



11/01/2021

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

Re: 2955860  
SUMMIT/STONE CREEK #110/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: I48256862 thru I48256934

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

Missouri COA: Engineering 001193



*Scott M. Sevier*

October 8, 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.

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	A1	Hip Girder	1	1	Job Reference (optional)	

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

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ID:9TfwzKJJ\_y34AD7?hPVfOzykJh0-6p5x6r57zX0SIFZ7bB2RIMXCE6z4uVzyfidKyVg3p

0-10-8	3-2-15	6-5-9	11-1-12	15-8-3	20-2-10	24-10-13	29-6-0	30-4-8
0-10-8	3-2-15	3-2-10	4-8-3	4-6-7	4-6-7	4-8-3	4-7-3	0-10-8

Scale = 1:52.8

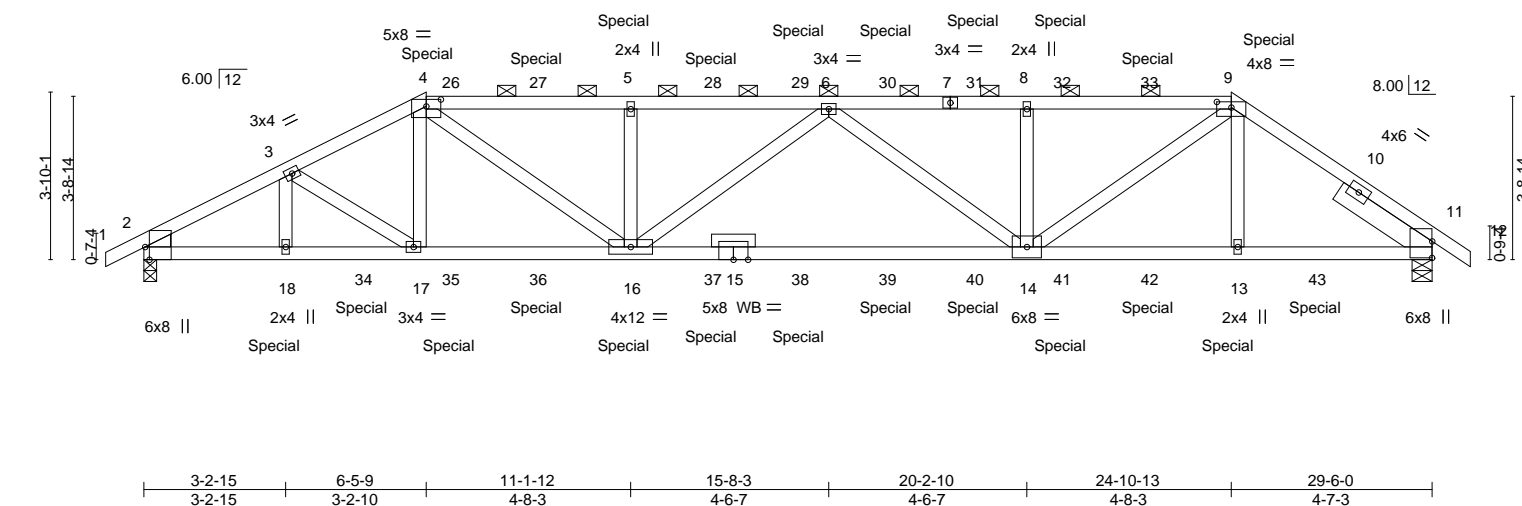


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [4:0-4-0,0-1-15], [9:0-4-0,0-1-9], [11:0-4-9,0-0-1]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	0.34 14-16 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.59 14-16 >598 180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.12 11 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS				Weight: 123 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x4 SPF 1650F 1.5E  
 WEBS 2x4 SPF No.2  
 OTHERS 2x4 SPF No.2  
 WEDGE  
 Left: 2x4 SPF No.2  
 SLIDER Right 2x6 SPF No.2 2-6-0

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-9-2 oc purlins, except 2-0-0 oc purlins (2-7-5 max.): 4-9.  
 BOT CHORD Rigid ceiling directly applied or 5-9-7 oc bracing.

**REACTIONS.**

(size) 2=0-3-8, 11=0-5-8  
 Max Horz 2=89(LC 28)  
 Max Uplift 2=657(LC 8), 11=698(LC 9)  
 Max Grav 2=1797(LC 1), 11=1773(LC 1)

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

TOP CHORD 2-3=-2982/1151, 3-4=-2867/1187, 4-5=-3526/1507, 5-6=-3525/1506, 6-8=-3235/1396,  
 8-9=-3236/1397, 9-11=-2378/1019  
 BOT CHORD 2-18=-1013/2580, 17-18=-1013/2580, 16-17=-1037/2554, 14-16=-1569/3621,  
 13-14=-763/1918, 11-13=-763/1921  
 WEBS 4-16=-591/1270, 5-16=-437/272, 8-14=-450/280, 9-14=-750/1679, 6-14=-503/278

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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=657, 11=698.
- This truss 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) 92 lb down and 88 lb up at 7-0-0, 92 lb down and 88 lb up at 9-0-0, 92 lb down and 88 lb up at 11-0-0, 92 lb down and 88 lb up at 13-0-0, 92 lb down and 85 lb up at 15-0-0, 92 lb down and 88 lb up at 17-0-0, 92 lb down and 88 lb up at 19-0-0, 92 lb down and 88 lb up at 21-0-0, and 92 lb down and 88 lb up at 23-0-0, and 92 lb down and 90 lb up at 24-10-13 on top chord, and 132 lb down and 70 lb up at 3-0-0, 85 lb down and 60 lb up at 5-0-0, 33 lb down and 22 lb up at 7-0-0, 33 lb down and 22 lb up at 9-0-0, 33 lb down and 22 lb up at 11-0-0, 33 lb down and 22 lb up at 13-0-0, 33 lb down and 22 lb up at 15-0-0, 33 lb down and 22 lb up at 17-0-0, 33 lb down and 22 lb up at 19-0-0, 33 lb down and 22 lb up at 21-0-0, 33 lb down and 22 lb up at 23-0-0, and 33 lb down and 22 lb up at 24-10-1, and 116 lb down and 93 lb up at 26-10-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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



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

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

**ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component****Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 2060116023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	A1	Hip Girder	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	Job Reference (optional)		

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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-4=-70, 4-9=-70, 9-12=-70, 19-22=-20
- Concentrated Loads (lb)
- Vert: 18=-132(B) 16=-18(B) 5=-28(B) 9=-28(B) 13=-18(B) 26=-28(B) 27=-28(B) 28=-28(B) 29=-28(B) 30=-28(B) 31=-28(B) 32=-28(B) 33=-28(B) 34=-85(B) 35=-18(B) 36=-18(B) 37=-18(B) 38=-18(B) 39=-18(B) 40=-18(B) 41=-18(B) 42=-18(B) 43=-116(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	A2	Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:06:28 2021 Page 1

ID:9TfwzKJJ\_y34AD7?hPVfOzykjh0-2Tk75LJ2VNPmUAWmDguuJernuLWYHL2DgVAgB3

-0-10-8	4-10-15	9-9-9	16-1-3	22-4-13	29-6-0	30-4-8
0-10-8	4-10-15	4-10-10	6-3-10	6-3-10	7-1-3	0-10-8

Scale = 1:52.0

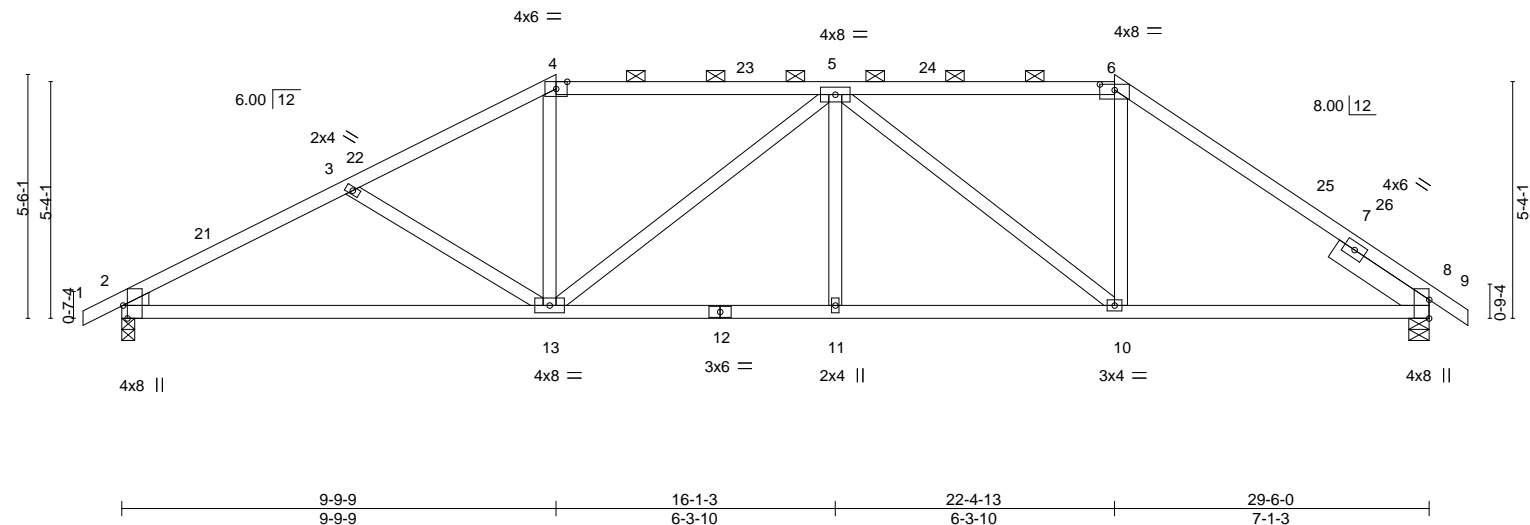


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [6:0-4-0,0-1-9], [8:0-5-1,Edge]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL)	-0.15 13-16	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.31 13-16	>999	180
BCLL 0.0	Rep Stress Incr	YES	WB 0.94	Horz(CT)	0.09 8	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				PLATES		GRIP	
				MT20		197/144	
				Weight: 118 lb		FT = 20%	

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except  
2-0-0 oc purlins (3-11-11 max.): 4-6.  
BOT CHORD Rigid ceiling directly applied.

#### REACTIONS.

(size) 2=0-3-8, 8=0-5-8  
Max Horz 2=130(LC 11)  
Max Uplift 2=202(LC 12), 8=180(LC 13)  
Max Grav 2=1389(LC 1), 8=1389(LC 1)

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

TOP CHORD 2-3=-2272/345, 3-4=-2000/293, 4-5=-1733/296, 5-6=-1424/258, 6-8=-1817/248  
BOT CHORD 2-13=-311/1955, 11-13=-227/1981, 10-11=-227/1981, 8-10=-92/1438  
WEBS 4-13=-22/481, 5-13=-451/126, 5-10=-813/196, 6-10=-41/596, 3-13=-257/142

#### 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 9-9-9, Exterior(2R) 9-9-9 to 14-0-8, Interior(1) 14-0-8 to 22-4-13, Exterior(2R) 22-4-13 to 26-7-12, Interior(1) 26-7-12 to 30-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=202, 8=180.
- This truss 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.



October 8, 2021

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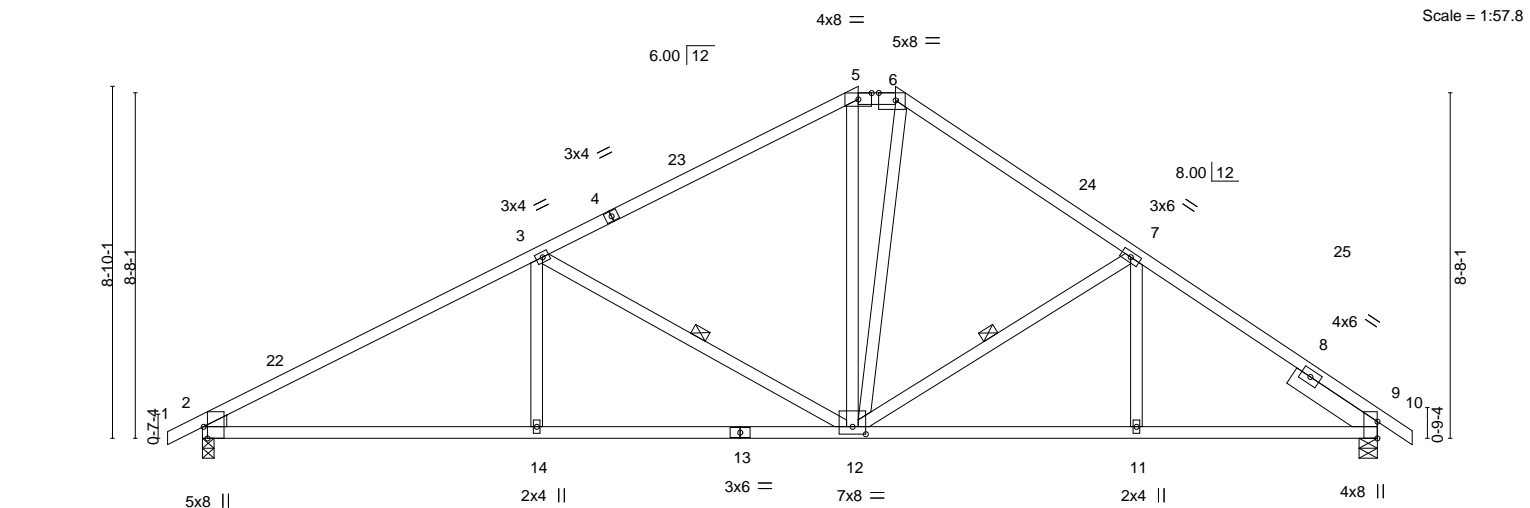


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	A4	Hip	1	1			DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						Job Reference (optional)	LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:33 2021 Page 1  
ID:9TfwzKJJ\_y34AD7?hPVfOzykjh0-PQY083NBKv12bxOK?DU3koLhkvxxbzp1UhmT2VAgBS  
11/01/2021



		8-2-15		16-5-9		17-4-13		23-3-11		29-6-0	
		8-2-15		8-2-10		0-11-4		5-10-13		6-2-5	
Plate Offsets (X,Y)--		[2:0-3-8,Edge], [5:0-4-0,0-1-15], [6:0-5-1,Edge], [9:0-5-1,Edge], [12:0-4-0,0-2-4]									
<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	0.61	Vert(LL)	-0.09 12-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.21 12-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.08 9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 128 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (4-8-10 max.): 5-6.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEDGE	WEBS 1 Row at midpt 3-12, 7-12
Left: 2x4 SPF No.2	
SLIDER Right 2x6 SPF No.2 2-6-0	

<b>REACTIONS.</b>	(size) 2=0-3-8, 9=0-5-8
	Max Horz 2=214(LC 11)
	Max Uplift 2=192(LC 12), 9=156(LC 13)
	Max Grav 2=1389(LC 1), 9=1389(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2215/293, 3-5=-1457/251, 5-6=-1181/261, 6-7=-1446/252, 7-9=-1833/237
BOT CHORD	2-14=-291/1878, 12-14=-291/1878, 11-12=-105/1457, 9-11=-105/1457
WEBS	5-12=-77/380, 3-14=0/319, 3-12=-814/258, 6-12=-154/612, 7-12=-444/199

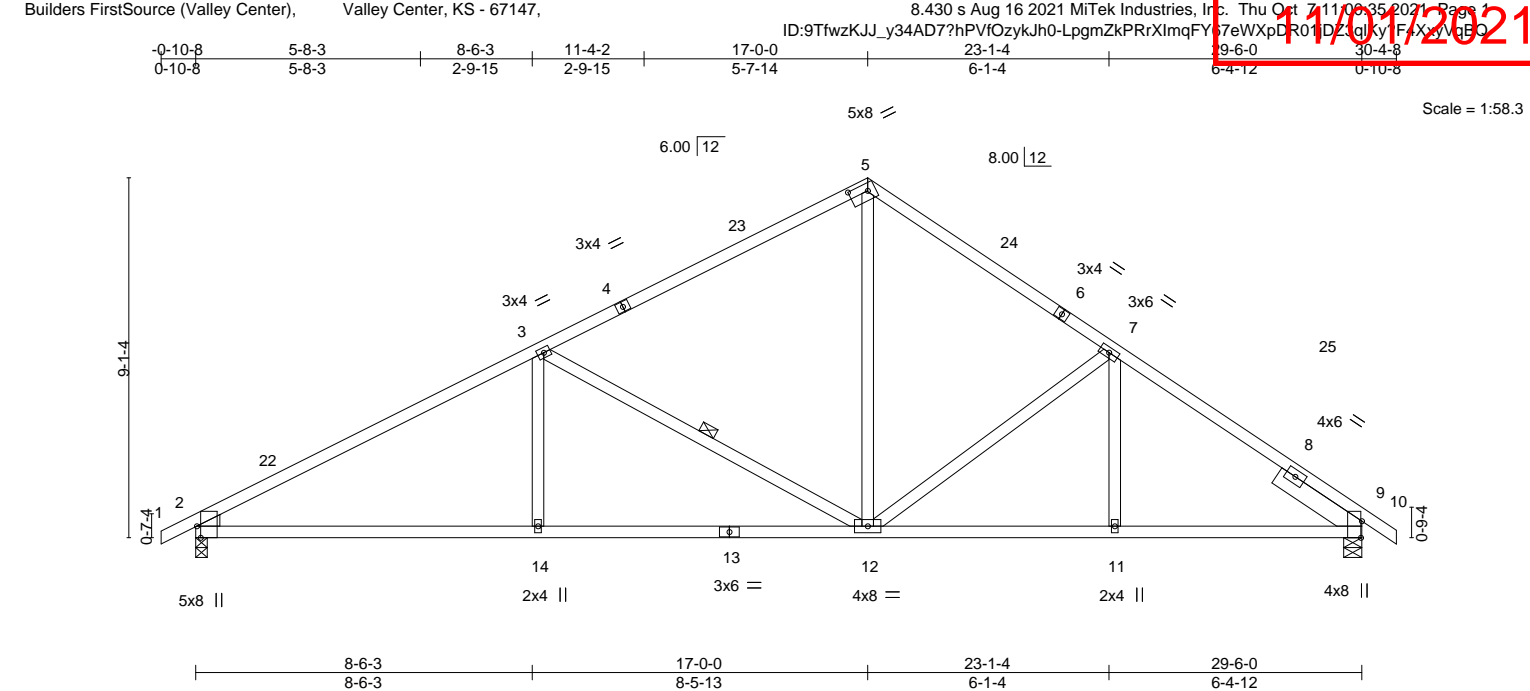
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-5-9, Exterior(2E) 16-5-9 to 17-4-13, Exterior(2R) 17-4-13 to 21-7-12, Interior(1) 21-7-12 to 30-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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=192, 9=156.
  - 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.



October 8, 2021



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	A5	Roof Special	1	1			DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:35 2021 Page 1	LEE'S SUMMIT, MISSOURI
Job Reference (optional)						11/01/2021	



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.68	Vert(LL)	-0.11 12-14	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.63	Vert(CT)	-0.26 12-14	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.48	Horz(CT)	0.08 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 119 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-12
WEDGE	
Left: 2x4 SPF No.2	
SLIDER Right 2x6 SPF No.2 2-6-0	

<b>REACTIONS.</b>	(size) 2=0-3-8, 9=0-5-8
	Max Horz 2=223(LC 11)
	Max Uplift 2=194(LC 12), 9=158(LC 13)
	Max Grav 2=1389(LC 1), 9=1389(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2207/296, 3-5=-1396/264, 5-7=-1464/272, 7-9=-1823/252
BOT CHORD	2-14=-297/1869, 12-14=-297/1869, 11-12=-108/1447, 9-11=-108/1447
WEBS	3-12=-880/273, 5-12=-97/812, 7-12=-457/211, 3-14=0/340

- 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 17-0-0, Exterior(2R) 17-0-0 to 20-0-0, Interior(1) 20-0-0 to 30-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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=194, 9=158.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

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



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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	A6	Roof Special Girder	1	2			DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)		

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:36 2021 Page 1  
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11/01/2021

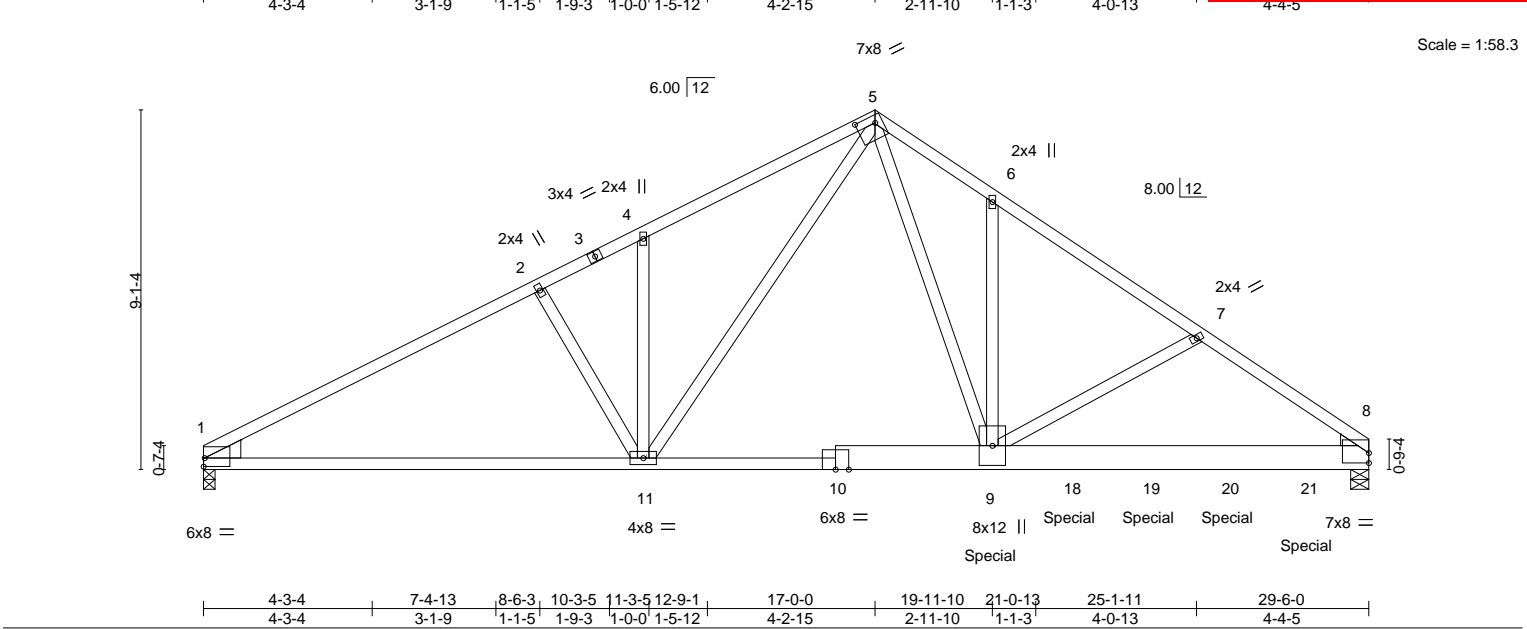


Plate Offsets (X,Y)--		[1:Edge,0-2-9], [5:0-5-12,0-2-4], [8:0-0-0,0-3-1]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.68
TCDL 10.0	Lumber DOL	1.15	BC 0.87
BCLL 0.0	Rep Stress Incr	NO	WB 0.58
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS
			<b>DEFL.</b>
			in (loc) l/defl L/d
			Vert(LL) -0.16 9-14 >999 240
			Vert(CT) -0.30 11-17 >999 180
			Horz(CT) 0.06 8 n/a n/a
			<b>PLATES</b>
			MT20
			<b>GRIP</b>
			197/144
			Weight: 297 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-8-7 oc purlins.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
8-10: 2x8 SP 2400F 2.0E	
WEBS 2x4 SPF No.2	
WEDGE	
Left: 2x6 SPF No.2 , Right: 2x4 SP No.3	

<b>REACTIONS.</b>	(size) 8=0-5-8, 1=0-3-8
	Max Horz 1=213(LC 5)
	Max Uplift 8=699(LC 9), 1=383(LC 8)
	Max Grav 8=4967(LC 1), 1=2551(LC 1)
<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-4684/726, 2-4=-4417/728, 4-5=-4466/818, 5-6=-6093/1066, 6-7=-6156/968, 7-8=-6463/994
BOT CHORD	1-11=-682/4060, 9-11=-471/3518, 8-9=-768/5357
WEBS	5-11=-368/837, 7-9=-388/192, 6-9=-318/206, 5-9=-875/4697, 4-11=-297/130, 2-11=-342/240

- NOTES-**
- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-3-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - 3) Unbalanced roof live loads have been considered for this design.
  - 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=699, 1=383.
  - 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2798 lb down and 534 lb up at 19-11-4, 516 lb down and 72 lb up at 21-11-4, 516 lb down and 72 lb up at 23-11-4, and 516 lb down and 72 lb up at 25-11-4, and 516 lb down and 72 lb up at 27-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	A6	Roof Special Girder	1	2	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:06:36 2021 Page 2

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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-5=-70, 5-8=-70, 12-15=-20
- Concentrated Loads (lb)
  - Vert: 9=-2798(F) 18=-516(F) 19=-516(F) 20=-516(F) 21=-516(F)

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

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO
2955860	A7	Roof Special Girder	1	1		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:06:37 2021 Page 1
Job Reference (optional)						11/01/2021

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

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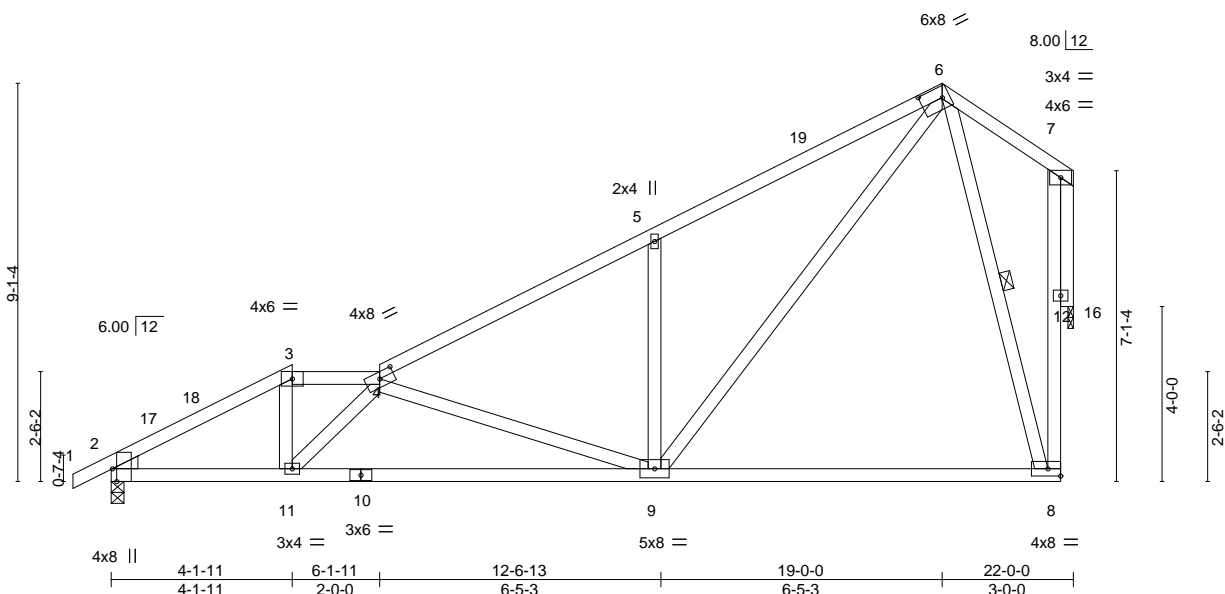


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [4:0-4-0,0-1-12], [6:0-5-15,0-3-0]							
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b> <b>GRIP</b>	
TCLL 25.0		Plate Grip DOL 1.15		TC 0.65		Vert(LL) -0.18 8-9 >999 240		MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.87		Vert(CT) -0.37 8-9 >717 180			
BCLL 0.0		Rep Stress Incr NO		WB 0.73		Horz(CT) 0.11 16 n/a n/a			
BCDL 10.0		Code IRC2018/TPI2014		Matrix-MS				Weight: 107 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  
WEDGE  
Left: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-4 max.): 3-4.  
BOT CHORD Rigid ceiling directly applied or 8-5-3 oc bracing.  
WEBS 1 Row at midpt 6-8

#### REACTIONS.

(size) 2=0-3-8, 16=0-1-8  
Max Horz 2=260(LC 9)  
Max Uplift 2=147(LC 12), 16=180(LC 12)  
Max Grav 2=1049(LC 1), 16=953(LC 1)

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

TOP CHORD 2-3=-1684/201, 3-4=-1411/201, 4-5=-1260/163, 5-6=-1287/298, 8-12=-205/881, 7-12=-205/881  
BOT CHORD 2-11=-425/1449, 9-11=-477/1902, 8-9=-124/289  
WEBS 3-11=-33/600, 4-9=-910/228, 5-9=-507/251, 6-9=-308/1268, 4-11=-717/119, 6-8=-830/244, 7-16=-959/207

#### 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-1-11, Exterior(2E) 4-1-11 to 6-1-11, Interior(1) 6-1-11 to 19-0-0, Exterior(2E) 19-0-0 to 21-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 16 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 at joint(s) 16.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=147, 16=180.
- This truss 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.



October 8, 2021

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

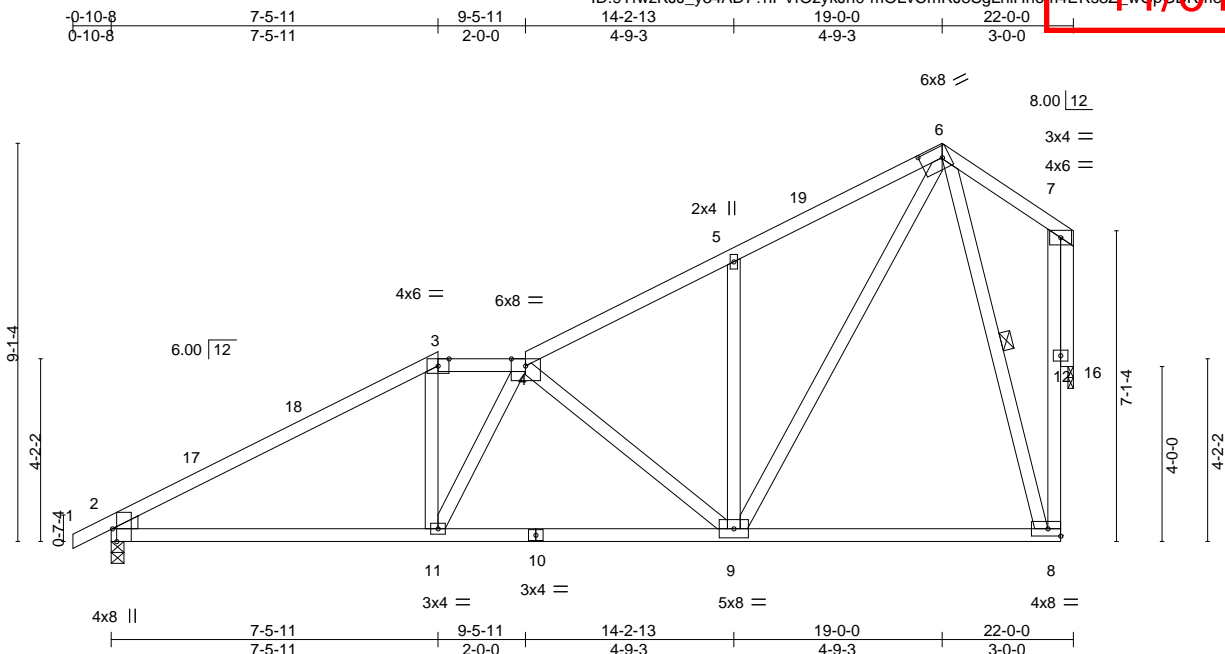
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO
2955860	A8	Roof Special	1	1		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:38 2021 Page 1
Job Reference (optional)						149256869

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

11/01/2021



Scale = 1:52.7

Plate Offsets (X,Y)--		[2:0-3-8,Edge], [4:0-3-14,Edge], [6:0-5-15,0-3-0]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>
TCLL 25.0	Plate Grip DOL 1.15	TC 0.51	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(LL) -0.08 8-9 >999 240
BCLL 0.0	Rep Stress Incr YES	WB 0.48	Vert(CT) -0.16 8-9 >999 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) 0.11 16 n/a n/a
		<b>PLATES</b> MT20	
		<b>GRIP</b> 197/144	
		Weight: 110 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  
WEDGE  
Left: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-9-14 max.): 3-4.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 6-8

#### REACTIONS.

(size) 2=0-3-8, 16=0-1-8  
Max Horz 2=260(LC 9)  
Max Uplift 2=147(LC 12), 16=180(LC 12)  
Max Grav 2=1049(LC 1), 16=953(LC 1)

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

TOP CHORD 2-3=-1549/198, 3-4=-1284/222, 4-5=-969/154, 5-6=-980/252, 8-12=-205/870, 7-12=-205/870  
BOT CHORD 2-11=-390/1294, 9-11=-370/1347, 8-9=-123/289  
WEBS 3-11=0/316, 5-9=-366/183, 4-9=-707/189, 6-8=-827/234, 6-9=-269/1084, 7-16=-959/211

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 7-5-11, Exterior(2E) 7-5-11 to 9-5-11, Interior(1) 9-5-11 to 19-0-0, Exterior(2E) 19-0-0 to 21-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 16 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 at joint(s) 16.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=147, 16=180.
- This truss 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.



October 8, 2021

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

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	A9	Roof Special	1	1			DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:06:40 2021 Page 1	11/01/2021
Job Reference (optional)						LEE'S SUMMIT, MISSOURI	

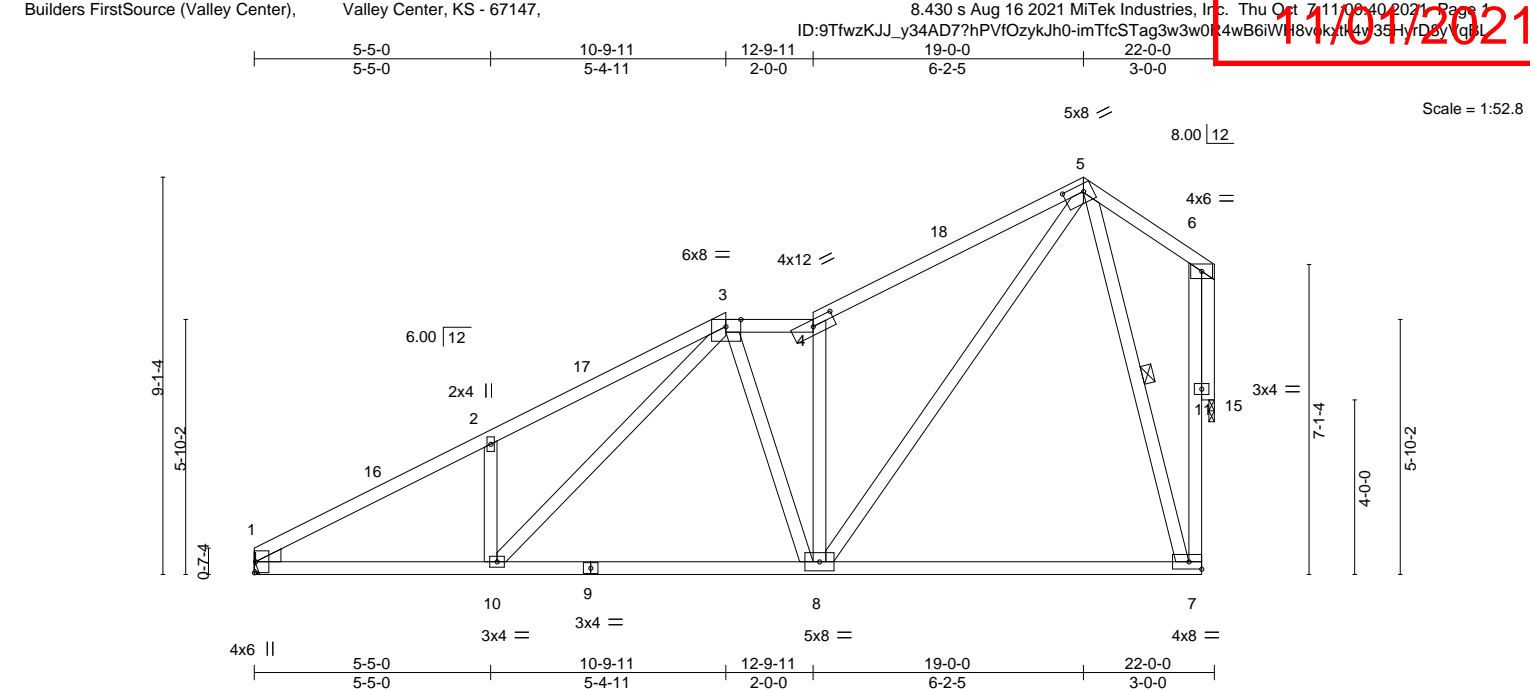


Plate Offsets (X,Y)-- [3:0-4-2,Edge], [4:0-6-0,0-1-12], [5:0-5-8,0-2-0]							
<b>LOADING</b> (psf)	<b>SPACING</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.13	7-8	>999
TCDL 10.0	Lumber DOL	1.15	BC 0.56	Vert(CT)	-0.27	7-8	>960
BCLL 0.0	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.09	15	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				<b>PLATES</b>	<b>GRIP</b>		
				MT20	197/144		
				Weight: 111 lb		FT = 20%	

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (5-7-12 max.): 3-4.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
OTHERS 2x4 SPF No.2	WEBS 1 Row at midpt 5-7
WEDGE	
Left: 2x4 SPF No.2	

<b>REACTIONS.</b>	(size) 1=Mechanical, 15=0-1-8
	Max Horz 1=253(LC 9)
	Max Uplift 1=130(LC 12), 15=180(LC 12)
	Max Grav 1=987(LC 1), 15=954(LC 1)
<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1639/216, 2-3=-1635/326, 3-4=-976/180, 4-5=-1171/273, 7-11=-229/904, 6-11=-229/904
BOT CHORD	1-10=-428/1395, 8-10=-305/978, 7-8=-129/296
WEBS	2-10=-335/188, 4-8=-781/224, 3-10=-195/605, 5-7=-854/267, 5-8=-273/1167, 6-15=-960/215

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-9-11, Exterior(2E) 10-9-11 to 12-9-11, Interior(1) 12-9-11 to 19-0-0, Exterior(2E) 19-0-0 to 21-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - Refer to girder(s) for truss to truss connections.
  - Bearing at joint(s) 15 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 at joint(s) 15.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=130, 15=180.
  - This truss 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.



October 8, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK - 110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	A10	Roof Special Girder	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:06:11 2021 Page 1
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11/01/2021

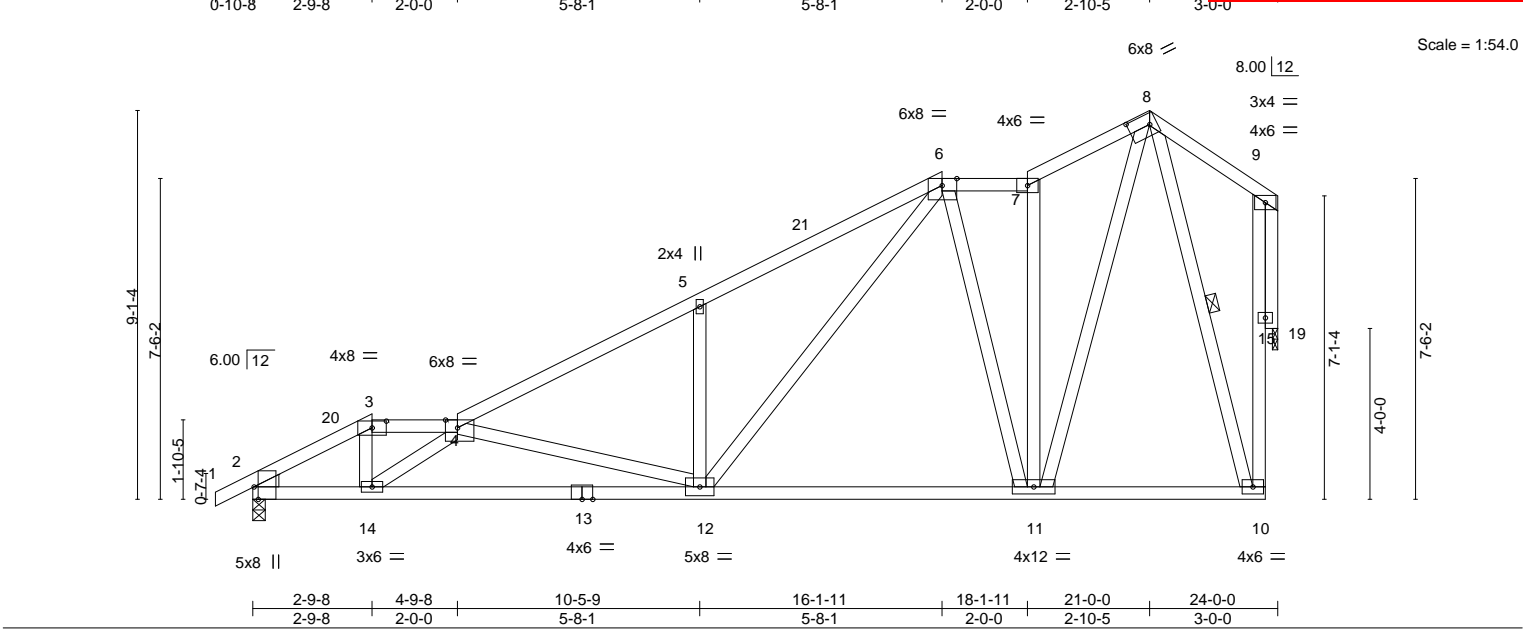


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [3:0-4-0,0-1-15], [4:0-3-6,Edge], [6:0-4-2,Edge], [8:0-5-15,0-3-0]							
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.12 12-14 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.27 12-14 >999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.14 19 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 135 lb FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-4 max.): 3-4, 6-7.
BOT CHORD 2x4 SPF No.2 "Except"	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-13: 2x4 SPF 1650F 1.5E	7-10-3 oc bracing: 12-14.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 8-10
OTHERS 2x4 SP 2400F 2.0E	
WEDGE	
Left: 2x4 SPF No.2	

<b>REACTIONS.</b>	(size) 2=0-3-8, 19=0-1-8
	Max Horz 2=260(LC 9)
	Max Uplift 2=167(LC 12), 19=192(LC 12)
	Max Grav 2=1139(LC 1), 19=1043(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-1839/224, 3-4=-1534/211, 4-5=-1725/225, 5-6=-1721/346, 6-7=-647/146, 7-8=-752/196, 10-15=-201/947, 9-15=-201/947
BOT CHORD	2-14=-445/1600, 12-14=-566/2510, 11-12=-233/781, 10-11=-121/319
WEBS	3-14=-59/742, 4-12=-1082/247, 5-12=-415/213, 8-10=-931/217, 7-11=-455/127, 8-11=-246/1085, 6-12=-266/1115, 4-14=-1223/208, 6-11=-483/170, 9-19=-1050/220

- 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 2-9-8, Exterior(2E) 2-9-8 to 4-9-8, Interior(1) 4-9-8 to 16-1-11, Exterior(2E) 16-1-11 to 18-1-11, Interior(1) 18-1-11 to 21-0-0, Exterior(2E) 21-0-0 to 23-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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) Bearing at joint(s) 19 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 at joint(s) 19.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=167, 19=192.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 8,2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO
2955860	A11	Roof Special	1	1		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:12 2021 Page 1
Job Reference (optional)						148956832

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

1/01/2021

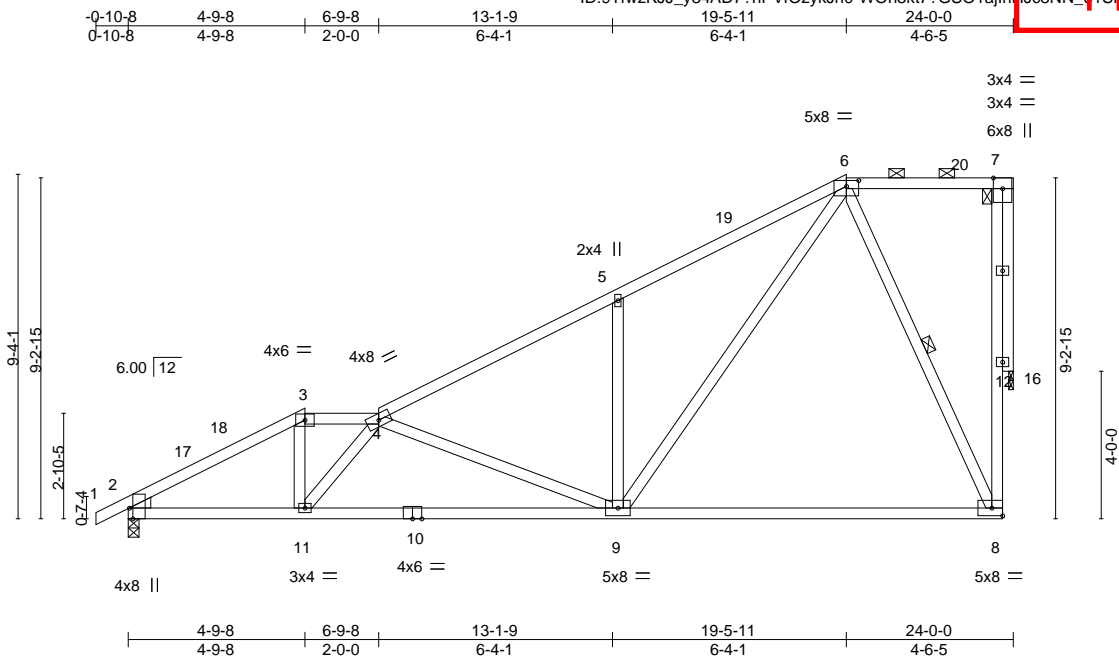


Plate Offsets (X,Y)--	[2:0-3-8,Edge], [6:0-4-0,0-1-15]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl
TCLL 25.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	-0.27	8-9 >999
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.55	8-9 >524
BCLL 0.0	Rep Stress Incr	YES	WB 0.82	Horz(CT)	-0.15	16 n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS			
<b>PLATES</b>						<b>GRIP</b>
MT20						197/144
Weight: 119 lb						FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2  
OTHERS 2x4 SP 2400F 2.0E  
WEDGE  
Left: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-6-8 max.): 3-4, 6-7.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 6-8

#### REACTIONS.

(size) 2=0-3-8, 16=0-1-8  
Max Horz 2=263(LC 12)  
Max Uplift 2=149(LC 12), 16=186(LC 12)  
Max Grav 2=1139(LC 1), 16=1043(LC 1)

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

TOP CHORD 2-3=-1840/206, 3-4=-1541/211, 4-5=-1380/138, 5-6=-1386/279, 8-12=-207/927, 7-12=-207/927  
BOT CHORD 2-11=-457/1578, 9-11=-487/2007, 8-9=-167/437  
WEBS 3-11=-26/660, 4-9=-927/238, 5-9=-473/241, 4-11=-735/98, 6-9=-295/1252, 6-8=-911/264, 7-16=-1046/223

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 4-9-8, Exterior(2E) 4-9-8 to 6-9-8, Interior(1) 6-9-8 to 19-5-11, Exterior(2R) 19-5-11 to 22-5-11, Interior(1) 22-5-11 to 23-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 16 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 at joint(s) 16.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=149, 16=186.
- This truss 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.



October 8, 2021

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	A12	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

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

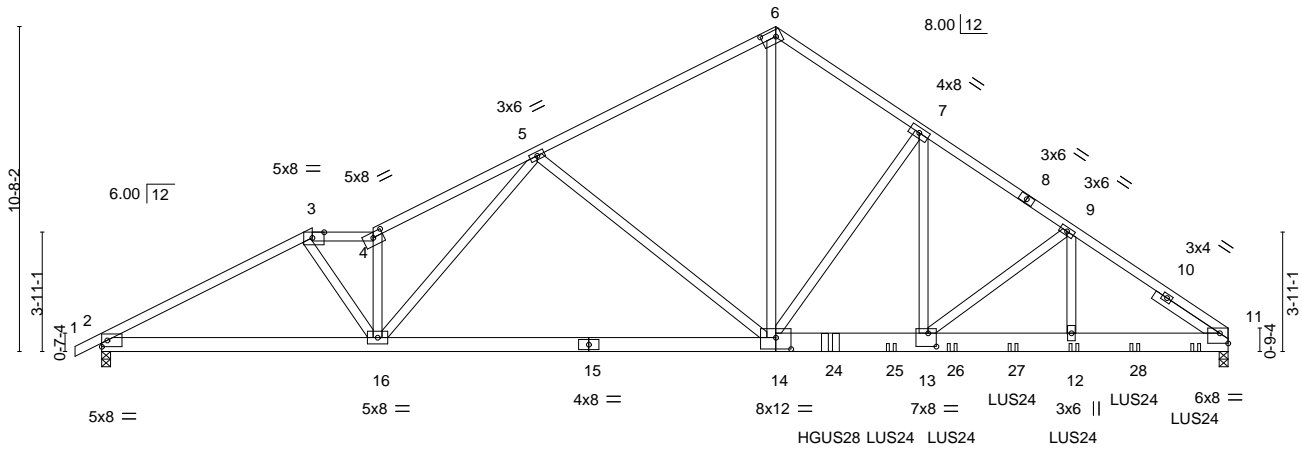
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:06:14 2021 Page 1

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0-10-8 3-5-11 6-11-0 8-11-0 13-3-14 14-1-14 17-8-13 22-1-11 27-0-0 31-10-4 37-0-0  
 0-10-8 3-5-11 3-5-5 2-0-0 4-4-14 0-10-0 3-6-14 4-4-14 4-10-4 4-10-4 5-1-12

5x8

Scale = 1:75.7



3-5-11 6-11-0 8-11-0 13-3-14 14-1-14 17-8-13 22-1-11 27-0-0 31-10-4 37-0-0  
 3-5-11 3-5-5 2-0-0 4-4-14 0-10-0 3-6-14 4-4-14 4-10-4 4-10-4 5-1-12

Plate Offsets (X, Y)-- [3:0-4-10,Edge], [4:0-4-0,0-2-0], [6:0-5-11,0-2-8], [11:Edge,0-4-0], [13:0-3-4,0-5-4], [14:0-6-0,0-4-8]

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 0.86	Vert(LL)	-0.22 14-16	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.82	Vert(CT)	-0.45 14-16	>989	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.79	Horz(CT)	0.09 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 410 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SPF No.2 \*Except\*  
 4-6: 2x4 SPF 1650F 1.5E  
 BOT CHORD 2x6 SPF No.2 \*Except\*  
 11-14: 2x8 SP 2400F 2.0E  
 WEBS 2x4 SPF No.2  
 SLIDER Right 2x4 SPF No.2 2-6-0

**BRACING-**

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

**REACTIONS.**

(size) 2=0-3-8, 11=0-3-8  
 Max Horz 2=259(LC 26)  
 Max Uplift 2=489(LC 8), 11=823(LC 9)  
 Max Grav 2=3210(LC 1), 11=6124(LC 1)

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

TOP CHORD 2-3=-6167/918, 3-4=-6835/1028, 4-5=-7554/1186, 5-6=-5403/862, 6-7=-5761/955,  
 7-9=-7699/1171, 9-11=-8283/1152  
 BOT CHORD 2-16=-902/5426, 14-16=-893/5645, 13-14=-863/6383, 12-13=-883/6800, 11-12=-883/6800  
 WEBS 6-14=-786/5085, 7-14=-2930/590, 7-13=-490/3116, 9-13=-607/142, 9-12=-37/541,  
 3-16=-326/2754, 5-14=-1201/360, 5-16=-240/1645, 4-16=-3570/577

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-3-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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=489, 11=823.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie HGUS28 (36-16d Girder, 6-16d Truss) or equivalent at 23-11-4 from the left end to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 25-0-0 from the left end to 35-11-4 to connect truss(es) to front face of bottom chord.



October 8, 2021

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

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



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	A12	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	DEVELOPMENT SERVICES

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

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NOTES-  
12) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 6-11=-70, 17-20=-20  
Concentrated Loads (lb)  
Vert: 12=-516(F) 22=-528(F) 24=-2836(F) 25=-516(F) 26=-516(F) 27=-516(F) 28=-527(F)

RELEASE FOR CONSTRUCTION

LEE'S SUMMIT, MISSOURI

11/01/2021

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	A13	Roof Special	1	1			DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:06:16 2021 Page 1	11/01/2021
Job Reference (optional)						148256874	LEE'S SUMMIT, MISSOURI

0-10-8	6-11-8	8-11-8	15-6-10	22-1-11	29-5-2	37-0-0	37-10-8
0-10-8	6-11-8	2-0-0	6-7-2	6-7-2	7-3-6	7-6-14	0-10-8

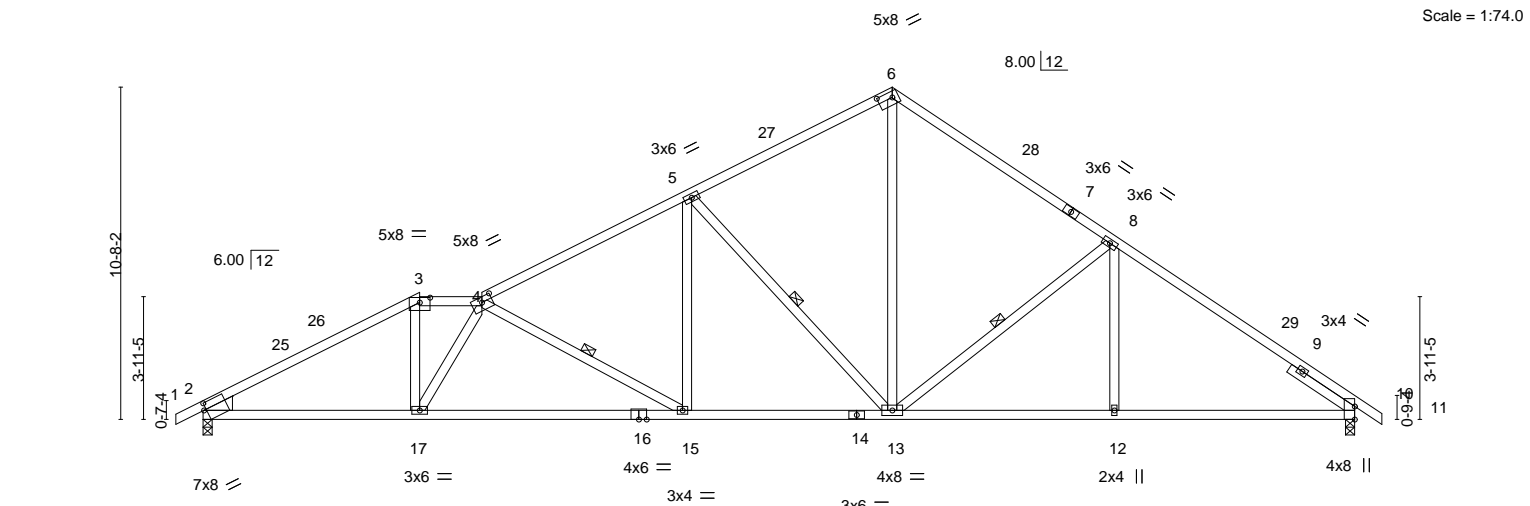


Plate Offsets (X,Y)--		[2:0-0-15,0-2-10], [3:0-4-0,0-1-15], [4:0-4-0,0-2-0], [6:0-5-10,0-2-4], [10:Edge,0-0-0]
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0
TCLL 25.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0	Rep Stress Incr	YES
BCDL 10.0	Code	IRC2018/TPI2014
	<b>CSI.</b>	
	TC	0.68
	BC	0.89
	WB	0.46
	Matrix-AS	
	<b>DEFL.</b>	
	in (loc)	l/defl L/d
	Vert(LL)	-0.21 15-17 >999 240
	Vert(CT)	-0.50 15-17 >892 180
	Horz(CT)	0.14 10 n/a n/a
	<b>PLATES</b>	<b>GRIP</b>
	MT20	197/144
	Weight: 161 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (3-6-1 max.): 3-4.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEDGE	WEBS 1 Row at midpt 4-15, 5-13, 8-13
Left: 2x6 SPF No.2	
SLIDER Right 2x4 SPF No.2 2-6-0	

<b>REACTIONS.</b>	(size) 2=0-3-8, 10=0-3-8
	Max Horz 2=263(LC 11)
	Max Uplift 2=247(LC 12), 10=190(LC 13)
	Max Grav 2=1726(LC 1), 10=1726(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2975/399, 3-4=-2522/396, 4-5=-2535/367, 5-6=-1733/344, 6-8=-1889/356, 8-10=-2352/325
BOT CHORD	2-17=-427/2563, 15-17=-495/3052, 13-15=-277/2176, 12-13=-144/1867, 10-12=-144/1867
WEBS	3-17=-75/1040, 4-15=-1005/250, 5-15=-53/658, 5-13=-1062/281, 6-13=-191/1237, 8-13=-576/250, 8-12=0/281, 4-17=-1056/159

- 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 2-9-14, Interior(1) 2-9-14 to 6-11-8, Exterior(2E) 6-11-8 to 8-11-8, Interior(1) 8-11-8 to 22-1-11, Exterior(2R) 22-1-11 to 25-10-2, Interior(1) 25-10-2 to 37-10-8 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) except (jt=lb) 2=247, 10=190.
  - This truss 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.



October 8, 2021

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

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Chesterfield, MO 63017

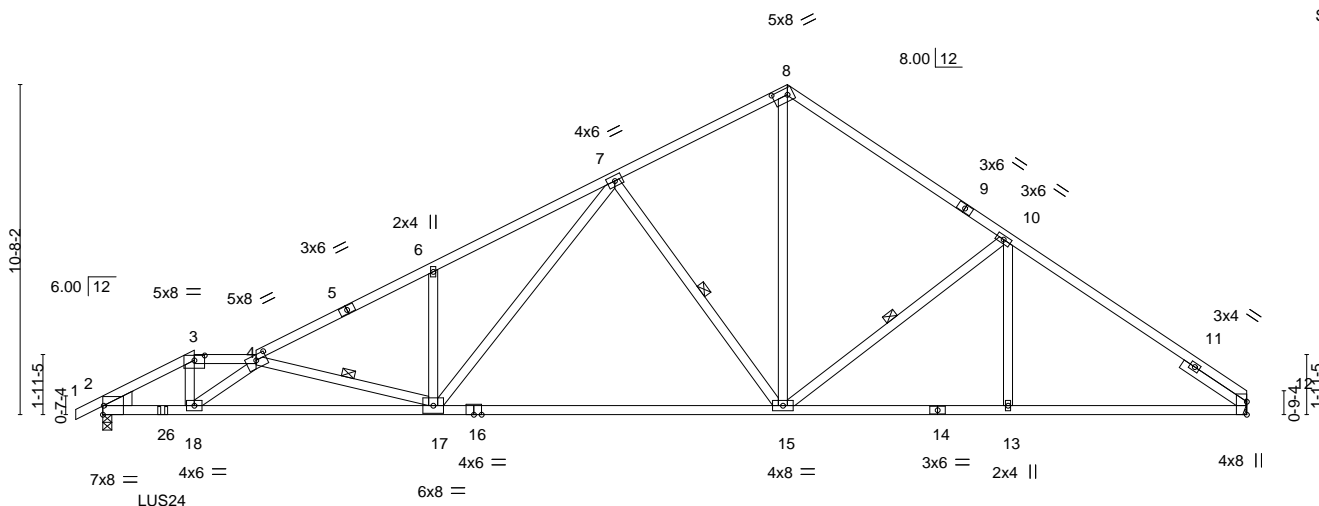
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	A15	Roof Special Girder	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

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

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0-10-8 2-11-8 4-11-8 10-8-4 16-5-0 22-1-11 29-5-2 37-0-0  
0-10-8 2-11-8 2-0-0 5-8-12 5-8-12 5-8-12 7-3-6 7-6-14



Scale = 1:74.5

Plate Offsets (X,Y)--	[3:0-4-0,0-1-15], [4:0-4-0,0-2-0], [8:0-5-11,0-2-8], [12:Edge,0-0-0]
-----------------------	----------------------------------------------------------------------

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 0.81	Vert(LL)	-0.36 15-17	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.82 15-17	>543	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.45	Horz(CT)	0.14 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 165 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SPF No.2 \*Except\*  
8-9: 2x4 SPF 1650F 1.5E  
BOT CHORD 2x4 SPF No.2 \*Except\*  
2-16: 2x4 SP 2400F 2.0E  
WEBS 2x4 SPF No.2  
WEDGE  
Left: 2x6 SPF No.2  
SLIDER Right 2x4 SPF No.2 2-6-0

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-5-14 oc purlins, except  
2-0-0 oc purlins (3-1-11 max.): 3-4.  
BOT CHORD Rigid ceiling directly applied or 9-1-3 oc bracing.  
WEBS 1 Row at midpt 4-17, 7-15, 10-15

**REACTIONS.**

(size) 2=0-3-8, 12=Mechanical  
Max Horz 2=260(LC 5)  
Max Uplift 2=358(LC 8), 12=179(LC 9)  
Max Grav 2=2373(LC 1), 12=1700(LC 1)

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

TOP CHORD 2-3=3750/531, 3-4=3198/477, 4-6=3425/456, 6-7=3430/574, 7-8=1794/305,  
8-10=1957/332, 10-12=2411/277  
BOT CHORD 2-18=604/3329, 17-18=827/4801, 15-17=280/2114, 13-15=153/1919, 12-13=153/1919  
WEBS 3-18=191/1531, 4-17=1883/390, 6-17=391/204, 7-15=1017/309, 8-15=212/1348,  
10-15=570/262, 4-18=2047/355, 7-17=279/1438

**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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=358, 12=179.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 1-11-4 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

Continued on page 2



October 8, 2021

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	A15	Roof Special Girder	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			Job Reference (optional)		

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11/01/2021

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 4-8=-70, 8-12=-70, 19-22=-20

Concentrated Loads (lb)

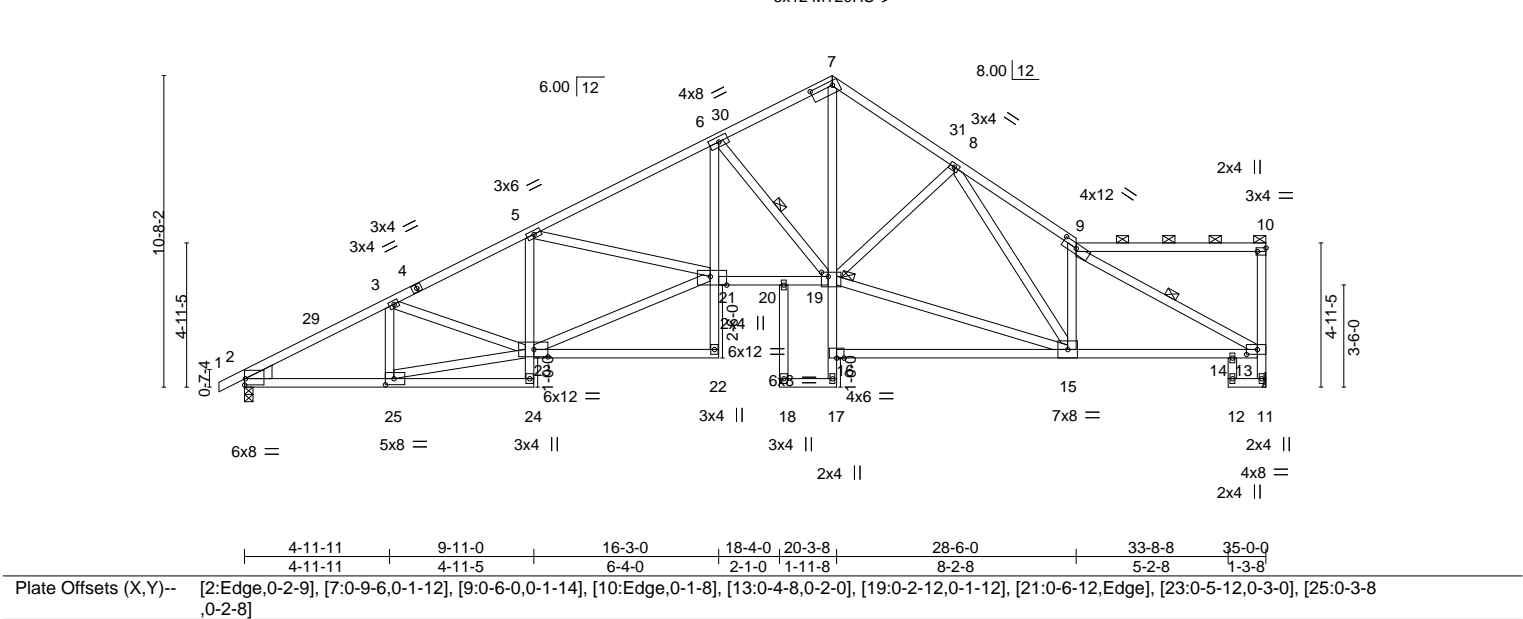
Vert: 26=-682(B)





Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	A17	Roof Special	1	1			DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)		LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:23 2021 Page 1  
ID:9TfwzKJJ\_y34AD7?hPvIOzykjh0-iVxE2eFvgmTORdpQ7JjKk\_L11TFM\_ZE3LS6dy/qbc  
11/01/2021  
Scale = 1:79.0



<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.97	Vert(LL) -0.27 22 >999 240	MT20HS	148/108
BCLL 0.0	Lumber DOL 1.15	WB 0.70	Vert(CT) -0.49 22-23 >853 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.30 11 n/a n/a		
	Code IRC2018/TPI2014			Weight: 196 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 9-10.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 6-19, 9-13
WEDGE	JOINTS 1 Brace at Jt(s): 10, 19
Left: 2x6 SPF No.2	

**REACTIONS.** (size) 11=Mechanical, 2=0-3-8  
Max Horz 2=319(LC 11)  
Max Uplift 11=182(LC 13), 2=226(LC 12)  
Max Grav 11=1568(LC 1), 2=1630(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2755/367, 3-5=-3016/437, 5-6=-3425/518, 6-7=-2211/383, 7-8=-2387/413,  
8-9=-2736/386, 11-13=-1532/192  
BOT CHORD 2-25=-434/2378, 5-23=-654/169, 6-21=-188/1415, 20-21=-479/2970, 19-20=-468/2929,  
7-19=-302/1958, 14-15=-322/2248, 13-14=-323/2275  
WEBS 21-23=-479/2854, 5-21=-40/302, 9-15=-607/174, 6-19=-1624/341, 9-13=-2520/311,  
15-19=-334/2069, 8-19=-345/165, 8-15=-77/277, 3-25=-466/129, 23-25=-400/2247,  
3-23=-28/298

- 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 2-7-8, Interior(1) 2-7-8 to 20-1-11, Exterior(2R) 20-1-11 to 23-7-11, Interior(1) 23-7-11 to 34-10-4 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) All plates are MT20 plates unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=182, 2=226.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 8, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	A18	Roof Special	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:25 2021 Page 1

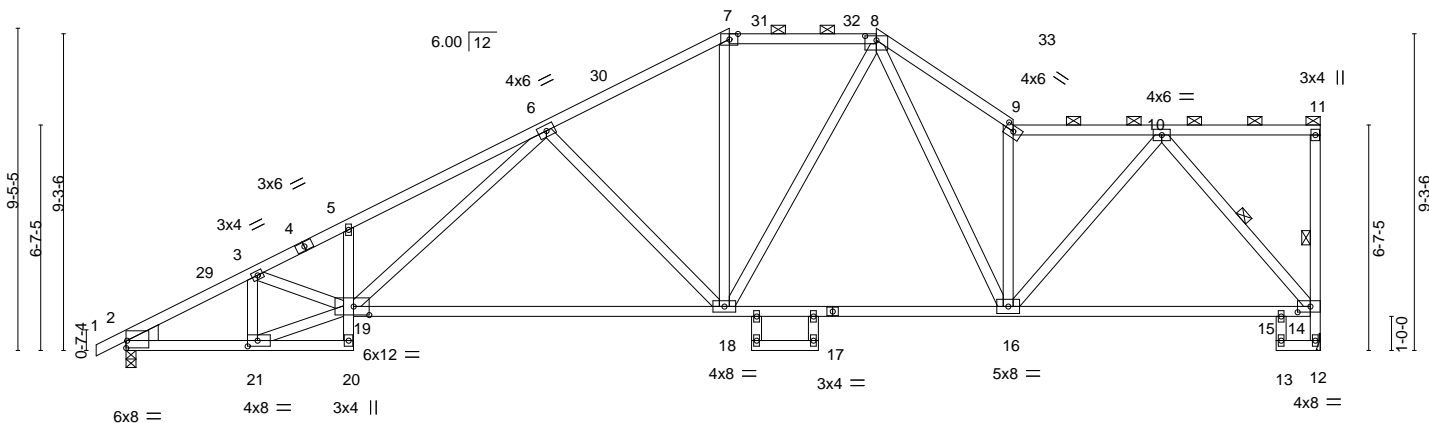
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-0-10-8 3-8-8 6-8-0 12-2-1 17-8-3 18-4-0 20-3-8 21-11-14 26-0-0 30-4-4 33-8-8 35-0-0  
0-10-8 3-8-8 2-11-8 5-6-1 5-6-1 0-7-13 1-11-8 1-8-6 4-0-2 4-4-4 3-4-4 1-3-8

4x6 =

5x8 = 8.00 | 12

Scale = 1:67.5



3-8-8 6-8-0 12-2-1 17-8-3 18-4-0 20-3-8 21-11-14 26-0-0 33-8-8 35-0-0  
3-8-8 2-11-8 5-6-1 5-6-1 0-7-13 1-11-8 1-8-6 4-0-2 7-8-8 1-3-8

Plate Offsets (X,Y)-- [2:Edge,0-2-9], [8:0-4-0,0-1-9], [9:0-3-0,0-1-14], [14:0-4-8,0-2-0], [19:0-5-8,0-3-0], [21:0-3-8,0-2-0]

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 0.50	Vert(LL)	-0.39 18-19	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.99	Vert(CT)	-0.86 18-19	>484	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.21 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 178 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEBS 2x4 SPF No.2  
WEDGE  
Left: 2x6 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-11-14 max.): 7-8, 9-11.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 11-12, 10-14

**REACTIONS.**

(size) 12=Mechanical, 2=0-3-8  
Max Horz 2=306(LC 11)  
Max Uplift 12=183(LC 13), 2=213(LC 12)  
Max Grav 12=1568(LC 1), 2=1630(LC 1)

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

TOP CHORD 2-3=-2692/341, 3-5=-3658/491, 5-6=-3806/586, 6-7=-2029/361, 7-8=-1734/346,  
8-9=-2398/456, 9-10=-1980/328, 12-14=-1529/226  
BOT CHORD 2-21=-500/2323, 5-19=-365/153, 18-19=-504/2299, 16-18=-327/1590, 15-16=-243/1165,  
14-15=-236/1210  
WEBS 6-19=-268/1414, 9-16=-1524/327, 10-14=-1749/296, 10-16=-173/1259, 7-18=-57/533,  
8-16=-161/801, 8-18=-87/442, 6-18=-804/274, 3-21=-904/193, 19-21=-442/2348,  
3-19=-168/1012

**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 2-7-8, Interior(1) 2-7-8 to 17-8-3, Exterior(2R) 17-8-3 to 21-2-3, Interior(1) 21-2-3 to 21-11-14, Exterior(2R) 21-11-14 to 25-5-14, Interior(1) 25-5-14 to 34-10-4 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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=183, 2=213.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 8, 2021

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

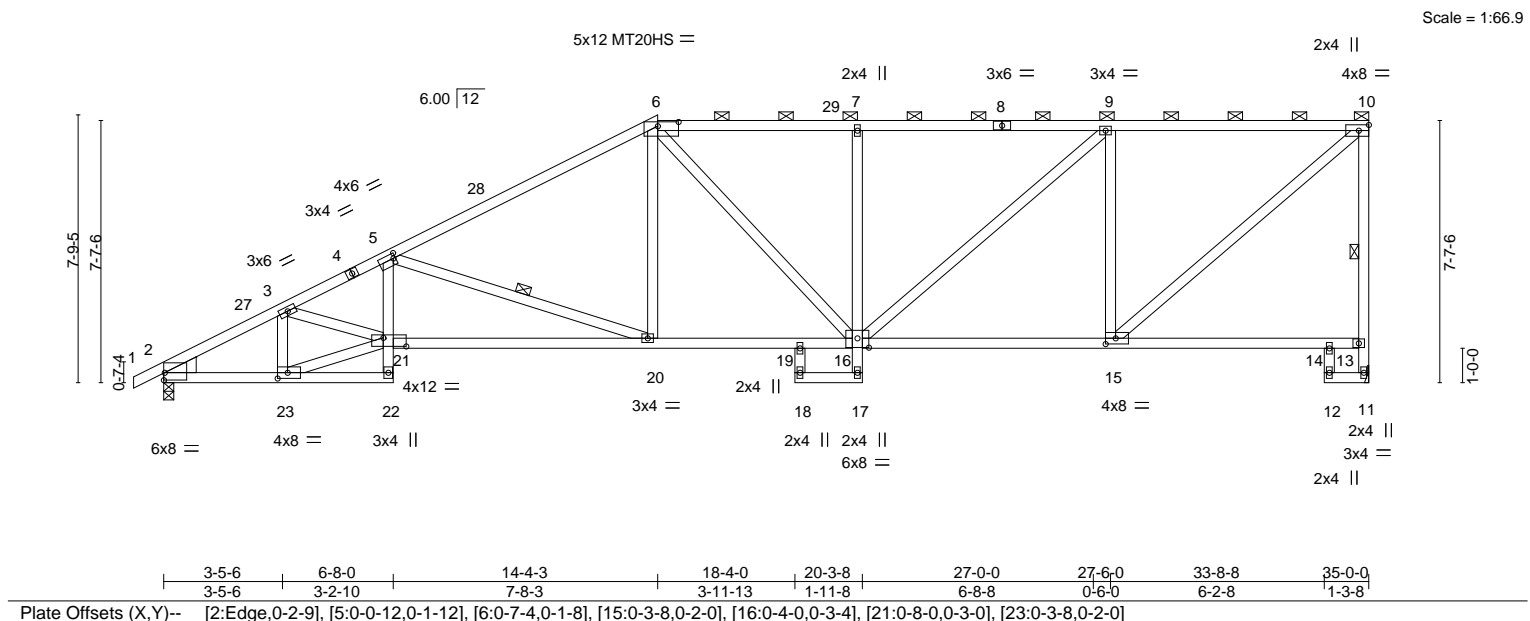
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	A19	Half Hip	1	1			DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						Job Reference (optional)	LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:26 2021 Page 1						11/01/2021	
ID:9TfwzKJJ_y34AD7?hPvFOzykjh0-64dMgfl0zm92FsMO5FsQxKZf9933Sj17526ivvVqB2							
-0-10-8	3-5-6	6-8-0	14-4-3	18-4-0	20-3-8	27-0-0	27-6-0
0-10-8	3-5-6	3-2-10	7-8-3	3-11-13	1-11-8	6-8-8	0-6-0
							33-8-8
							35-0-0
							1-3-8



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.82	Vert(LL)	-0.21 20-21	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.92	Vert(CT)	-0.44 20-21	>944	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.18 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
Weight: 171 lb									FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (3-3-13 max.): 6-10.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEDGE	WEBS 1 Row at midpt 10-11, 5-20
Left: 2x6 SPF No.2	

<b>REACTIONS.</b>	(size) 11=Mechanical, 2=0-3-8
	Max Horz 2=277(LC 11)
	Max Uplift 11=270(LC 9), 2=190(LC 12)
	Max Grav 11=1568(LC 1), 2=1630(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2672/293, 3-5=-3724/461, 5-6=-2499/321, 6-7=-2148/324, 7-9=-2155/323, 9-10=-1511/247, 11-13=-1532/273, 10-13=-1493/289
BOT CHORD	2-23=-490/2302, 5-21=-53/575, 20-21=-710/3452, 19-20=-415/2117, 16-19=-401/2098, 7-16=-492/174, 15-16=-320/1511
WEBS	5-20=-1393/350, 6-20=-49/576, 6-16=-138/270, 9-16=-151/849, 9-15=-1115/292, 10-15=-329/1943, 3-23=-836/183, 21-23=-444/2213, 3-21=-195/1080

- 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 2-7-8, Interior(1) 2-7-8 to 14-4-3, Exterior(2R) 14-4-3 to 19-3-9, Interior(1) 19-3-9 to 34-10-4 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) All plates are MT20 plates unless otherwise indicated.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=270, 2=190.
  - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 8, 2021

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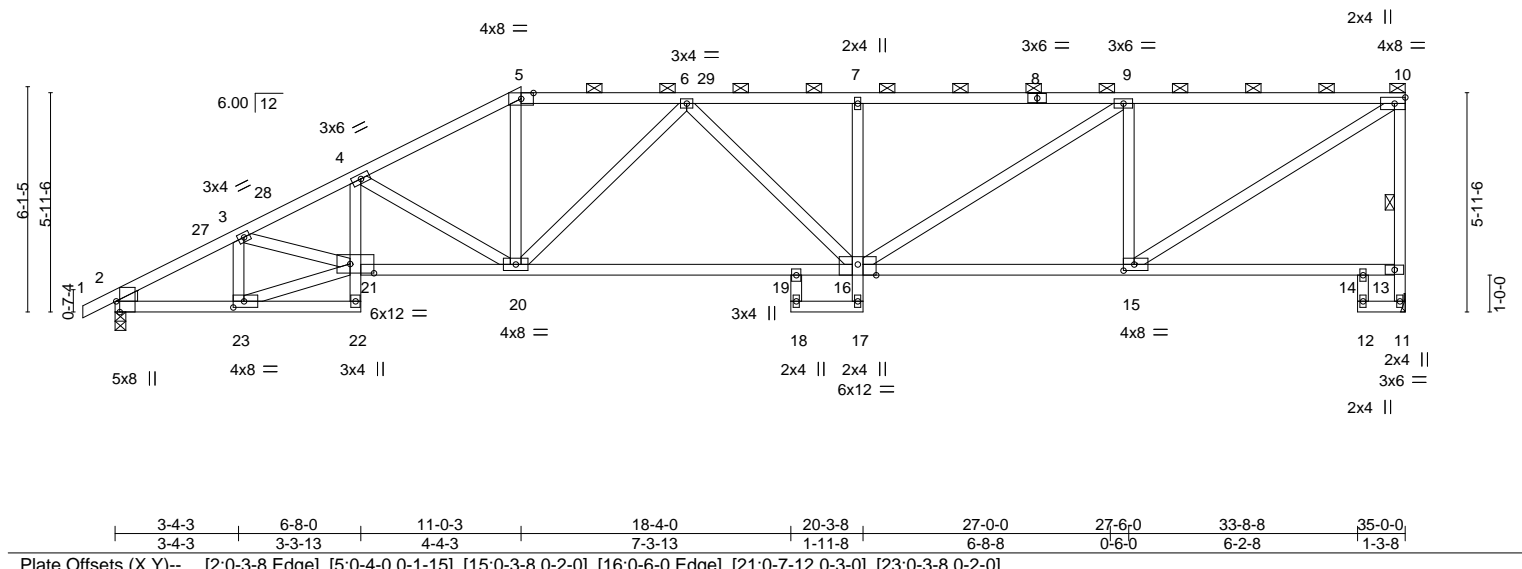
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO
2955860	A20	Half Hip	1	1		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:06:29 2021 Page 1
Job Reference (optional)						AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

ID: 9TfwzKJJ\_y34AD7?hPVfOzykJh0-WfIVJhKgGhXd6K5zmNP7ZzBxo5l4R33dmKHV4BNV

11/08/2021

Scale = 1:62.5



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 0.86	Vert(LL)	-0.24	19-20	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.94	Vert(CT)	-0.55	19-20	>755		
BCLL 0.0	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.20	11	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
Weight: 161 lb									FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-7-14 max.): 5-10.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 10-11

**REACTIONS.**

(size) 11=Mechanical, 2=0-3-8  
 Max Horz 2=215(LC 11)  
 Max Uplift 11=275(LC 9), 2=162(LC 12)  
 Max Grav 11=1568(LC 1), 2=1630(LC 1)

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

TOP CHORD 2-3=-2674/302, 3-4=-3682/479, 4-5=-2910/405, 5-6=-2534/376, 6-7=-2928/456,  
 7-9=-2928/469, 9-10=-2046/336, 11-13=-1531/280, 10-13=-1489/299  
 BOT CHORD 2-23=-450/2309, 4-21=-84/539, 20-21=-624/3315, 19-20=-557/2896, 16-19=-516/2914,  
 7-16=-423/146, 15-16=-409/2046  
 WEBS 4-20=-875/221, 5-20=-98/953, 3-23=-818/182, 21-23=-439/2188, 3-21=-177/1005,  
 6-20=-643/200, 9-16=-171/1044, 9-15=-1119/292, 10-15=-413/2353

**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 2-7-8, Interior(1) 2-7-8 to 11-0-3, Exterior(2R) 11-0-3 to 15-11-9, Interior(1) 15-11-9 to 34-10-4 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=275, 2=162.
- 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.



October 8, 2021

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

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	A21	Roof Special Girder	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

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

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ID:9TfwzKJJ\_y34AD7?hPVfOzykjh0-T2QFjNMwoInLLdLuoSbeOGF46Q/V.11N/H09VAgB

0-1-8 2-5-8 6-11-3 8-1-12 11-4-13 15-10-8 17-2-0  
 0-1-8 2-4-0 4-5-11 1-2-9 3-3-1 4-5-11 1-3-8

Scale: 3/8"=1'

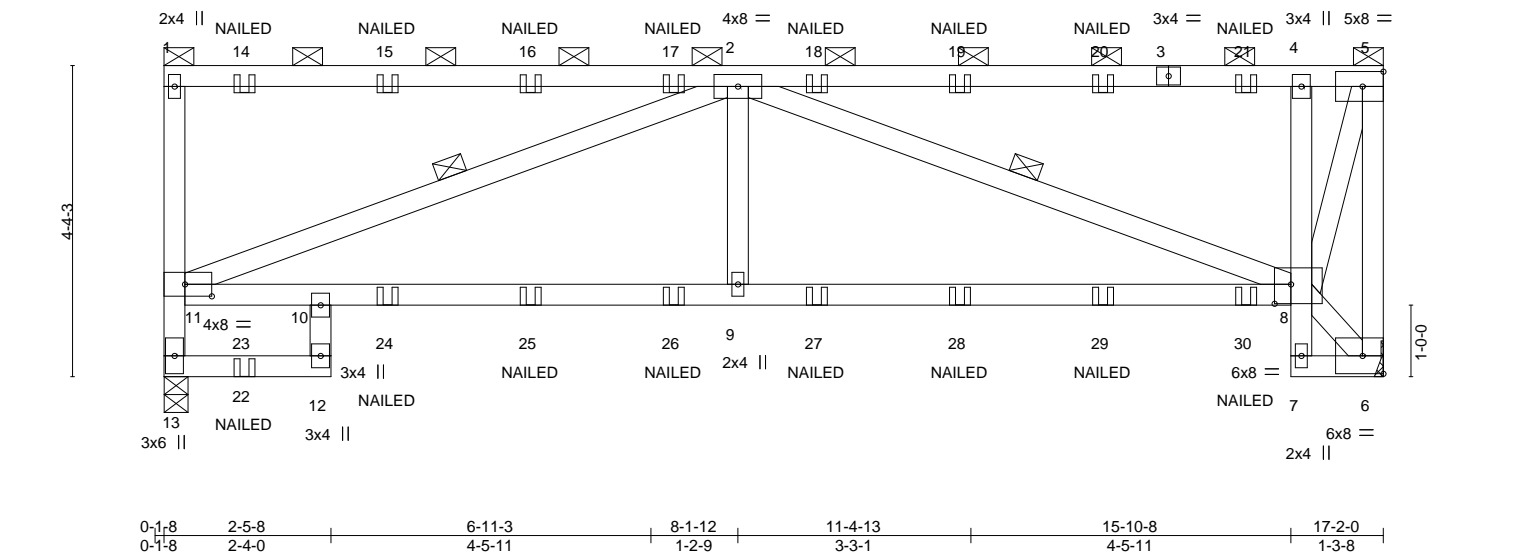


Plate Offsets (X,Y)-- [8:0-2-12,0-3-4], [11:0-4-8,0-2-0]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	0.17 8-9 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.26 8-9 >762 180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.62	Horz(CT)	0.12 6 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS				Weight: 81 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x4 SPF 1650F 1.5E \*Except\*  
 3-5: 2x4 SPF No.2  
 BOT CHORD 2x4 SPF No.2  
 WEBS 2x4 SPF No.2

**BRACING-**

TOP CHORD 2-0-0 oc purlins (2-4-4 max.): 1-5, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 WEBS 1 Row at midpt 2-8, 2-11

**REACTIONS.**

(size) 6=Mechanical, 13=0-4-0  
 Max Horz 13=103(LC 28)  
 Max Uplift 6=478(LC 5), 13=513(LC 4)  
 Max Grav 6=1062(LC 1), 13=1093(LC 1)

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

TOP CHORD 2-4=-483/248, 4-5=-413/216, 5-6=-1043/480  
 BOT CHORD 10-11=-879/1889, 9-10=-877/1760, 8-9=-877/1760, 4-8=-590/336  
 WEBS 5-8=-649/1313, 2-9=-111/484, 2-8=-1370/655, 2-11=-1842/869, 11-13=-1025/500,  
 1-11=-287/171

**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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=478, 13=513.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-5=-70, 12-13=-20, 8-10=-20, 6-7=-20



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Continued on page 2

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

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	A21	Roof Special Girder	1	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

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11/01/2021

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 14=-55(B) 15=-32(B) 16=-32(B) 17=-32(B) 18=-32(B) 19=-32(B) 20=-32(B) 21=-32(B) 22=-27(B) 24=-48(B) 25=-48(B) 26=-48(B) 27=-48(B) 28=-48(B) 29=-48(B) 30=-48(B)

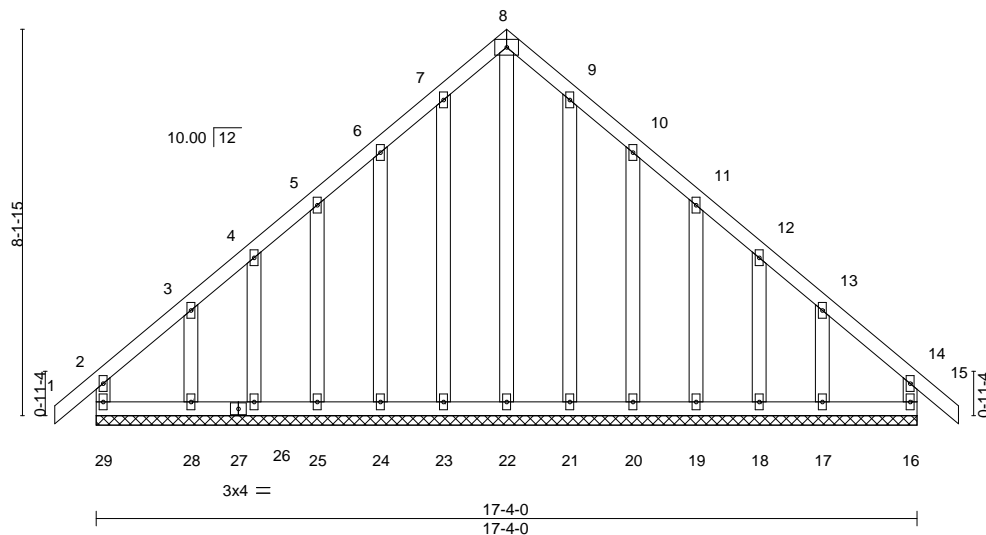
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	B1	Common Supported Gable	1	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:41 2021 Page 1  
 ID:9TfwzKJJ\_y34AD7?hPVfOzykjh0-Az11qoTCRN2wYA1GTvdx2UuAzb3OpTbChKxPlyvVgqK

0-10-8 8-8-0 17-4-0 18-2-8  
 0-10-8 8-8-0 8-8-0 0-10-8

4x6 =

Scale = 1:48.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	15	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.00	15	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.32	Horz(CT)	0.00	16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 107 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 17-4-0.

(lb) - Max Horz 29=211(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 29, 16, 23, 24, 25, 26, 21, 20, 19, 18 except 28=140(LC 12),

17=132(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 29, 16, 22, 23, 24, 25, 26, 28, 21, 20, 19, 18, 17

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

TOP CHORD 6-7=-129/253, 7-8=-146/290, 8-9=-146/290, 9-10=-129/253

WEBS 8-22=-298/113

**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 2-0-0, Exterior(2N) 2-0-0 to 8-8-0, Corner(3R) 8-8-0 to 11-8-0, Exterior(2N) 11-8-0 to 18-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 16, 23, 24, 25, 26, 21, 20, 19, 18 except (jt=lb) 28=140, 17=132.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 8, 2021

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

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



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	B2	Common Girder	1	2	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:43 2021 Page 1

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2-2-9 4-5-12 8-8-0 12-10-4 15-1-7 17-4-0 18-2-8  
 2-2-9 2-3-3 4-2-4 4-2-4 2-3-3 2-2-9 0-10-8

4x8 ||

Scale = 1:53.0

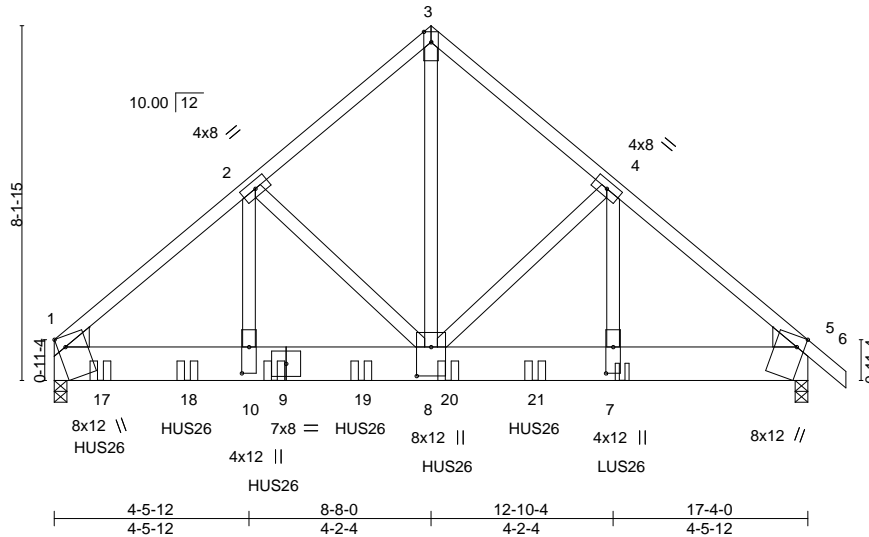


Plate Offsets (X,Y)-- [1:0-2-15,Edge], [5:0-2-15,Edge], [7:0-7-4,0-2-0], [8:0-8-0,0-4-0], [10:0-7-4,0-2-0]

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 0.36	Vert(LL)	-0.08	8-10	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.14	8-10	>999	180	
BCLL 0.0	Rep Stress Incr	NO	WB 0.80	Horz(CT)	0.02	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
Weight: 252 lb									FT = 20%

**LUMBER-**

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x10 SP 2400F 2.0E  
 WEBS 2x4 SPF No.2

WEDGE  
 Left: 2x6 SPF No.2, Right: 2x6 SPF No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-4-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 5=0-3-8  
 Max Horz 1=-181(LC 27)  
 Max Uplift 1=-1011(LC 8), 5=-965(LC 9)  
 Max Grav 1=7187(LC 1), 5=4896(LC 1)

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

TOP CHORD 1-2=-7419/1133, 2-3=-5429/1003, 3-4=-5409/1004, 4-5=-6342/1268  
 BOT CHORD 1-10=-881/5625, 8-10=-881/5625, 7-8=-905/4789, 5-7=-905/4789  
 WEBS 3-8=-1179/6518, 4-8=-976/487, 4-7=-428/1031, 2-8=-2146/343, 2-10=-235/2520

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-5-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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
- The Fabrication Tolerance at joint 1 = 12%, joint 5 = 12%
- 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) 1=1011, 5=965.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-0-12 from the left end to 11-0-12 to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent at 13-0-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

Continued on page 2



October 8, 2021

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



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	B2	Common Girder	1	2	Job Reference (optional)	DEVELOPMENT SERVICES

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:43 2021 Page 2  
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RELEASE FOR CONSTRUCTION

LEE'S SUMMIT, MISSOURI

LOAD CASE(S) Standard

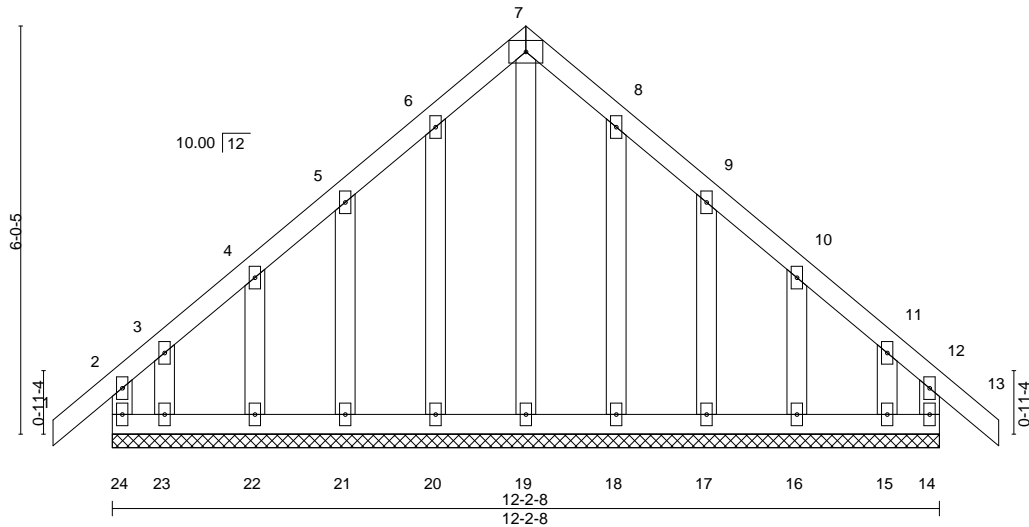
- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
  - Vert: 1-3=-70, 3-6=-70, 11-14=-20
- Concentrated Loads (lb)
  - Vert: 9=-1548(F) 7=-1042(F) 17=-1680(F) 18=-1548(F) 19=-1548(F) 20=-1548(F) 21=-1548(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	C1	Common Supported Gable	1	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

0-10-8 6-1-4 12-2-8 13-1-0  
0-10-8 6-1-4 6-1-4 0-10-8

4x6 =

Scale = 1:34.0



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 0.08	Vert(LL)	-0.00	13	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	13	n/r		
BCLL 0.0	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.00	14	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 67 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 6-0-0 oc bracing.

#### REACTIONS.

- All bearings 12-2-8.  
(lb) - Max Horz 24=161(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 14, 20, 21, 22, 18, 17, 16 except 24=123(LC 8), 23=134(LC 12), 15=122(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

**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 2-1-4, Exterior(2N) 2-1-4 to 6-1-4, Corner(3R) 6-1-4 to 9-1-4, Exterior(2N) 9-1-4 to 13-1-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 20, 21, 22, 18, 17, 16 except (jt=lb) 24=123, 23=134, 15=122.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 8, 2021

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

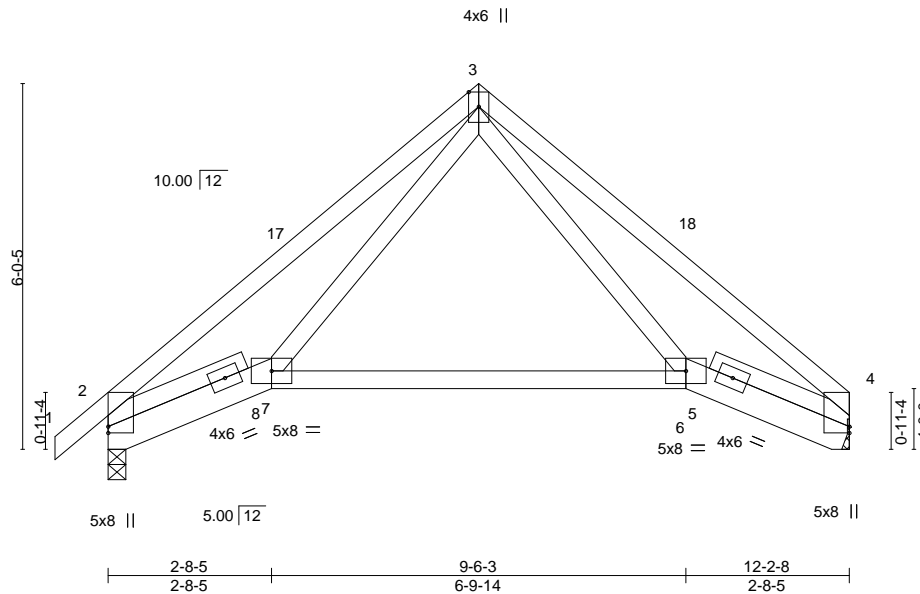
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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	C2	Roof Special	2	1			DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:47 2021 Page 1	LEE'S SUMMIT, MISSOURI
Job Reference (optional)						ID:9TfwzKJJ_y34AD7?hPVfOzykjh0-770I4rYz1Do3G5TQq9kMlw8WYCSLn5tpizEYVqBF	

0-10-8	2-8-5	6-1-4	9-6-3	12-2-8
0-10-8	2-8-5	3-4-15	3-4-15	2-8-5



Scale = 1:38.0

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 0.33	Vert(LL)	-0.06	6-7	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.13	6-7	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.02	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
									Weight: 57 lb FT = 20%

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
 BOT CHORD 2x6 SPF No.2 \*Except\*  
 6-7: 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) 4=Mechanical, 2=0-3-8  
 Max Horz 2=131(LC 9)  
 Max Uplift 4=54(LC 13), 2=71(LC 12)  
 Max Grav 4=547(LC 1), 2=613(LC 1)

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

TOP CHORD 2-3=-894/192, 3-4=-904/192  
 BOT CHORD 2-7=-350/649, 6-7=-24/372, 4-6=-284/621  
 WEBS 3-6=-39/406, 3-7=-68/408

#### 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 6-1-4, Exterior(2R) 6-1-4 to 9-1-4, Interior(1) 9-1-4 to 12-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 8, 2021

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

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



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	C3	Roof Special	4	1			DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:48 2021 Page 1	11/01/2021
Job Reference (optional)						LEE'S SUMMIT, MISSOURI	

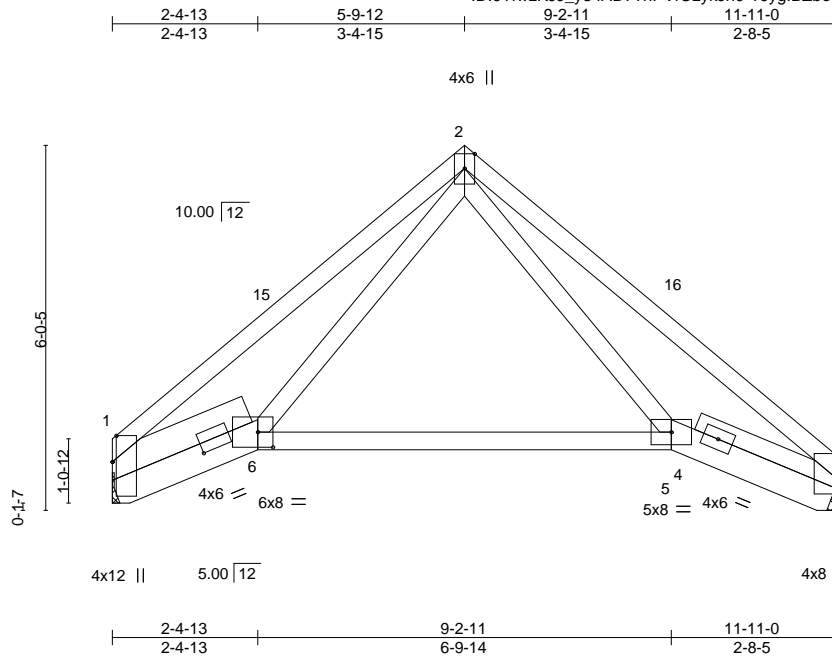


Plate Offsets (X,Y)-- [1:0-5-3,Edge], [1:1-5-6,0-5-6], [6:0-3-0,0-3-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.06	5-6	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.14	5-6	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.02	3	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 56 lb FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x6 SPF No.2 \*Except\*  
5-6: 2x4 SPF No.2  
WEBS 2x4 SPF No.2  
SLIDER Left 2x6 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) 1=Mechanical, 3=Mechanical  
Max Horz 1=-119(LC 8)  
Max Uplift 1=-52(LC 12), 3=-54(LC 13)  
Max Grav 1=536(LC 1), 3=536(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-848/196, 2-3=-884/195  
BOT CHORD 1-6=-97/639, 5-6=-20/358, 3-5=-399/606  
WEBS 2-6=-74/393, 2-5=-46/398

#### 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 5-9-12, Exterior(2R) 5-9-12 to 8-9-12, Interior(1) 8-9-12 to 11-11-0 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



October 8, 2021

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

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	C4	Flat	1	1	Job Reference (optional)	11/01/2021

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:49 2021 Page 1

ID:9TfwzKJJ\_y34AD7?hPVfOzyKJh0-xVW3VXZDYq2nWOdpamqNA0L2M09/3TCAGer17/VhBC

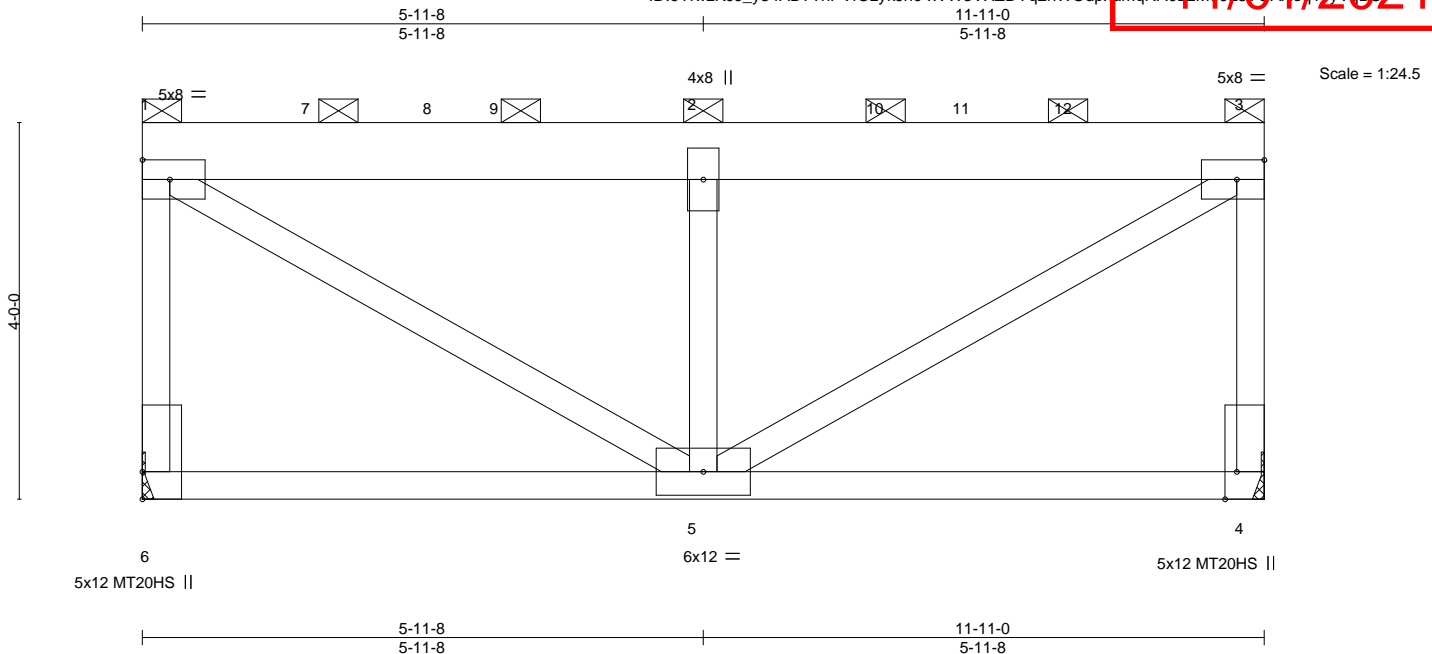


Plate Offsets (X,Y)-- [4:0-3-8,Edge]												
LOADING (psf)		SPACING-2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.06	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.11	5	>999	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 79 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x8 SP 2400F 2.0E	TOP CHORD 2-0-0 oc purlins (5-8-12 max.): 1-3, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	

**REACTIONS.** (size) 6=Mechanical, 4=Mechanical  
Max Horz 6=122(LC 32)  
Max Uplift 6=512(LC 8), 4=509(LC 9)  
Max Grav 6=2807(LC 1), 4=2833(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-6=-2730/650, 1-2=-3019/626, 2-3=-3019/626, 3-4=-2756/650  
WEBS 1-5=-764/3449, 2-5=-3516/801, 3-5=-765/3444

#### 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) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 8-9-4, Corner(3) 8-9-4 to 11-9-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are MT20 plates 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=512, 4=509.
- 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.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 883 lb down and 212 lb up at 1-10-4, 883 lb down and 212 lb up at 3-10-4, 884 lb down and 212 lb up at 5-10-4, and 973 lb down and 224 lb up at 7-10-4, and 973 lb down and 218 lb up at 9-10-4 on top 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: 1-3=-70, 4-6=-20



October 8, 2021

Continued on page 2

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	C4	Flat	1	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:50 2021 Page 2  
ID:9TfwzKJJ\_y34AD7?hPVfOzykJh0-Ph4RjtarJ8Ae7YB?V3wOYWwmSD4WixPqNjZZVAgBB

LOAD CASE(S) Standard  
Concentrated Loads (lb)  
Vert: 2=-884 7=-883 9=-883 10=-973 12=-973

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK 110/MO	AS NOTED FOR PLAN REVIEW
2955860	CJ1	Diagonal Hip Girder	2	1	148256889	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:50 2021 Page 1						11/01/2021
ID:9TfwzKJJ_y34AD7?hPVfOzykJh0-Ph4RjtarJ8Ae7YB?YlI3wOYgJmtW4xPqNMZyVqgB						
Job Reference (optional)						

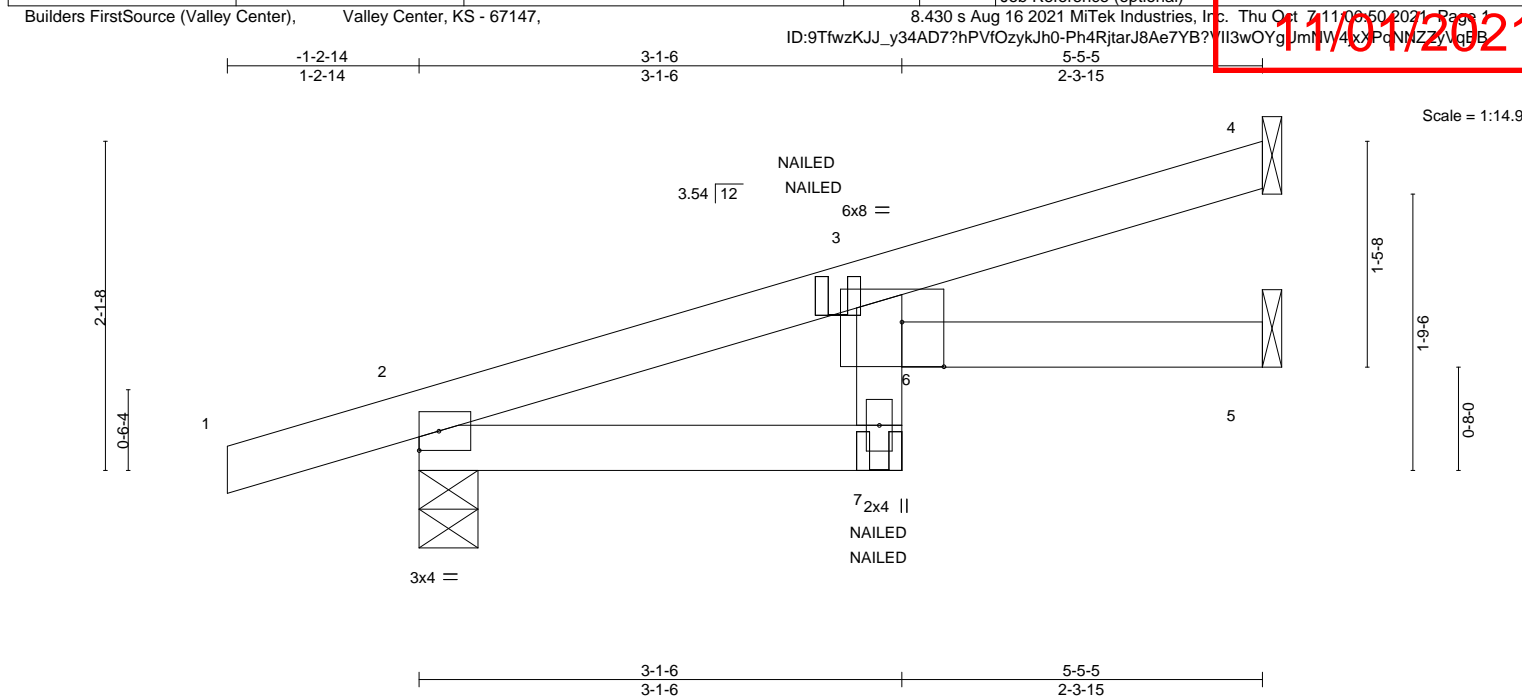


Plate Offsets (X,Y)--	[3:0-3-4,0-3-7]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	-0.03	6	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.41	Vert(CT)	-0.06	5-6	>999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR					Weight: 15 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 5-5-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 2=0-4-9, 5=Mechanical  
Max Horz 2=76(LC 4)  
Max Uplift 4=41(LC 8), 2=83(LC 4), 5=11(LC 8)  
Max Grav 4=133(LC 1), 2=341(LC 1), 5=101(LC 1)

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

TOP CHORD 2-3=-336/38  
BOT CHORD 2-7=-71/288

**NOTES-**

- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "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: 1-4=-70, 7-8=-20, 5-6=-20  
Concentrated Loads (lb)  
Vert: 7=-4(F=-2, B=-2)



October 8, 2021

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO
2955860	CJ2	Diagonal Hip Girder	1	1		
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:52 2021 Page 1
Job Reference (optional)						ID:9TfwzKJJ_y34AD7?hPVfOzykjh0-L4BB8Yc5rlRMNslOdjKX?p1s26NdlqsJse2yVq89

AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI

148256890

11/01/2021

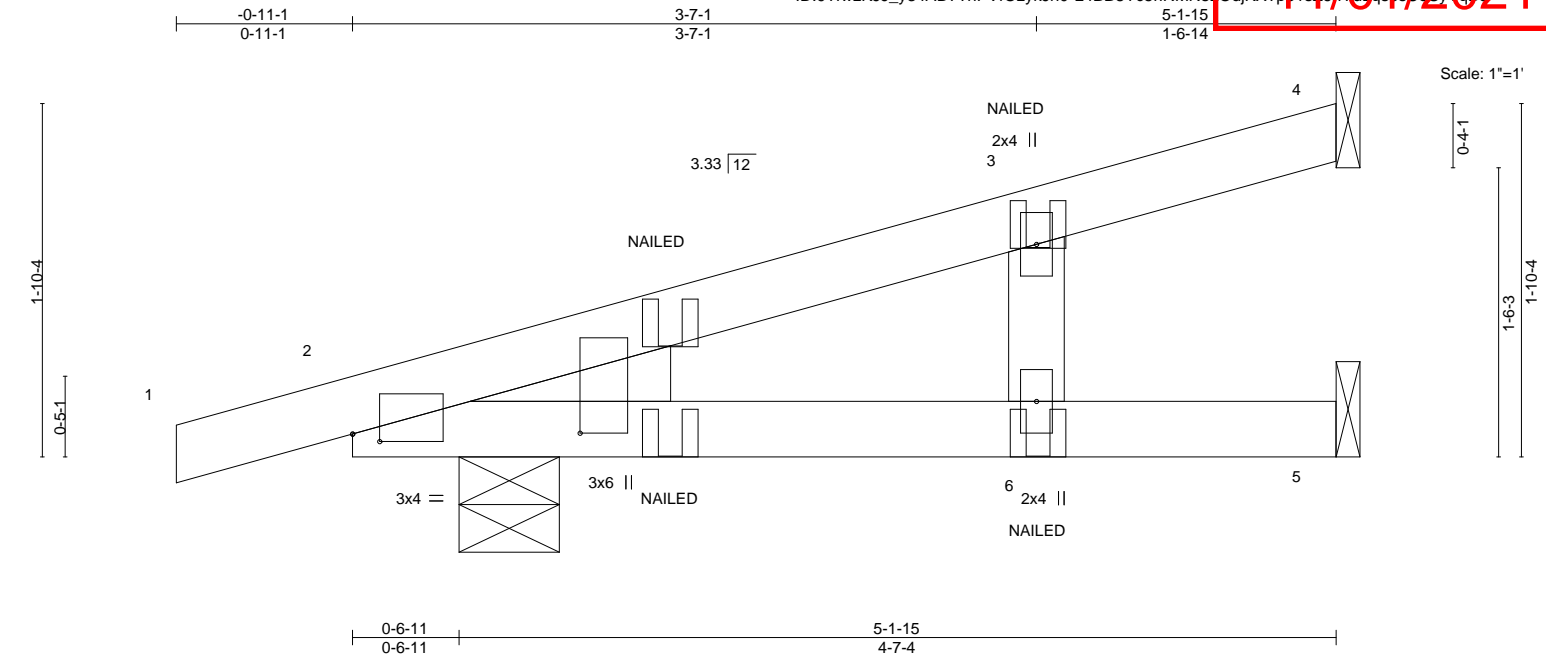


Plate Offsets (X,Y)-- [2:0-1-11,0-0-8], [2:0-0-1,1-2-5]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.02	6-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.05	6-11	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.01	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 15 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-1-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 4=Mechanical, 2=0-6-5, 5=Mechanical  
Max Horz 2=64(LC 4)  
Max Uplift 4=33(LC 8), 2=81(LC 4), 5=14(LC 8)  
Max Grav 4=107(LC 1), 2=338(LC 1), 5=82(LC 1)

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

**NOTES-**

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 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: 1-4=-70, 5-7=-20  
Concentrated Loads (lb)  
Vert: 6=-3(B) 11=-0(F)



October 8, 2021

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	CJ3	Roof Special Girder	1	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:53 2021 Page 1  
 ID:9TfwzKJJ\_y34AD7?hPvOzykjh0-qGIZLudjc3ZD\_0waAQrmX0AEkUzH4Hz5ocAxyVq88

11/01/2021

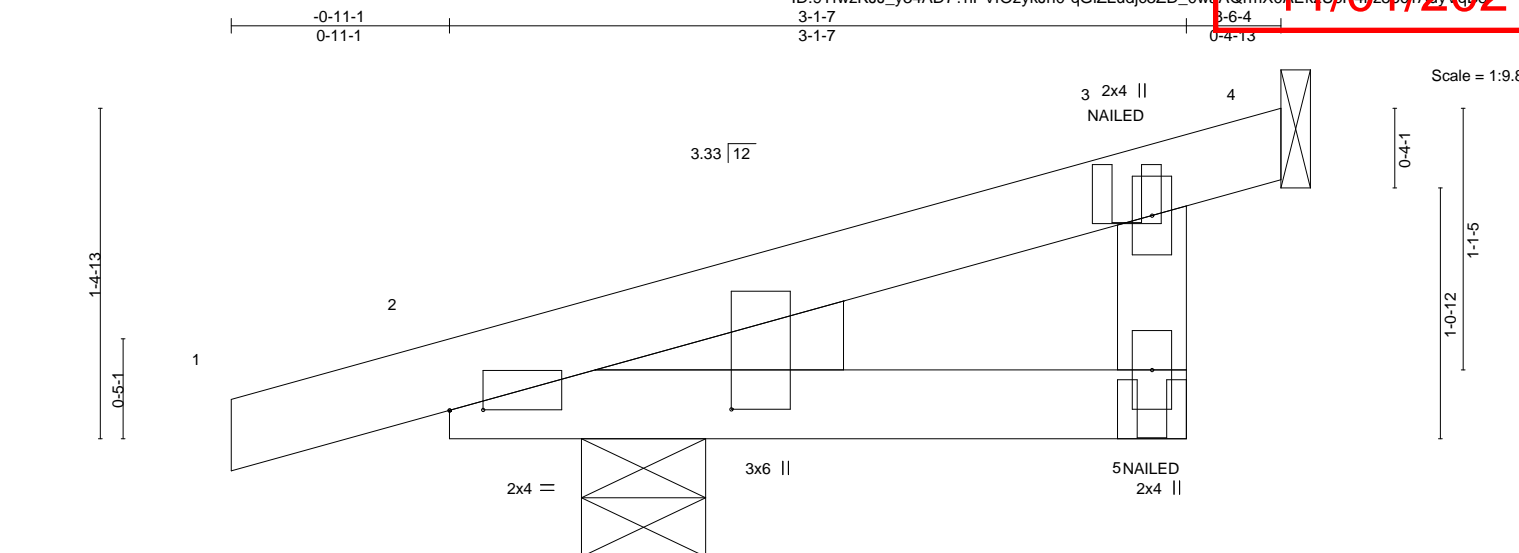


Plate Offsets (X,Y)--	[2:0-1-11,0-0-0], [2:0-0-1,1-2-5]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	10	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.01	10	>999	180	197/144
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						
Weight: 11 lb									FT = 20%

**LUMBER-**

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEDGE

Left: 2x4 SPF No.2

**BRACING-**

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 3-6-4 oc purlins.

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

**REACTIONS.**

(size) 4=Mechanical, 2=0-6-5

Max Horz 2=48(LC 21)

Max Uplift 4=26(LC 8), 2=72(LC 4)

Max Grav 4=101(LC 1), 2=274(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; 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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: 1-4=70, 5-6=20

Concentrated Loads (lb)

Vert: 5=9(B)



October 8, 2021

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



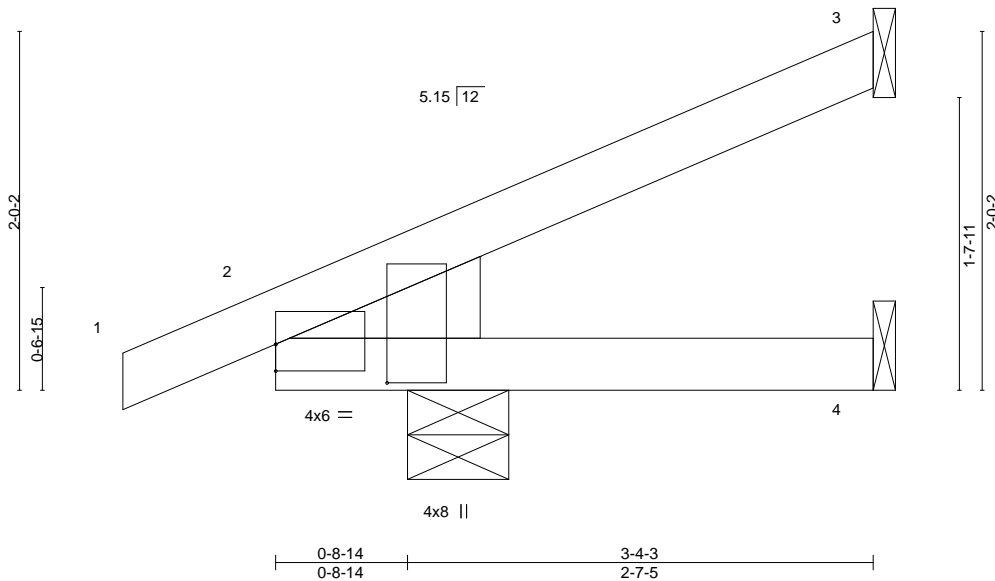
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK
2955860	CJ4	Jack-Open	1	1	110/MO
Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:54 2021 Page 1		
			ID:9TfwzKJJ_y34AD7?hPVfOzykjh0-ITJyYEdMNMh4cAVmk7M?4E NG hph0Xw7, SlbjkyVq87		
			Job Reference (optional)		

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
11/01/2021

-0-10-4 3-4-3  
0-10-4 3-4-3



Scale = 1:12.9

Plate Offsets (X,Y)-- [2:0-0-0,0-1-13], [2:0-2-10,0-7-8]							
<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 0.17	Vert(LL)	-0.01	5	>999
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.01	5	>999
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP				
				<b>PLATES</b>	<b>GRIP</b>		
				MT20	197/144		
				Weight: 11 lb	FT = 20%		

#### LUMBER-

TOP CHORD 2x4 SPF No.2  
BOT CHORD 2x4 SPF No.2  
WEDGE  
Left: 2x6 SPF No.2

#### BRACING-

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

**REACTIONS.** (size) 3=Mechanical, 2=0-6-13, 4=Mechanical  
Max Horz 2=63(LC 12)  
Max Uplift 3=-33(LC 12), 2=-43(LC 12), 4=-8(LC 1)  
Max Grav 3=51(LC 1), 2=313(LC 1), 4=29(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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) 3, 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.



October 8, 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

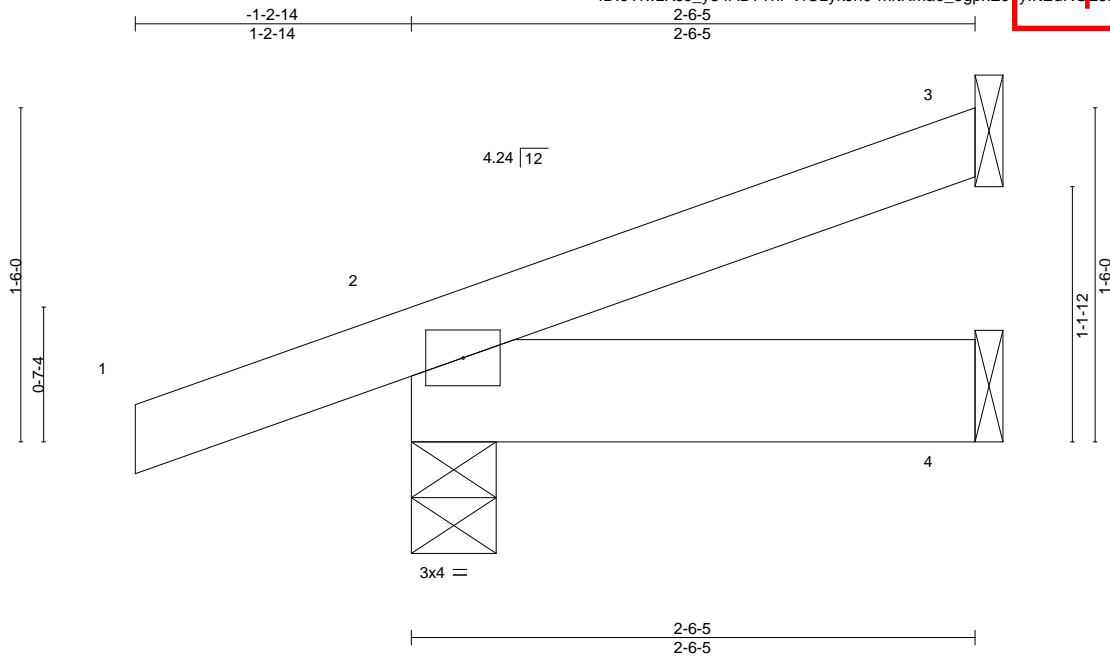


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	CJ6	Jack-Open	2	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:55 2021 Page 1  
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Scale = 1:10.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.00	7	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	7	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 9 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-5 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-4-9, 4=Mechanical  
Max Horz 2=53(LC 8)  
Max Uplift 3=24(LC 12), 2=68(LC 8)  
Max Grav 3=58(LC 1), 2=219(LC 1), 4=48(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) 3, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 8, 2021

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	CJ7	Jack-Open	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:56 2021 Page 1

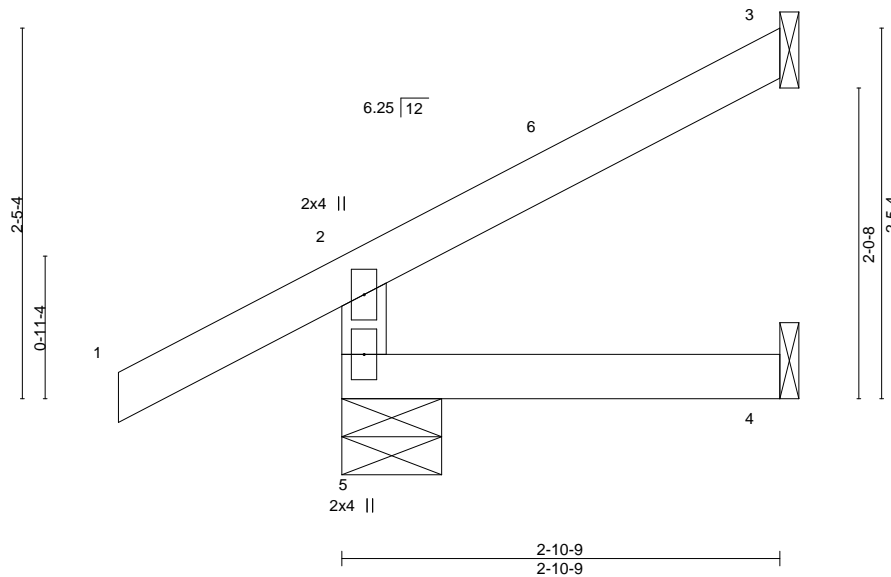
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11/01/2021

-1-5-10  
1-5-10

2-10-9  
2-10-9

Scale = 1:15.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	-0.00	4-5	>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: 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 2-10-9 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-7-14, 3=Mechanical, 4=Mechanical  
Max Horz 5=68(LC 12)  
Max Uplift 5=-34(LC 12), 3=-42(LC 12)  
Max Grav 5=267(LC 1), 3=66(LC 1), 4=48(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) -1-5-10 to 1-6-6, Interior(1) 1-6-6 to 2-9-13 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
- 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 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.



October 8, 2021

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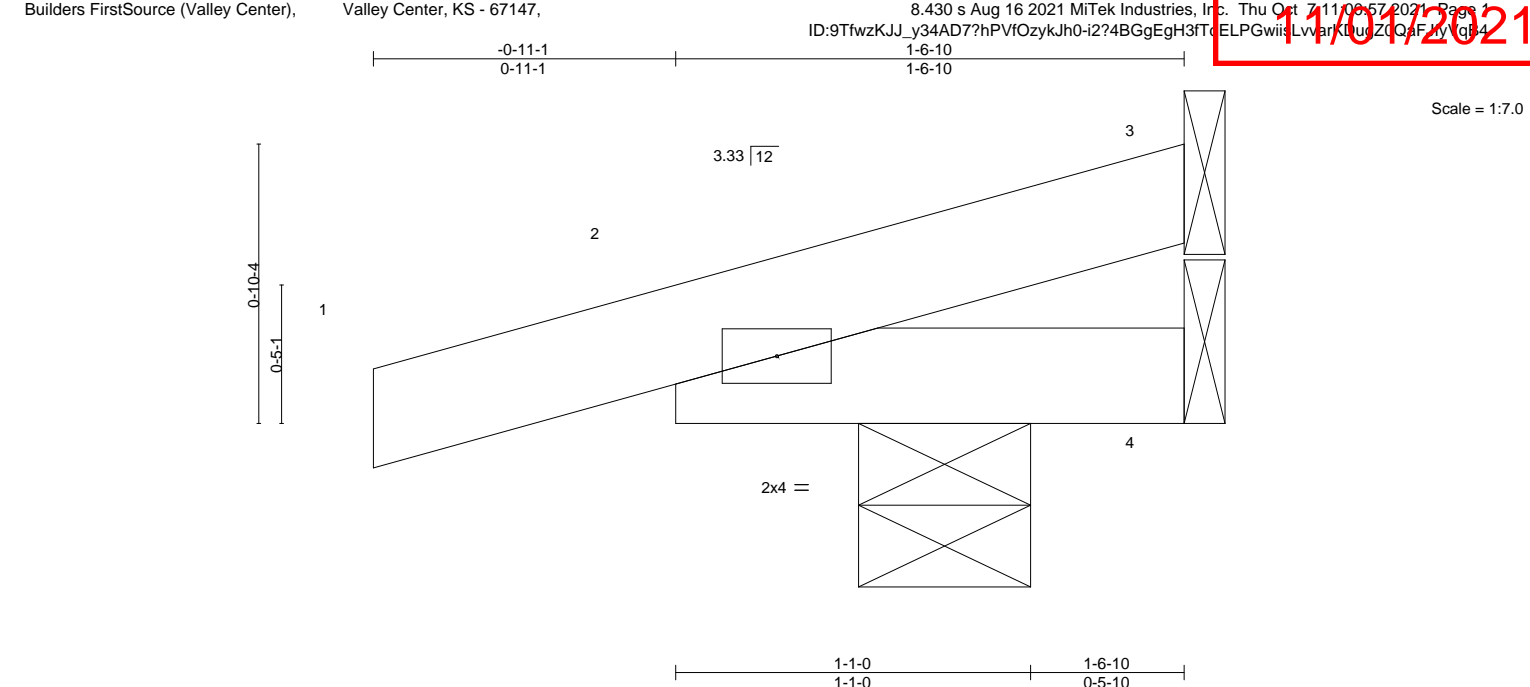
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	CJ8	Jack-Open	1	1	Job Reference (optional)		DEVELOPMENT SERVICES
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:57 2021 Page 1				
			ID:9TfwzKJJ_y34AD7?hPVfOzykjh0-i274BGgEgH3fTcELPGwiisLwarkDuzZQqAFWVq84				
			1-6-10 1-6-10				
			LEE'S SUMMIT, MISSOURI				



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.00	5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 5 lb	FT = 20%

<b>LUMBER-</b>			<b>BRACING-</b>	
TOP CHORD	2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied or 1-6-10 oc purlins.
BOT CHORD	2x4 SPF No.2		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-6-5, 4=Mechanical  
Max Horz 2=28(LC 8)  
Max Uplift 3=-12(LC 1), 2=-88(LC 8), 4=-38(LC 1)  
Max Grav 3=6(LC 8), 2=254(LC 1), 4=23(LC 8)

**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) 3, 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.



October 8, 2021

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

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



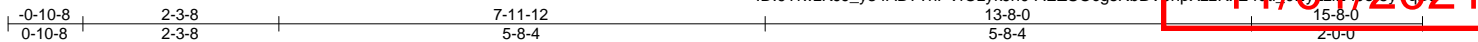
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	D1	ROOF SPECIAL	1	1	Job Reference (optional)	

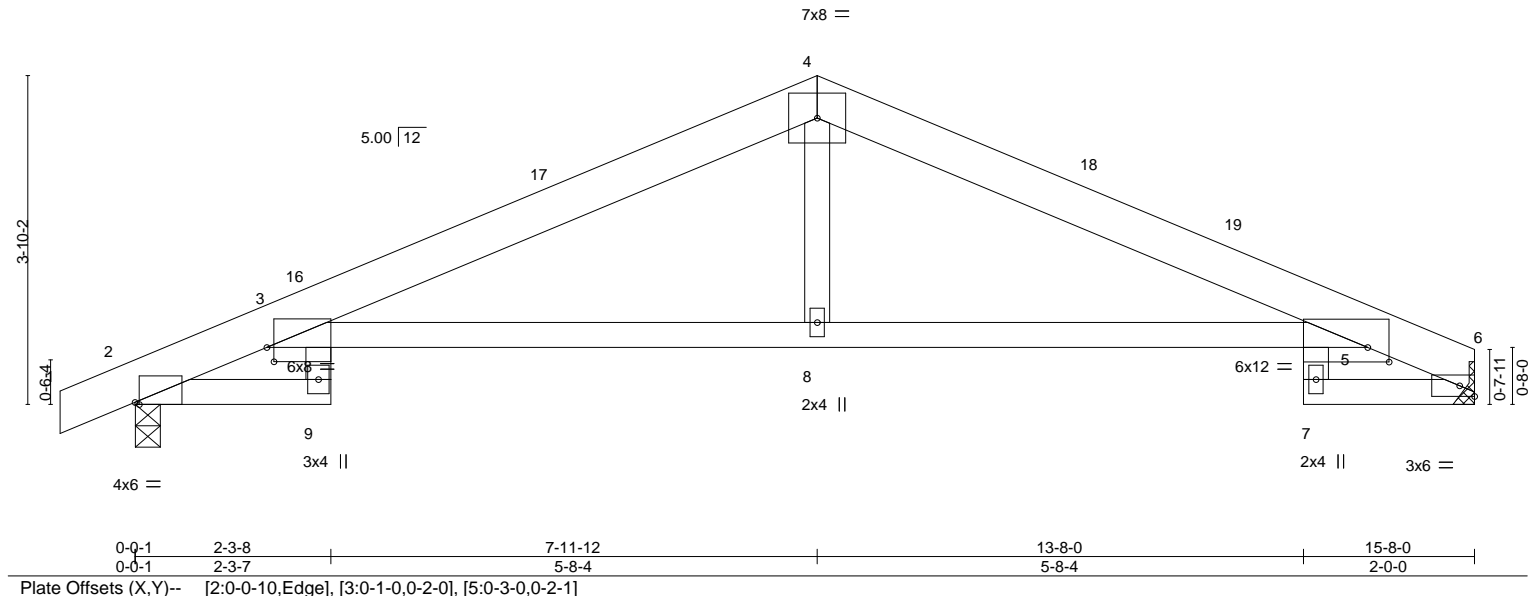
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:58 2021 Page 1

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Scale = 1:26.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.91	Vert(LL)	-0.22	3-8	>873	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.41	3-8	>463		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.25	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 56 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.

#### REACTIONS.

(size) 6=Mechanical, 2=0-3-8  
Max Horz 2=67(LC 12)  
Max Uplift 6=86(LC 13), 2=106(LC 12)  
Max Grav 6=710(LC 1), 2=774(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-14=-320/97, 3-4=-1337/319, 4-5=-1341/329, 5-6=-307/89  
BOT CHORD 3-8=-228/1238, 5-8=-228/1238  
WEBS 4-8=0/274

#### 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 7-11-12, Exterior(2R) 7-11-12 to 10-11-12, Interior(1) 10-11-12 to 15-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=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.
- 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.



October 8, 2021

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

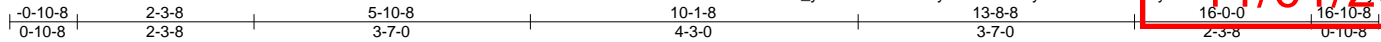


Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	D2	Hip	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:59 2021 Page 1

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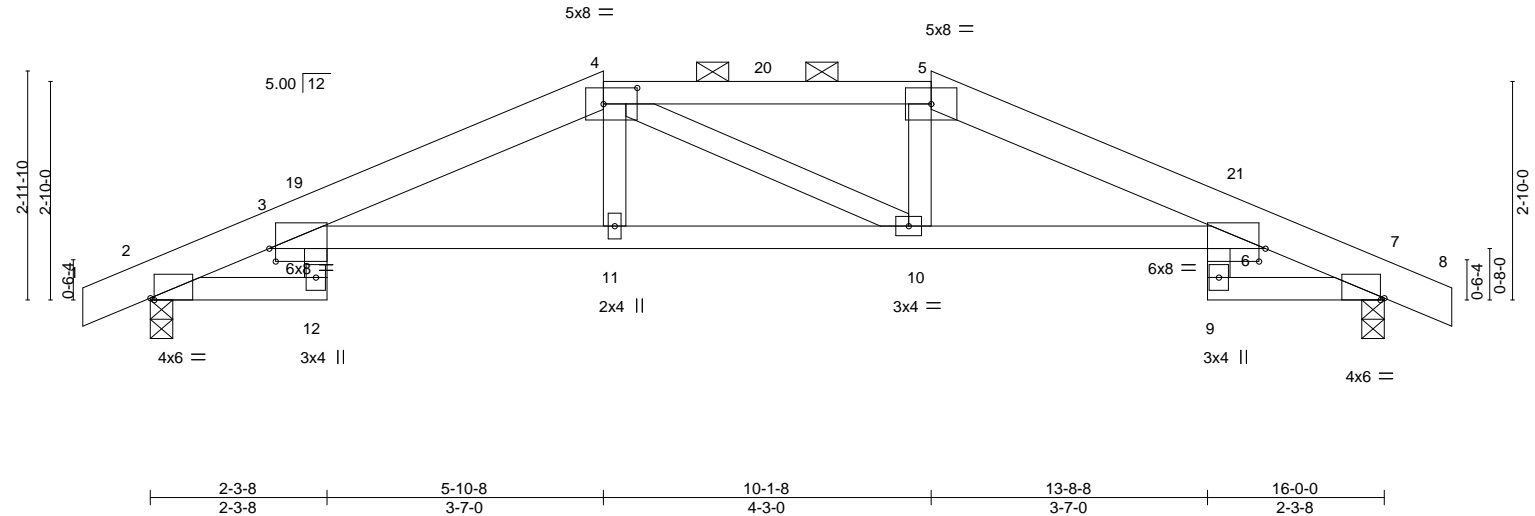


Plate Offsets (X,Y)--		[2:0-0-10,Edge], [3:0-1-0,0-2-0], [4:0-5-4,0-2-8], [6:0-1-0,0-2-0], [7:0-0-10,Edge]																	
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL		1.15		TC	0.93	Vert(LL)	-0.18	6-10	>999		240		MT20		197/144		
TCDL	10.0	Lumber DOL		1.15		BC	0.91	Vert(CT)	-0.34	3-11	>565		180						
BCLL	0.0	Rep Stress Incr		YES		WB	0.05	Horz(CT)	0.25	7	n/a		n/a						
BCDL	10.0	Code IRC2018/TPI2014				Matrix-AS										Weight: 61 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 (4-7-8 max.): 4-5.  
BOT CHORD Rigid ceiling directly applied.

#### REACTIONS.

(size) 2=0-3-8, 7=0-3-8  
Max Horz 2=-44(LC 17)  
Max Uplift 2=-110(LC 12), 7=-110(LC 13)  
Max Grav 2=788(LC 1), 7=788(LC 1)

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

TOP CHORD 3-14=-327/98, 3-4=-1595/337, 4-5=-1522/353, 5-6=-1595/337, 6-7=-327/101  
BOT CHORD 3-11=-250/1517, 10-11=-247/1522, 6-10=-254/1517

#### 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 5-10-8, Exterior(2E) 5-10-8 to 10-1-8, Exterior(2R) 10-1-8 to 14-2-2, Interior(1) 14-2-2 to 16-10-8 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) except (jt=lb) 2=110, 7=110.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



October 8, 2021

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	D3	HIP GIRDER	1	1	Job Reference (optional)	

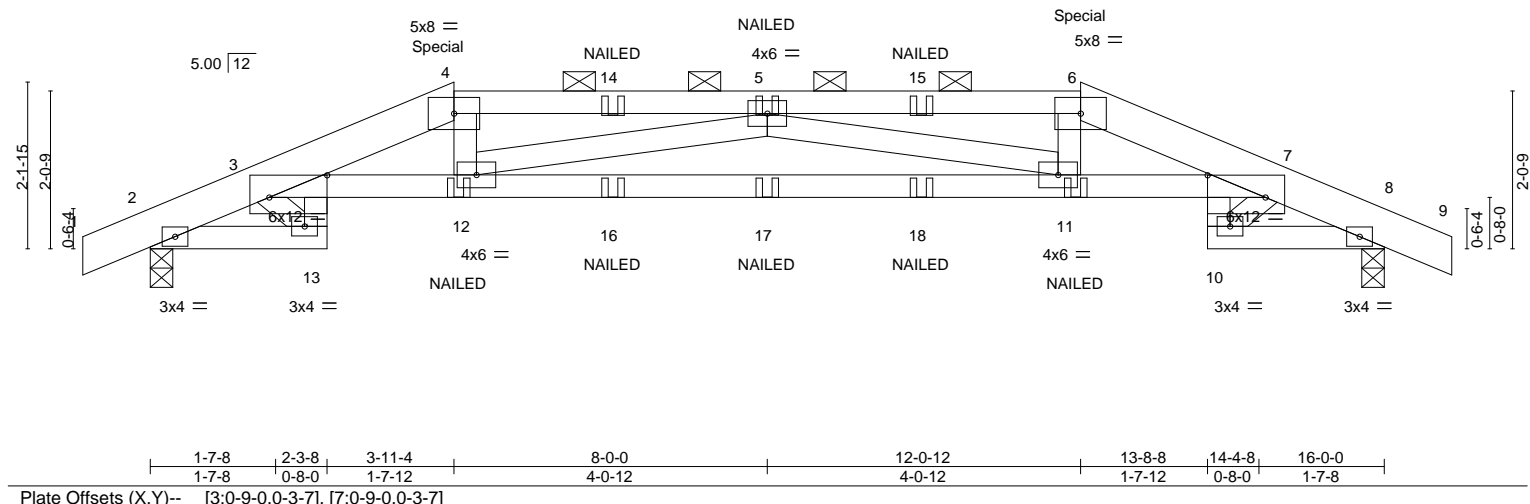
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:00 2021 Page 1

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-0-10-8	2-3-8	3-11-4	8-0-0	12-0-12	13-8-8	16-0-0	16-10-8
0-10-8	2-3-8	1-7-12	4-0-12	4-0-12	1-7-12	2-3-8	0-10-8

Scale = 1:29.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.62	Vert(LL)	-0.23 11-12	>819	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.47 11-12	>405	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.21	Horz(CT)	0.22 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 66 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x6 SPF 2100F 1.8E *Except*	TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins, except
4-6: 2x4 SPF No.2	2-0-0 oc purlins (2-11-5 max.): 4-6.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
3-7: 2x4 SP 2400F 2.0E	
WEBS 2x4 SPF No.2	

<b>REACTIONS.</b>	(size) 2=0-3-8, 8=0-3-8
	Max Horz 2=-32(LC 13)
	Max Uplift 2=-231(LC 8), 8=-231(LC 9)
	Max Grav 2=1093(LC 1), 8=1093(LC 1)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-466/133, 3-4=-3185/678, 4-5=-3138/679, 5-6=-3138/677, 6-7=-3185/679, 7-8=-466/127
BOT CHORD	3-12=-629/3063, 11-12=-857/3764, 7-11=-618/3063
WEBS	4-12=-88/552, 5-12=-682/236, 5-11=-682/237, 6-11=-88/552

- 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=231, 8=231.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 117 lb down and 96 lb up at 3-11-4, and 117 lb down and 96 lb up at 12-0-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

<b>LOAD CASE(S)</b> Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-6=-70, 6-9=-70, 2-13=-20, 3-7=-20, 8-10=-20

Continued on page 2



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**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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**MiTek®**  
 16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	D3	HIP GIRDER	1	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:01 2021 Page 2  
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**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 4=-58(B) 6=-58(B) 12=-127(B=-54) 5=-24(B) 11=-127(B=-54) 14=-24(B) 15=-24(B) 16=-54(B) 17=-54(B) 18=-54(B)

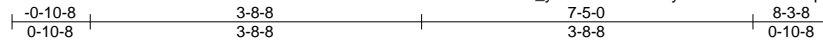
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	E1	Common Supported Gable	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

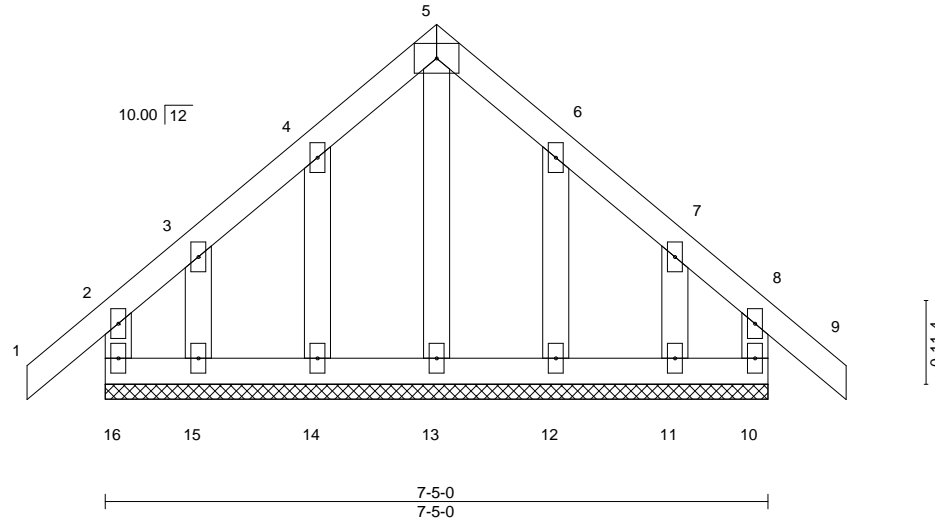
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:02 2021 Page 1

ID:9TfwzKJJ\_y34AD7?hPVfOzykJh0-3?ozEzkNVghxZC6JCpVtPv2mStZbu3ll9ih0?yvq8?



4x6 =

Scale = 1:25.8



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 0.09	Vert(LL)	-0.00	9	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	9	n/r		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						
								Weight: 36 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 6-0-0 oc bracing.

**REACTIONS.**

All bearings 7-5-0.

(lb) - Max Horz 16=-114(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11

Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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 2-4-8, Exterior(2N) 2-4-8 to 3-8-8, Corner(3R) 3-8-8 to 6-8-8, Exterior(2N) 6-8-8 to 8-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 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.



October 8, 2021

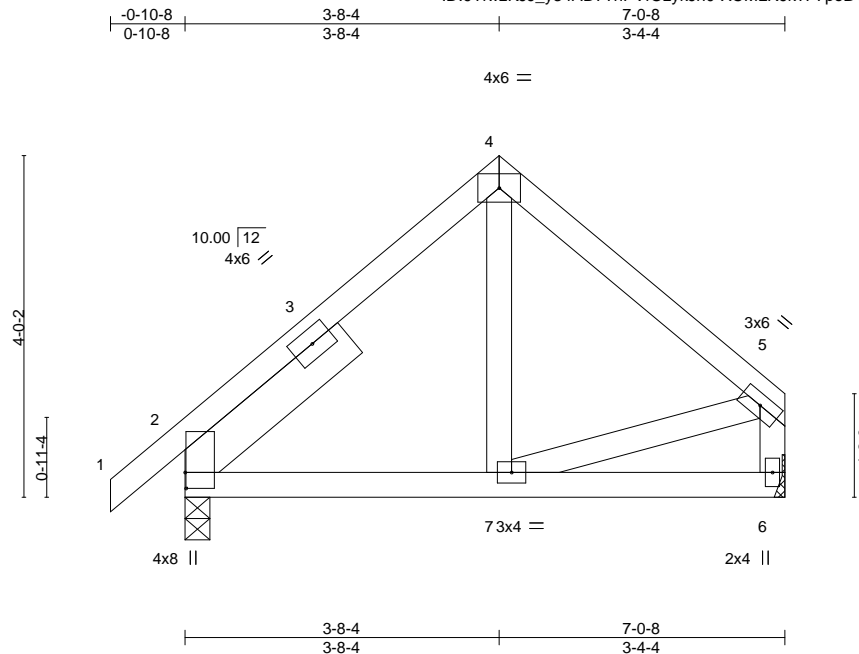
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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component****Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 2060116023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	E2	COMMON	2	1	AS NOTED FOR PLAN REVIEW
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					DEVELOPMENT SERVICES
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:03 2021 Page 1					LEE'S SUMMIT, MISSOURI
Job Reference (optional)					11/01/2021

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Scale = 1:27.0

Plate Offsets (X,Y)--		[2:0-2-4,0-0-2]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18
TCDL 10.0	Lumber DOL	1.15	BC 0.14
BCLL 0.0	Rep Stress Incr	YES	WB 0.04
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
			<b>DEFL.</b> in (loc) l/defl L/d
			Vert(LL) -0.01 7-10 >999 240
			Vert(CT) -0.01 7-10 >999 180
			Horz(CT) -0.01 2 n/a n/a
			<b>PLATES</b> <b>GRIP</b>
			MT20 197/144
			Weight: 33 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.

**REACTIONS.**

(size) 2=0-3-8, 6=Mechanical  
 Max Horz 2=104(LC 11)  
 Max Uplift 2=47(LC 12), 6=31(LC 12)  
 Max Grav 2=375(LC 1), 6=306(LC 1)

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

TOP CHORD 4-5=-254/119, 5-6=-286/141

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-8-4, Exterior(2E) 3-8-4 to 6-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.



October 8, 2021

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

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



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	G1	Half Hip Girder	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

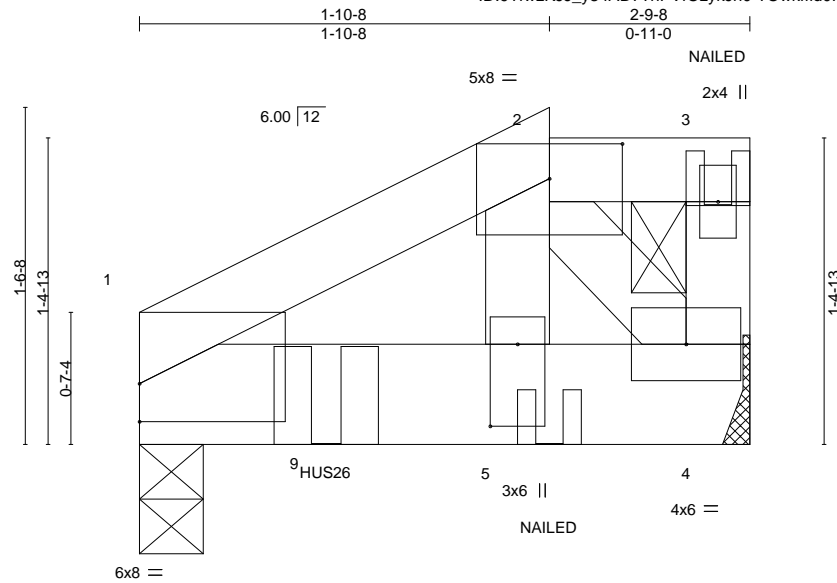
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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11/01/2021



Scale = 1:10.5

Plate Offsets (X,Y)--	[1:0-0-0,0-2-1], [2:0-4-0,0-1-15], [5:0-4-8,0-1-8]
-----------------------	----------------------------------------------------

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.00	5-8	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.38	Vert(CT)	-0.01	5-8	>999	180	197/144
BCLL 0.0	Rep Stress Incr	NO	WB 0.14	Horz(CT)	0.00	1	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						
									Weight: 11 lb FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-9-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 4=Mechanical  
 Max Horz 1=35(LC 28)  
 Max Uplift 1=108(LC 8), 4=73(LC 5)  
 Max Grav 1=778(LC 1), 4=446(LC 1)

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

TOP CHORD 1-2=-480/70  
 BOT CHORD 1-5=-68/431, 4-5=-58/352  
 WEBS 2-4=-606/91, 2-5=-80/588

**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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 1=108.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 0-10-4 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates 3-10d (0.148"x3") or 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, 2-3=-70, 4-6=-20
- Concentrated Loads (lb)  
 Vert: 3=-9(B) 5=-9(B) 9=-968(F)



October 8, 2021

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



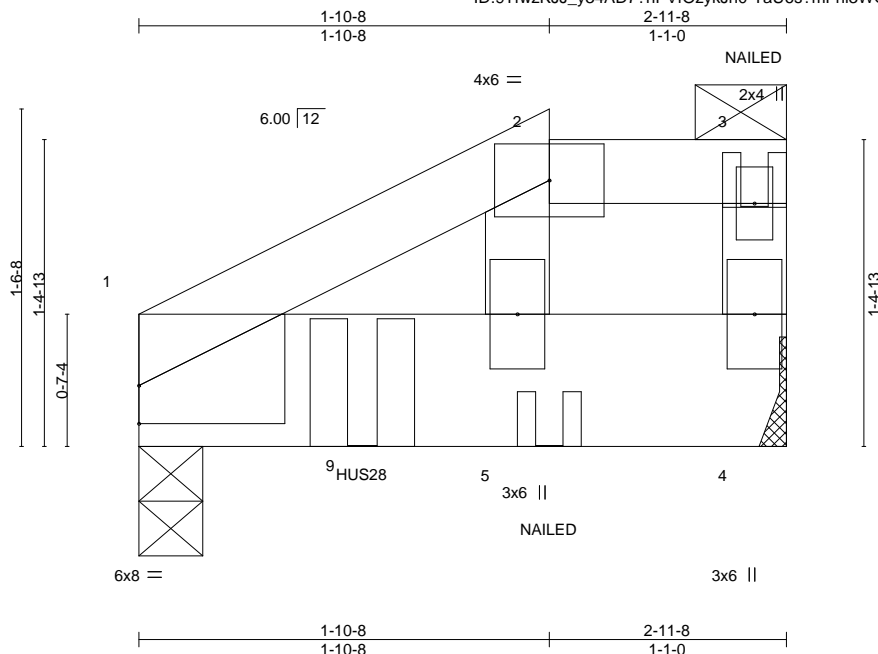
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	G2	Half Hip Girder	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

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

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11/01/2021



Scale = 1:10.5

Plate Offsets (X,Y)--		[1:0-0-0,0-2-1]			
<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 0.16	Vert(LL) -0.01 5 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(CT) -0.01 5-8 >999 180		
BCLL 0.0	Rep Stress Incr NO	WB 0.02	Horz(CT) 0.00 1 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP			
				Weight: 14 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-3.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 4=Mechanical  
 Max Horz 1=33(LC 28)  
 Max Uplift 1=155(LC 8), 4=108(LC 5)  
 Max Grav 1=1116(LC 1), 4=702(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=155, 4=108.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie HUS28 (22-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 1-0-4 from the left end to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)  
 Vert: 1-2=-70, 2-3=-70, 4-6=-20
- Concentrated Loads (lb)  
 Vert: 3=-9(F) 5=-7(F) 9=-1548(B)



October 8, 2021

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	G3	Half Hip Girder	1	1	48256994	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

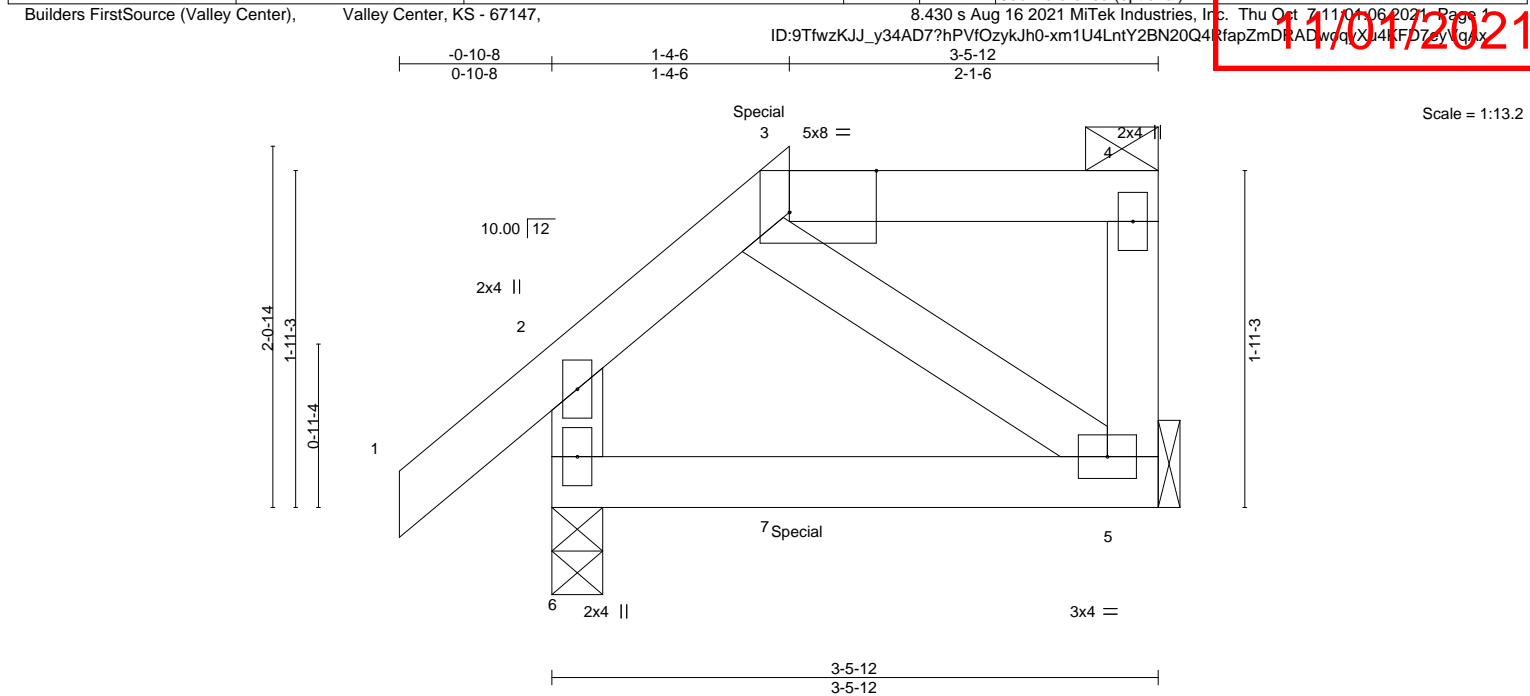


Plate Offsets (X,Y)-- [3:0-6-0,Edge]							
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	-0.01 5-6	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.01 5-6	>999	180
BCLL 0.0	Rep Stress Incr	NO	WB 0.02	Horz(CT)	-0.00 5	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS				
				<b>PLATES</b>	<b>GRIP</b>		
				MT20	197/144		
				Weight: 15 lb	FT = 20%		

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-12 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 6=0-3-8, 5=Mechanical  
Max Horz 6=64(LC 7)  
Max Uplift 6=54(LC 8), 5=50(LC 5)  
Max Grav 6=245(LC 1), 5=152(LC 22)

**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; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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) 37 lb down and 81 lb up at 1-4-6 on top chord, and 36 lb down and 22 lb up at 1-4-6 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: 1-3=-70, 3-4=-70, 5-6=-20  
Concentrated Loads (lb)  
Vert: 3=-4(B) 7=-26(B)



October 8, 2021

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

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

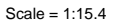
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:07 2021 Page 1  
ID:9TfwzKJJ\_y34AD7?hpVfOzykJh0-PzbsHhnVJMKEg?G?M52szldcG4ZF1t1\_7nf4Vla/fw



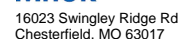
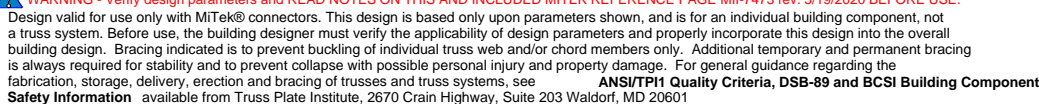
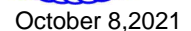
Weight: 18 lb      FT = 20%

TOP CHORD	Structural wood sheathing directly applied or 3-5-12 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

(size) 5=Mechanical, 6=0-5-8  
Max Horz 6=85(LC 5)  
Max Uplift 5=-73(LC 5), 6=-59(LC 8)  
Max Grav 5=136(LC 22), 6=228(LC 1)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BC DL=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
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 117 lb down and 100 lb up at 1'-10"-9 on top chord, and 38 lb down and 12 lb up at 1'-10"-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-6=-20  
Concentrated Loads (lb)  
Vert: 3=-1(F) 7=-2(F)



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	H1	MONOPITCH	4	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

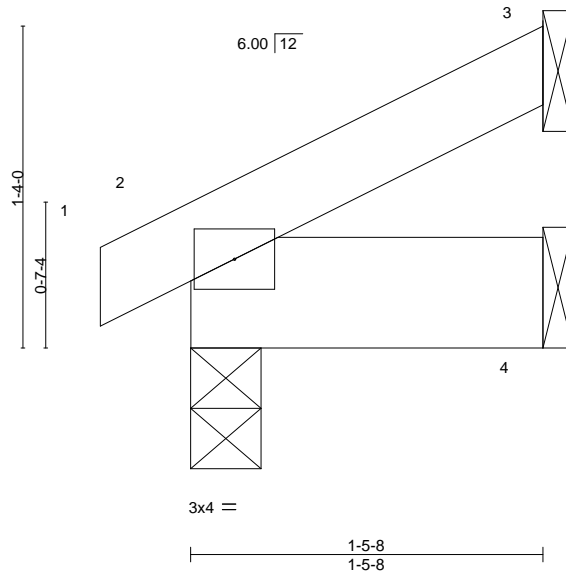
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:08 2021 Page 1

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-0-4-8 1-5-8  
0-4-8 1-5-8

Scale = 1:9.5



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 0.07	Vert(LL)	-0.00 7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00 7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00 2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 5 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-5-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 4=Mechanical  
Max Horz 2=30(LC 12)  
Max Uplift 2=-8(LC 12), 4=-20(LC 9)  
Max Grav 2=95(LC 1), 4=63(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) 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.



October 8, 2021

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

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	J1	Jack-Open	7	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Builders FirstSource (Valley Center),

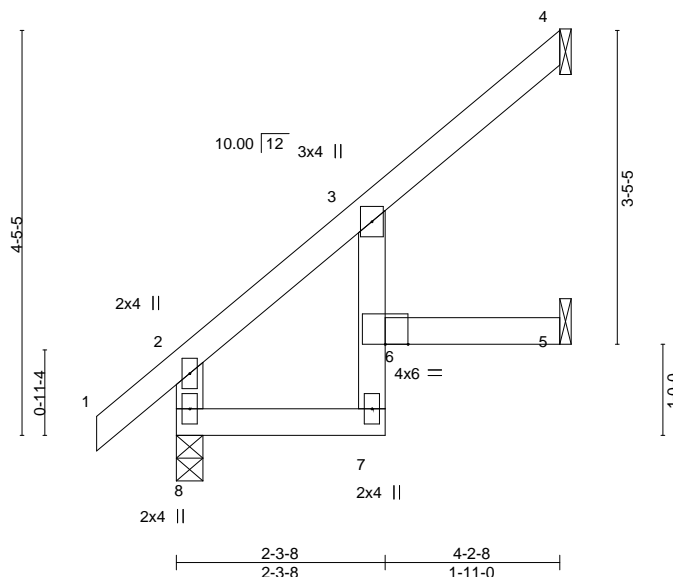
Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:09 2021 Page 1

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Scale = 1:25.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	0.03 6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.03 6	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02 5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 16 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** (size) 8=0-3-8, 4=Mechanical, 5=Mechanical  
 Max Horz 8=140(LC 12)  
 Max Uplift 4=70(LC 12), 5=34(LC 12)  
 Max Grav 8=261(LC 1), 4=111(LC 19), 5=77(LC 19)

**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 2-0-10, Interior(1) 2-0-10 to 4-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
- 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.



October 8, 2021

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



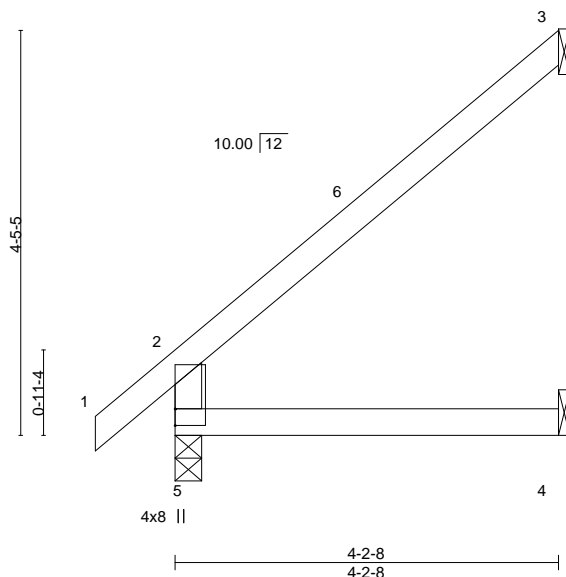
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	J2	Jack-Open	1	1	4825698	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

ID: 9TfwzKJJ\_y34AD7?hPVfOzykjh0-lkrN72r0Nbqf9nl1ECA\_GpvF7Ea/V/D3dcbz\_gvY/qus

11/01/2021

Scale = 1:25.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	0.03 4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.03 4-5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.03 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					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) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=140(LC 12)  
Max Uplift 3=-98(LC 12), 4=-7(LC 12)  
Max Grav 5=261(LC 1), 3=136(LC 19), 4=76(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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 4-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.
- 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.



October 8, 2021

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	J3	Jack-Open	10	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:12 2021 Page 1

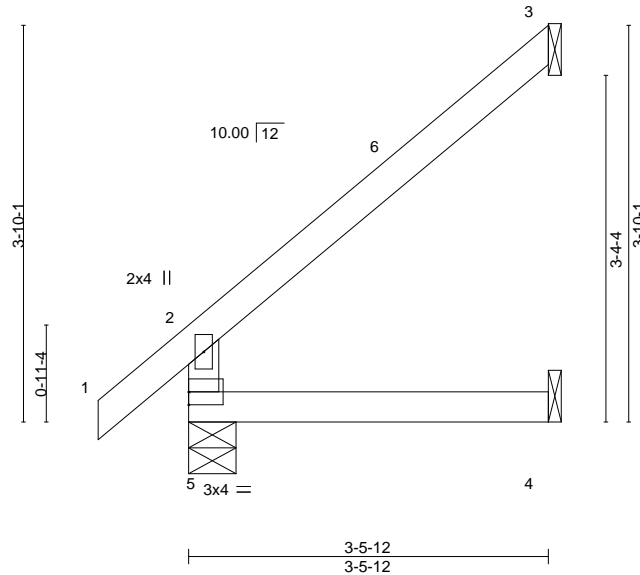
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-0-10-8  
0-10-8

3-5-12  
3-5-12

11/01/2021

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 0.21	Vert(LL)	0.02	4-5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.01	4-5	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	3	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						
									Weight: 11 lb FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-5-12 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 5=0-5-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=117(LC 12)  
Max Uplift 3=-80(LC 12), 4=-8(LC 12)  
Max Grav 5=230(LC 1), 3=109(LC 19), 4=62(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 3-5-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.



October 8, 2021

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	J4	Half Hip	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:13 2021 Page 1

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11/01/2021

-0-10-8 2-6-12 3-5-12  
0-10-8 2-6-12 0-11-0

Scale = 1:18.4

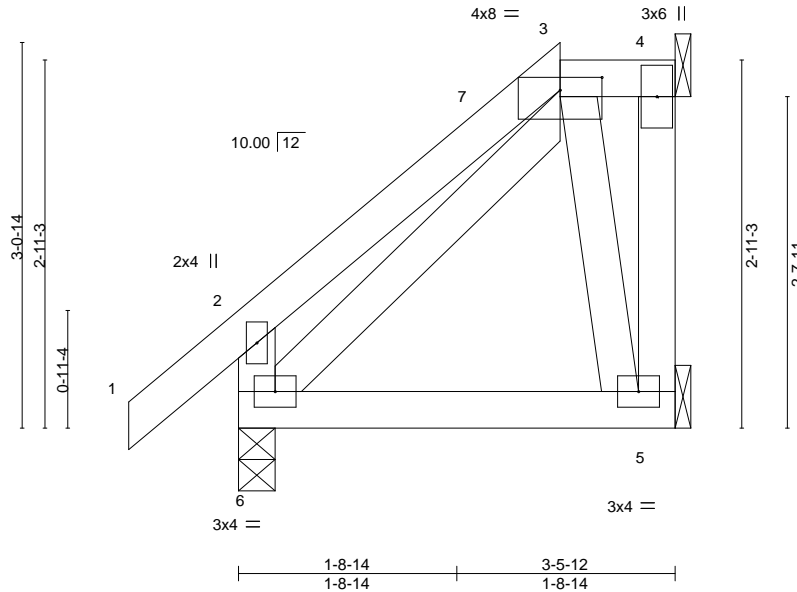


Plate Offsets (X,Y)--		[3:0-4-0,0-1-4]									
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>	
TCLL	25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.01	5-6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.01	5-6	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	4	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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-5-12 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 5=Mechanical, 6=0-3-8, 4=Mechanical  
Max Horz 6=100(LC 11)  
Max Uplift 5=40(LC 9), 6=27(LC 12), 4=10(LC 8)  
Max Grav 5=113(LC 19), 6=226(LC 1), 4=27(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-6=173/256, 3-6=252/107

**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 2-6-12, Exterior(2E) 2-6-12 to 3-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 4.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



October 8, 2021

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16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO
2955860	J5	Jack-Open	1	1	Job Reference (optional)	

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

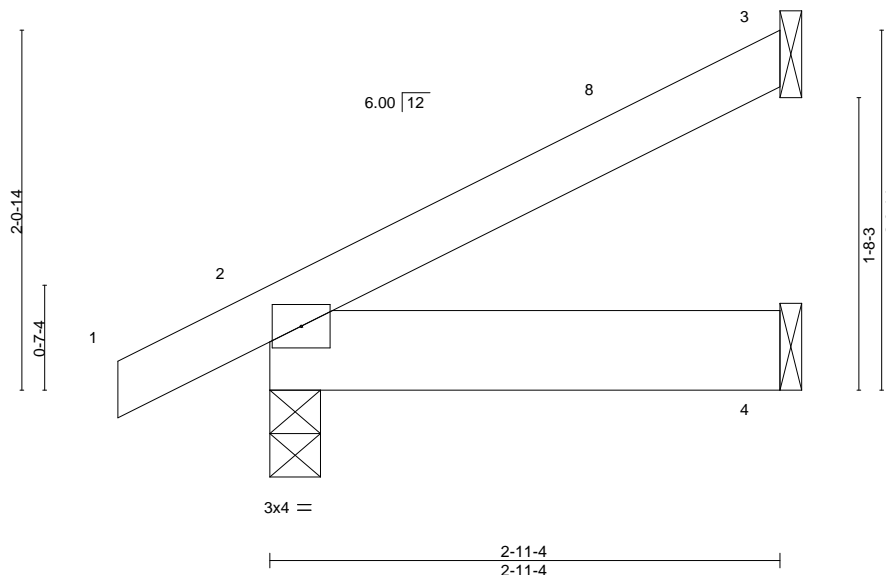
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:14 2021 Page 1

ID:9TfwzKJJ\_y34AD7?hPVfOzykJh0-iJWWI4tugWCE0E1cvKjhuSYpeRgcatsWZBfPAVUqap

11/01/2021

-0-10-8  
0-10-8  
2-11-4  
2-11-4

Scale = 1:13.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-7	>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-MP						Weight: 10 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=66(LC 12)  
Max Uplift 3=35(LC 12), 2=-26(LC 12), 4=-2(LC 12)  
Max Grav 3=74(LC 1), 2=200(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 2-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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) 3, 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.



October 8, 2021

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

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



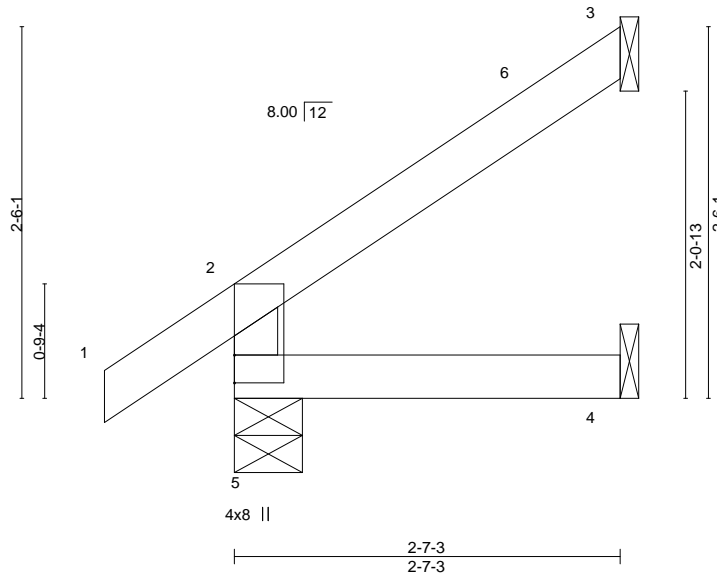
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	J6	Jack-Open	1	1	AS NOTED FOR PLAN REVIEW
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					DEVELOPMENT SERVICES
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:15 2021 Page 1					LEE'S SUMMIT, MISSOURI
Job Reference (optional)					148256942

ID:9TfwzKJJ\_y34AD7?hPVfOzykjh0-AV4uyQuXRpK5dOcoT2EwRfs\_Qu\_gR17D8DxCyZVq4q

-0-10-8 2-7-3  
0-10-8 2-7-3

Scale = 1:15.5



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 0.08	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	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 2-7-3 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 5=0-5-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=73(LC 12)  
Max Uplift 5=-10(LC 12), 3=-47(LC 12), 4=-2(LC 12)  
Max Grav 5=194(LC 1), 3=73(LC 19), 4=44(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 2-6-7 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 connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 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.



October 8, 2021

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	J7	Jack-Open	5	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

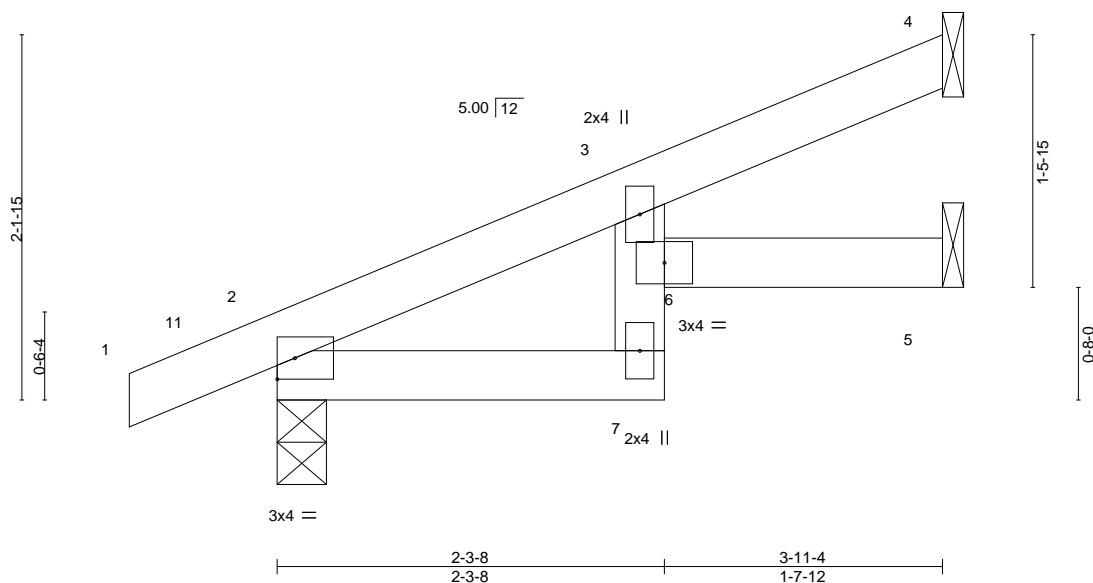
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:17 2021 Page 1

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-0-10-8	2-3-8	3-11-4
0-10-8	2-3-8	1-7-12



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	-0.01	6	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.02	6	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						
								Weight: 12 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=71(LC 12)  
Max Uplift 4=34(LC 12), 2=35(LC 12), 5=12(LC 12)  
Max Grav 4=94(LC 1), 2=243(LC 1), 5=74(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 2-1-1, Interior(1) 2-1-1 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 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.



October 8, 2021

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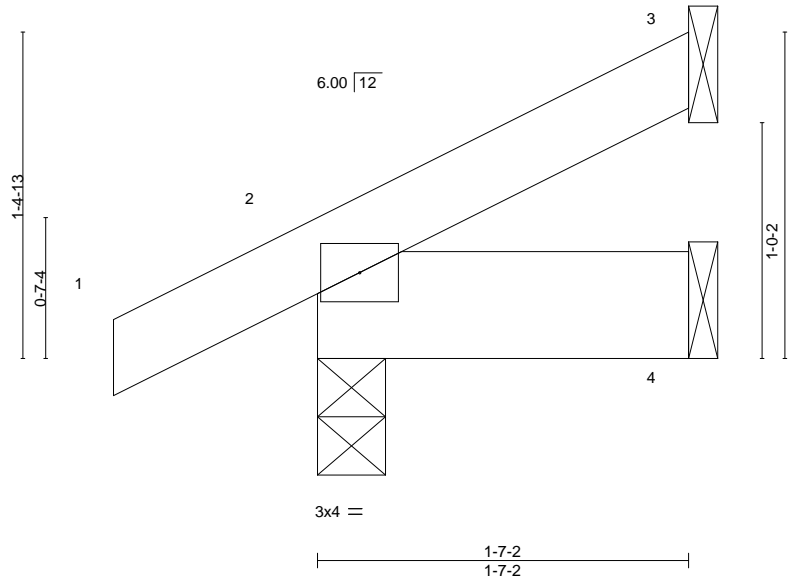
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	J8	Jack-Open	1	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:18 2021 Page 1  
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-0-10-8  
0-10-8  
1-7-2  
1-7-2

Scale = 1:9.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	7	>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-MP						Weight: 6 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-7-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=43(LC 12)  
Max Uplift 3=-18(LC 12), 2=-23(LC 12), 4=-1(LC 12)  
Max Grav 3=36(LC 1), 2=149(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) 3, 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.



October 8, 2021

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

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



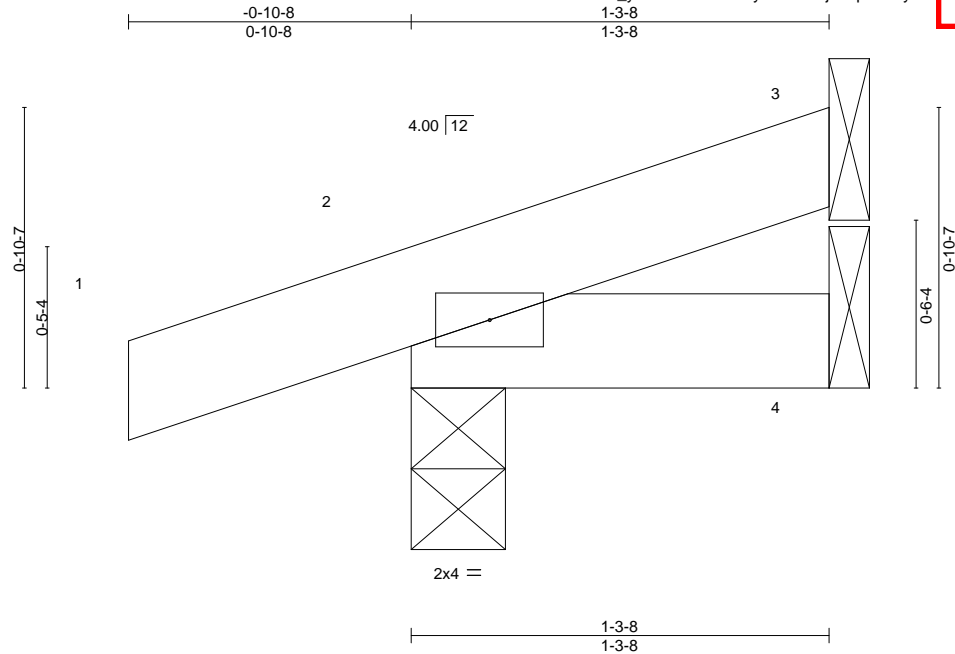
16023 Swingley Ridge Rd  
Chesterfield, MO 63017





Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO	AS NOTED FOR PLAN REVIEW
2955860	J10	Jack-Open	1	1			DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)		

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:09 2021 Page 1  
 ID:9TfwzKJJ\_y34AD7?hPVfOzykjh0-MLjdiMpmrzayvT86n7WBCr\_KDyDlJkKnlUuijvYqau



Scale = 1:7.1

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 4 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 1-3-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=30(LC 8)  
 Max Uplift 3=-10(LC 12), 2=-49(LC 8)  
 Max Grav 3=26(LC 1), 2=140(LC 1), 4=20(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) 3, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 8, 2021

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 Chesterfield, MO 63017

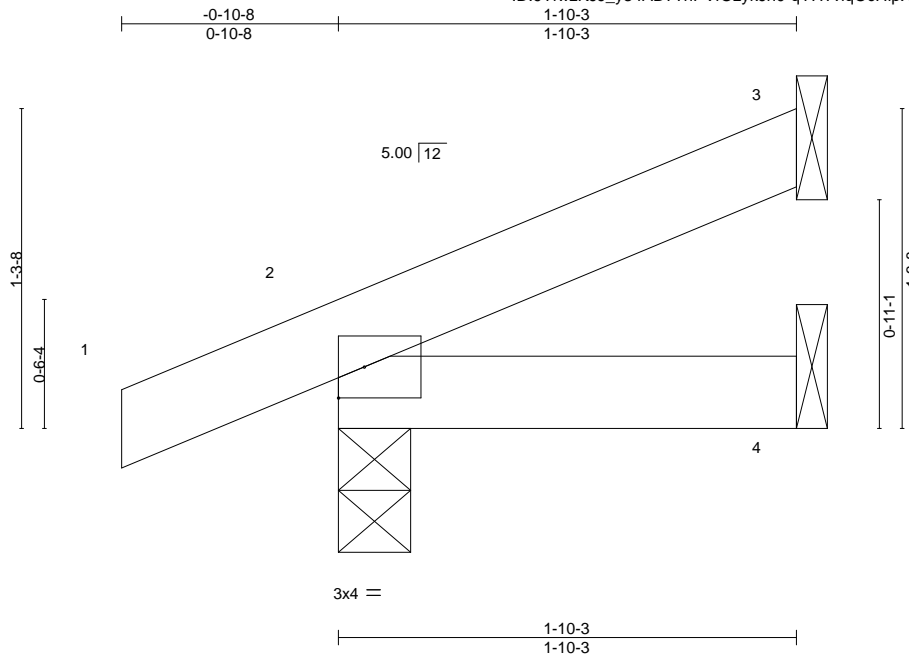
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK	110/MO
2955860	J11	Jack-Open	4	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:10 2021 Page 1

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11/01/2021



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)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7	>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-MP						Weight: 6 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 1-10-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=39(LC 12)  
Max Uplift 3=22(LC 12), 2=27(LC 8)  
Max Grav 3=49(LC 1), 2=158(LC 1), 4=32(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) 3, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 8, 2021

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	K1	Half Hip Supported	1	1	Job Reference (optional)	

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

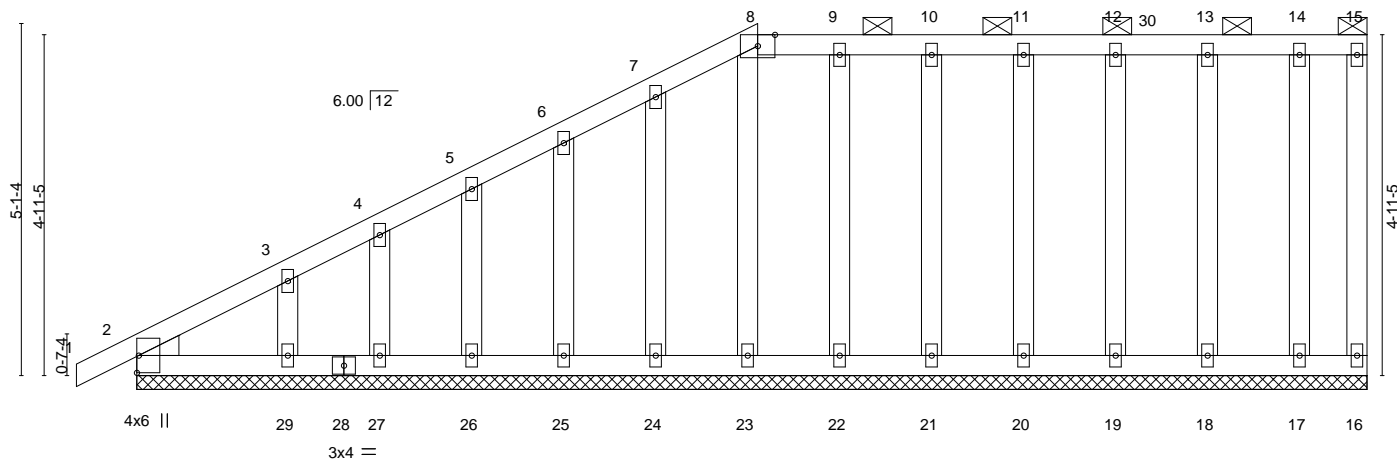
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:00:20 2021 Page 1

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0-10-8 9-0-0 17-10-0  
0-10-8 9-0-0 8-10-0

4x6 =

Scale = 1:33.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	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	0.04	Horz(CT)	-0.00 16 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							
								Weight: 98 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  
WEDGE  
Left: 2x4 SPF No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals, and 2'-0-0 oc purlins (6'-0-0 max.): 8-15.  
BOT CHORD Rigid ceiling directly applied or 6'-0-0 oc bracing.

#### REACTIONS.

All bearings 17-10-0.  
(lb) - Max Horz 2=175(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 16, 2, 23, 24, 25, 26, 27, 29, 22, 21, 20, 19, 18, 17  
Max Grav All reactions 250 lb or less at joint(s) 16, 2, 23, 24, 25, 26, 27, 29, 22, 21, 20, 19, 18, 17

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

TOP CHORD 2-3=272/149

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-2-4, Exterior(2N) 2-2-4 to 9-0-0, Corner(3R) 9-0-0 to 12-0-0, Exterior(2N) 12-0-0 to 17-8-4 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.
- Provide adequate drainage to prevent water ponding.
- 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) 16, 2, 23, 24, 25, 26, 27, 29, 22, 21, 20, 19, 18, 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 8, 2021

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

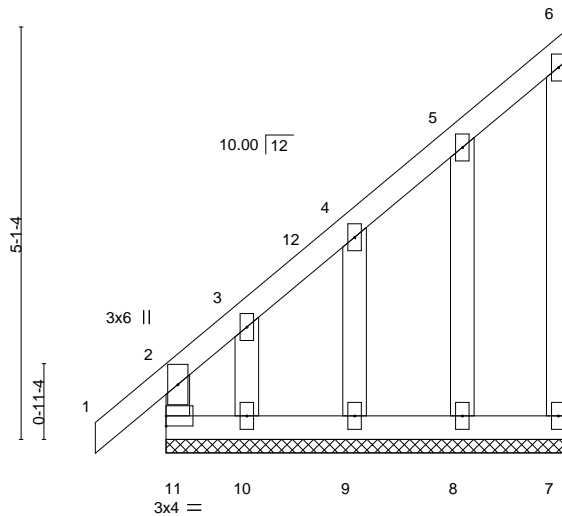
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	K2	Monopitch Supported Gable	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:21 2021 Page 1

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11/01/2021



Scale = 1:28.5

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 0.21	Vert(LL)	0.00	2	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	0.00	2	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 28 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 5-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

All bearings 5-0-0.

(lb) - Max Horz 11=178(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 11, 7, 8, 9 except 10=-156(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 11, 7, 8, 9, 10

#### FORCES.

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

TOP CHORD 2-11=-358/184, 2-3=-520/316, 3-4=-333/219

WEBS 3-10=-179/282

#### 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(3E) -0-10-8 to 2-4-0, Exterior(2N) 2-4-0 to 4-10-4 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
- 2) 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.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 7, 8, 9 except (jt=lb) 10=156.
- 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.



October 8, 2021

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

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2955860	L1	GABLE	1	1	Job Reference (optional)	148256930

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

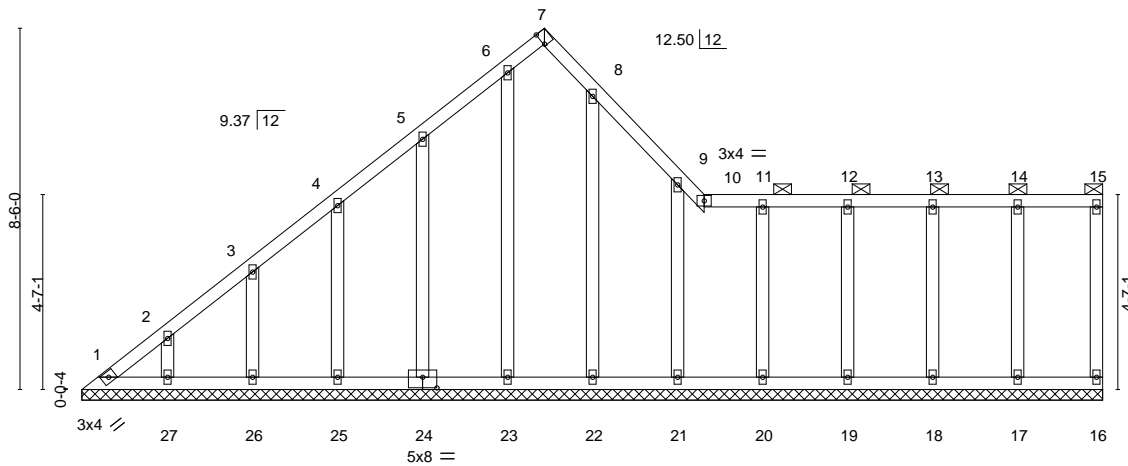
8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:23 2021 Page 1

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10-10-10	14-7-11	24-0-3
10-10-10	3-9-1	9-4-8

3x4 //

Scale = 1:54.2



24-0-3  
24-0-3

Plate Offsets (X,Y)-- [7:0-3-8,Edge], [24:0-4-0,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	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	0.19	Horz(CT)	-0.00 16	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 119 lb FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

All bearings 24-0-3.  
(lb) - Max Horz 1=246(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27 except 24=110(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 1, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-259/211

#### 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) 0-5-1 to 3-5-1, Interior(1) 3-5-1 to 10-10-10, Exterior(2R) 10-10-10 to 14-0-3, Interior(1) 14-0-3 to 23-10-7 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27 except (jt=lb) 24=110.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 8, 2021

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

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

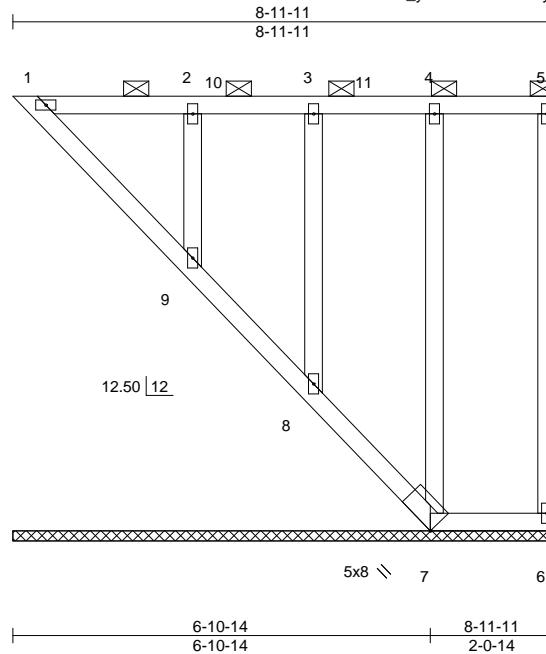


16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	L2	GABLE	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:24 2021 Page 1  
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Scale = 1:38.1

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.13	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 47 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 2-0-0 oc purlins: 1-5, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:  
6-0-0 oc bracing: 1-9.

**REACTIONS.**

All bearings 8-11-11.

(lb) - Max Horz 1=176(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8, 9 except 7=-108(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 1, 6, 7, 8, 9

**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 Corner(3) 0-4-2 to 3-4-2, Exterior(2) 3-4-2 to 5-9-15, Corner(3) 5-9-15 to 8-9-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 8, 9 except (jt=lb) 7=108.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 8, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 8, 2021

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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	L3	GABLE	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:25 2021 Page 1  
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11/01/2021

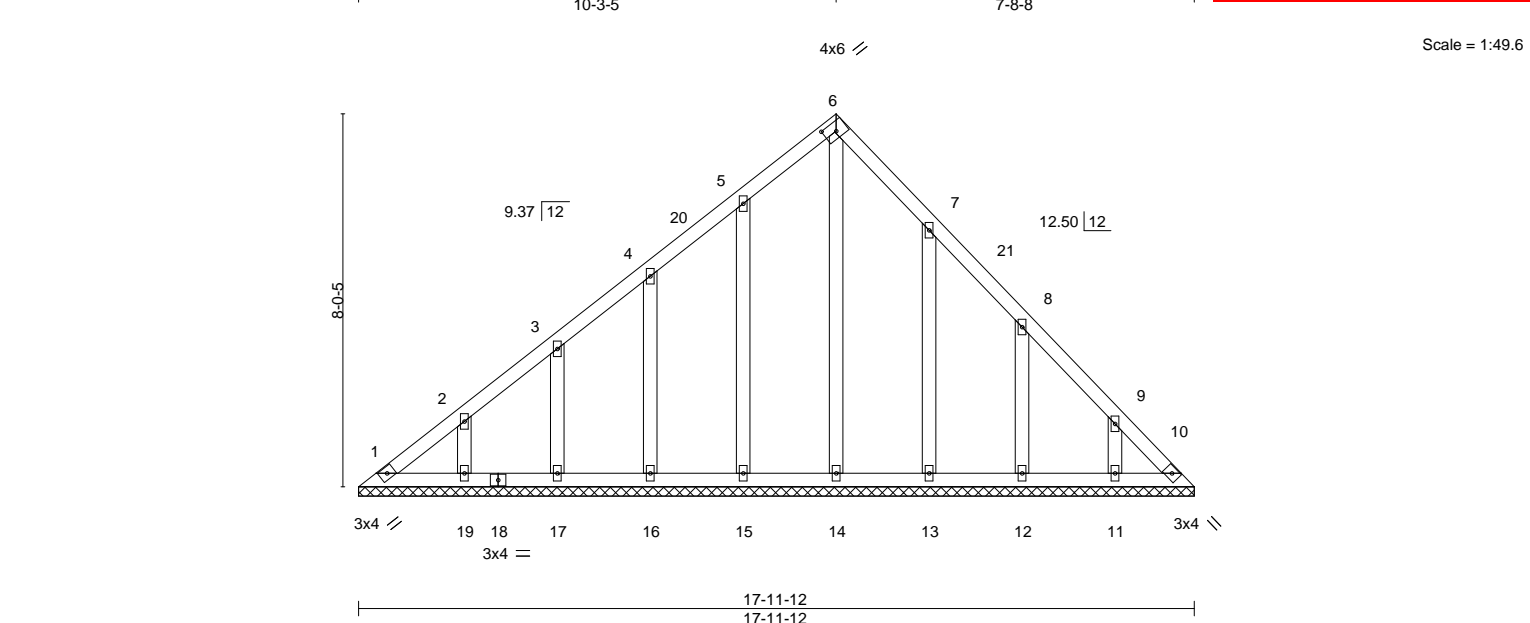


Plate Offsets (X,Y)-- [6:0-3-2,0-2-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a - n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a - n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00 10 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 83 lb FT = 20%

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

**REACTIONS.** All bearings 17-11-12.  
(lb) - Max Horz 1=183(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 15, 16, 17, 19 except 13=114(LC 13), 12=115(LC 13), 11=104(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 10, 14, 15, 16, 17, 19, 13, 12, 11

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-1 to 3-5-1, Interior(1) 3-5-1 to 10-3-5, Exterior(2R) 10-3-5 to 13-3-5, Interior(1) 13-3-5 to 17-7-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) Gable requires continuous bottom chord bearing.
  - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 15, 16, 17, 19 except (jt=lb) 13=114, 12=115, 11=104.
  - 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.



October 8, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	L4	GABLE	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:26 2021 Page 1

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11/01/2021

3-11-2 3-11-2 7-10-4 3-11-2

4x6 =

Scale = 1:29.1

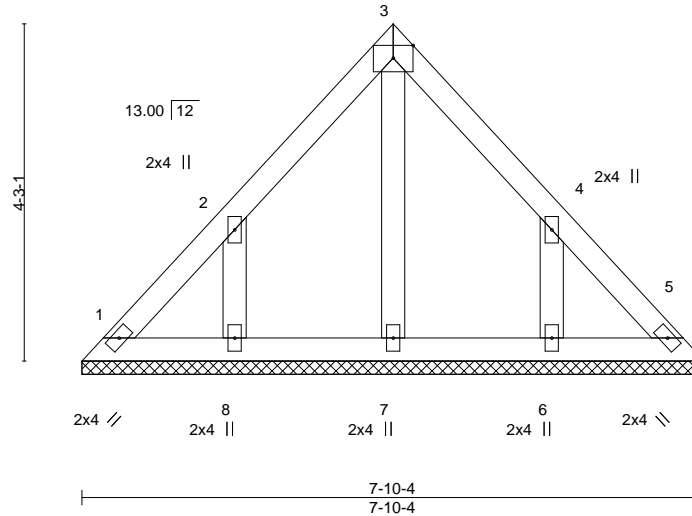


Plate Offsets (X,Y)--		[3:Edge,0-1-15]	
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06
TCDL 10.0	Lumber DOL	1.15	BC 0.02
BCLL 0.0	Rep Stress Incr	YES	WB 0.03
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-P
			<b>DEFL.</b>
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) 0.00 5 n/a n/a
			<b>PLATES</b>
			MT20
			<b>GRIP</b>
			197/144
			Weight: 29 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 7-10-4.

(lb) - Max Horz 1=93(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=134(LC 12), 6=134(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 3-11-2, Exterior(2R) 3-11-2 to 6-11-2, Interior(1) 6-11-2 to 7-6-4 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
- 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=134, 6=134.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 8, 2021

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

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	L5	Lay-In Gable	1	1	48256924	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

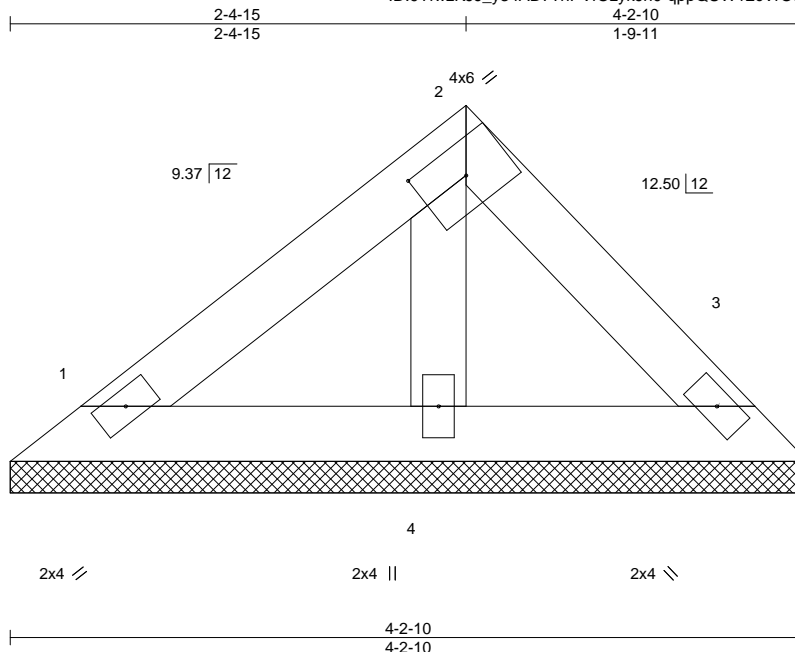


Plate Offsets (X,Y)-- [2:0-3-2,0-2-0]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a - n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a - n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00 3 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 12 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 4-2-10 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 1=4-2-10, 3=4-2-10, 4=4-2-10  
Max Horz 1=37(LC 9)  
Max Uplift 1=19(LC 12), 3=19(LC 13)  
Max Grav 1=96(LC 1), 3=88(LC 1), 4=127(LC 1)

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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.



October 8, 2021

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



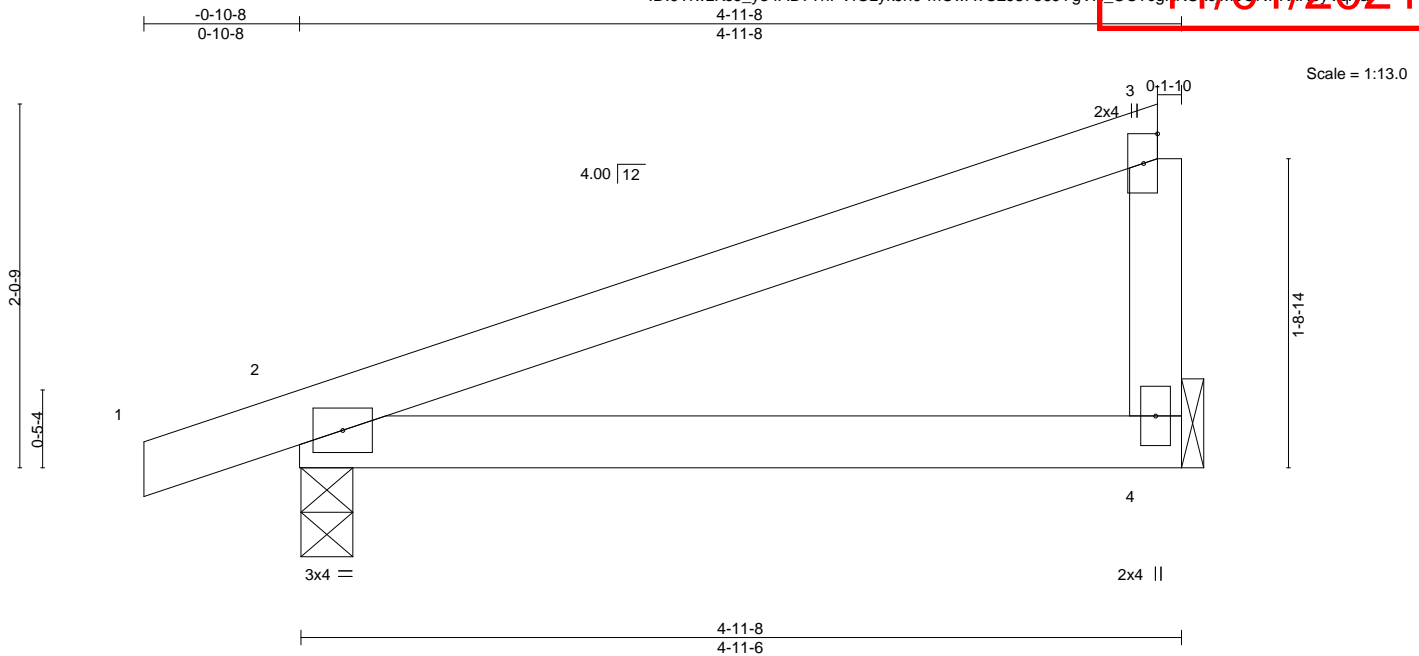
16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK 110/MO	AS NOTED FOR PLAN REVIEW
2955860	M2	MONOPITCH	5	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:29 2021 Page 1  
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11/01/2021



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 0.30	Vert(LL)	-0.03	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	-0.06	4-7	>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-AS						Weight: 14 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 4=Mechanical, 2=0-3-8  
 Max Horz 2=73(LC 11)  
 Max Uplift 4=43(LC 12), 2=69(LC 8)  
 Max Grav 4=211(LC 1), 2=283(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 4-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



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

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16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	M3	MONOPITCH	2	1		DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)	LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:30 2021 Page 1  
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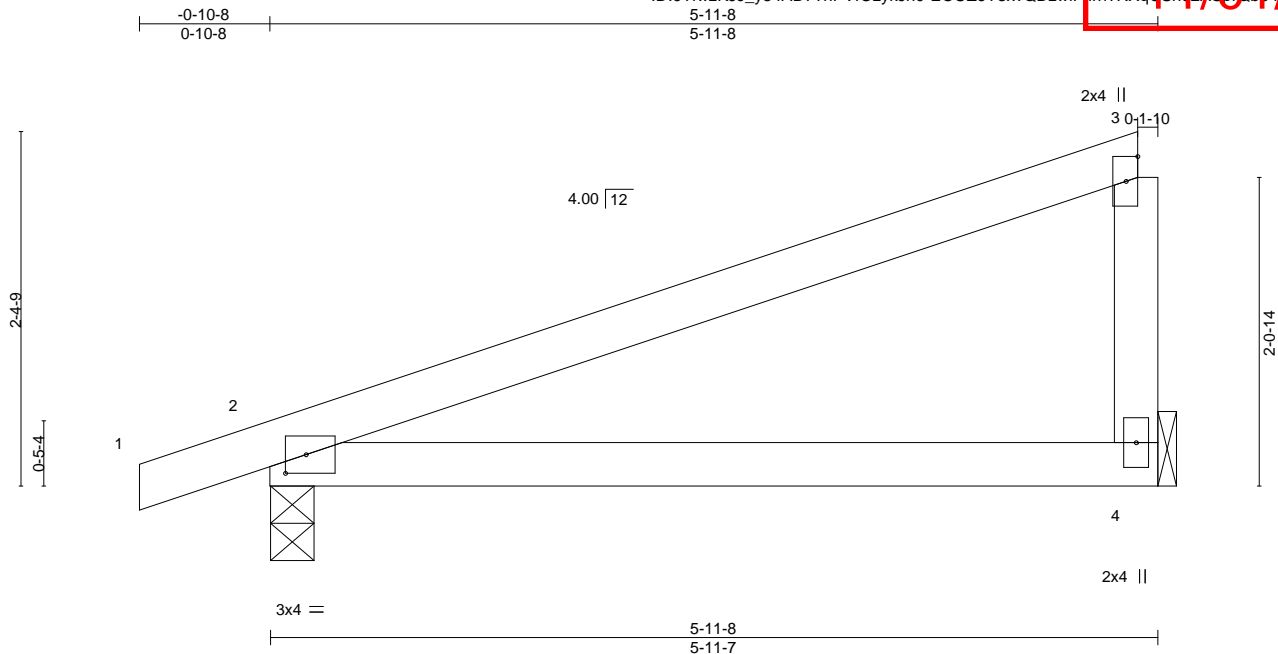


Plate Offsets (X,Y)-- [2:0-1-11,0-1-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	0.06	4-7	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.12	4-7	>595	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-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, 2=0-3-8  
Max Horz 2=87(LC 11)  
Max Uplift 4=53(LC 12), 2=76(LC 8)  
Max Grav 4=257(LC 1), 2=327(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 5-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) 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) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



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



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	M5	Half Hip Girder	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

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

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-0-10-8	1-4-14	3-2-0	4-11-8	5-0-0
0-10-8	1-4-14	1-9-2	1-9-8	0-0-8

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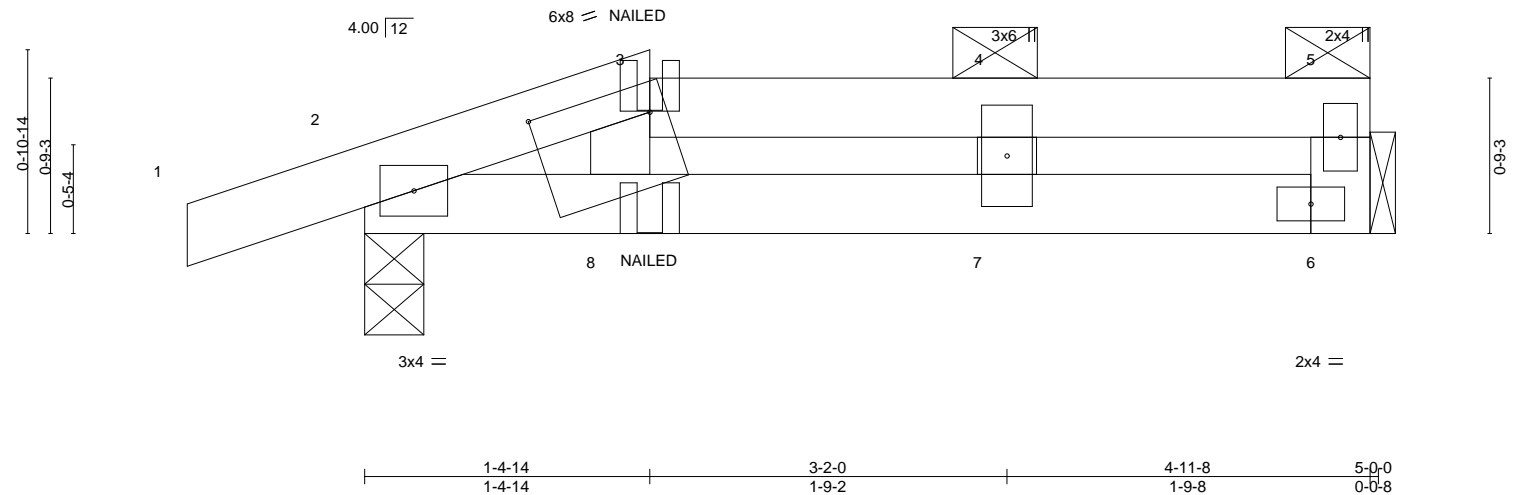


Plate Offsets (X,Y)-- [3:0-7-0,0-1-12]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.05 7-8 >999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.06 7-8 >914	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01 2 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 13 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins: 3-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=Mechanical  
Max Horz 2=27(LC 4)  
Max Uplift 2=60(LC 4), 6=34(LC 5)  
Max Grav 2=226(LC 1), 6=189(LC 1)

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 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, 6-9=-20  
Concentrated Loads (lb)  
Vert: 3=40(F) 8=39(F)



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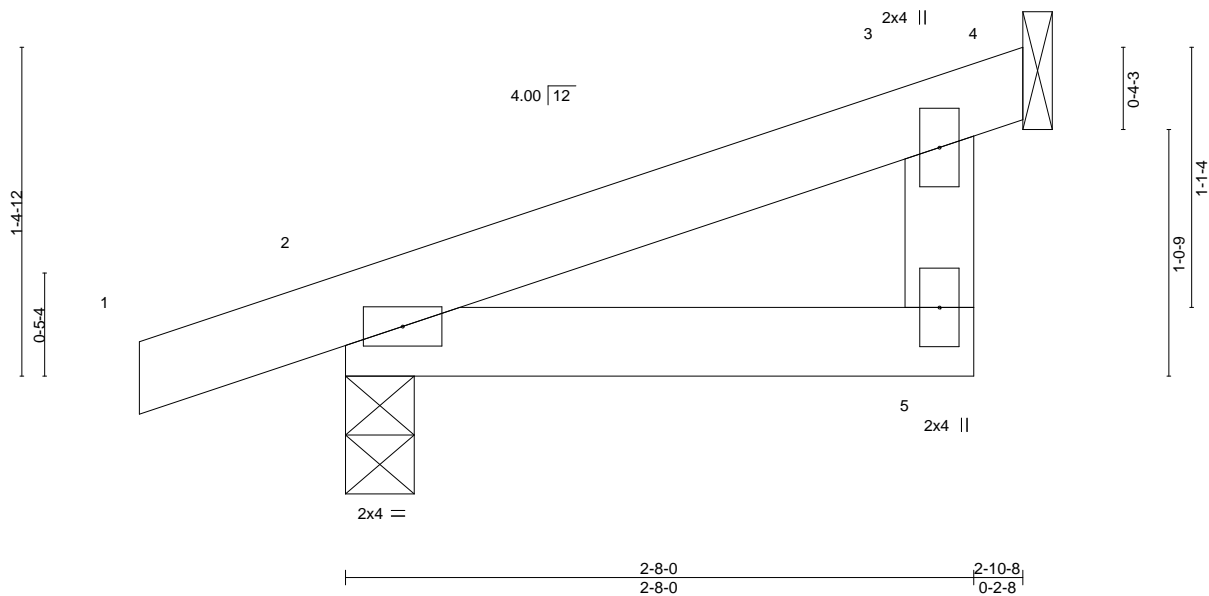


16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	M6	Monopitch	4	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

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11/01/2021



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 0.10	Vert(LL)	-0.00	5-8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.01	5-8	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 8 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

#### REACTIONS.

(size) 4=Mechanical, 2=0-3-8  
Max Horz 2=49(LC 8)  
Max Uplift 4=-30(LC 12), 2=-53(LC 8)  
Max Grav 4=112(LC 1), 2=197(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 2-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) 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) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



October 8, 2021

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

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

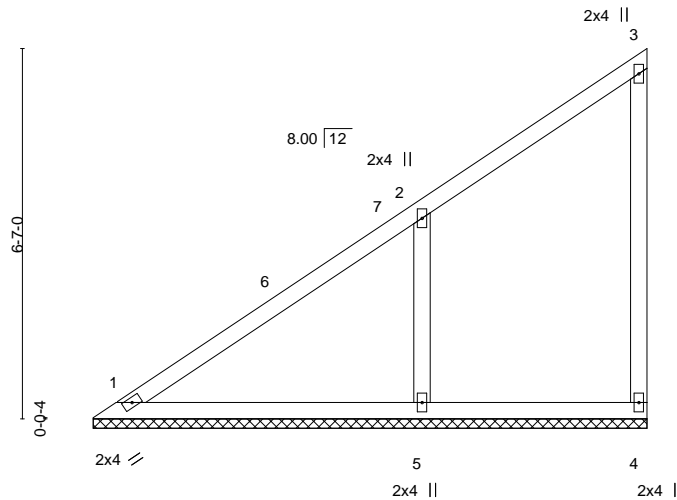


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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	V1	Valley	1	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

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11/01/2021



Scale = 1:41.0

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 0.38	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
									Weight: 35 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=9-10-2, 4=9-10-2, 5=9-10-2  
Max Horz 1=221(LC 9)  
Max Uplift 4=43(LC 9), 5=157(LC 12)  
Max Grav 1=215(LC 20), 4=124(LC 19), 5=538(LC 19)

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

TOP CHORD 1-2=-314/230  
WEBS 2-5=-411/254

#### 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) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 9-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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) 4 except (jt=lb) 5=157.
- 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.



October 8, 2021

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

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



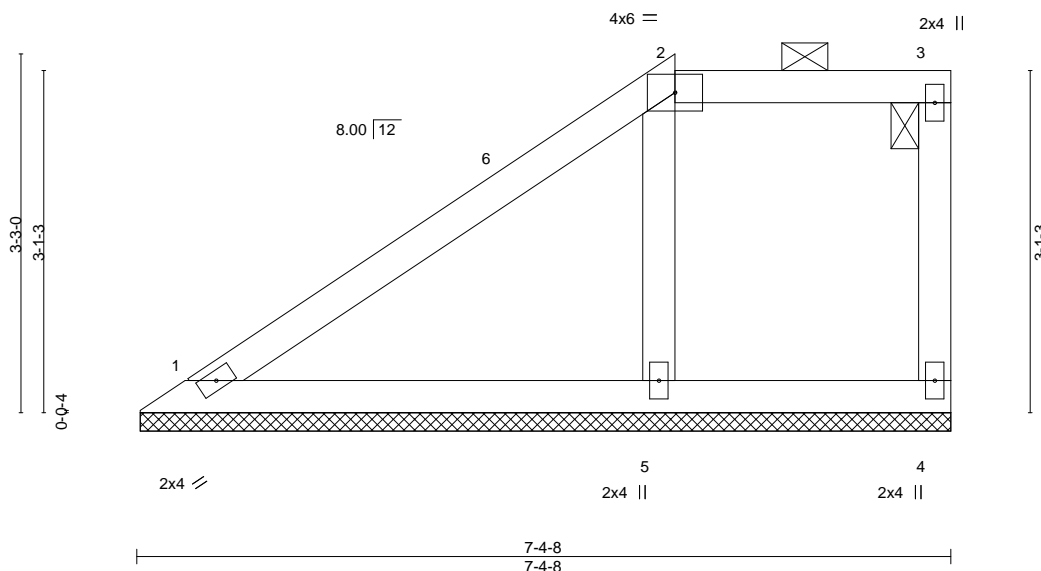
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO
2955860	V2	Valley	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Builders FirstSource (Valley Center),		Valley Center, KS - 67147,	8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:34 2021 Page 1		
			Job Reference (optional)		

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11/01/2021

Scale = 1:20.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.37	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999	197/144
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: 23 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=7-4-2, 4=7-4-2, 5=7-4-2  
Max Horz 1=100(LC 9)  
Max Uplift 1=-20(LC 12), 4=-25(LC 8), 5=-46(LC 12)  
Max Grav 1=180(LC 1), 4=94(LC 1), 5=334(LC 1)

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-10-8, Exterior(2E) 4-10-8 to 7-2-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 8, 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

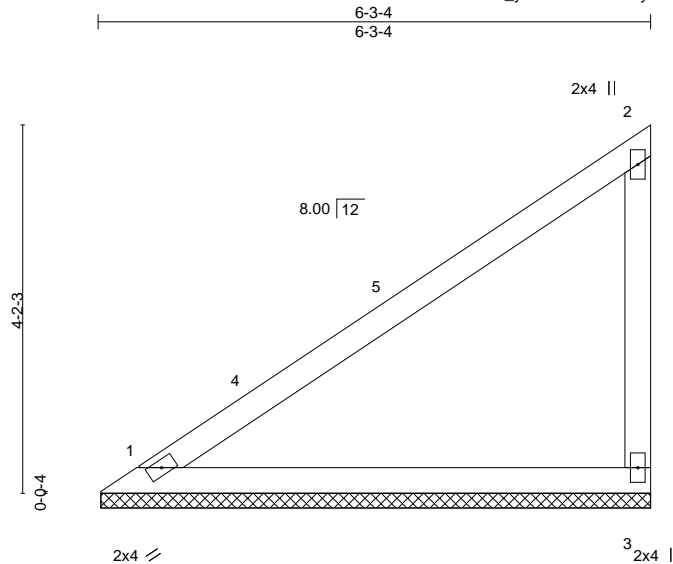


16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #110/MO	AS NOTED FOR PLAN REVIEW
2955860	V3	Valley	1	1	Job Reference (optional)	DEVELOPMENT SERVICES
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						LEE'S SUMMIT, MISSOURI

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:35 2021 Page 1  
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Scale = 1:26.2

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 0.64	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.34	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: 19 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 1=6-2-14, 3=6-2-14  
Max Horz 1=135(LC 9)  
Max Uplift 1=-17(LC 12), 3=-75(LC 12)  
Max Grav 1=254(LC 1), 3=267(LC 19)

**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) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 6-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



October 8, 2021

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

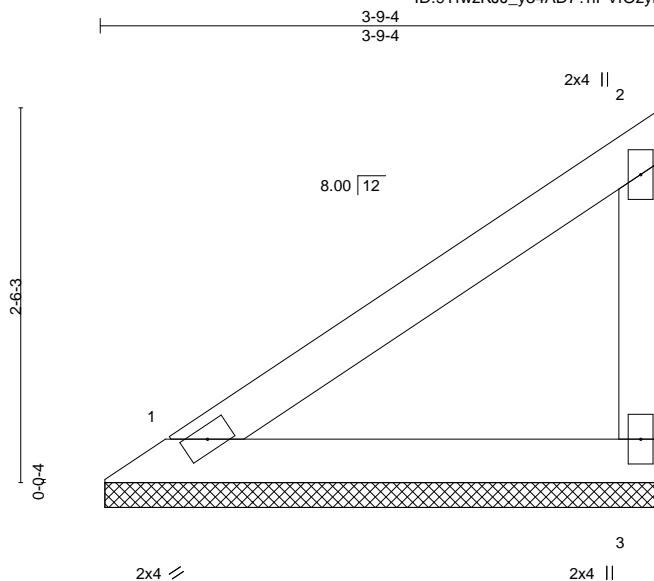
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/STONE CREEK #110/MO
2955860	V4	Valley	1	1	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Oct 7 11:01:36 2021 Page 1  
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Scale = 1:15.5

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 0.18	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	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: 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 3-9-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=3-8-14, 3=3-8-14  
Max Horz 1=75(LC 11)  
Max Uplift 1=-12(LC 12), 3=-39(LC 12)  
Max Grav 1=142(LC 1), 3=149(LC 19)

**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.



October 8, 2021

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



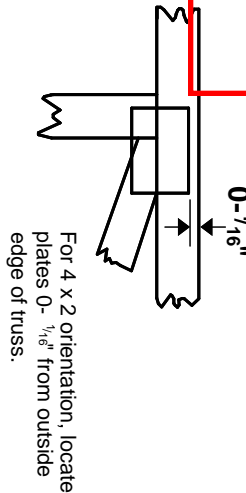
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11/01/2021

# 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.



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

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

## PLATE SIZE

4 X 4

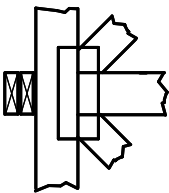
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



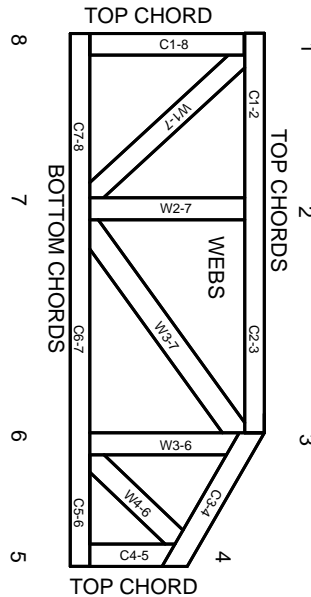
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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