



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

Re: 2701162
SUMMIT/STONE CREEK #79/MO

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
04/22/2021

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Valley Center).

Pages or sheets covered by this seal: I45665369 thru I45665411

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

Missouri COA: Engineering 001193



April 15, 2021

Hoffman, Lauren, 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 2701162	Truss A1	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO I45665369
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:15 2021 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-WDWlh8fPd0SWIRbSPgBO7s8Nd4tL4fUlfEdG?MzQkz6

-0-11-0 18-0-0 26-0-0
0-11-0 18-0-0 8-0-0

4x4 =

Scale = 1:59.0

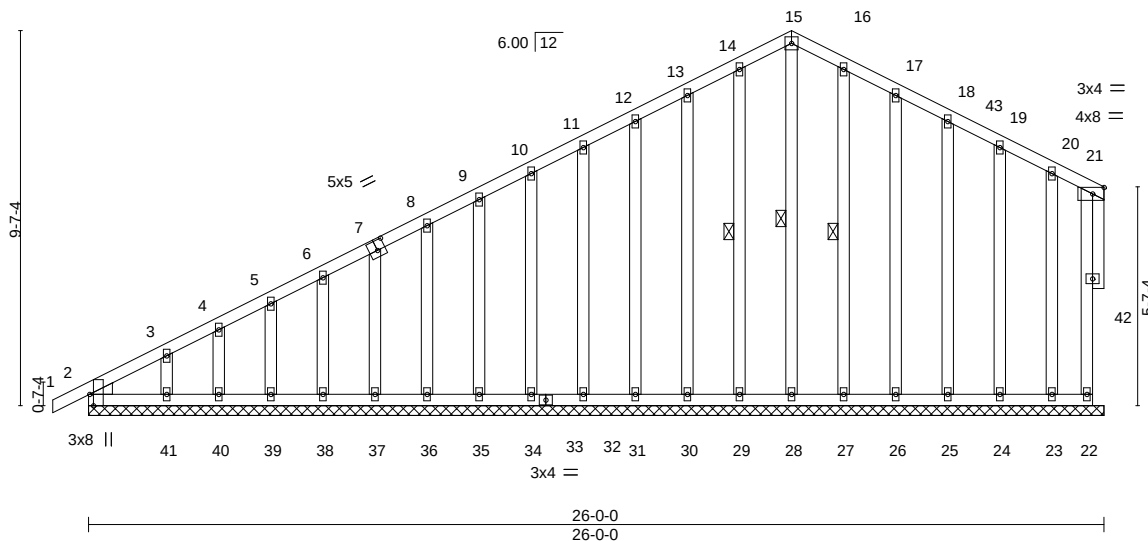


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [7:0-2-8,0-3-0]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP	
TCLL 25.0		Plate Grip DOL 1.15		TC 0.18		Vert(LL) 0.00 1	n/r	120	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.08		Vert(CT) -0.00 1	n/r	120		
BCLL 0.0		Rep Stress Incr YES		WB 0.11		Horz(CT) -0.00 22	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S					Weight: 189 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.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 15-28, 14-29, 16-27

REACTIONS.

All bearings 26-0-0.
(lb) - Max Horz 2=279(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 27, 26, 25, 24, 23
Max Grav All reactions 250 lb or less at joint(s) 2, 22, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 27, 26, 25, 24, 23

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

TOP CHORD 2-3=-288/177, 13-14=-150/258, 14-15=-154/279, 15-16=-154/279, 16-17=-150/258

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-0-0, Exterior(2N) 2-0-0 to 18-0-0, Corner(3R) 18-0-0 to 21-0-0, Exterior(2N) 21-0-0 to 25-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 27, 26, 25, 24, 23.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 15, 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 2701162	Truss A2	Truss Type COMMON	Qty 6	Ply 1	SUMMIT/STONE CREEK #79/MO I45665370
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-lyZ9ZDm2VnaFKpnAR3sV_m?orioehcf3k8JEoLzQkyz

0-11-0 6-0-3 12-0-2 18-0-0 26-0-0
0-11-0 6-0-3 5-11-14 5-11-14 8-0-0

7x8 ||

Scale = 1:59.0

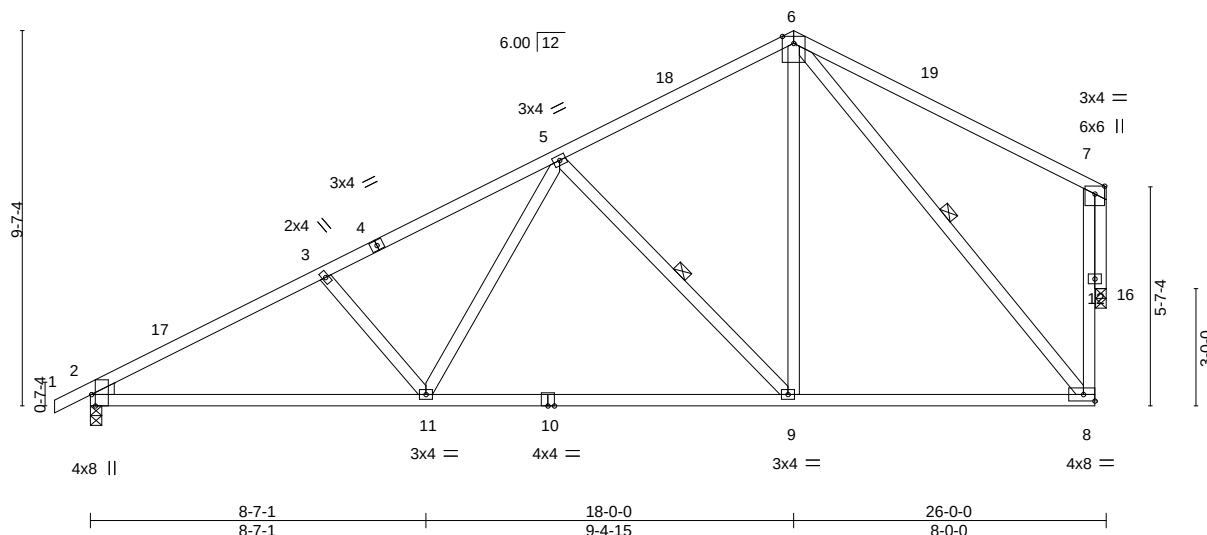


Plate Offsets (X, Y)--		[2:0-3-8, Edge]									
LOADING (psf)		SPACING-		CSI.		DEFL.		in (loc)		l/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.15	9-11	>999	240	
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.33	9-11	>927	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.15	16	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							
										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
WEDGE
Left: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-9, 6-8

REACTIONS.

(size) 2=0-3-8, 16=0-3-4
Max Horz 2=239(LC 12)
Max Uplift 2=-224(LC 12), 16=-185(LC 12)
Max Grav 2=1229(LC 1), 16=1136(LC 1)

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

TOP CHORD 2-3=-1949/350, 3-5=-1707/338, 5-6=-900/257, 8-12=-109/821, 7-12=-109/821
BOT CHORD 2-11=-459/1665, 9-11=-324/1207, 8-9=-172/721
WEBS 3-11=-346/205, 5-11=-95/502, 5-9=-730/291, 6-9=-133/708, 6-8=-963/174, 7-16=-1148/229

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 18-0-0, Exterior(2R) 18-0-0 to 21-0-0, Interior(1) 21-0-0 to 25-6-12 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
- 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 capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=224, 16=185.
- This truss 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.



April 15, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2701162	Truss A8	Truss Type COMMON GIRDER	Qty 1	Ply 2	SUMMIT/STONE CREEK #79/MO 145665371
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

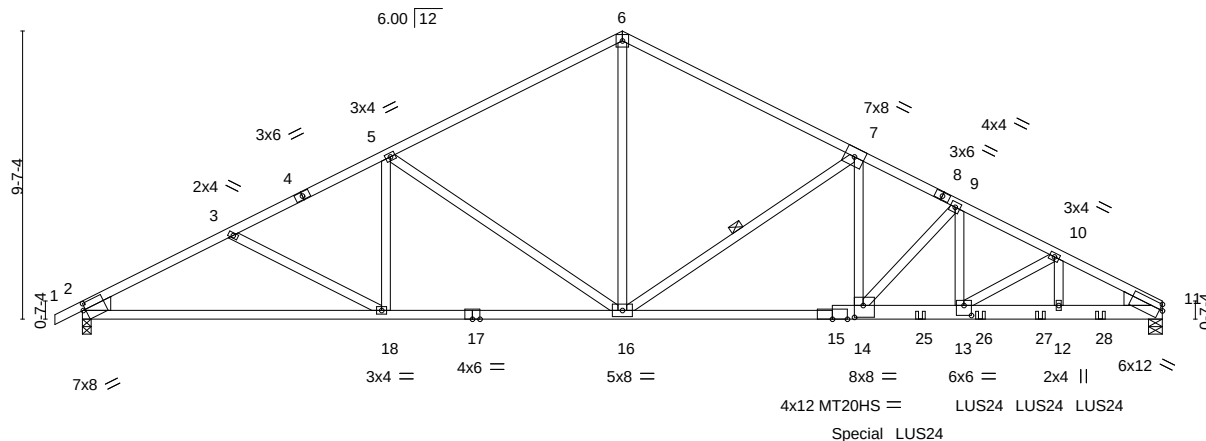
8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:26 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-iLhw_vol1OqzZ7xZYUuz3B54uVQv9QTMBSoltdZkYyx

-0-11-0	5-0-5	6-0-3	10-3-3	12-0-2	18-0-0	25-10-9	29-2-14	32-6-9	36-0-0
0-11-0	5-0-5	0-11-15	4-3-0	1-8-15	5-11-14	7-10-9	3-4-5	3-3-11	3-5-7

5x8 ||

Scale = 1:76.8



6-0-3	10-3-3	12-0-2	18-0-0	25-10-9	29-2-14	32-6-9	36-0-0
6-0-3	4-3-0	1-8-15	5-11-14	7-10-9	3-4-5	3-3-11	3-5-7

Plate Offsets (X,Y)-- [2:0-0-15,0-2-10], [11:Edge,0-2-5], [13:0-3-0,0-4-0], [14:0-3-8,0-4-12]

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 0.95	Vert(LL)	-0.15 14-16	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.51 14-16	>855	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	NO	WB 0.99	Horz(CT)	0.15 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 326 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
8-11: 2x4 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.5E *Except*
11-15: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x6 SPF No.2 , Right: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-11-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 7-16

REACTIONS.

(size) 2=0-3-8, 11=0-5-8
Max Horz 2=175(LC 12)
Max Grav 2=3190(LC 1), 11=6598(LC 1)

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

TOP CHORD 2-3=-5882/0, 3-5=-5730/0, 5-6=-5185/0, 6-7=-5181/0, 7-9=-10676/0, 9-10=-11971/0,
10-11=-11927/0
BOT CHORD 2-18=0/5112, 16-18=0/5108, 14-16=0/9548, 13-14=0/10684, 12-13=0/10566,
11-12=0/10566
WEBS 6-16=0/3994, 7-16=-6109/0, 7-14=0/5443, 9-14=-1663/320, 9-13=-311/1612,
10-12=-752/0, 10-13=0/882, 5-18=-108/264, 5-16=-742/390, 3-18=-39/320

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 3 rows staggered at 0-2-0 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 27-11-4 from the left end to 33-11-4 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4225 lb down at 25-10-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

LOAD CASE(S) Standard

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April 15, 2021



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665371
2701162	A8	COMMON GIRDER	1	2	Job Reference (optional)	

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

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ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-iLhw_vol1OqzZ7xZYUuz3B54uVQv9QTMBSoLtDzQkyx

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-70, 6-11=-70, 19-22=-20
Concentrated Loads (lb)
Vert: 14=-4225(F) 25=-565(F) 26=-565(F) 27=-565(F) 28=-565(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2701162	Truss A9	Truss Type Common	Qty 4	Ply 1	SUMMIT/STONE CREEK #79/MO 145665372
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Builders FirstSource (Valley Center),

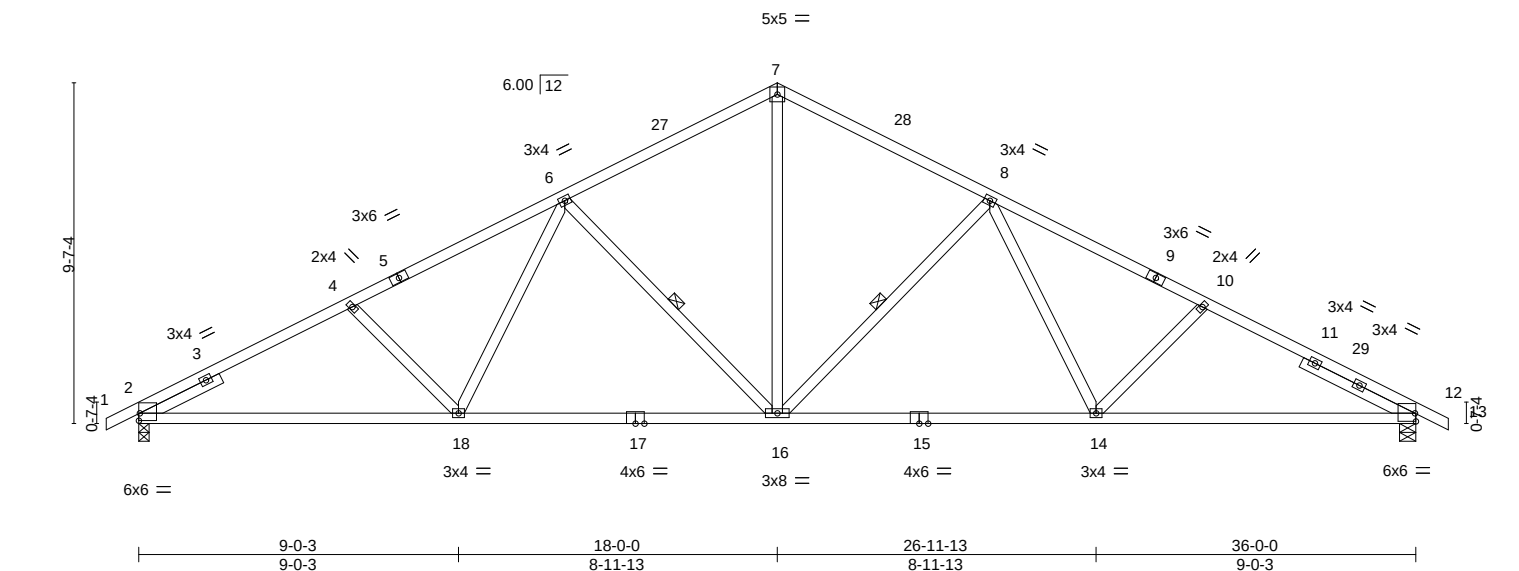
Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:28 2021 Page 1

ID:4rXHhD3_rtbCgQSIY2gdJuzGwv6-epgPbpZZ04gpR5ygwwR9cAUzJ85dVffmHSx6zQkyv

0-11-0	6-0-3	12-0-2	18-0-0	23-11-14	29-11-13	36-0-0	36-11-0
0-11-0	6-0-3	5-11-14	5-11-14	5-11-14	5-11-14	6-0-3	0-11-0

Scale = 1:65.0



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 0.59	Vert(LL)	-0.18 16-18	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.40 16-18	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.30	Horz(CT)	0.13 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 151 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 - t 2-6-0, Right 2x4 SPF No.2 - t 3-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-16, 6-16

REACTIONS.

(size) 2=0-3-8, 12=0-5-8
Max Horz 2=167(LC 12)
Max Uplift 2=289(LC 12), 12=290(LC 13)
Max Grav 2=1677(LC 1), 12=1684(LC 1)

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

TOP CHORD 2-4=-2734/470, 4-6=-2538/447, 6-7=-1850/401, 7-8=-1850/400, 8-10=-2520/443, 10-12=-2681/466
BOT CHORD 2-18=-489/2375, 16-18=-327/2036, 14-16=-206/2029, 12-14=-316/2343
WEBS 7-16=-197/1183, 8-16=-702/285, 8-14=-66/409, 10-14=-262/187, 6-16=-710/286, 6-18=-69/422, 4-18=-283/191

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 18-0-0, Exterior(2R) 18-0-0 to 21-0-0, Interior(1) 21-0-0 to 36-11-0 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=289, 12=290.
- This truss 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.



April 15, 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 2701162	Truss A9A	Truss Type ROOF SPECIAL	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO 145665373
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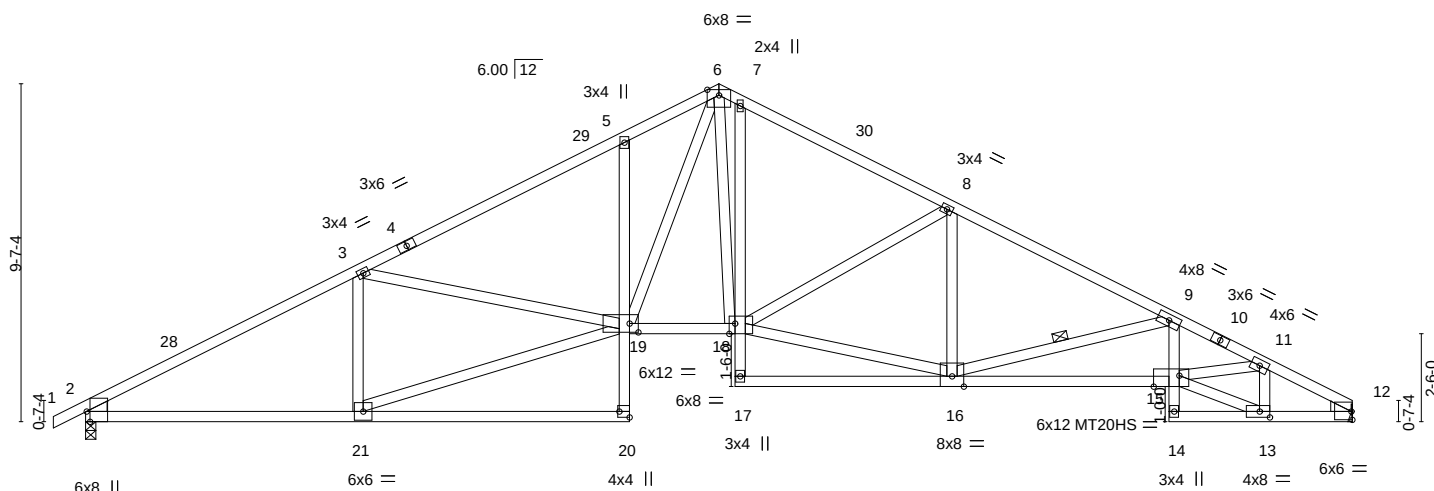
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:29 2021 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-6vM2dxqBKJCXQbg8DdRghpJePjTJMTdotQ0?TYzQkyu

0-11-0 7-8-15 15-5-8 18-0-0 18-5-8 24-7-8 30-9-8 33-6-2 36-0-0
0-11-0 7-8-15 7-8-9 2-6-8 0-5-8 6-2-0 6-2-0 2-8-10 2-5-14

Scale = 1:65.5



	7-8-15 7-8-15	15-5-8 7-8-9	18-5-8 3-0-0	24-7-8 6-2-0	30-9-8 6-2-0	33-6-2 2-8-10	36-0-0 2-5-14
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Plate Offsets (X,Y)--										[2:0-3-8,Edge], [12:Edge,0-2-13], [13:0-3-8,0-2-0], [15:0-8-12,Edge], [18:0-2-0,Edge], [19:0-3-0,0-3-0], [20:Edge,0-3-8]									
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL		1.15		TC 0.68		Vert(LL)		-0.27 18-19		>999		240		MT20		197/144	
TCDL	10.0	Lumber DOL		1.15		BC 0.87		Vert(CT)		-0.50 20-21		>871		180		MT20HS		148/108	
BCLL	0.0	Rep Stress Incr		YES		WB 0.64		Horz(CT)		0.26 12		n/a		n/a					
BCDL	10.0	Code IRC2018/TPI2014				Matrix-AS													
										Weight: 181 lb FT = 20%									

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
15-17: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-16

REACTIONS.

(size) 2=0-3-8, 12=Mechanical
Max Horz 2=175(LC 16)
Max Uplift 2=288(LC 12), 12=267(LC 13)
Max Grav 2=1685(LC 1), 12=1619(LC 1)

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

TOP CHORD 2-3=-2842/458, 3-5=-3081/508, 5-6=-3000/599, 6-7=-2515/537, 7-8=-2622/479,
8-9=-2992/499, 9-11=-4392/693, 11-12=-2672/441
BOT CHORD 2-21=-471/2438, 5-19=-390/217, 18-19=-195/2147, 15-16=-583/4054, 9-15=-67/741,
13-14=-59/260, 12-13=-351/2303
WEBS 3-21=-660/218, 19-21=-504/2507, 3-19=-12/312, 16-18=-302/2603, 8-18=-499/254,
9-16=-1518/363, 11-13=-1057/176, 13-15=-315/2210, 11-15=-202/1646, 6-19=-381/1316,
6-18=-313/1117

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-8-3, Interior(1) 2-8-3 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3, Interior(1) 21-7-3 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=288, 12=267.
- This truss 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.



April 15, 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 #79/MO	I45665374
2701162	A9B	COMMON	2	1	Job Reference (optional)	

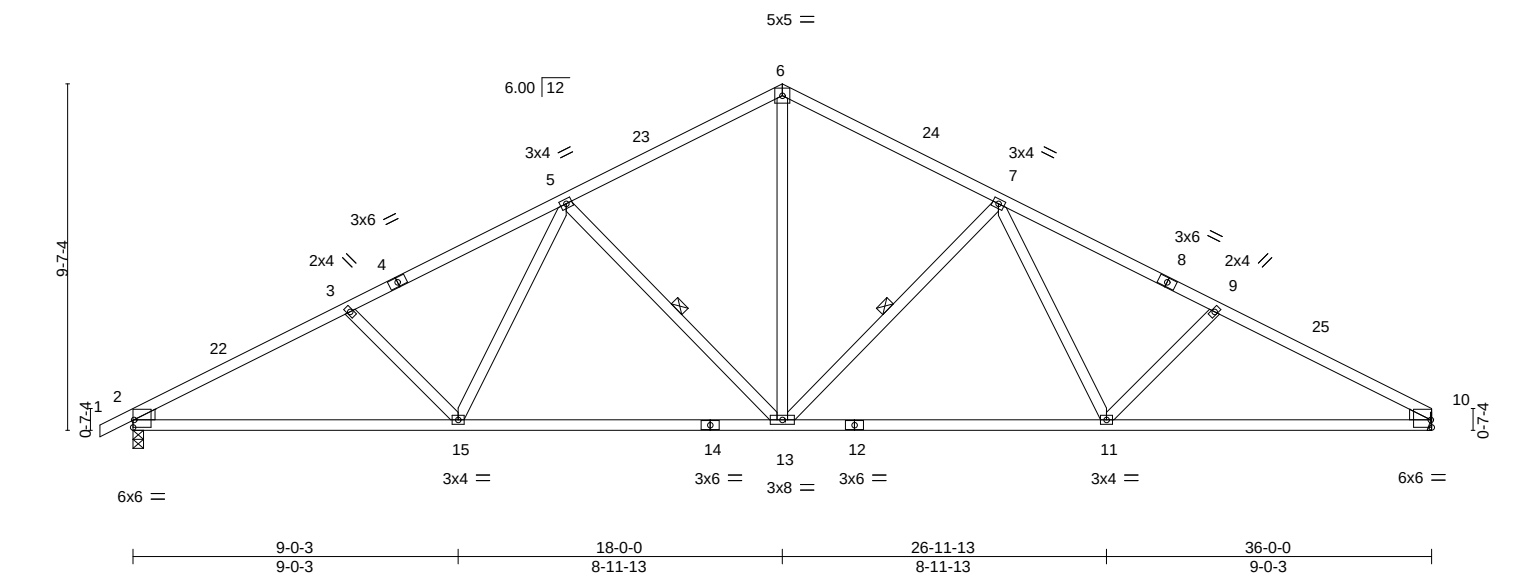
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:30 2021 Page 1

ID:4rXHhD3_rtbCgQSIY2gdJuzGwv6-a6wQqHrp5dKO2kEkKzvE1FqW7pR5Owy64mZ0_zQkYt

-0-11-0	6-0-3	12-0-2	18-0-0	23-11-14	29-11-13	36-0-0
0-11-0	6-0-3	5-11-14	5-11-14	5-11-14	5-11-14	6-0-3

Scale: 3/16"=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 0.59	Vert(LL)	-0.20 13-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.43 13-15	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.32	Horz(CT)	0.13 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 144 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 7-13, 5-13

REACTIONS.

(size) 2=0-3-8, 10=Mechanical
 Max Horz 2=175(LC 12)
 Max Uplift 2=-288(LC 12), 10=-267(LC 13)
 Max Grav 2=1685(LC 1), 10=1619(LC 1)

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

TOP CHORD 2-3=-2867/483, 3-5=-2610/458, 5-6=-1890/416, 6-7=-1889/419, 7-9=-2615/467,
 9-10=-2873/486
 BOT CHORD 2-15=-511/2472, 13-15=-341/2081, 11-13=-235/2083, 10-11=-355/2480
 WEBS 6-13=-208/1213, 7-13=-725/289, 7-11=-77/449, 9-11=-332/202, 5-13=-722/288,
 5-15=-75/448, 3-15=-328/200

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-8-3, Interior(1) 2-8-3 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3, Interior(1) 21-7-3 to 36-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=288, 10=267.
- This truss 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.



April 15, 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 2701162	Truss A10	Truss Type ROOF SPECIAL	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO I45665375
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:17 2021 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-TceW5qhf9diE_IIqW5EsCHDbUtNiYSI17Y6N3FzQkz4

0-11-0 1-7-8 2-3-8 4-10-12 5-11-12 8-0-13 13-6-0 18-0-0 23-11-14 29-11-13 36-0-0
0-11-0 1-7-8 0-8-0 2-7-4 1-1-0 2-1-1 5-5-4 4-6-0 5-11-14 5-11-14 6-0-3

Scale = 1:73.5

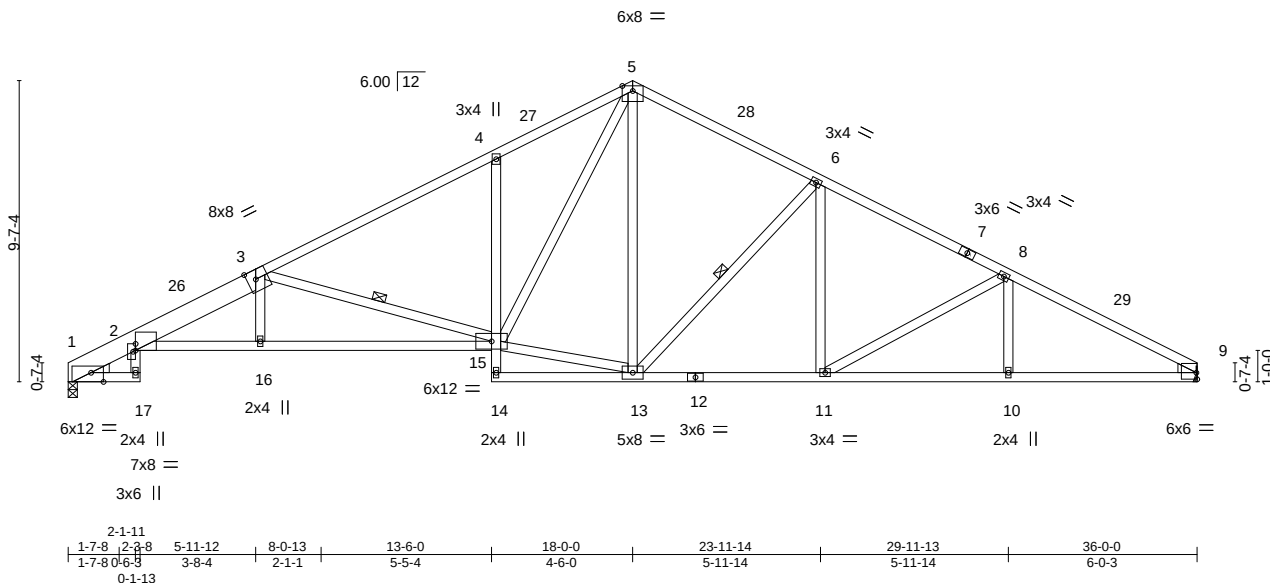


Plate Offsets (X,Y)-- [1:0-4-12,Edge], [2:0-3-0,0-0-15], [3:0-3-4,Edge], [9:Edge,0-2-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.26 15-16 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.53 15-16 >806 180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.27 9 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 175 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
2-15: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-13, 3-15

REACTIONS.

(size) 1=0-3-8, 9=Mechanical
Max Horz 1=163(LC 12)
Max Uplift 1=265(LC 12), 9=267(LC 13)
Max Grav 1=1616(LC 1), 9=1614(LC 1)

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

TOP CHORD 2-18=-665/225, 2-3=-3869/671, 3-4=-2665/452, 4-5=-2580/557, 5-6=-1870/411,
6-8=-2427/432, 8-9=-2863/470
BOT CHORD 2-16=-731/3631, 15-16=-728/3644, 4-15=-429/242, 11-13=-219/2097, 10-11=-342/2469,
9-10=-342/2469
WEBS 13-15=-99/1532, 5-15=-381/1428, 5-13=-163/415, 6-13=-769/273, 6-11=-40/394,
8-11=-461/190, 3-16=0/319, 3-15=-1431/418

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 18-0-0, Exterior(2R) 18-0-0 to 21-0-0, Interior(1) 21-0-0 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=265, 9=267.
- This truss 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.



April 15, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665376
2701162	A10A	ROOF SPECIAL	1	1	Job Reference (optional)	

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

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ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-xoCuJAHhwxq5cuK14pl5lVImEHiiHvMBLCswchzQkz3

0-11-0	2-3-8	5-2-8	7-10-12	11-4-4	13-6-0	18-0-0	23-7-8	24-7-12	30-9-8	33-5-5	36-0-0
0-11-0	2-3-8	2-11-0	2-8-4	3-5-8	2-1-12	4-6-0	5-7-8	1-0-4	6-1-12	2-7-13	2-6-11

Scale = 1:68.1

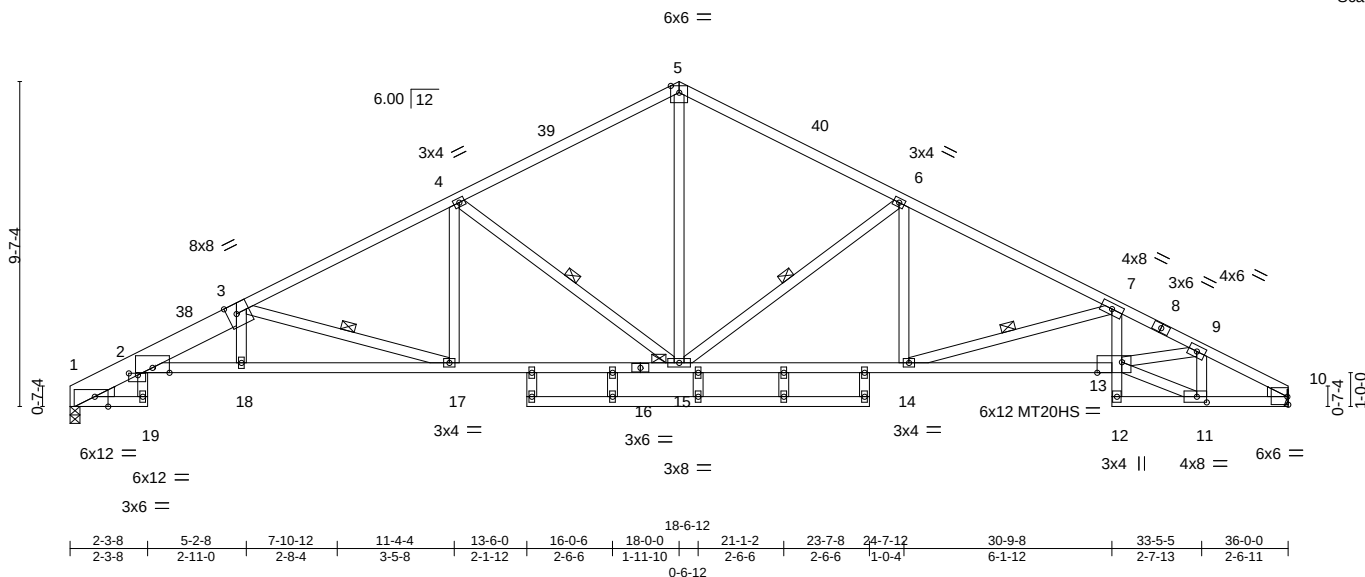


Plate Offsets (X,Y)-- [1:0-4-12,Edge], [2:0-3-3,0-0-10], [3:0-3-4,Edge], [10:Edge,0-2-13], [11:0-3-8,0-2-0], [13:0-8-12,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.29	15-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.54	15-17	>793	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.33	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 180 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-3: 2x8 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SPF No.2 *Except* 2-16,13-16: 2x4 SPF 1650F 1.5E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 4-15, 6-15, 7-14, 3-17
WEDGE		JOINTS	1 Brace at Jt(s): 15
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2			

REACTIONS.	(size) 1=0-3-8, 10=Mechanical
	Max Horz 1=163(LC 12)
	Max Uplift 1=265(LC 12), 10=-267(LC 13)
	Max Grav 1=1616(LC 1), 10=1614(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-30=-665/225, 2-3=-4104/719, 3-4=-2966/492, 4-5=-2093/430, 5-6=-2094/432, 6-7=-2982/498, 7-9=-4378/693, 9-10=-2671/443
BOT CHORD	2-18=-796/3908, 17-18=-793/3922, 15-17=-419/2569, 14-15=-290/2589, 13-14=-578/4038, 7-13=-70/743, 11-12=-58/257, 10-11=-352/2302
WEBS	5-15=-202/1336, 9-11=-1080/180, 11-13=-320/2222, 9-13=-201/1640, 4-17=-47/515, 4-15=-992/324, 6-14=-37/530, 6-15=-1018/316, 7-14=-1508/352, 3-18=0/254, 3-17=-1402/388

- 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-8-15, Interior(1) 3-8-15 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3, Interior(1) 21-7-3 to 36-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=265, 10=267.
 - This truss 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.



April 15, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665377
2701162	A12	ROOF SPECIAL	3	1		

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

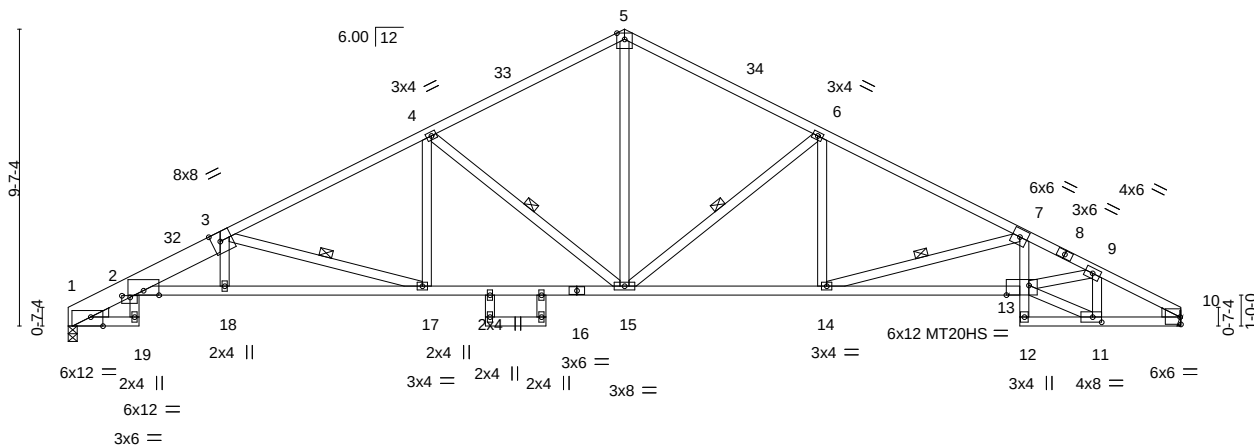
8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:20 2021 Page 1

ID:4rXhHd3_rtbCgQSIY2gdJuzGwv6-tBKEksjXSY4prCUPCEnZqwr6k5O2lphUpWL1gazQkz1

0-11-0 2-3-8	5-0-12	7-10-12	11-9-0	13-6-0	15-5-8	18-0-0	24-4-12	30-9-8	33-3-8	36-0-0
0-11-0 2-3-8	2-9-4	2-10-0	3-10-4	1-9-0	1-11-8	2-6-8	6-4-12	6-4-12	2-6-0	2-8-8

6x6 =

Scale = 1:74.6



2-3-8	5-0-12	7-10-12	11-9-0	13-6-0	15-5-8	18-0-0	24-4-12	30-9-8	33-3-8	36-0-0
2-3-8	2-9-4	2-10-0	3-10-4	1-9-0	1-11-8	2-6-8	6-4-12	6-4-12	2-6-0	2-8-8

Plate Offsets (X,Y)-- [1:0-4-12,Edge], [2:0-3-3,0-0-10], [3:0-3-4,Edge], [10:Edge,0-2-13], [11:0-3-8,0-2-0], [13:0-8-12,0-3-12]

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 0.67	Vert(LL)	-0.29 15-17	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.88	Vert(CT)	-0.54 15-17	>798	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.56	Horz(CT)	0.34 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 169 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied.
1-3: 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
BOT CHORD 2x4 SPF No.2 *Except*	WEBS 1 Row at midpt 7-14, 6-15, 4-15, 3-17
2-16,13-16: 2x4 SPF 1650F 1.5E	
WEBS 2x4 SPF No.2	
WEDGE	
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2	

REACTIONS. (size) 1=0-3-8, 10=Mechanical
Max Horz 1=163(LC 12)
Max Uplift 1=265(LC 12), 10=-267(LC 13)
Max Grav 1=1616(LC 1), 10=1614(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=-665/225, 2-3=-4119/724, 3-4=-2934/488, 4-5=-2087/432, 5-6=-2088/434,
6-7=-2950/494, 7-9=-4395/696, 9-10=-2687/445
BOT CHORD 2-18=-804/3925, 17-18=-800/3939, 15-17=-408/2535, 14-15=-283/2555, 13-14=-586/4067,
7-13=-68/753, 11-12=-61/252, 10-11=-352/2315
WEBS 6-14=-38/530, 9-11=-1146/185, 11-13=-320/2268, 9-13=-205/1663, 7-14=-1570/371,
5-15=-212/1356, 6-15=-1002/311, 4-15=-977/319, 4-17=-48/516, 3-18=0/267,
3-17=-1451/405

- 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-8-15, Interior(1) 3-8-15 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3, Interior(1) 21-7-3 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=265, 10=267.
 - This truss 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.



April 15, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	145665378
2701162	A13	ROOF SPECIAL	1	1		

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:21 2021 Page 1

ID:4rXHhD3_rtbCgQSIY2gdJuzGwv6-LNu1xCk9CsCgTM2clxIoM7NHTUkeUGId2A4aC0zQkz0

Job Reference (optional)

0-11-0	2-3-8	5-2-8	7-10-12	11-6-4	13-6-0	18-0-0	18-5-8	24-7-8	30-9-8	33-7-7	36-0-0
0-11-0	2-3-8	2-11-0	2-8-4	3-7-8	1-11-12	4-6-0	0-5-8	6-2-0	6-2-0	2-9-15	2-4-9

Scale = 1:66.1

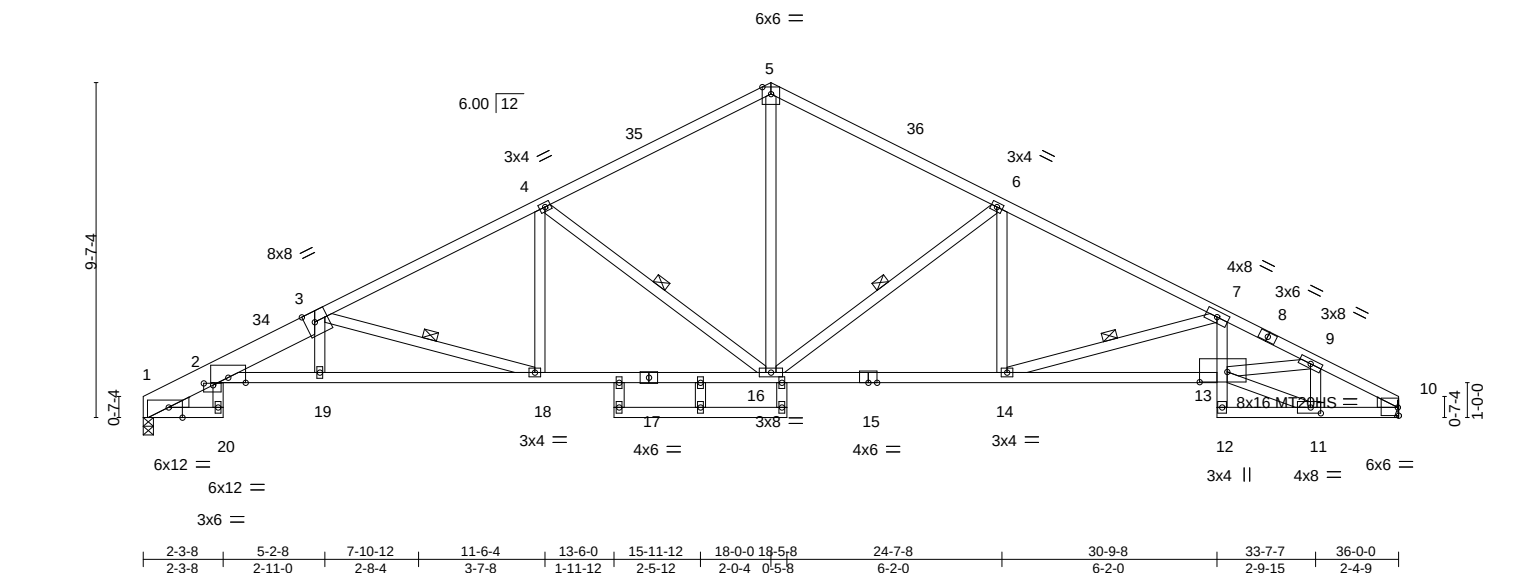


Plate Offsets (X,Y)--		[1:0-4-12,Edge], [2:0-3-3,0-0-10], [3:0-3-4,Edge], [10:Edge,0-2-13], [11:0-3-8,0-2-0], [13:0-9-8,0-3-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.67
TCDL 10.0	Lumber DOL	1.15	BC 0.85
BCLL 0.0	Rep Stress Incr	YES	WB 0.53
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.29 16-18 >999 240
			Vert(CT) -0.54 16-18 >790 180
			Horz(CT) 0.33 10 n/a n/a
			PLATES
			MT20 197/144
			MT20HS 148/108
			Weight: 173 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied.
1-3: 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
BOT CHORD 2x4 SPF No.2 *Except*	WEBS 1 Row at midpt 6-16, 7-14, 4-16, 3-18
2-17,13-15: 2x4 SPF 1650F 1.5E	
WEBS 2x4 SPF No.2	
WEDGE	
Left: 2x4 SPF No.2 , Right: 2x4 SPF No.2	

REACTIONS.	(size) 1=0-3-8, 10=Mechanical
	Max Horz 1=163(LC 12)
	Max Uplift 1=265(LC 12), 10=-267(LC 13)
	Max Grav 1=1616(LC 1), 10=1614(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-26=-665/225, 2-3=-4105/719, 3-4=-2963/492, 4-5=-2093/431, 5-6=-2093/432, 6-7=-2980/498, 7-9=-4367/691, 9-10=-2649/439
BOT CHORD	2-19=-797/3910, 18-19=-794/3923, 16-18=-418/2566, 14-16=-290/2586, 13-14=-577/4026, 7-13=-667/32, 11-12=-58/263, 10-11=-351/2283
WEBS	6-16=-1016/315, 6-14=-38/530, 7-14=-1498/352, 5-16=-203/1337, 4-16=-991/324, 4-18=-47/516, 3-18=-1407/389, 3-19=0/254, 9-11=-1014/173, 11-13=-315/2173, 9-13=-200/1632

- 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-8-15, Interior(1) 3-8-15 to 18-0-0, Exterior(2R) 18-0-0 to 21-7-3, Interior(1) 21-7-3 to 36-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=265, 10=267.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



April 15, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665379
2701162	A15	GABLE	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:23 2021 Page 1

ID:4rXHd3_rtBCgQSIY2gdJuzGwv6-Hm?nMtQkTSOigC_tMLGSYTmKldryHTwVUZhHuzQkz_

0-11-0 18-0-0 36-0-0
0-11-0 18-0-0 18-0-0

Scale: 3/16"=1'

5x5 =

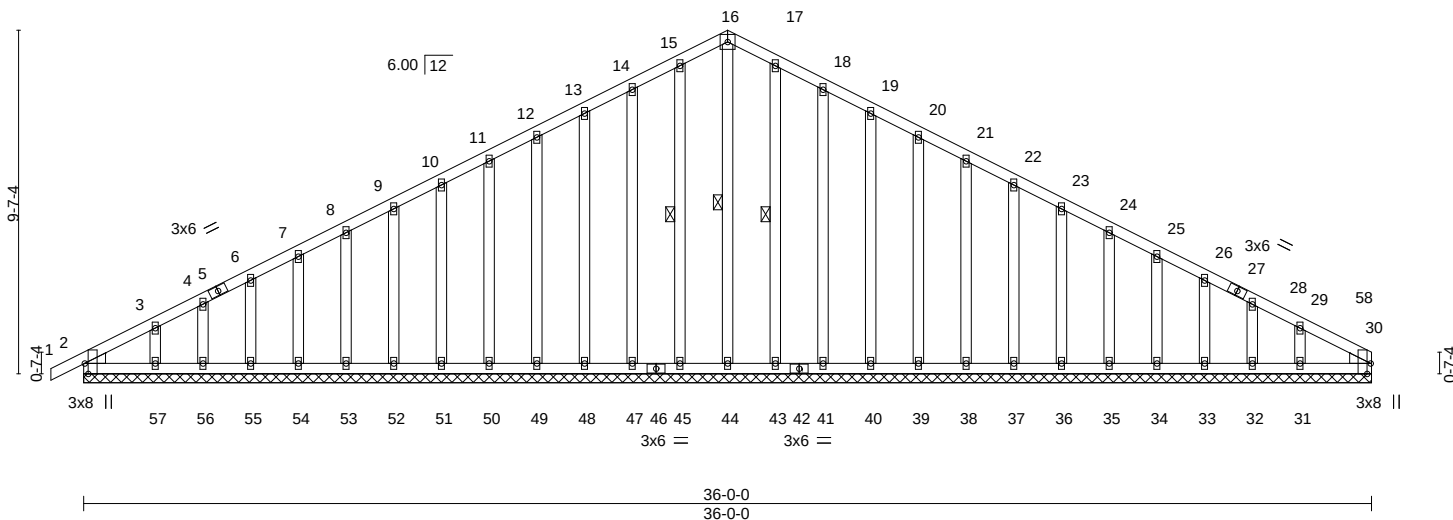


Plate Offsets (X,Y)--		[2:0-3-8,Edge], [30:0-3-8,Edge]								
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.07		Vert(LL) -0.00 1	n/r	120	MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.04		Vert(CT) -0.00 1	n/r	120		
BCLL 0.0		Rep Stress Incr YES		WB 0.11		Horz(CT) 0.01 30	n/a	n/a		
BCDL 10.0		Code IRC2018/TPI2014		Matrix-S					Weight: 229 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 16-44, 15-45, 17-43

REACTIONS.

All bearings 36-0-0.
(lb) - Max Horz 2=170(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 45, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 43, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31
Max Grav All reactions 250 lb or less at joint(s) 2, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 43, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 30, 31

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

TOP CHORD 14-15=-101/282, 15-16=-108/302, 16-17=-108/302, 17-18=-101/282

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-0-0, Exterior(2N) 2-0-0 to 18-0-0, Corner(3R) 18-0-0 to 21-0-0, Exterior(2N) 21-0-0 to 36-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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) 2, 45, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 43, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 15, 2021

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



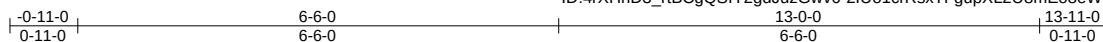
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665380
2701162	B1	GABLE	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:31 2021 Page 1

ID:4rXHhD3_rtbCgQSIY2gdJuzGwv6-2Uo1crRsxTFgupXL2U8mEo8eWL_qvP5LkV6YRzQkys



4x4 =

Scale = 1:31.1

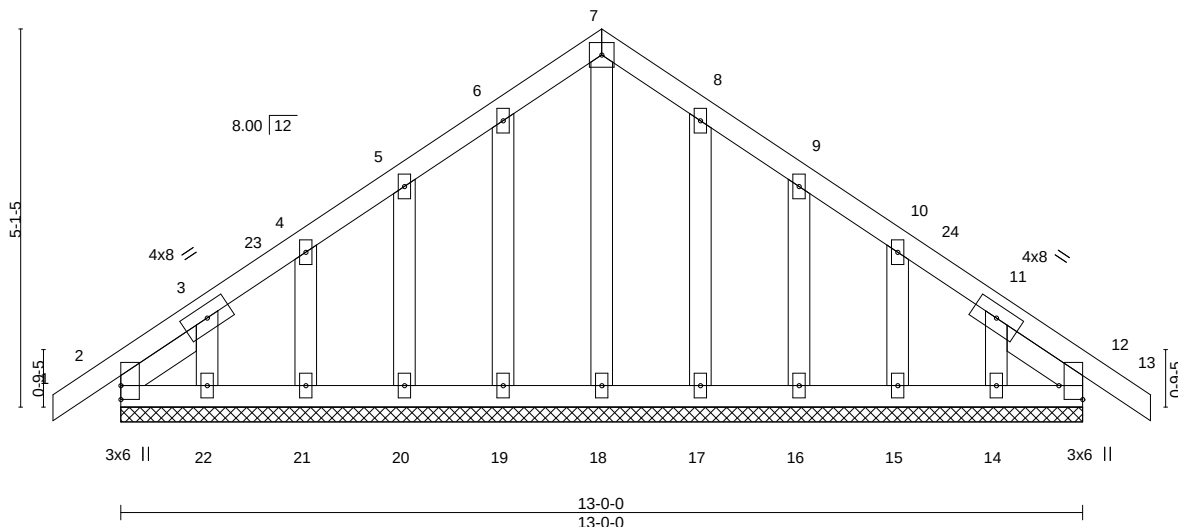


Plate Offsets (X,Y)-- [12:Edge,0-3-14]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	12	n/r
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	13	n/r
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	12	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 65 lb	FT = 20%		

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 OTHERS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 -t 1-3-10, Right 2x4 SPF No.2 -t 1-3-10

BRACING-

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

REACTIONS.

All bearings 13-0-0.
 (lb) - Max Horz 2=129(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14
 Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 22, 17, 16, 15, 14

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 6-6-0, Corner(3R) 6-6-0 to 9-6-0, Exterior(2N) 9-6-0 to 13-11-0 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 15, 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



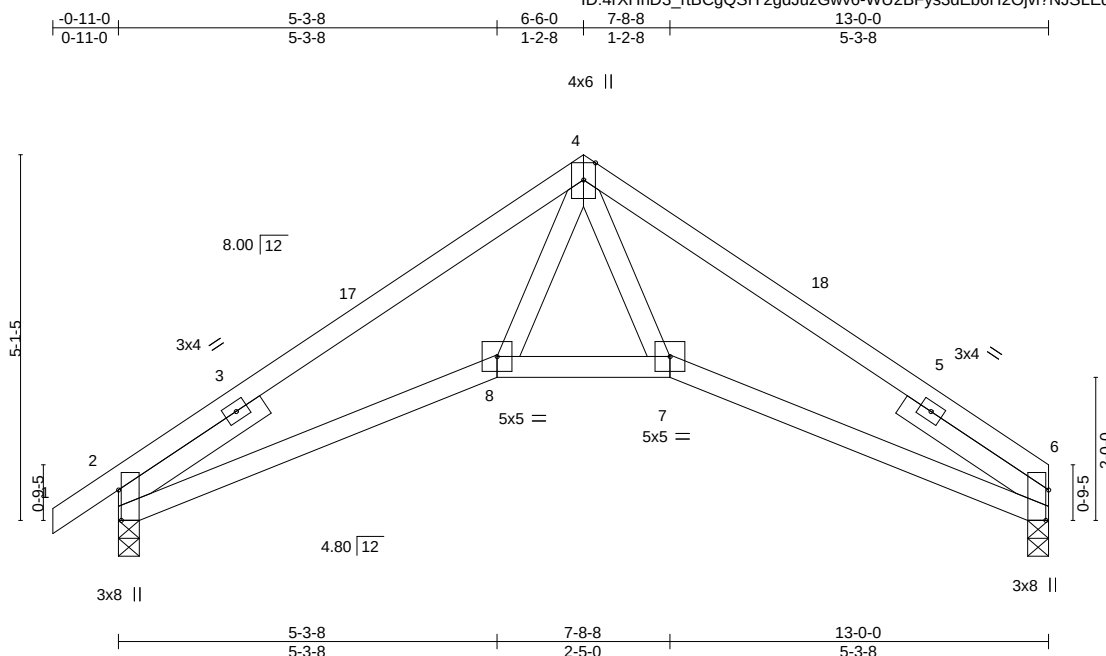
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2701162	Truss B2	Truss Type ROOF SPECIAL	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO I45665381
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:32 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-WU2BFys3dEb6H2Ojvi?NJSLEqwc0ZLaFZO4tZQkyr



Scale: 3/8"=1'

Plate Offsets (X,Y)-- [2:0-5-1,Edge], [6:0-5-1,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	0.35	Vert(LL)	-0.03	7-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.06	8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.06	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 47 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=0-3-8, 2=0-3-8
 Max Horz 2=124(LC 9)
 Max Uplift 6=-88(LC 13), 2=-109(LC 12)
 Max Grav 6=583(LC 1), 2=651(LC 1)

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

TOP CHORD 2-4=-1089/239, 4-6=-1093/242
 BOT CHORD 2-8=-141/968, 7-8=-85/711, 6-7=-117/974
 WEBS 4-7=-32/462, 4-8=-70/484

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Bearing at joint(s) 6, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=109.
- 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.



April 15, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2701162	Truss B3	Truss Type Roof Special	Qty 4	Ply 1	SUMMIT/STONE CREEK #79/MO I45665382
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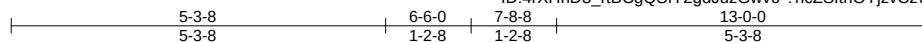
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:33 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-?hcZSithOYjzvCzvSSWcstfPbKy6loqOo2_DcJzQkyq

Job Reference (optional)



4x6 ||

Scale = 1:32.6

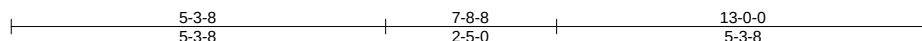
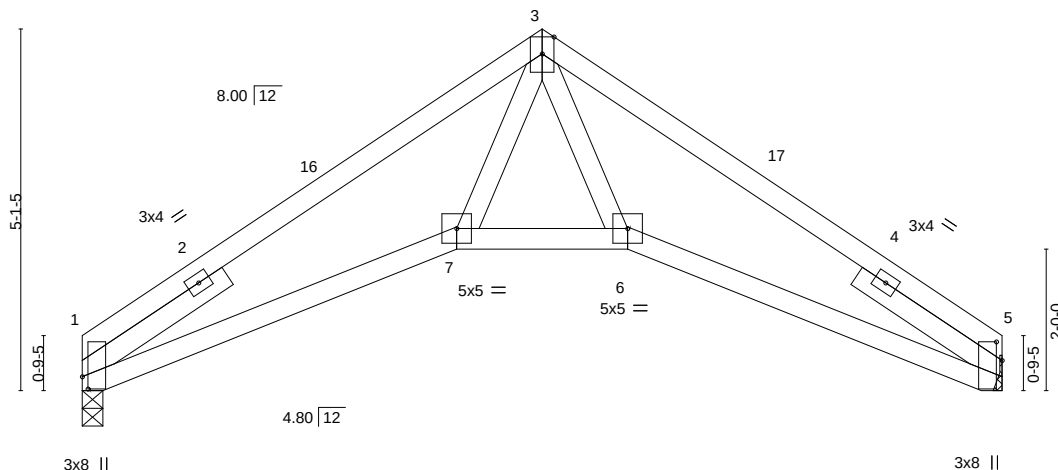


Plate Offsets (X,Y)-- [1:0-2-1,0-0-15], [5:0-3-3,0-0-15]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.03	7-10	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.06	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.06	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 46 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 5=Mechanical
 Max Horz 1=-113(LC 8)
 Max Uplift 1=-88(LC 12), 5=-88(LC 13)
 Max Grav 1=585(LC 1), 5=585(LC 1)

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

TOP CHORD 1-3=-1100/241, 3-5=-1100/243
 BOT CHORD 1-7=-142/981, 6-7=-86/717, 5-6=-118/981
 WEBS 3-7=-71/493, 3-6=-32/461

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=25ft; 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 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 13-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 1 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) 1, 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



April 15, 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 2701162	Truss B5	Truss Type Flat Girder	Qty 1	Ply 2	SUMMIT/STONE CREEK #79/MO I45665383
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:34 2021 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-TtAxgeuJ8srqXMY50A1rOtQbwkBZ14JY1hkm9mzQkyp

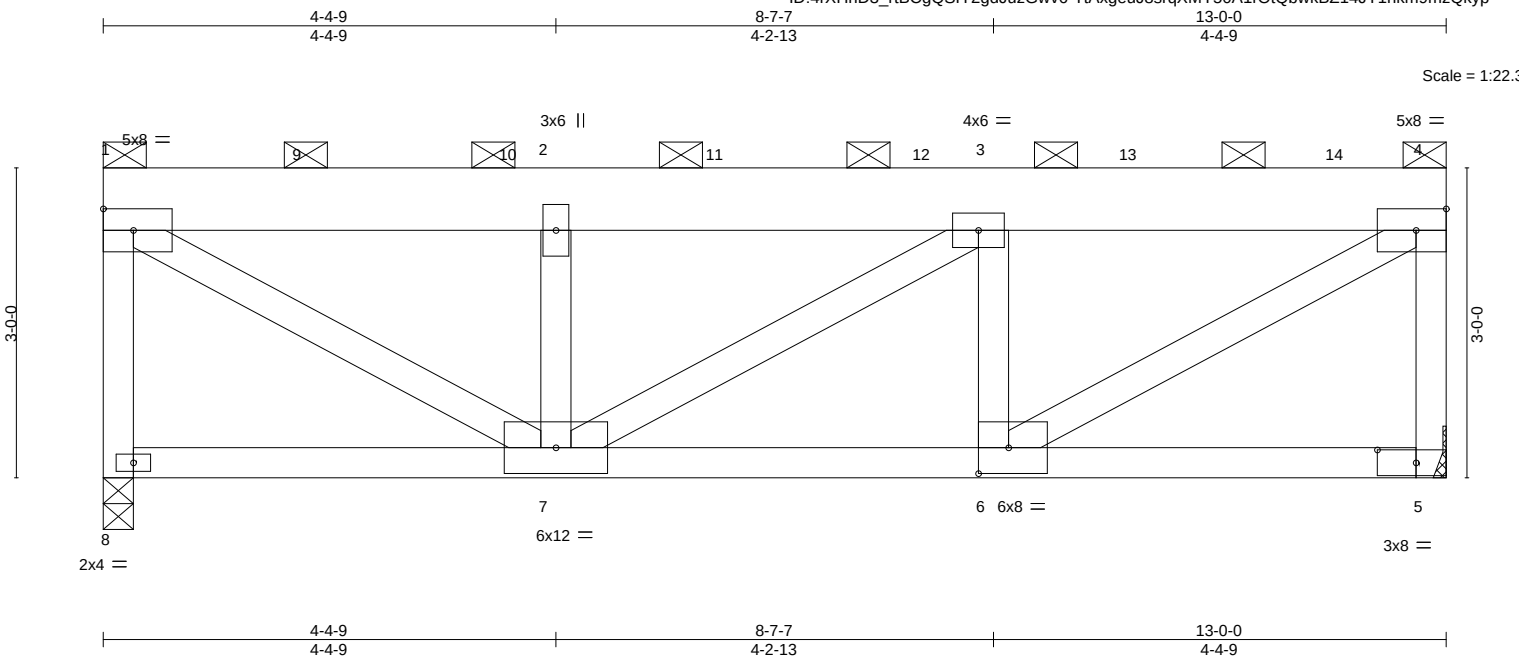


Plate Offsets (X,Y)-- [5:0-4-8,0-1-8], [6:0-3-8,0-3-0]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.31	Vert(LL) -0.01	6-7 >999 240
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT) -0.09	6-7 >999 180
BCLL 0.0	Rep Stress Incr	NO	WB 0.80	Horz(CT) 0.02	5 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS		
				PLATES	GRIP
				MT20	197/144
				Weight: 160 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-4, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 8=0-3-8, 5=Mechanical
Max Horz 8=-97(LC 4)
Max Grav 8=3742(LC 1), 5=4245(LC 1)

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

TOP CHORD 1-8=-3681/0, 1-2=-4816/0, 2-3=-4816/0, 3-4=-4829/0, 4-5=-4181/0
BOT CHORD 6-7=0/4829
WEBS 1-7=0/5530, 2-7=-2778/0, 3-6=-2795/0, 4-6=0/5535

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 69 lb down and 23 lb up at 0-1-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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



April 15, 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 #79/MO	I45665383
2701162	B5	Flat Girder	1	2	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:34 2021 Page 2
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-TtAxgeuJ8srqXMY50A1rOtQbwkBZ14JY1hkm9mzQkyp

- LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-4=-70, 5-8=-20

 Concentrated Loads (lb)

Vert: 1=-33 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-58, 5-8=-20

 Concentrated Loads (lb)

Vert: 1=-29 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-20, 5-8=-40

 Concentrated Loads (lb)

Vert: 1=-30 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=29, 5-8=-8

Horz: 1-8=17, 4-5=22

 Concentrated Loads (lb)

Vert: 1=13 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=29, 5-8=-8

Horz: 1-8=-22, 4-5=-17

 Concentrated Loads (lb)

Vert: 1=13 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=9, 5-8=-20

Horz: 1-8=28, 4-5=10

 Concentrated Loads (lb)

Vert: 1=22 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=9, 5-8=-20

Horz: 1-8=-10, 4-5=-28

 Concentrated Loads (lb)

Vert: 1=22 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=29, 5-8=-8

Horz: 1-8=14, 4-5=20

 Concentrated Loads (lb)

Vert: 1=13 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=29, 5-8=-8

Horz: 1-8=-20, 4-5=-14

 Concentrated Loads (lb)

Vert: 1=13 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=16, 5-8=-8

Horz: 1-8=7, 4-5=15

 Concentrated Loads (lb)

Vert: 1=20 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=16, 5-8=-8

Horz: 1-8=-15, 4-5=-7

 Concentrated Loads (lb)

Vert: 1=20 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=9, 5-8=-20

Horz: 1-8=26, 4-5=8

 Concentrated Loads (lb)

Vert: 1=22 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-4=9, 5-8=-20

Horz: 1-8=-8, 4-5=-26

 Concentrated Loads (lb)

Vert: 1=22 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 14) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Continued on page 3

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665383
2701162	B5	Flat Girder	1	2	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:34 2021 Page 3
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-TtAxeuJ8srqXMY50A1rOtQbwkBZ14JY1hkm9mzQkyp

LOAD CASE(S) Standard

- Uniform Loads (plf)
Vert: 1-4=-20, 5-8=-20
- Concentrated Loads (lb)
Vert: 1=-18 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 15) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=21, 4-5=7
- Concentrated Loads (lb)
Vert: 1=15 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 16) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=-7, 4-5=-21
- Concentrated Loads (lb)
Vert: 1=15 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 17) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=19, 4-5=6
- Concentrated Loads (lb)
Vert: 1=15 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 18) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=-6, 4-5=-19
- Concentrated Loads (lb)
Vert: 1=15 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 19) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-12, 5-8=-8
Horz: 1-8=16
- Concentrated Loads (lb)
Vert: 1=23 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 20) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-12, 5-8=-8
Horz: 4-5=16
- Concentrated Loads (lb)
Vert: 1=23 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 21) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=17, 4-5=22
- Concentrated Loads (lb)
Vert: 1=-69 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 22) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=-22, 4-5=-17
- Concentrated Loads (lb)
Vert: 1=-69 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 23) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=28, 4-5=10
- Concentrated Loads (lb)
Vert: 1=-60 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 24) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=-10, 4-5=-28
- Concentrated Loads (lb)
Vert: 1=-60 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=14, 4-5=20
- Concentrated Loads (lb)
Vert: 1=-69 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 26) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=29, 5-8=-8
Horz: 1-8=-20, 4-5=-14
- Concentrated Loads (lb)
Vert: 1=-69 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

Continued on page 4

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665383
2701162	B5	Flat Girder	1	2	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:34 2021 Page 4
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-TtAxgeuJ8srqXMY50A1rOtQbwkBZ14JY1hkm9mzQkyp

LOAD CASE(S) Standard

- 27) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=16, 5-8=-8
Horz: 1-8=7, 4-5=15
Concentrated Loads (lb)
Vert: 1=-62 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=16, 5-8=-8
Horz: 1-8=-15, 4-5=-7
Concentrated Loads (lb)
Vert: 1=-62 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 29) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=26, 4-5=8
Concentrated Loads (lb)
Vert: 1=-60 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 30) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=9, 5-8=-20
Horz: 1-8=-8, 4-5=-26
Concentrated Loads (lb)
Vert: 1=-60 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 31) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=21, 4-5=7
Concentrated Loads (lb)
Vert: 1=-53 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 32) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=-7, 4-5=-21
Concentrated Loads (lb)
Vert: 1=-53 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 33) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=19, 4-5=6
Concentrated Loads (lb)
Vert: 1=-53 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-36, 5-8=-20
Horz: 1-8=-6, 4-5=-19
Concentrated Loads (lb)
Vert: 1=-53 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 35) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 5-8=-8
Horz: 1-8=16
Concentrated Loads (lb)
Vert: 1=-36 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135
- 36) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 5-8=-8
Horz: 4-5=-16
Concentrated Loads (lb)
Vert: 1=-36 9=-1135 10=-1135 11=-1135 12=-1135 13=-1135 14=-1135

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO
2701162	B6	GABLE	1	1	I45665384

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

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ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-PGIh5KvagT5YmfU8b3JTIV?NX33V89qU?DtDezQkyn

0-11-0 10-0-0 20-0-0 20-11-0
0-11-0 10-0-0 10-0-0 0-11-0

Scale = 1:45.0

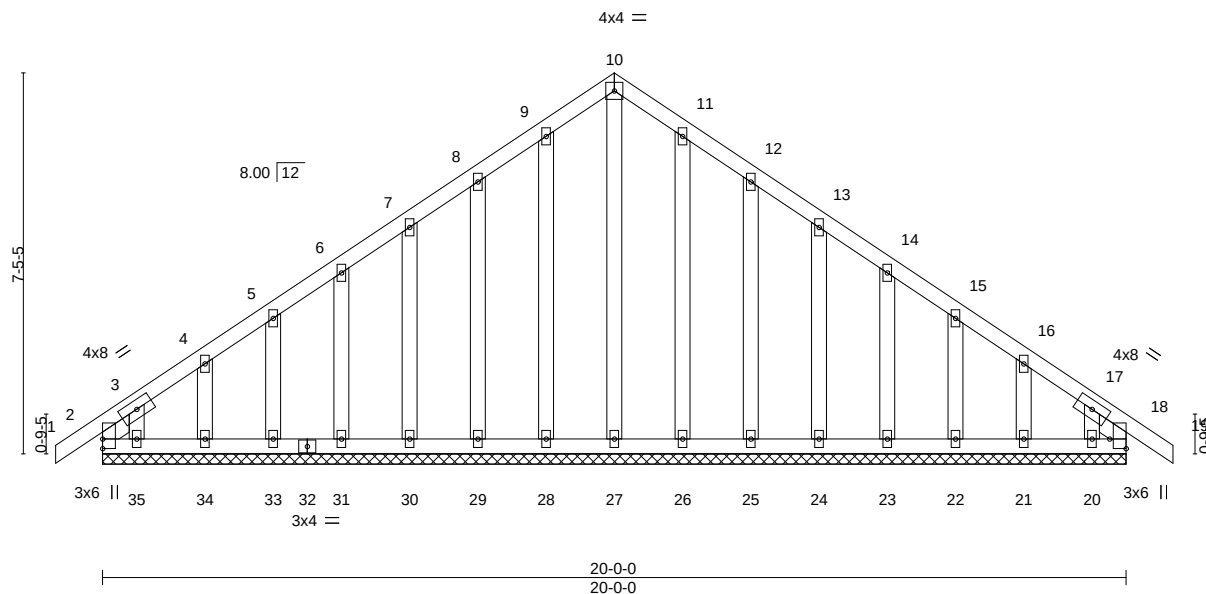


Plate Offsets (X,Y)-- [18:Edge,0-3-14]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	18	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	19	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 116 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -t 0-8-7, Right 2x4 SPF No.2 -t 0-8-7

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 20-0-0.
(lb) - Max Horz 2=190(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 28, 29, 30, 31, 33, 34, 26, 25, 24, 23, 18, 22, 21 except 2=113(LC 8), 35=-136(LC 12), 20=-112(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 29, 30, 31, 33, 34, 35, 26, 25, 24, 23, 18, 22, 21, 20

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-250/186

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-0-0, Exterior(2N) 2-0-0 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-11-0 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
- 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) 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) 28, 29, 30, 31, 33, 34, 26, 25, 24, 23, 18, 22, 21 except (jt=lb) 2=113, 35=136, 20=112.
- 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.



April 15, 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

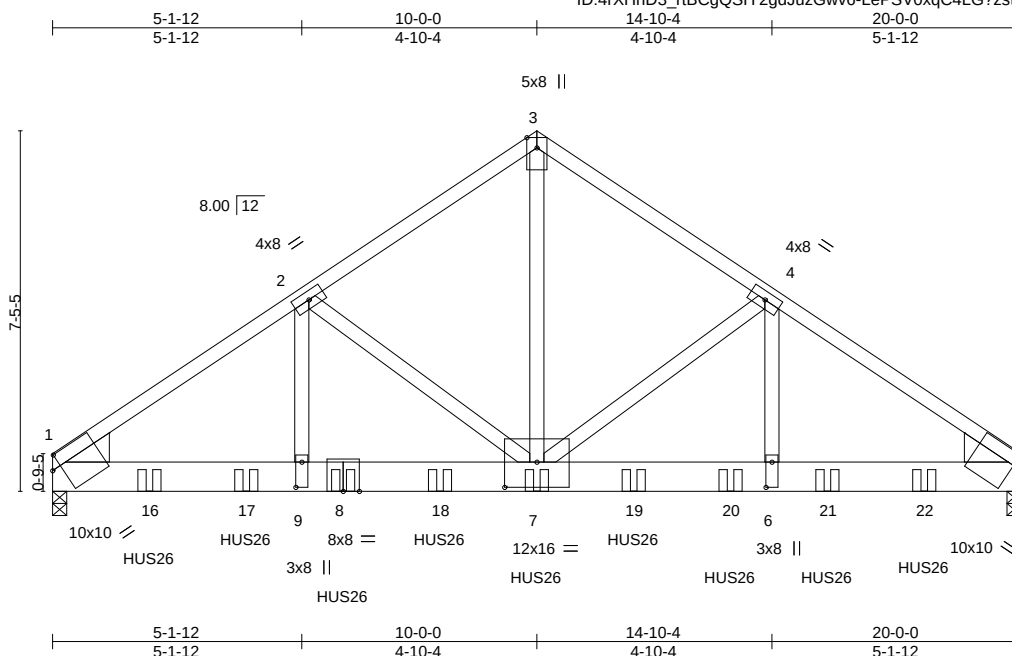
Job 2701162	Truss B7	Truss Type COMMON GIRDER	Qty 1	Ply 2	SUMMIT/STONE CREEK #79/MO I45665385
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:38 2021 Page 1

ID:4rXhHd3_rBCgQSIY2gdJuzGwv6-LePSV0xqC4LG?zstF06nZja8vLe5zw77yJi_lXzQkyl



Scale: 1/4"=1'

Plate Offsets (X,Y)-- [1:0-2-4,0-3-3], [5:0-2-4,0-3-3], [6:0-6-4,0-1-8], [7:0-8-0,0-6-4], [9:0-6-4,0-1-8]												
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	0.88	Vert(LL)	-0.14	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.25	6-7	>955	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 246 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2 *Except*
3-7: 2x4 SPF 1650F 1.5E

WEDGE

Left: 2x8 SP No.2 , Right: 2x8 SP No.2

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
Max Horz 1=-174(LC 25)
Max Uplift 1=-1377(LC 8), 5=-1377(LC 9)
Max Grav 1=8078(LC 1), 5=8081(LC 1)

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

TOP CHORD 1-2=-11045/1891, 2-3=-8018/1440, 3-4=-8018/1440, 4-5=-11049/1892
BOT CHORD 1-9=-1604/9092, 7-9=-1604/9092, 6-7=-1495/9096, 5-6=-1495/9096
WEBS 3-7=-1472/8445, 4-7=-3153/675, 4-6=-540/3296, 2-7=-3149/673, 2-9=-538/3292

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1378, 5=1377.
- This truss 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 2-0-0 from the left end to 18-0-0 to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard



April 15, 2021

Continued on page 2

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665385
2701162	B7	COMMON GIRDER	1	2	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:38 2021 Page 2
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-LePSV0xqC4LG?zstF06nZja8vLe5zw77yJi_lXzQkyl

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-5=-70, 10-13=-20

Concentrated Loads (lb)

Vert: 8=-1594(F) 7=-1594(F) 16=-1599(F) 17=-1594(F) 18=-1594(F) 19=-1594(F) 20=-1594(F) 21=-1599(F) 22=-1599(F)

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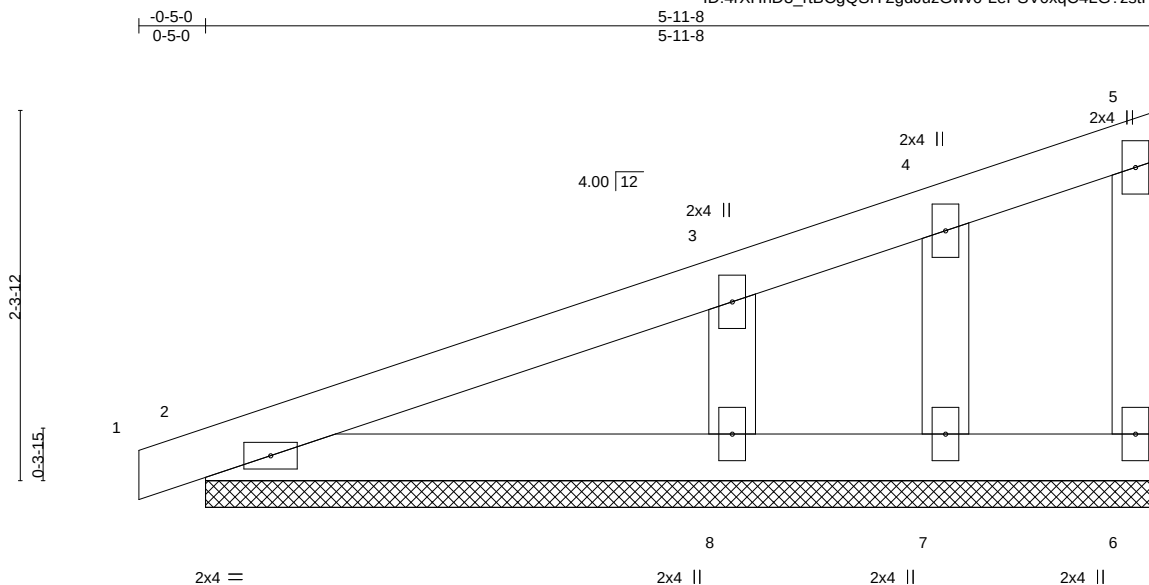
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665386
2701162	C1	GABLE	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:38 2021 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-LePSV0xqC4LG?zstF06nZjaJdLjz4v7yJi_lXzQkyl



Scale = 1:14.4

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 0.13	Vert(LL)	-0.00	1	n/r	120	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	0.00	1	n/r	120	
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 19 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 5-11-8.
(lb) - Max Horz 2=90(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7 except 8=304(LC 1)

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

WEBS 3-8=-235/337

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-5-0 to 2-7-0, Exterior(2N) 2-7-0 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) 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) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 1-4-0 oc.
- 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) 6, 2, 7, 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 15, 2021

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

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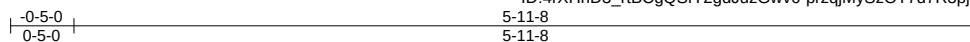
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665387
2701162	C2	MONO TRUSS	6	1	Job Reference (optional)	

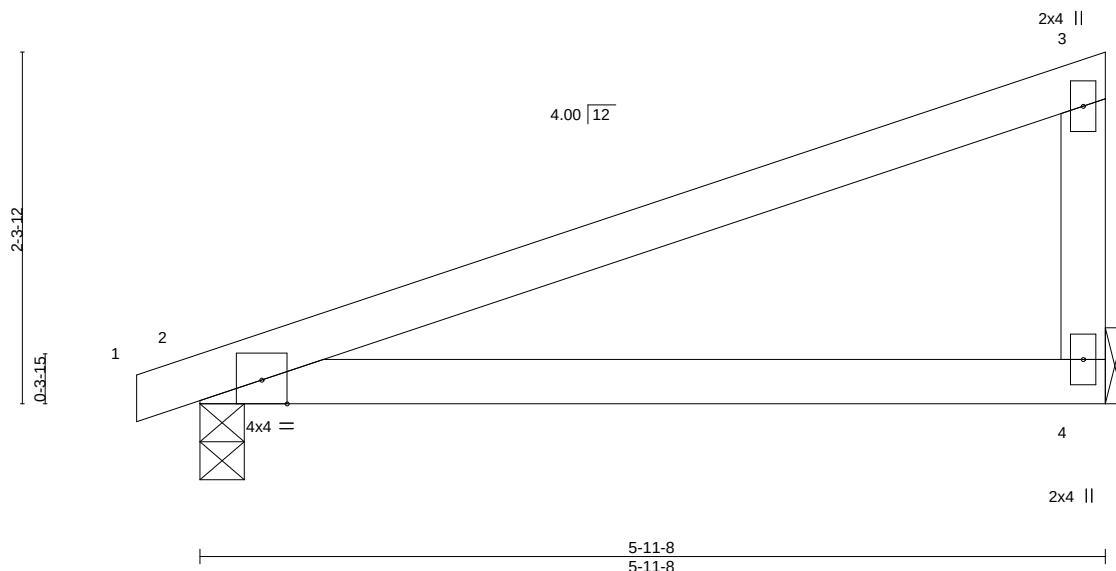
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:39 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-przqjMySzOT7d7R3pjd05w7PPI?TIX4HBzRXqzzQkyk



Scale = 1:15.2



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 0.45	Vert(LL)	0.07	4-7	>979	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.13	4-7	>548	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-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) 2=0-3-8, 4=Mechanical
Max Horz 2=90(LC 11)
Max Uplift 2=71(LC 8), 4=66(LC 12)
Max Grav 2=292(LC 1), 4=261(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior(1) 2-7-0 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 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.
- 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.



April 15, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2701162	Truss C3	Truss Type MONO TRUSS	Qty 4	Ply 1	SUMMIT/STONE CREEK #79/MO I45665388
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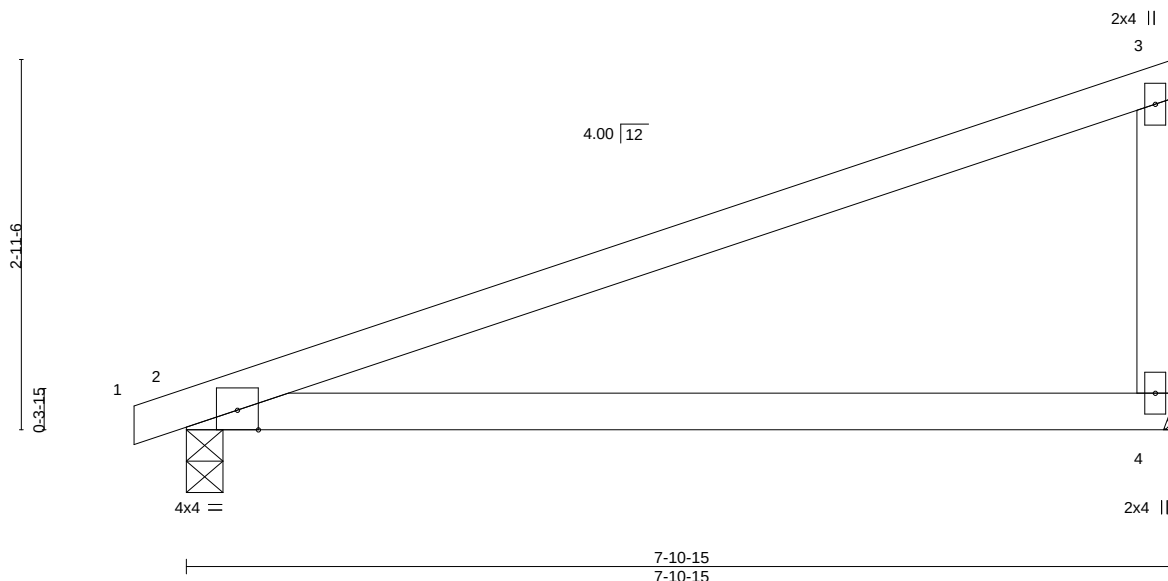
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:40 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-H1XCwhy4kibzFH?FNQ8Fe8gVR9HgR_jQPdB4MPzQkyj

0-5-0	4-4-10	7-10-6	7-11-8
0-5-0	4-4-10	3-5-12	0-1-2

Scale = 1:18.4



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 0.82	Vert(LL)	0.20	4-7	>467	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.37	4-7	>249	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS							
									Weight: 22 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 4=Mechanical
Max Horz 2=113(LC 8)
Max Uplift 2=79(LC 8), 4=96(LC 12)
Max Grav 2=377(LC 1), 4=347(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior(1) 2-7-0 to 7-8-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.
- 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.



April 15, 2021

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Chesterfield, MO 63017

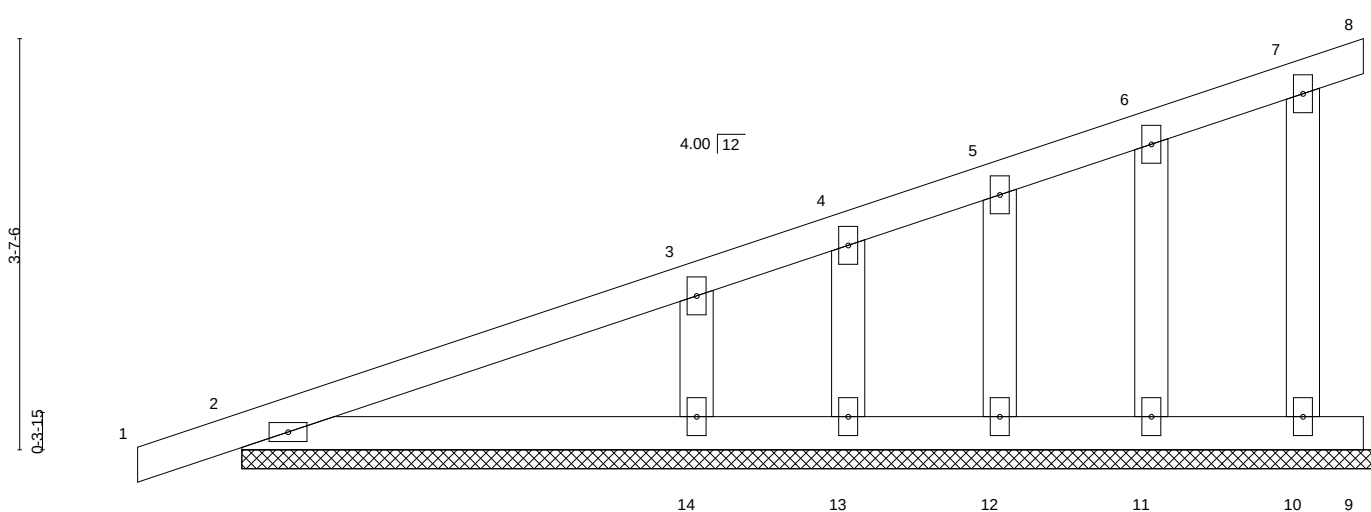
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665389
2701162	C4	GABLE	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:41 2021 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-mD5a81ziV?jsRaSw8fUALCqHYI7ARmaeHwevszQkyi

-0-11-0 0-11-0 9-10-6 9-10-6 9-11-8 0-1-2



Scale = 1:20.3

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 0.17	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 36 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 9-11-8.
(lb) - Max Horz 2=150(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 8, 2, 13, 12, 11, 10 except 14=-101(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 8, 2, 9, 12, 11, 10 except 14=372(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-14=-271/291

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 9-10-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Gable studs spaced at 1-4-0 oc.
- 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) 8, 2, 13, 12, 11, 10 except (jt=lb) 14=101.
- 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.



April 15, 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



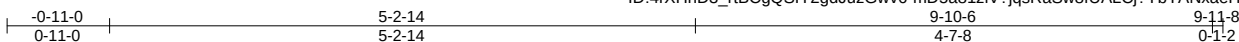
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665390
2701162	C5	MONOPITCH	9	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:41 2021 Page 1

ID:4rXHhD3_rTBcgQSIY2gdJuzGwv6-mD5a81ziV?jqsRaSw8fUAlCj?YbYANxaeHwevszQkyi



Scale = 1:20.6

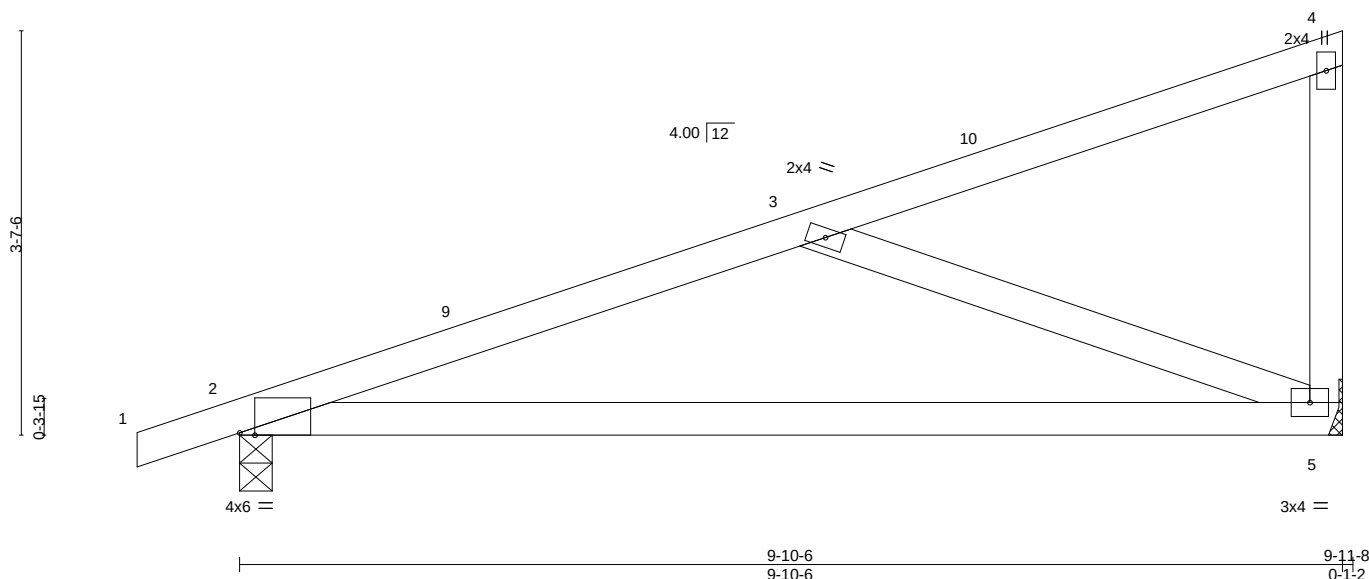


Plate Offsets (X,Y)--		[2:0-1-10,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.25	5-8	>476	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.51	5-8	>230		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	5	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS						Weight: 33 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 5=Mechanical
Max Horz 2=149(LC 8)
Max Uplift 2=118(LC 8), 5=120(LC 12)
Max Grav 2=505(LC 1), 5=434(LC 1)

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

TOP CHORD 2-3=-700/266
BOT CHORD 2-5=-379/659
WEBS 3-5=-700/403

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 9-8-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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) except (jt=lb) 2=118, 5=120.
- 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.



April 15, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

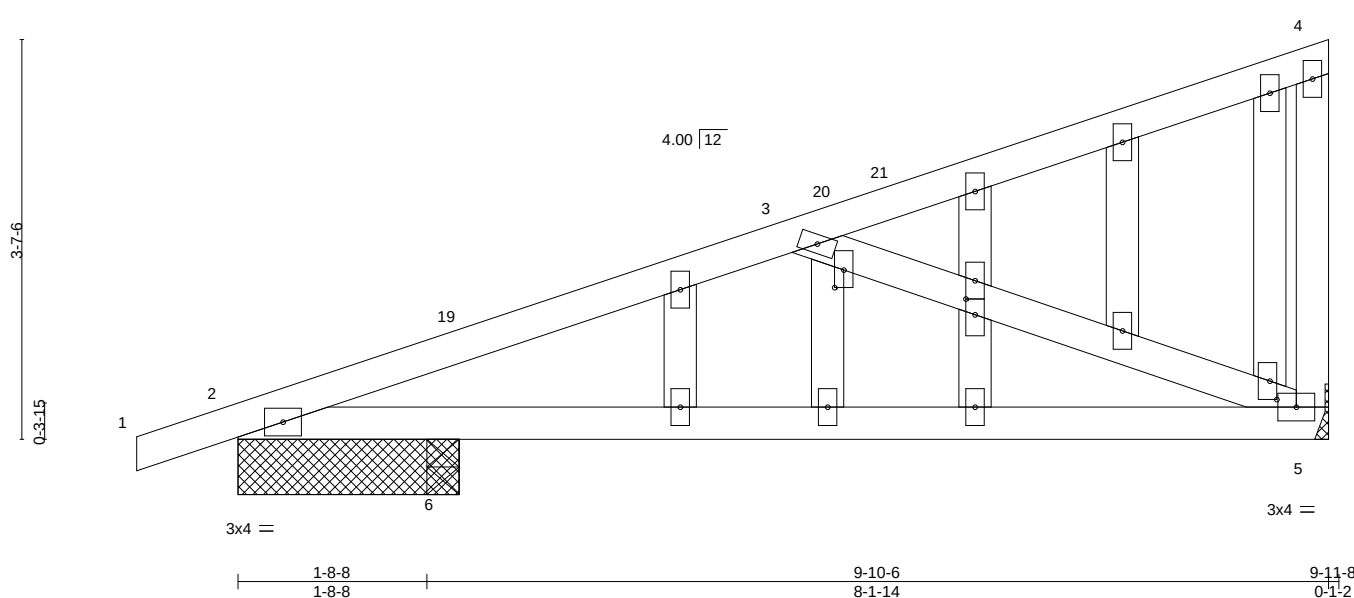
Job 2701162	Truss C6	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO 145665391
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:42 2021 Page 1
ID:4rXHhD3_rBCgQSIY2gdJuzGww6-EQfzLN_LGJrhUa9eUrAjjZl_iz28vrljtgBRizQkyh

-0-11-0 5-2-14 9-10-6 9-11-8
0-11-0 5-2-14 4-7-8 0-1-2



Scale = 1:20.8

Plate Offsets (X,Y)-- [3:0-1-14,0-1-0], [5:0-2-0,0-0-12], [12:0-1-11,0-1-0]												
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	0.26	Vert(LL)	-0.12	5-6	>811	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.23	5-6	>410	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 43 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=2-0-0, 5=Mechanical, 6=0-3-8
Max Horz 2=149(LC 8)
Max Uplift 2=-149(LC 8), 5=-127(LC 8)
Max Grav 2=266(LC 1), 5=378(LC 1), 6=422(LC 3)

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

TOP CHORD 2-3=-573/275
BOT CHORD 2-6=-400/502, 5-6=-400/502
WEBS 3-5=-534/425

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 9-8-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 studs spaced at 1-4-0 oc.
- 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) 2=149, 5=127.
- 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.



April 15, 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 #79/MO	145665393
2701162	D1	GABLE	1	1	Job Reference (optional)	

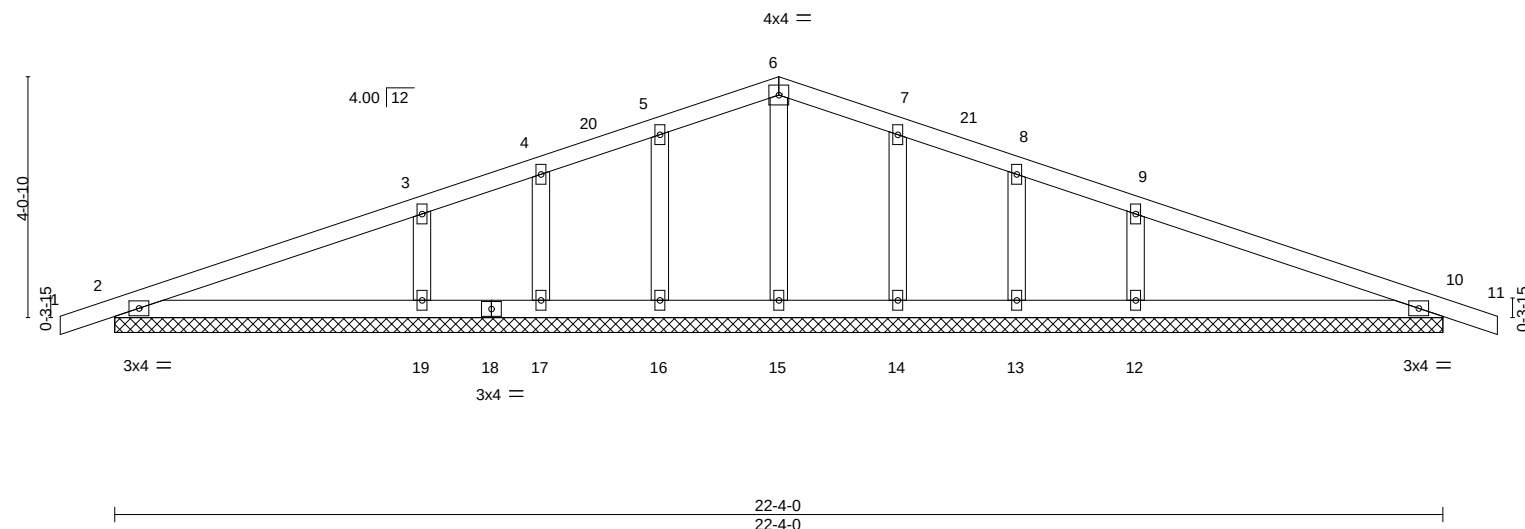
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:44 2021 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-Aomjm30bow5PjuJ1cGDBo_qIWmIfNoa0KF9IVBzQkyf

0-11-0	11-2-0	22-4-0	23-3-0
0-11-0	11-2-0	11-2-0	0-11-0

Scale = 1:38.7



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 0.30	Vert(LL)	0.02	11	n/r	120	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	0.03	11	n/r	120	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	10	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 73 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 22-4-0.
(lb) - Max Horz 2=-71(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 17, 14, 13, 10 except 19=-131(LC 12), 12=-131(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 15, 16, 17, 14, 13 except 2=262(LC 1), 19=479(LC 25), 12=479(LC 26), 10=262(LC 1)

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

WEBS 3-19=-351/193, 9-12=-351/193

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-11-0 to 2-1-0, Exterior(2N) 2-1-0 to 11-2-0, Corner(3R) 11-2-0 to 14-2-0, Exterior(2N) 14-2-0 to 23-3-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Gable studs spaced at 2-0-0 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) 2, 16, 17, 14, 13, 10 except (jt=lb) 19=131, 12=131.
- 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.



April 15, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	145665394
2701162	D2	Common	5	1		

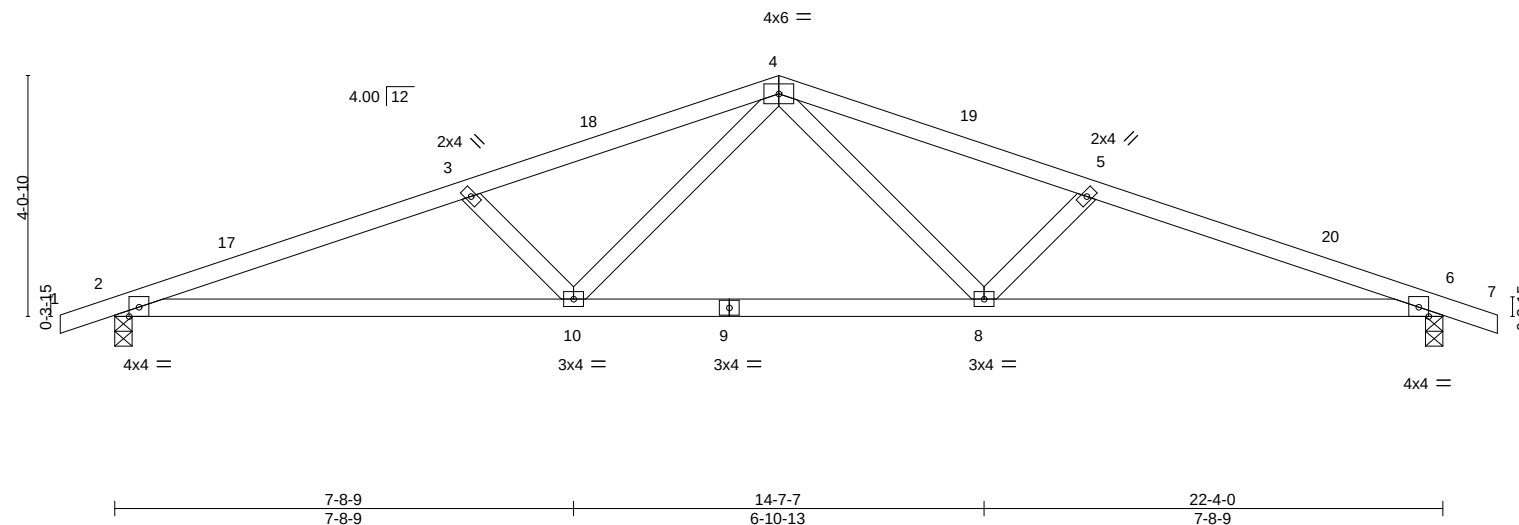
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:45 2021 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-e_K5zP0DZEDGL2uD9_kQLBNRmAya6D?9Zvur2dzQkye

0-11-0	5-11-14	11-2-0	16-4-2	22-4-0	23-3-0
0-11-0	5-11-14	5-2-2	5-2-2	5-11-14	0-11-0

Scale = 1:38.7



7-8-9		14-7-7		22-4-0	
7-8-9		6-10-13		7-8-9	
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.40	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.71	Vert(LL) -0.13 10-13 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.16	Vert(CT) -0.26 10-13 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.07 6 n/a n/a		
	Code IRC2018/TPI2014			Weight: 72 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=-71(LC 17)
Max Uplift 2=-227(LC 8), 6=-227(LC 9)
Max Grav 2=1069(LC 1), 6=1069(LC 1)

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

TOP CHORD 2-3=-2401/575, 3-4=-2118/515, 4-5=-2118/515, 5-6=-2401/575
BOT CHORD 2-10=-482/2248, 8-10=-277/1508, 6-8=-486/2248
WEBS 4-8=-127/672, 5-8=-456/201, 4-10=-127/672, 3-10=-456/201

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 23-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=227, 6=227.
- This truss 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.



April 15, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2701162	Truss E1	Truss Type Hip Girder	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO I45665395
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

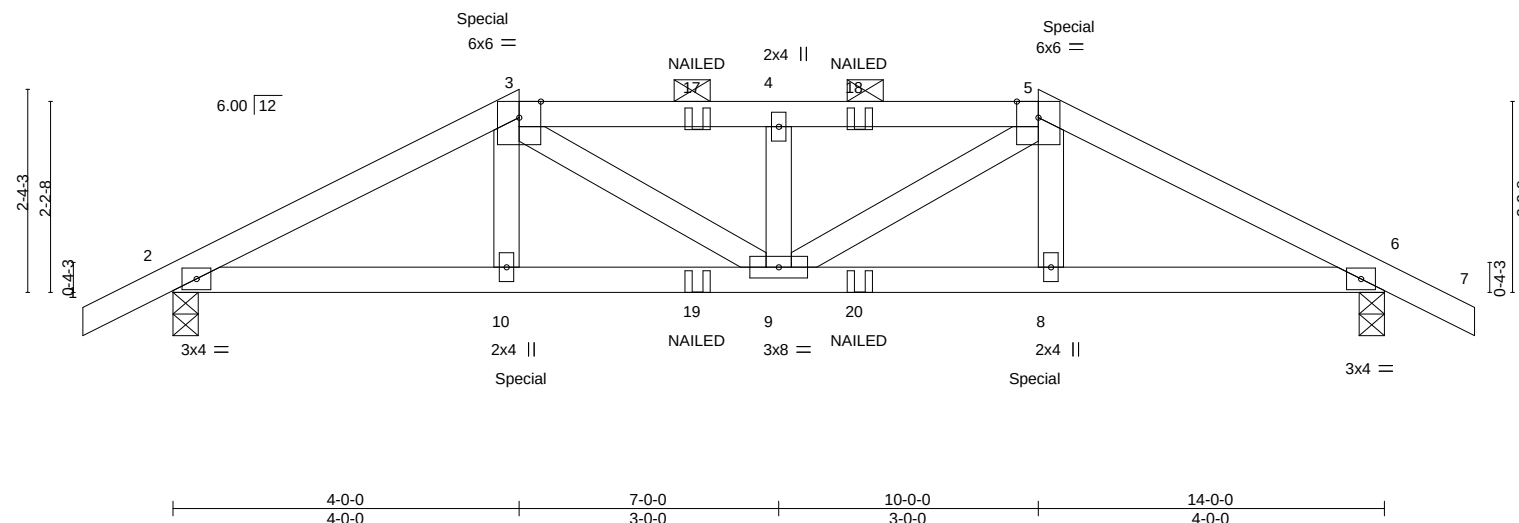
8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:46 2021 Page 1

ID:4rXHhD3_rTBCgQSIY2gdJuzGwv6-6BuTBI1rKYL7zCTPjhFftPwf5ZNyrh3JoZePa3zQkyd

Job Reference (optional)

-1-0-8	4-0-0	7-0-0	10-0-0	14-0-0	15-0-8
1-0-8	4-0-0	3-0-0	3-0-0	4-0-0	1-0-8

Scale = 1:26.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.23	Vert(LL)	-0.05	9	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.09	9	>999	180	197/144
BCLL 0.0	Rep Stress Incr	NO	WB 0.11	Horz(CT)	0.03	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 49 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-6 oc purlins, except

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

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

REACTIONS.

(size) 2=0-3-8, 6=0-3-8

Max Horz 2=42(LC 29)

Max Uplift 2=-214(LC 8), 6=-214(LC 9)

Max Grav 2=966(LC 1), 6=966(LC 1)

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

TOP CHORD 2-3=-1672/352, 3-4=-1797/403, 4-5=-1797/402, 5-6=-1672/353

BOT CHORD 2-10=-288/1459, 9-10=-291/1447, 8-9=-265/1447, 6-8=-261/1459

WEBS 3-9=-125/459, 4-9=-359/162, 5-9=-125/459

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=214, 6=214.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 166 lb down and 150 lb up at 4-0-0, and 166 lb down and 150 lb up at 10-0-0 on top chord, and 81 lb down at 4-0-0, and 81 lb down at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-70, 3-5=-70, 5-7=-70, 11-14=-20

Concentrated Loads (lb)

Vert: 10=-79(F) 3=-107(F) 5=-107(F) 8=-79(F) 17=-45(F) 18=-45(F) 19=-33(F) 20=-33(F)



April 15, 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

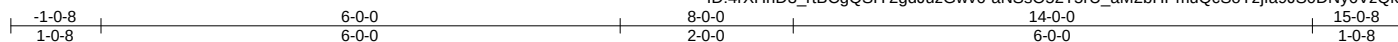
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	145665396
2701162	E2	Hip	1	1		

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:47 2021 Page 1

ID:4rXHhD3_rtbCgQSIY2gdJuzGwv6-aNssO52T5rU_aM2bHPmuQcSoYzfja9JS0DNy6VzQkyc

Job Reference (optional)



Scale = 1:26.6

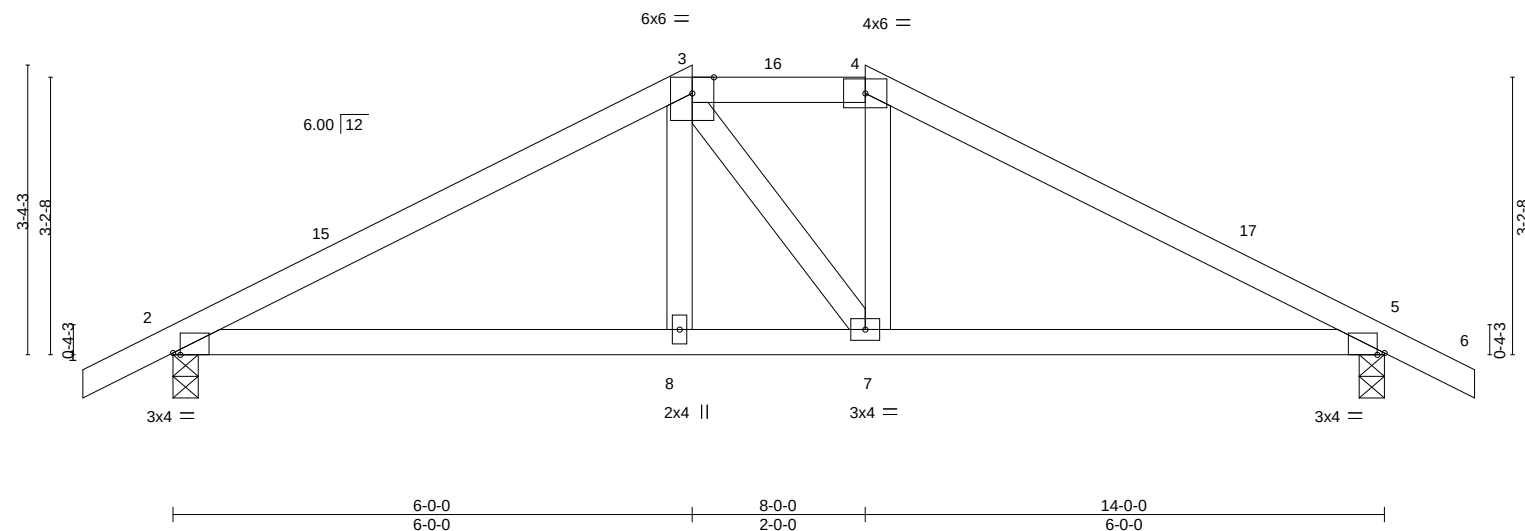


Plate Offsets (X,Y)-- [2:0-1-0,Edge], [5:0-1-0,Edge]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.04 8-11 >999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.09 8-11 >999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.01 5 n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 47 lb	FT = 20%

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

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=61(LC 12)
Max Uplift 2=-131(LC 12), 5=-131(LC 13)
Max Grav 2=703(LC 1), 5=703(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-950/263, 3-4=-779/295, 4-5=-951/266
BOT CHORD 2-8=-136/784, 7-8=-136/778, 5-7=-142/784

- 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 to 6-0-0, Exterior(2E) 6-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 15-0-8 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=131, 5=131.
 - This truss 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.



April 15, 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 2701162	Truss E3	Truss Type Common	Qty 2	Ply 1	SUMMIT/STONE CREEK #79/MO 145665397
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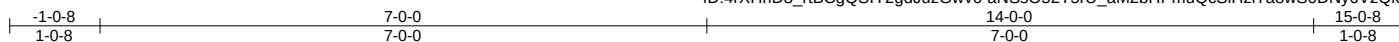
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:47 2021 Page 1

ID:4rXHd3_rtBCgQSIY2gdJuzGwv6-aNSsO52T5rU_aM2bHPmuQcSIHziTa8wS0DNy6VzQkyc

Job Reference (optional)



Scale = 1:26.6

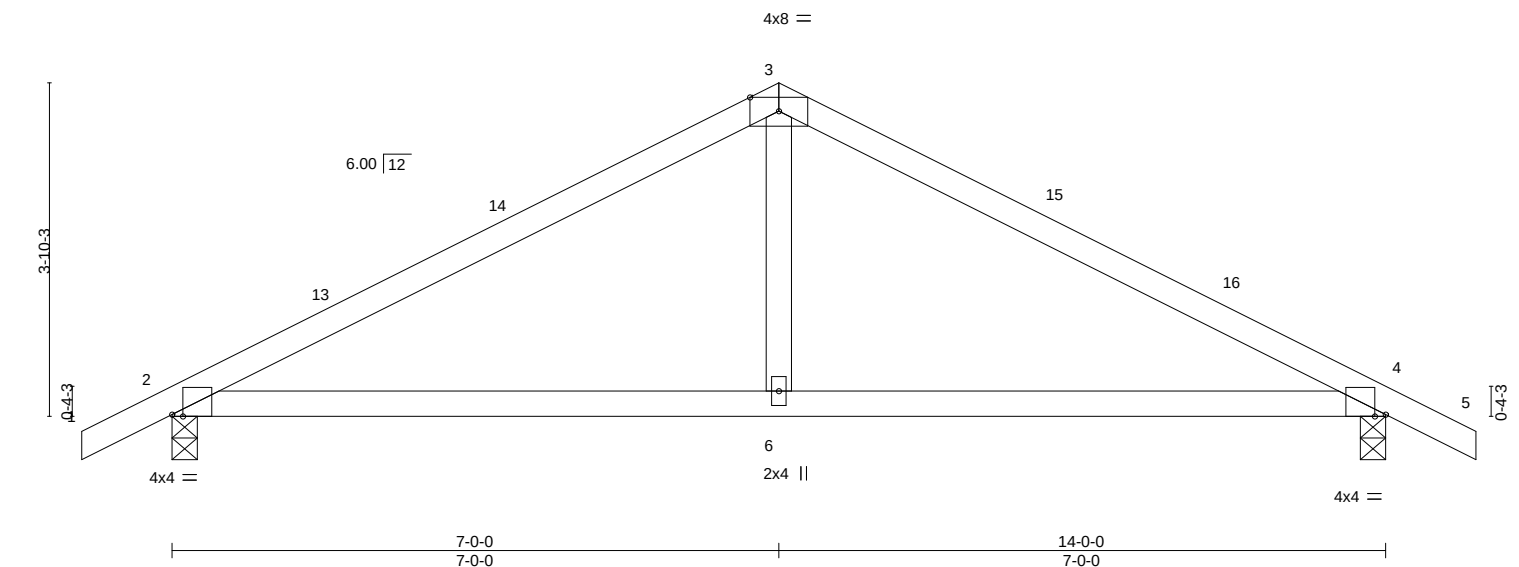


Plate Offsets (X,Y)--		[2:0-1-8,Edge], [4:0-1-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.52
TCDL 10.0	Lumber DOL	1.15	BC 0.49
BCLL 0.0	Rep Stress Incr	YES	WB 0.07
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.09 6-9 >999 240
			Vert(CT) -0.15 6-9 >999 180
			Horz(CT) 0.01 4 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 40 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 4=0-3-8
Max Horz 2=71(LC 12)
Max Uplift 2=-129(LC 12), 4=-129(LC 13)
Max Grav 2=703(LC 1), 4=703(LC 1)

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

TOP CHORD 2-3=-903/299, 3-4=-903/299
BOT CHORD 2-6=-131/728, 4-6=-131/728
WEBS 3-6=0/321

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 to 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 15-0-8 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=129, 4=129.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



April 15, 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 2701162	Truss J1	Truss Type Jack-Open	Qty 4	Ply 1	SUMMIT/STONE CREEK #79/MO Job Reference (optional)	I45665398
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Builders FirstSource (Valley Center),

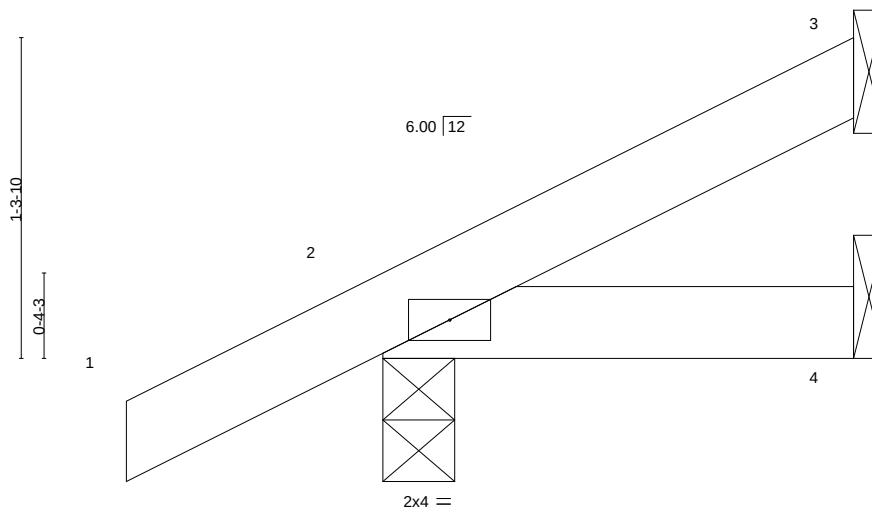
Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:48 2021 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-2Z0EcQ35r9crCWdor6H7zq?11N9tJb1bFt7WeyzQkyb



Scale = 1:9.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	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 1-10-15 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=57(LC 12)
Max Uplift 3=-23(LC 12), 2=-41(LC 12)
Max Grav 3=46(LC 1), 2=178(LC 1), 4=31(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) 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.



April 15, 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

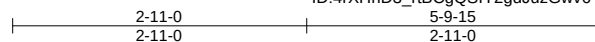
Job 2701162	Truss L1	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO I45665399
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Builders FirstSource (Valley Center),

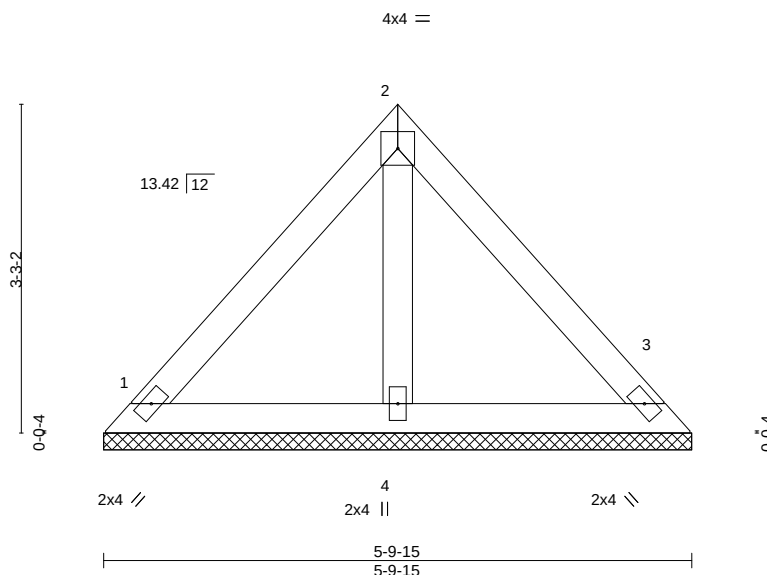
Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:49 2021 Page 1

ID:4rXHhD3_rBcgQSIY2gdJuzGwv6-Xmacpm3kcTkiqfB_OpoMV1YBsnVe22FIUXs3BOzQkya



Scale = 1:22.8



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 0.13	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	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
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-9-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-9-15, 3=5-9-15, 4=5-9-15
Max Horz 1=-78(LC 8)
Max Uplift 1=-42(LC 13), 3=-36(LC 13)
Max Grav 1=145(LC 1), 3=145(LC 1), 4=175(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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.



April 15, 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

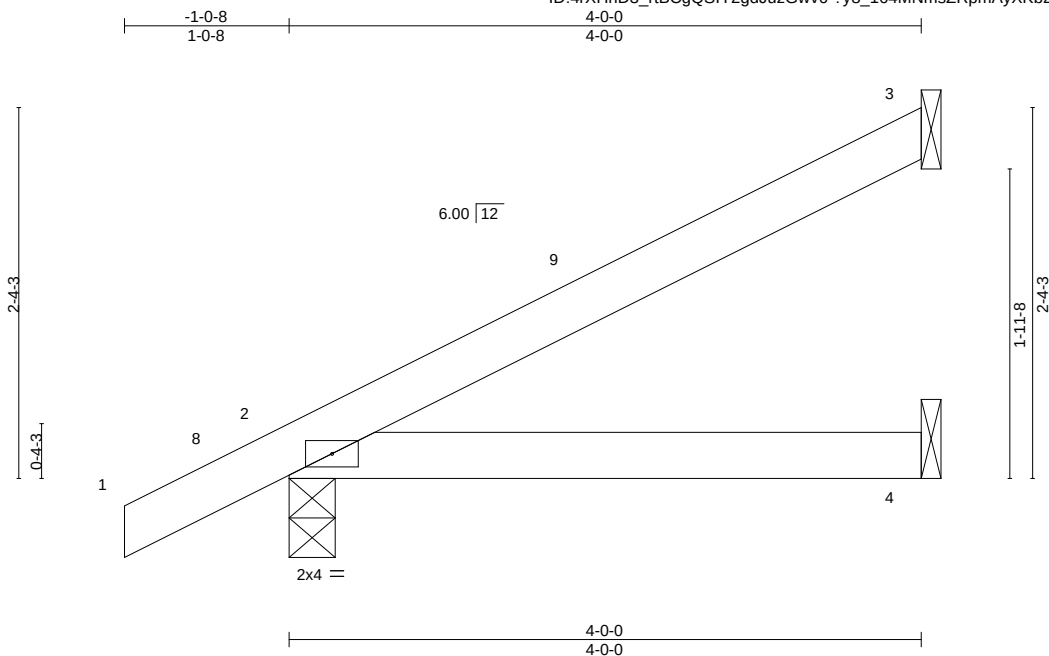
Job 2701162	Truss M1	Truss Type Jack-Open	Qty 4	Ply 1	SUMMIT/STONE CREEK #79/MO I45665400
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:50 2021 Page 1

ID:4rXHhD3_rtbCgQSIY2gdJuzGwv6-?y8_164MNmsZRpmAyXKb2F4LeBoSnVouiBccjqzQkyZ



Scale = 1:14.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	-0.03	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: 11 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 4-0-0 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=99(LC 12)
Max Uplift 3=-59(LC 12), 2=-47(LC 12)
Max Grav 3=115(LC 1), 2=260(LC 1), 4=72(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-8 to 1-11-8, Interior(1) 1-11-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) 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.



April 15, 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



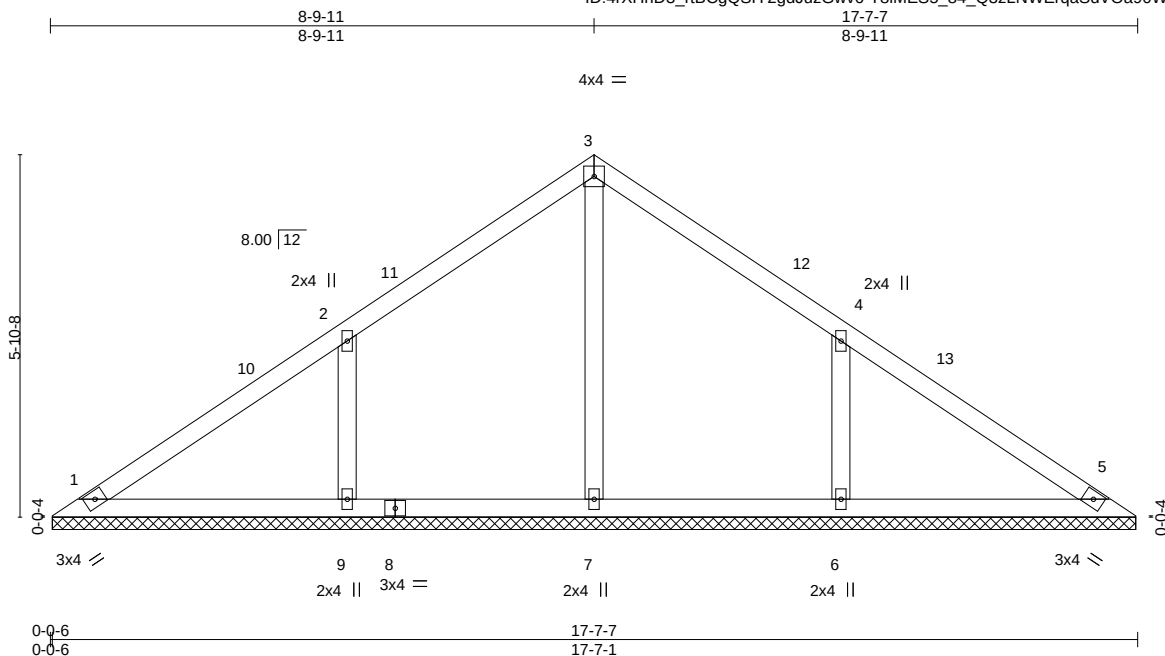
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2701162	Truss V1	Truss Type Valley	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO I45665401
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:51 2021 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGww6-T8iMES5_84_Q3zLNWErqaSdVOa90WxS2xrLAFHzQkyY



Scale = 1:37.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.26	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 55 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 17-6-11.
(lb) - Max Horz 1=-145(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-197(LC 12), 6=-197(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=256(LC 1), 9=467(LC 19), 6=467(LC 20)

FORCES.

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

WEBS

2-9=-361/228, 4-6=-360/227

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=25ft; 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 8-9-11, Exterior(2R) 8-9-11 to 11-9-11, Interior(1) 11-9-11 to 17-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 9=197, 6=197.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 15, 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

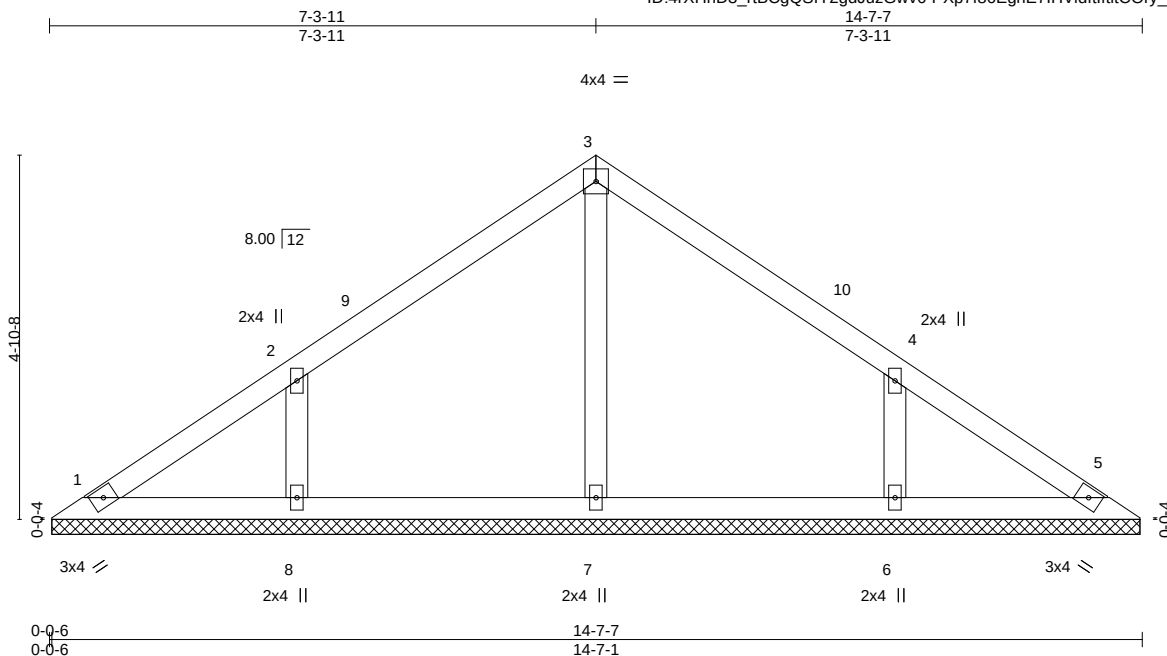


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665402
2701162	V2	Valley	1	1	Job Reference (optional)	

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:53 2021 Page 1
ID:4rXHhD3_rTBcgQSIY2gdJuzGwv6-PXp7f86EghE7IHVldftitCory_rLLP9qGK9zQkyW



Scale = 1:30.8

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 0.17	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 44 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 14-6-11.
(lb) - Max Horz 1=119(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-162(LC 12), 6=-162(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=292(LC 1), 8=377(LC 19), 6=377(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-299/191, 4-6=-299/190

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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-12 to 3-3-11, Interior(1) 3-3-11 to 7-3-11, Exterior(2R) 7-3-11 to 10-3-11, Interior(1) 10-3-11 to 14-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=162, 6=162.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 15, 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 2701162	Truss V3	Truss Type Valley	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO I45665403
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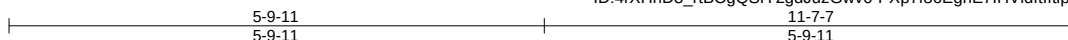
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:53 2021 Page 1

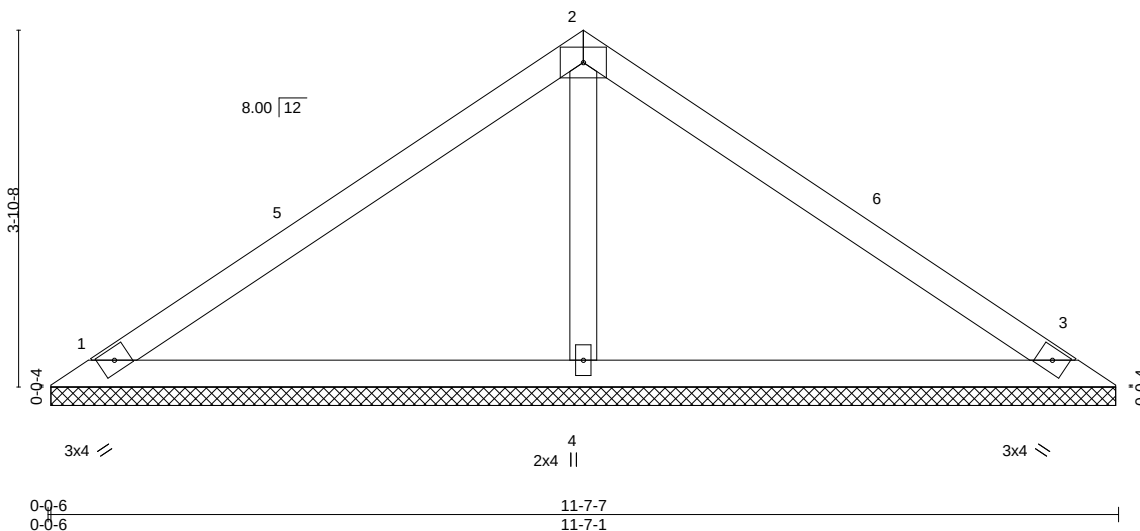
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Job Reference (optional)



4x6 =

Scale = 1:25.0



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 0.41	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 32 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=11-6-11, 3=11-6-11, 4=11-6-11
Max Horz 1=-93(LC 8)
Max Uplift 1=-51(LC 12), 3=-64(LC 13), 4=-47(LC 12)
Max Grav 1=236(LC 1), 3=236(LC 1), 4=488(LC 1)

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

WEBS 2-4=-325/121

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=25ft; 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 5-9-11, Exterior(2R) 5-9-11 to 8-9-11, Interior(1) 8-9-11 to 11-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 15, 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

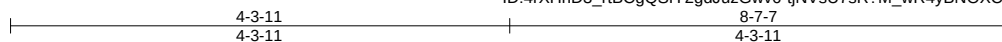
Job 2701162	Truss V4	Truss Type Valley	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO 145665404
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Builders FirstSource (Valley Center),

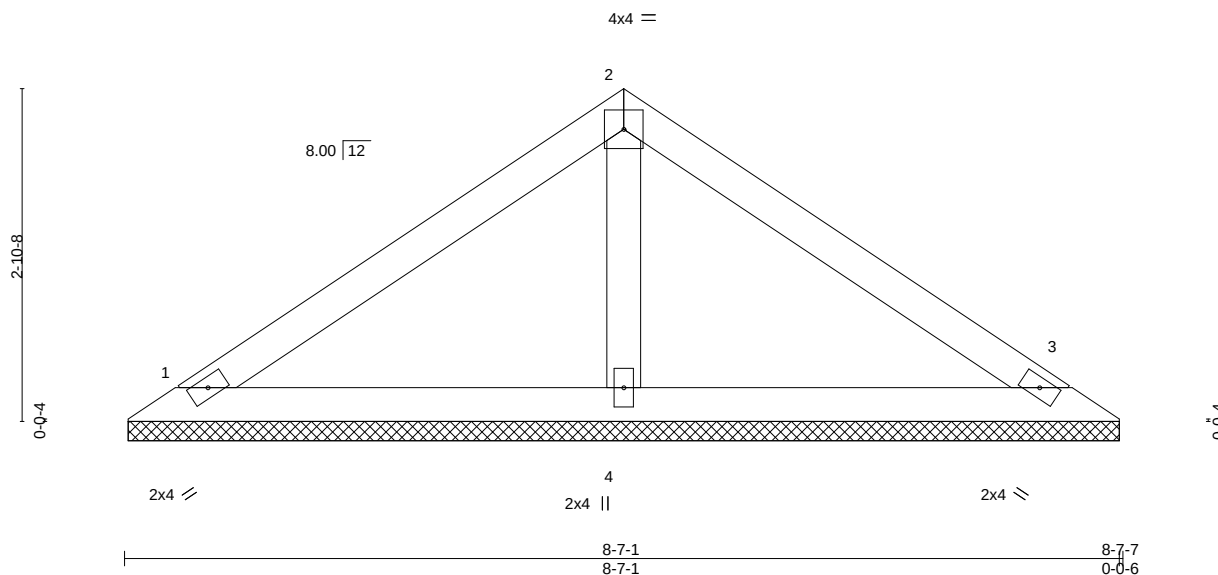
Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:54 2021 Page 1

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Scale = 1:19.9



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 0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	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
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 1=8-6-11, 3=8-6-11, 4=8-6-11
Max Horz 1=67(LC 9)
Max Uplift 1=-46(LC 12), 3=-55(LC 13), 4=-15(LC 12)
Max Grav 1=186(LC 1), 3=186(LC 1), 4=316(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=25ft; 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 4-3-11, Exterior(2R) 4-3-11 to 7-3-11, Interior(1) 7-3-11 to 8-1-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 15, 2021

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

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Chesterfield, MO 63017

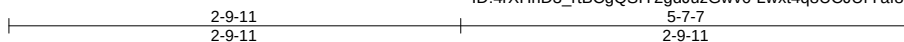
Job 2701162	Truss V5	Truss Type Valley	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO I45665405
Job Reference (optional)					

Builders FirstSource (Valley Center),

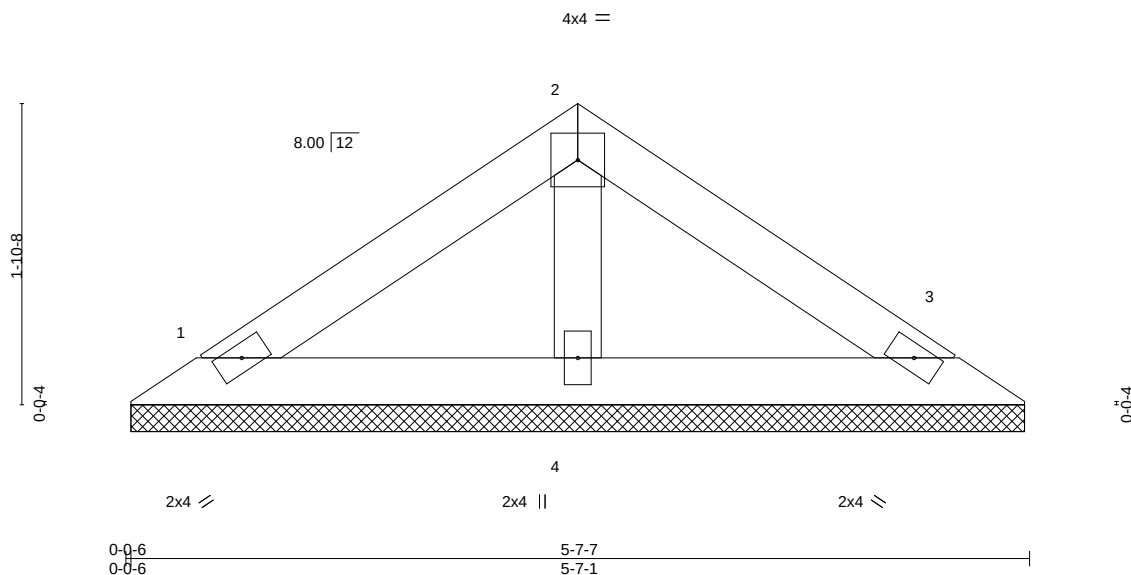
Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:55 2021 Page 1

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Scale = 1:14.3



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 0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 14 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 5-7-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-6-11, 3=5-6-11, 4=5-6-11
Max Horz 1=-41(LC 8)
Max Uplift 1=-28(LC 12), 3=-33(LC 13), 4=-9(LC 12)
Max Grav 1=113(LC 1), 3=113(LC 1), 4=192(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 15, 2021

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

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Chesterfield, MO 63017

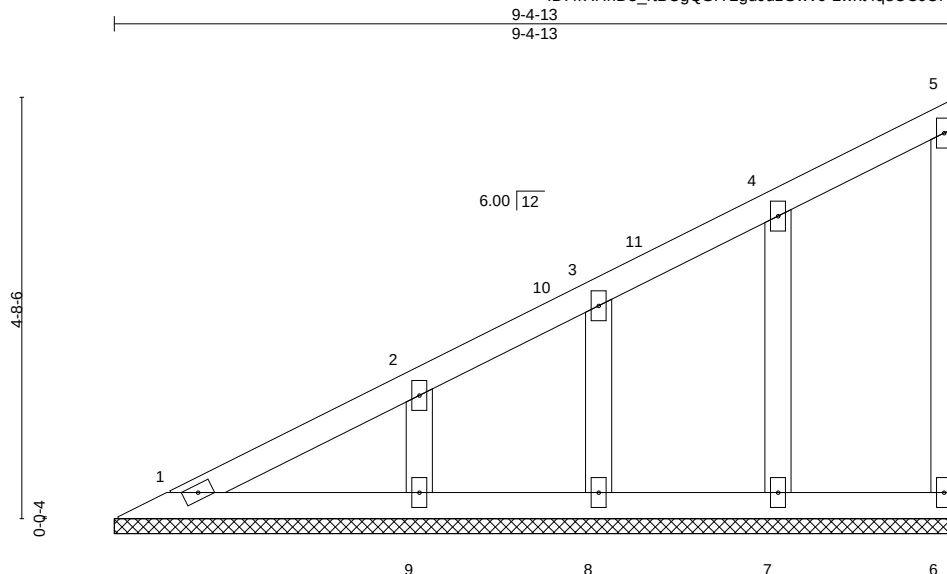
Job 2701162	Truss V6	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO I45665406
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:55 2021 Page 1

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Scale = 1:25.7

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 0.11	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.00	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
									Weight: 34 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 9-4-13.

(lb) - Max Horz 1=180(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 8, 9

Max Grav All reactions 250 lb or less at joint(s) 1, 6, 7, 8 except 9=260(LC 1)

FORCES.

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

TOP CHORD 1-2=-279/173

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-4-13, Interior(1) 3-4-13 to 9-3-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7, 8, 9.
- 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.



April 15, 2021

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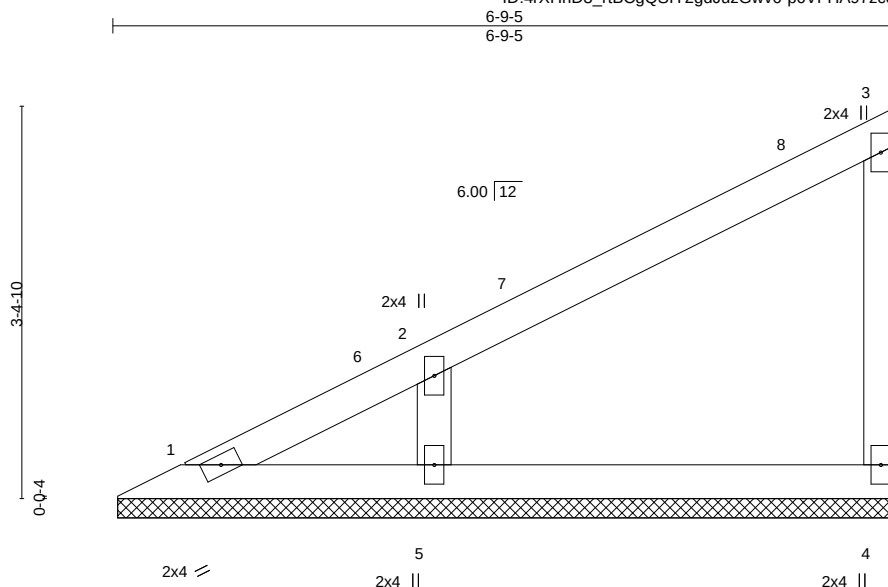
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665407
2701162	V7	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:56 2021 Page 1

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Scale = 1:19.9

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 0.18	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
									Weight: 20 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-8-13, 4=6-8-13, 5=6-8-13
Max Horz 1=125(LC 9)
Max Uplift 4=-29(LC 9), 5=-122(LC 12)
Max Grav 1=59(LC 20), 4=141(LC 1), 5=361(LC 1)

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

WEBS 2-5=-281/267

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-7-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=122.
- 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.



April 15, 2021

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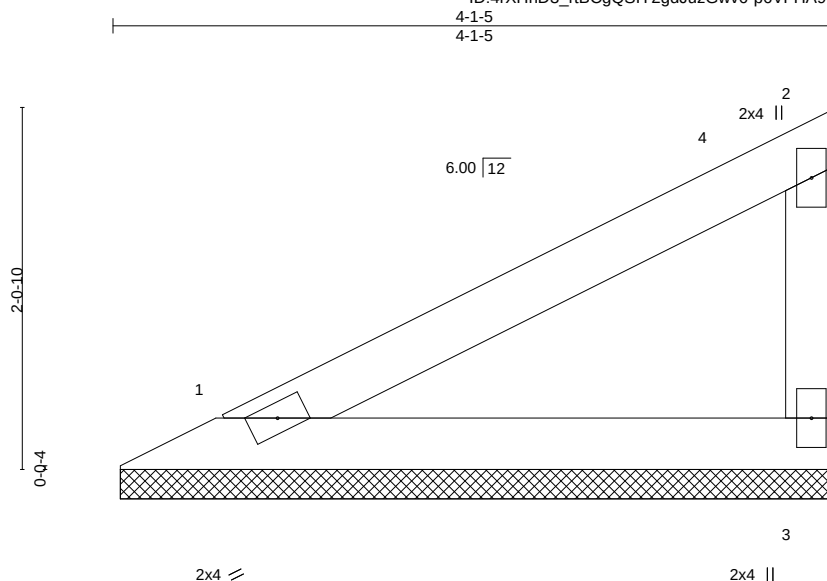
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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Chesterfield, MO 63017



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) n/a -	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) n/a -	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P				Weight: 11 lb	FT = 20%

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

REACTIONS. (size) 1=4-0-13, 3=4-0-13
 Max Horz 1=70(LC 9)
 Max Uplift 1=-25(LC 12), 3=-43(LC 12)
 Max Grav 1=150(LC 1), 3=150(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 3-11-9 zone; cantilever left and right exposed; and 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.



April 15, 2021

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

WARNING – Verify design parameters listed in **NOTES ON THIS AND INCLUDED WELDER REFERENCE PAGE MP-743.161, 3/29/2020** 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

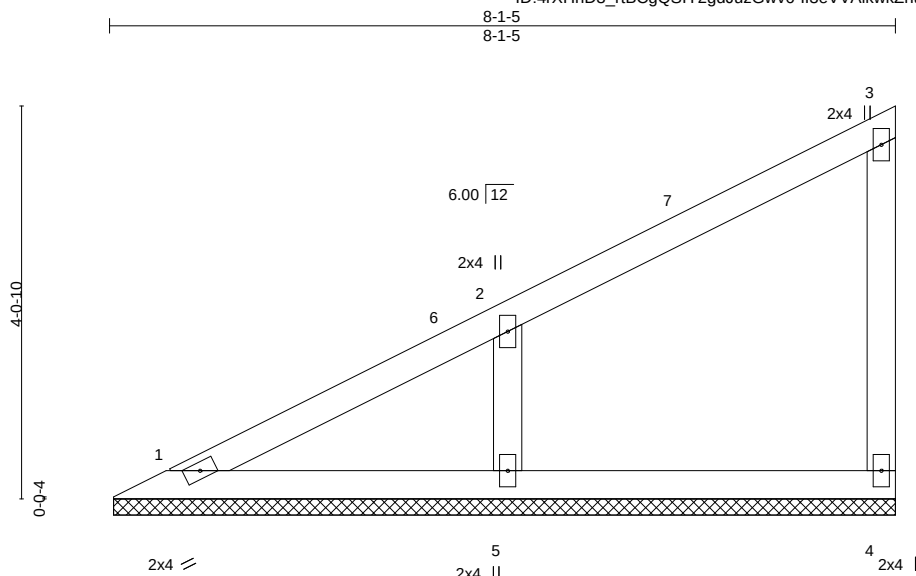
Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665409
2701162	V9	Valley	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-Il3eVVAkwkZnupWsVyEqjtYT?CewgowJmoUTwzQkyS



Scale: 1/2"=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 0.22	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 24 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=8-0-13, 4=8-0-13, 5=8-0-13
Max Horz 1=153(LC 9)
Max Uplift 4=-31(LC 9), 5=-129(LC 12)
Max Grav 1=119(LC 20), 4=134(LC 1), 5=413(LC 1)

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

TOP CHORD 1-2=-255/160
WEBS 2-5=-321/268

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-11-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=129.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #79/MO	I45665410
2701162	V10	Valley	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

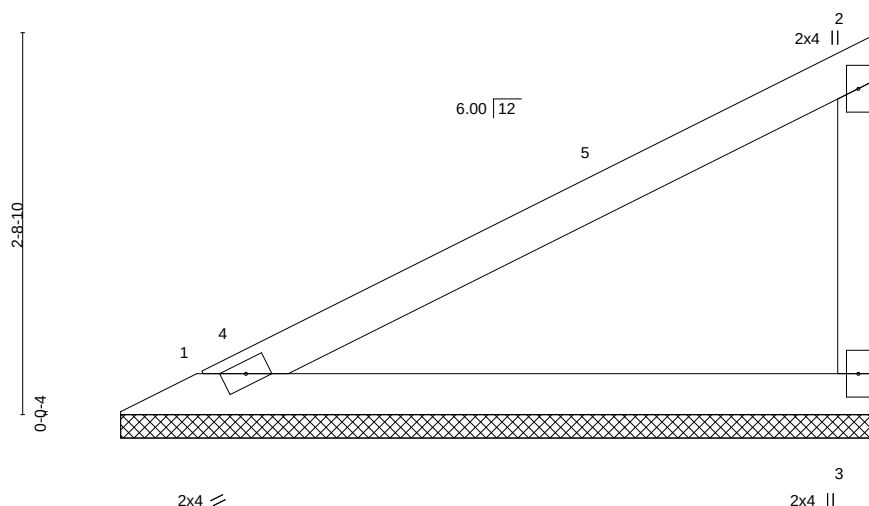
8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 14 16:42:51 2021 Page 1

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5-5-5

5-5-5

Scale = 1:16.4



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 0.42	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 15 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-5-5 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=5-4-13, 3=5-4-13

Max Horz 1=97(LC 9)

Max Uplift 1=-35(LC 12), 3=-60(LC 12)

Max Grav 1=210(LC 1), 3=210(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-3-9 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) 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.



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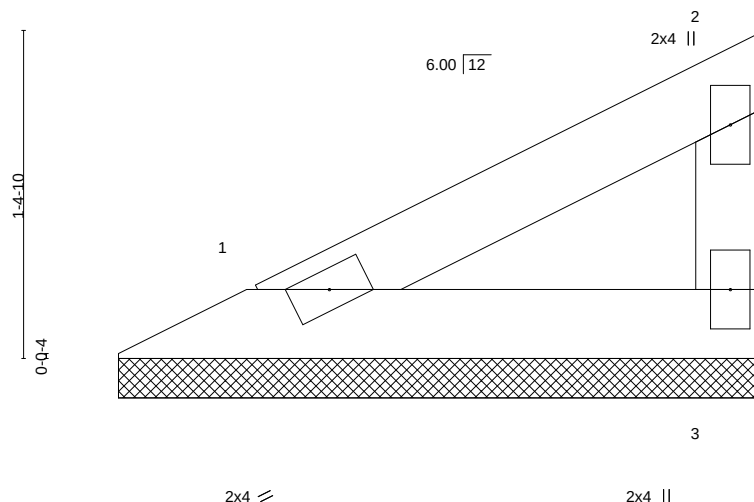
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Chesterfield, MO 63017

Job 2701162	Truss V11	Truss Type Valley	Qty 1	Ply 1	SUMMIT/STONE CREEK #79/MO I45665411
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

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ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-xLFISo6cvO6Gh7wZ4yM37gAj8_WhFPiBAV5jnizQkyX

2-9-5
2-9-5

Scale = 1:9.7



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 0.07	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	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: 7 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-8-13, 3=2-8-13
Max Horz 1=42(LC 9)
Max Uplift 1=-15(LC 12), 3=-26(LC 12)
Max Grav 1=90(LC 1), 3=90(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) 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.



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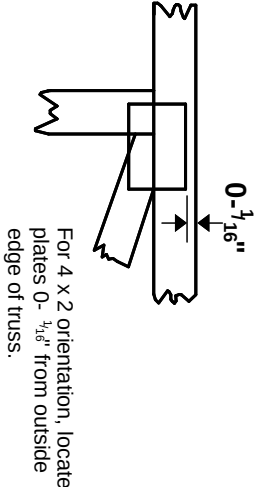
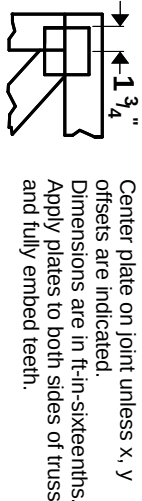
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Symbols

PLATE LOCATION AND ORIENTATION



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

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

PLATE SIZE

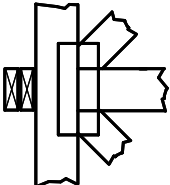
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

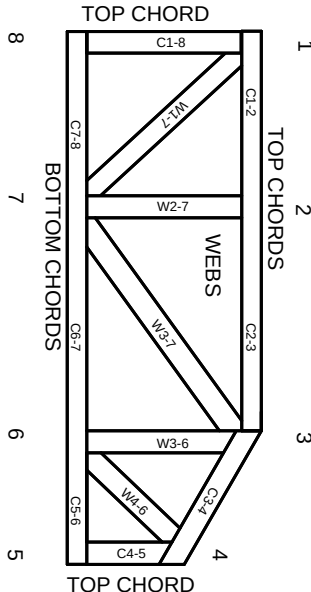


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:
ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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 T or 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.