12), 10=106(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 16, 17, 12, 11, 10

**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; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-7 to 3-4-7, Interior(1) 3-4-7 to 8-3-12, Exterior(2R) 8-3-12 to 11-3-12, Interior(1) 11-3-12 to 16-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 14, 16, 12, 11 except (jt=lb) 17=106, 10=106.
- This truss 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 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258215
3016946	LG3	GABLE	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:30:00 2021 Page 1  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-rl4QrQIXZNBejpdDcHENxcmPMwGtVkd84hKT\_my91f5

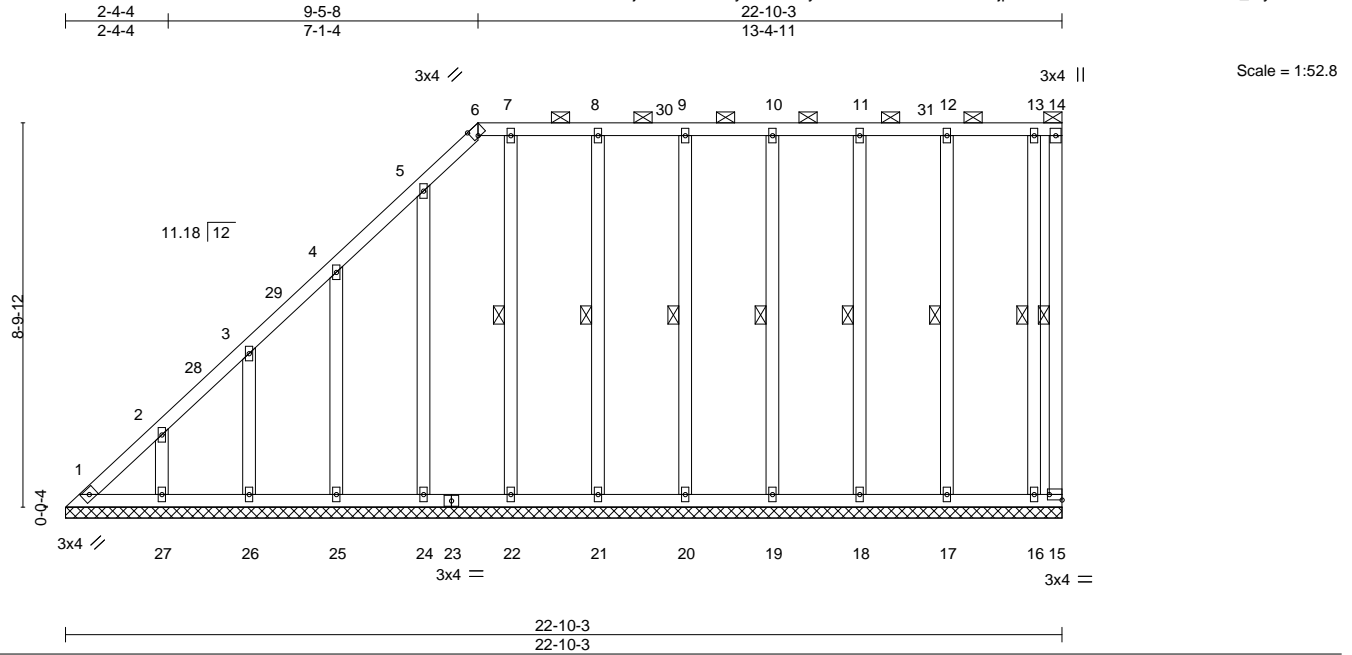


Plate Offsets (X,Y)-- [6:0-1-10,Edge], [15:Edge,0-1-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.15	Horz(CT)	-0.00	15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 150 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-14.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 14-15, 13-16, 12-17, 11-18, 10-19, 9-20, 8-21, 7-22
OTHERS 2x4 SPF No.2	

**REACTIONS.** All bearings 22-10-3.  
(lb) - Max Horz 1=305(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 17, 18, 19, 20, 21, 22, 24, 26 except 15=112(LC 11), 16=117(LC 8), 25=105(LC 12), 27=104(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1, 15, 16, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-431/283, 2-3=-366/244, 3-4=-297/208

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-7 to 3-4-7, Interior(1) 3-4-7 to 9-5-8, Exterior(2R) 9-5-8 to 13-8-7, Interior(1) 13-8-7 to 22-8-7 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
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 17, 18, 19, 20, 21, 22, 24, 26 except (jt=lb) 15=112, 16=117, 25=105, 27=104.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 16, 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

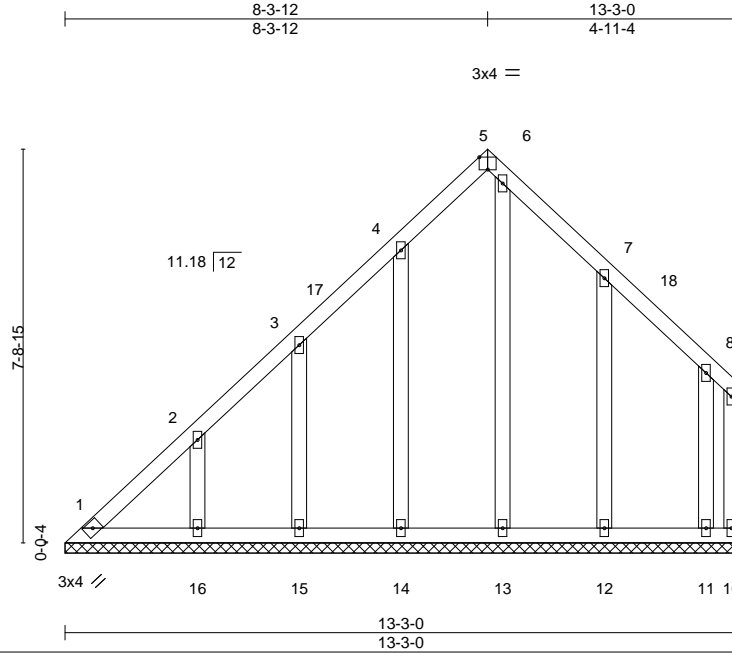


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	LG4	GABLE	1	1	I49258216

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:30:01 2021 Page 1  
ID:tnOHGeVPJTiy41JASwyTKzhfUX-Jxeo2mJ9KgJVLyCPA?lcTpJepKeAEaHJL30WCy91f4



Scale = 1:45.3

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

LOADING (psf)	SPACING-		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	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.23	Horz(CT)	-0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 69 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.

All bearings 13-3-0.  
(lb) - Max Horz 1=210(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 10, 13, 14, 15, 11 except 1=101(LC 8), 16=115(LC 12), 12=127(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 10, 13, 14, 15, 16, 12, 11

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 6-7=181/254  
WEBS 6-13=261/126

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-7 to 3-4-7, Interior(1) 3-4-7 to 8-3-12, Exterior(2R) 8-3-12 to 11-3-12, Interior(1) 11-3-12 to 13-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 13, 14, 15, 11 except (jt=lb) 1=101, 16=115, 12=127.
- This truss 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 16, 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



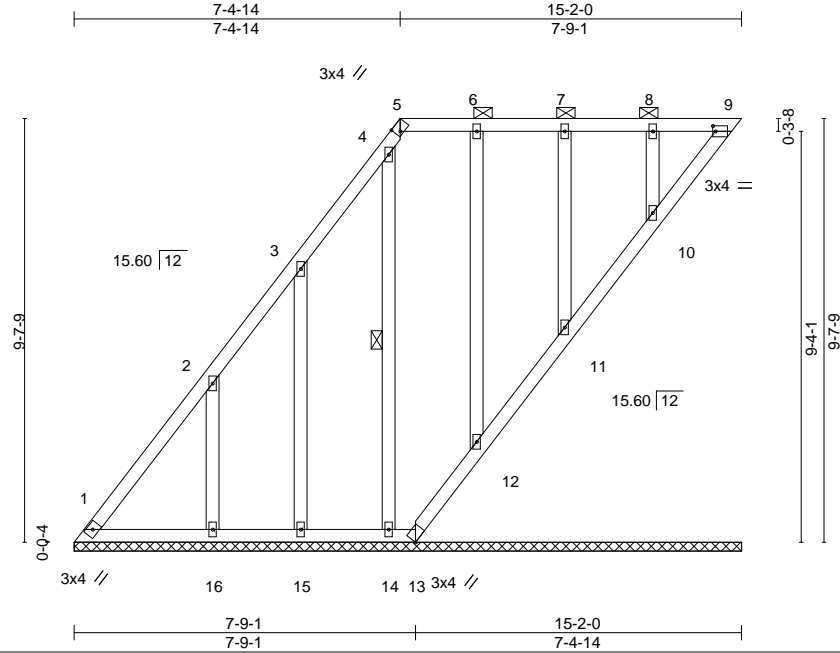
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	LG6	GABLE	1	1	I49258218

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:30:07 2021 Page 1  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-75?3JpOwwW3e3tgZWfS0j4ZethYeuWAhGWLksy91f\_



Scale = 1:52.4

Plate Offsets (X,Y)-- [5:0-1-4,Edge], [9:0-0-12,0-1-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	-0.00	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 81 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 5-9.
OTHERS 2x4 SPF No.2	Rigid ceiling directly applied or 10-0-0 oc bracing.
	WEBS 1 Row at midpt 4-14

**REACTIONS.** All bearings 15-2-0.  
(lb) - Max Horz 1=344(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 13, 14, 12, 11, 10 except 16=227(LC 12), 15=147(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 9, 13, 15, 14, 12, 11, 10 except 1=280(LC 12), 16=317(LC 19)

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

TOP CHORD 1-2=379/314  
WEBS 2-16=279/236

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-9 to 3-1-12, Interior(1) 3-1-12 to 7-4-14, Exterior(2R) 7-4-14 to 10-4-14, Interior(1) 10-4-14 to 14-11-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 13, 14, 12, 11, 10 except (jt=lb) 16=227, 15=147.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 12, 11, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 16, 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**



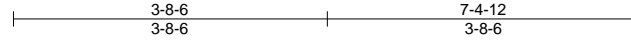
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	LG7	GABLE	1	1	I49258219

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:30:08 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-chZRW9OYgqCVg1Ei4zNFGI5r?91BNNUJwwGuFly91ez



4x6 =

Scale = 1:27.1

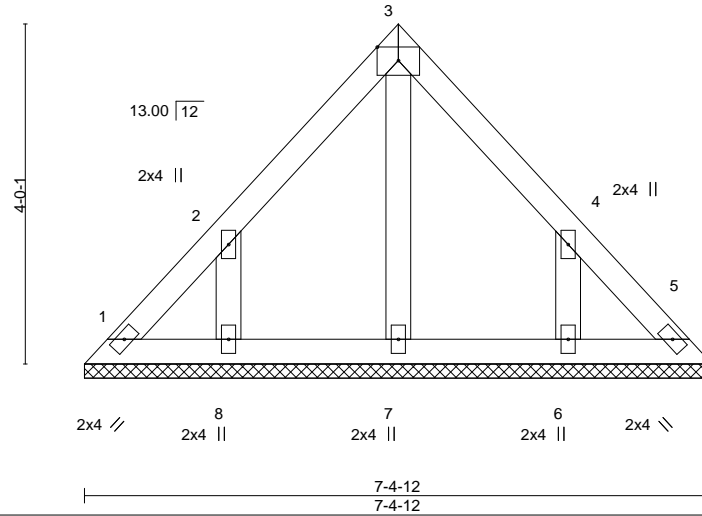


Plate Offsets (X,Y)-- [3:Edge,0-1-15]

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 0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 27 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 7-4-12.  
(lb) - Max Horz 1=87(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=129(LC 12), 6=128(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 3-8-6, Exterior(2R) 3-8-6 to 6-8-6, Interior(1) 6-8-6 to 7-0-12 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=129, 6=128.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16,2021

**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

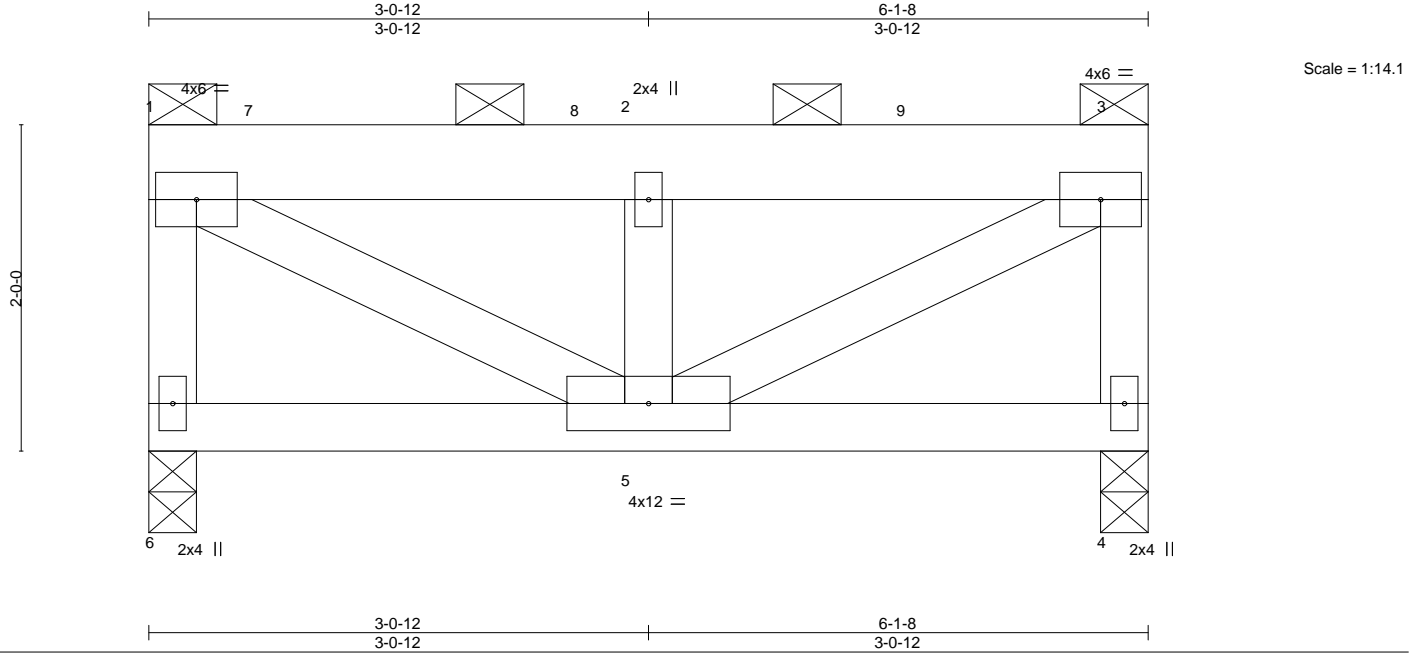


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	R1	Flat Girder	1	2	149258220

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:30:11 2021 Page 1  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-0sFa9ARQzla4YVzKI5xytwjG0M2NagwmcuUYsdy91ew



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) -0.01 5 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.30	Vert(CT) -0.02 5 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MP	Horz(CT) -0.00 4 n/a n/a		
	Code IRC2018/TPI2014			Weight: 58 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 6=0-3-8, 4=0-3-8  
Max Horz 6=56(LC 5)  
Max Uplift 6=347(LC 4), 4=269(LC 5)  
Max Grav 6=2257(LC 1), 4=1893(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=2211/353, 1-2=2138/304, 2-3=2138/304, 3-4=1848/275  
WEBS 2-5=2356/374, 3-5=362/2447, 1-5=362/2447

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=347, 4=269.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1187 lb down and 203 lb up at 0-9-0, and 1213 lb down and 183 lb up at 2-9-0, and 1224 lb down and 172 lb up at 4-9-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-70, 4-6=-20  
Concentrated Loads (lb)  
Vert: 7=-1187 8=-1213 9=-1224



December 16, 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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



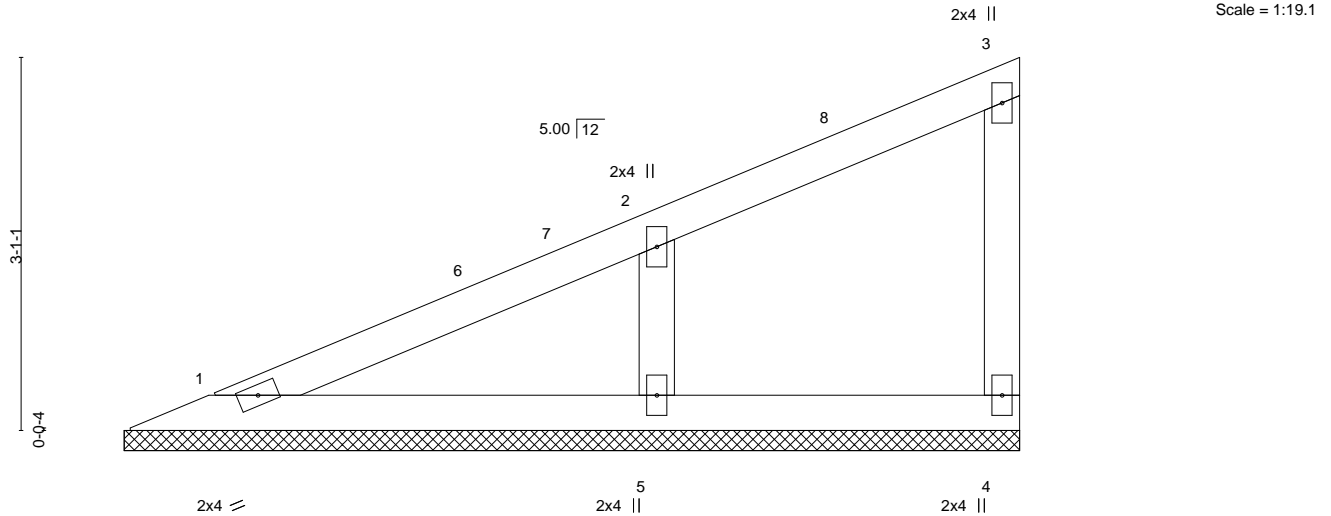
Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO	I49258221
3016946	V01	Valley	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:30:12 2021 Page 1

ID:tnOHGeVPJT41JASwyTKzhfUX-U2oyMWS2k2ix9fYWJoSBQ8GV\_mN4JBHvrYE6O3y91ev

7-4-14  
7-4-14



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 21 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=7-4-14, 4=7-4-14, 5=7-4-14  
Max Horz 1=107(LC 11)  
Max Uplift 1=-2(LC 12), 4=-16(LC 9), 5=-89(LC 12)  
Max Grav 1=130(LC 1), 4=85(LC 1), 5=370(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-5=-288/211

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 7-3-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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



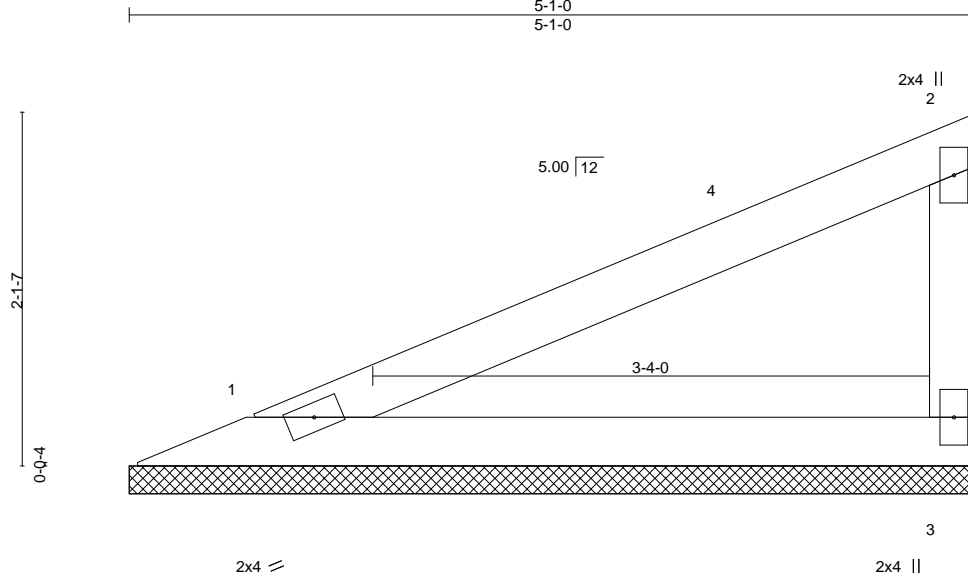
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	V02	Valley	1	1	I49258222

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:30:13 2021 Page 1

ID:tnOHGeVPJTyi41JASwyTKzhfUX-yFMKasShVMqono7jtWzQzLodRAi\_2e624CzfwWy91eu



Scale = 1:13.8

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 0.33	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 13 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=5-1-0, 3=5-1-0  
Max Horz 1=69(LC 9)  
Max Uplift 1=-27(LC 12), 3=-41(LC 12)  
Max Grav 1=188(LC 1), 3=188(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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

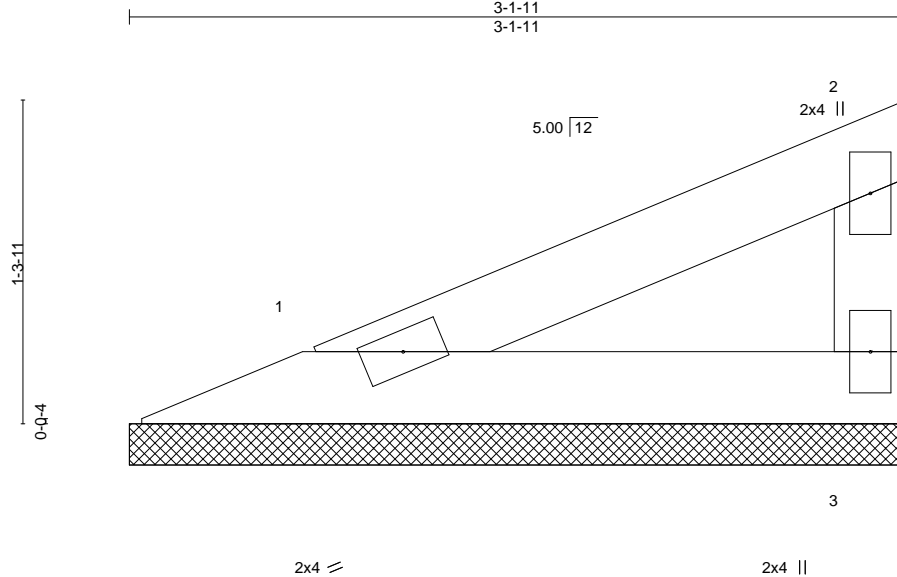


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	V03	Valley	1	1	I49258223

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:30:14 2021 Page 1  
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-QRwjnCTJGgyfPyivQDUfVZLs\_Z4Hn5MCIsjCTyy91et



Scale = 1:9.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	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 3-1-11 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 1=3-1-11, 3=3-1-11  
Max Horz 1=37(LC 9)  
Max Uplift 1=14(LC 12), 3=-22(LC 12)  
Max Grav 1=101(LC 1), 3=101(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=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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

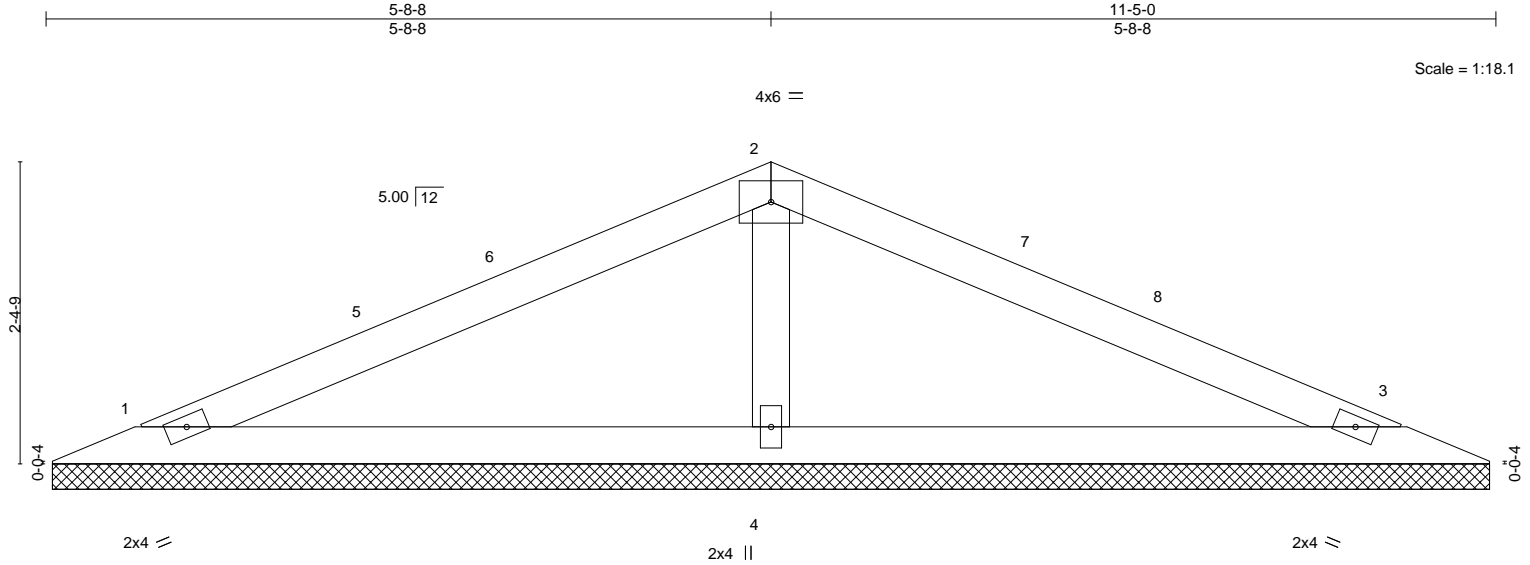


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	V04	Valley	1	1	I49258224

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:30:14 2021 Page 1  
ID:tjnOHGeVPJTYi41JASwyTKzhfUX-QRwijnCTJGgyfPyivQDUfVZLoyZ1pn5bClSjCTyy91et



0-0-10	11-5-0
0-0-10	11-4-6

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 0.34	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 27 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=11-3-13, 3=11-3-13, 4=11-3-13  
Max Horz 1=33(LC 12)  
Max Uplift 1=-39(LC 12), 3=-44(LC 13), 4=-38(LC 12)  
Max Grav 1=202(LC 25), 3=202(LC 26), 4=499(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-4=-350/177

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 5-8-8, Exterior(2R) 5-8-8 to 8-8-8, Interior(1) 8-8-8 to 10-7-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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 16, 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**



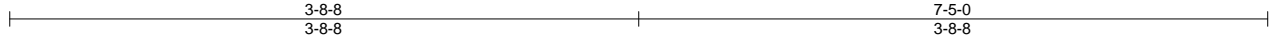
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/COBEY CREEK #13/MO
3016946	V05	Valley	1	1	I49258225

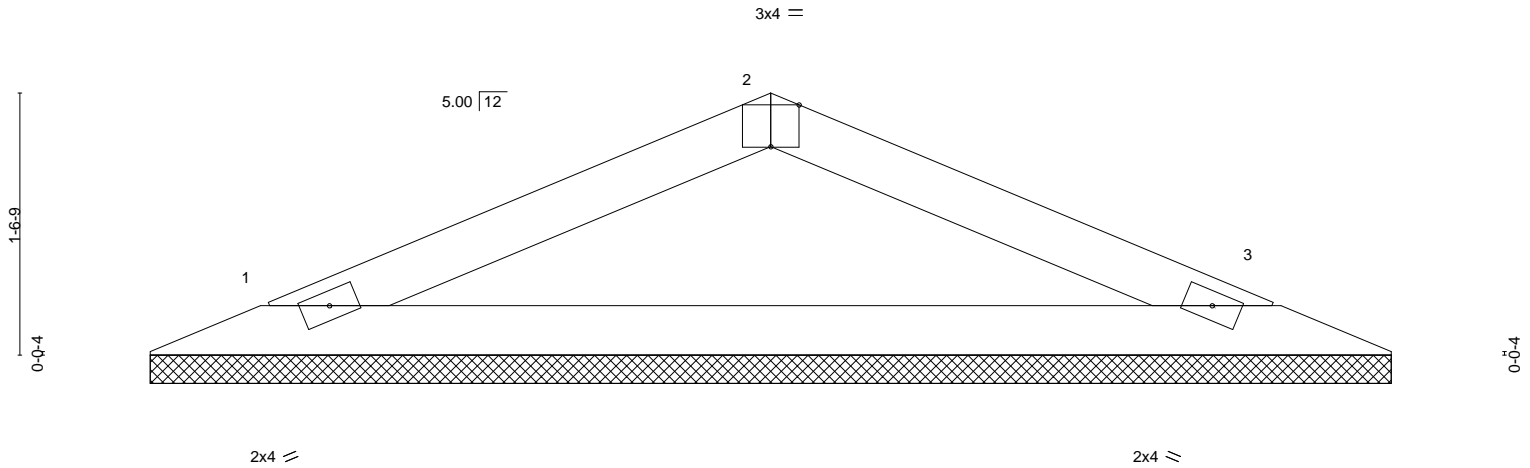
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Dec 14 13:30:15 2021 Page 1

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-udU5\_YUx1z4W06H5\_x?u2mu0dzK8WYbLXWsm?Oy91es



Scale = 1:13.6



0-0-10  
0-0-10

7-5-0  
7-4-6

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.39	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: 16 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=7-3-13, 3=7-3-13  
Max Horz 1=-20(LC 17)  
Max Uplift 1=-34(LC 12), 3=-34(LC 13)  
Max Grav 1=266(LC 1), 3=266(LC 1)

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

TOP CHORD 1-2=-299/201, 2-3=-299/209

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 16, 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

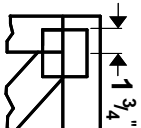
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



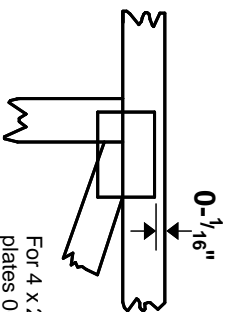
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

# Symbols

## PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



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

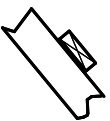
**\* Plate location details available in MITek 20/20 software or upon request.**

## PLATE SIZE

**4 X 4**

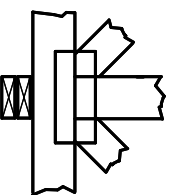
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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/TP1: 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)

