



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

Re: 2894229
SUMMIT/STONE CREEK #126/MO

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

Pages or sheets covered by this seal: I47327096 thru I47327120

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

Missouri COA: Engineering 001193



August 5, 2021

Johnson, Andrew ,Engineer

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

Job 2894229	Truss A1	Truss Type Common Supported Gable	Qty 1	Ply 1	SUMMIT/STONE CREEK #126/MO 147327096
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 11:59:57 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-7CkwI4nmaWMmsK5l2PhHkWFZgDWT1uqtTX164UyqvJm

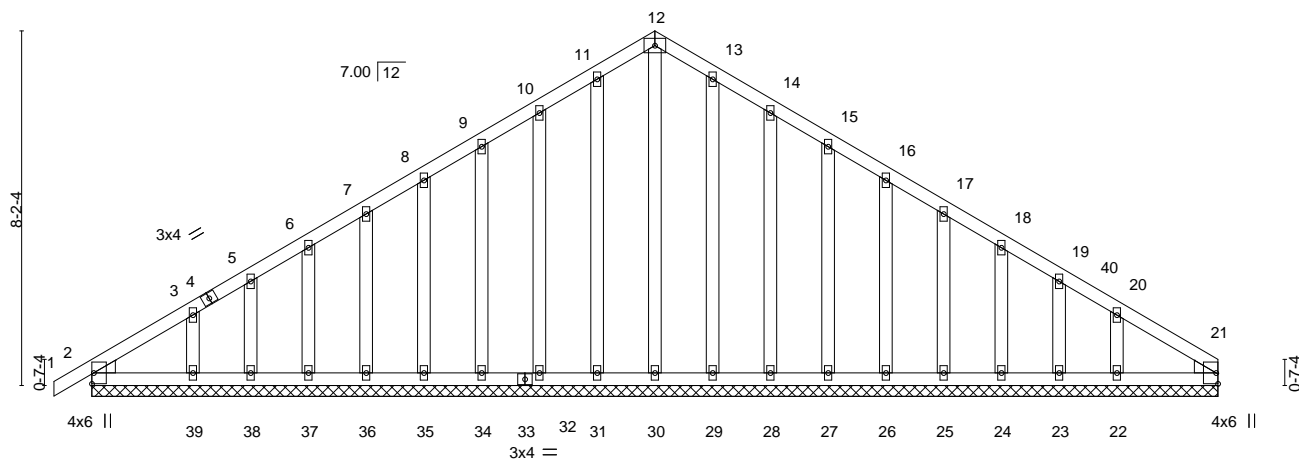
0-10-8
0-10-8

13-0-0
13-0-0

26-0-0
13-0-0

4x6 =

Scale = 1:53.2



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 0.06	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.01	21	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 151 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.

REACTIONS.

All bearings 26-0-0.

(lb) - Max Horz 2=188(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 2, 31, 32, 34, 35, 36, 37, 38, 39, 29, 28, 27, 26, 25, 24, 23, 22

Max Grav All reactions 250 lb or less at joint(s) 2, 30, 31, 32, 34, 35, 36, 37, 38, 39, 29, 28, 27, 26, 25, 24, 23, 22, 21

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-4-0, Exterior(2N) 2-4-0 to 13-0-0, Corner(3R) 13-0-0 to 16-0-0, Exterior(2N) 16-0-0 to 26-0-0 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, 31, 32, 34, 35, 36, 37, 38, 39, 29, 28, 27, 26, 25, 24, 23, 22.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss A2	Truss Type Roof Special	Qty 1	Ply 1	SUMMIT/STONE CREEK #126/MO 147327097
----------------	-------------	----------------------------	----------	----------	---

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

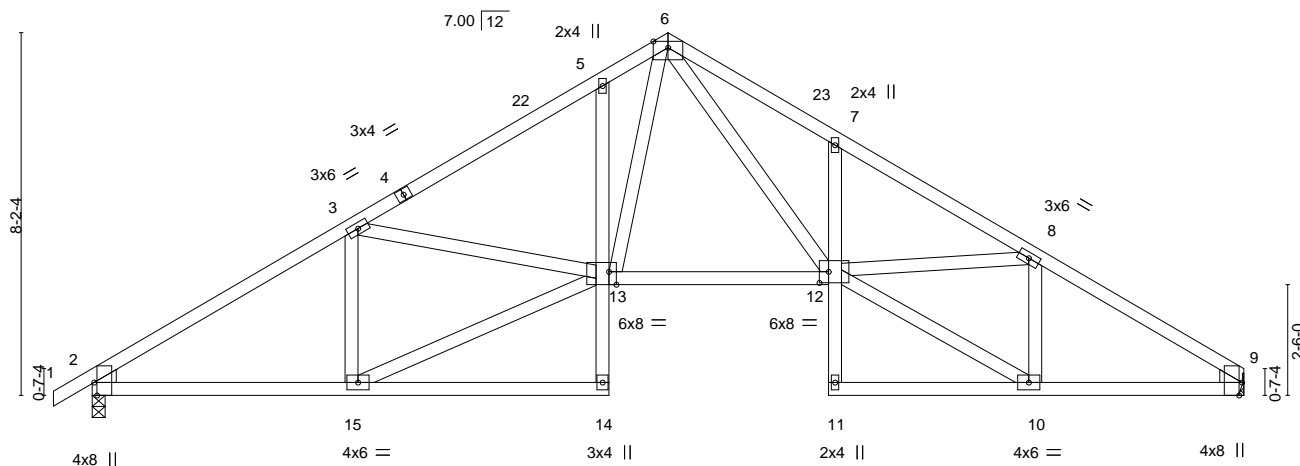
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 11:59:59 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-3bsgimp158cU5eE89gkpxlqo15TVk8AwrWD8MyqvJk

0-10-8 5-10-4 11-8-0 13-0-0 16-7-8 21-3-8 26-0-0
0-10-8 5-10-4 5-9-12 1-4-0 3-7-8 4-8-0 4-8-8

5x8 =

Scale = 1:52.0



5-10-4 11-8-0 16-7-8 21-3-8 26-0-0
5-10-4 5-9-12 4-11-8 4-8-0 4-8-8

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [9:0-3-8,Edge], [12:0-2-8,0-3-0], [13:0-2-0,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.14	12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.27	12-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.15	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 124 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.

REACTIONS.

(size) 2=0-3-8, 9=Mechanical
Max Horz 2=186(LC 11)
Max Uplift 2=-158(LC 12), 9=-141(LC 13)
Max Grav 2=1232(LC 1), 9=1169(LC 1)

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

TOP CHORD 2-3=-1806/220, 3-5=-2058/256, 5-6=-1978/328, 6-7=-2628/351, 7-8=-2634/279,
8-9=-1826/224
BOT CHORD 2-15=-233/1476, 5-13=-273/141, 12-13=-68/1417, 7-12=-298/154, 9-10=-130/1503
WEBS 3-15=-550/146, 13-15=-257/1590, 3-13=0/258, 6-12=-238/1381, 6-13=-228/997,
8-10=-769/108, 10-12=-146/1677, 8-12=-33/711

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-0-0, Exterior(2R) 13-0-0 to 16-0-0, Interior(1) 16-0-0 to 26-0-0 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=158, 9=141.
- This truss 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.



August 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

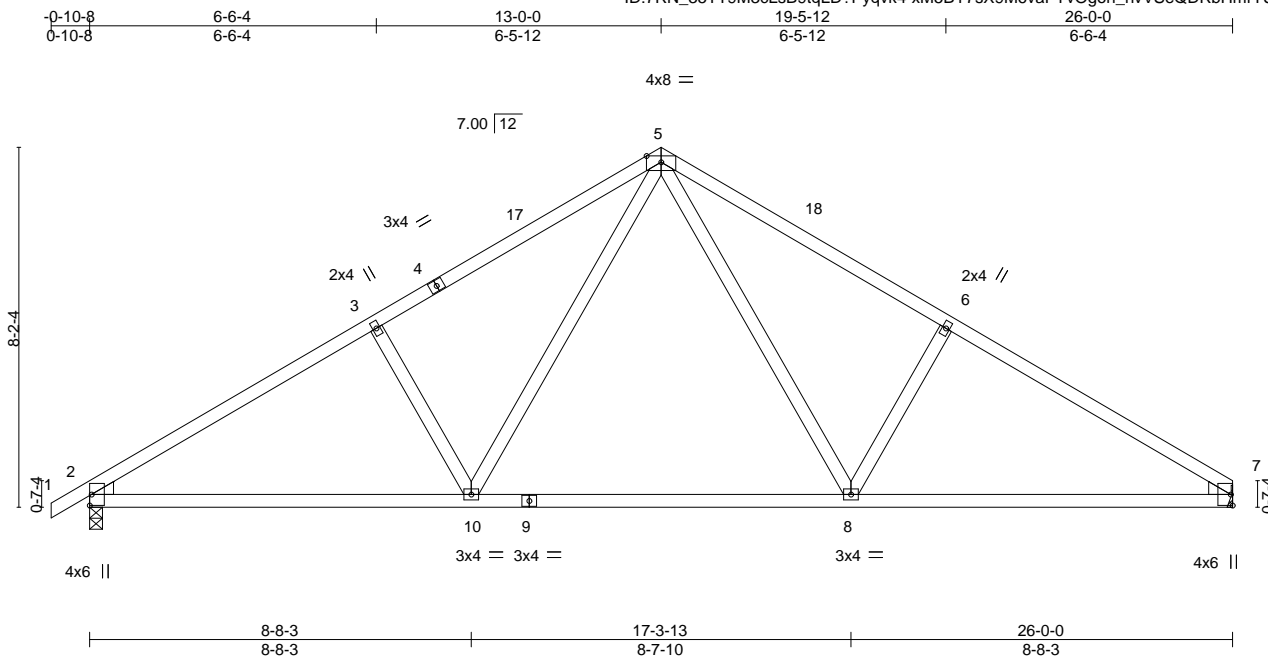
Job 2894229	Truss A3	Truss Type Common	Qty 8	Ply 1	SUMMIT/STONE CREEK #126/MO 147327098
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:03 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-xM5BY7sX9M6vaFYvOgoh_nvVSeQDRbHmrTUQH7yqvJg



Scale = 1:52.4

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)	-0.09 8-10	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.59	Vert(CT)	-0.21 8-10	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.05 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 96 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

REACTIONS.

(size) 2=0-3-8, 7=Mechanical

Max Horz 2=186(LC 11)

Max Uplift 2=158(LC 12), 7=141(LC 13)

Max Grav 2=1232(LC 1), 7=1169(LC 1)

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

TOP CHORD 2-3=-1775/228, 3-5=-1576/273, 5-6=-1580/275, 6-7=-1779/230

BOT CHORD 2-10=-233/1447, 8-10=-56/978, 7-8=-121/1452

WEBS 5-8=-146/617, 6-8=-418/223, 5-10=-145/612, 3-10=-415/223

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-0-0, Exterior(2R) 13-0-0 to 16-0-0, Interior(1) 16-0-0 to 26-0-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=158, 7=141.

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.



August 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss A4	Truss Type Roof Special	Qty 1	Ply 1	SUMMIT/STONE CREEK #126/MO 147327099
Job Reference (optional)					

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

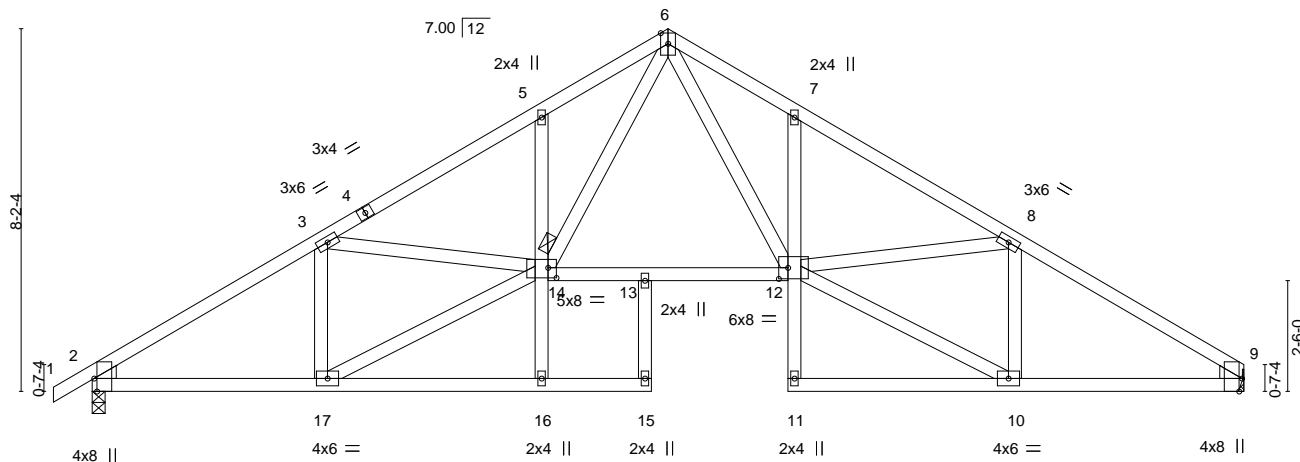
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:05 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-ulDxzptoh_MdpZiIW5q93C?sKS7pvSk3lnzXM0yqvJe

0-10-8 5-2-0 6-4-0 10-3-8 12-7-8 13-0-0 15-8-8 20-10-0 26-0-0
0-10-8 5-2-0 1-2-0 3-11-8 2-4-0 0-4-8 2-8-8 5-1-8 5-2-0

4x6 ||

Scale = 1:52.0



5-2-0 6-4-0 10-3-8 12-7-8 15-8-8 20-10-0 26-0-0
5-2-0 1-2-0 3-11-8 2-4-0 3-1-0 5-1-8 5-2-0

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [9:0-3-8,Edge], [12:0-2-8,0-3-0], [14:0-2-4,0-2-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.14 12-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.27 12-13	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.14 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 128 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.
JOINTS 1 Brace at Jt(s): 14

REACTIONS.

(size) 2=0-3-8, 9=Mechanical
Max Horz 2=186(LC 11)
Max Uplift 2=-158(LC 12), 9=-141(LC 13)
Max Grav 2=1232(LC 1), 9=1169(LC 1)

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

TOP CHORD 2-3=-1816/223, 3-5=-2326/280, 5-6=-2291/368, 6-7=-2336/322, 7-8=-2372/260,
8-9=-1823/224
BOT CHORD 2-17=-244/1491, 13-14=-54/1382, 12-13=-67/1407, 7-12=-281/145, 9-10=-124/1497
WEBS 8-10=-674/104, 5-14=-288/151, 6-14=-245/1159, 6-12=-211/1200, 3-17=-649/148,
14-17=-259/1611, 3-14=0/446, 10-12=-140/1647, 8-12=-18/495

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-0-0, Exterior(2R) 13-0-0 to 15-11-2, Interior(1) 15-11-2 to 26-0-0 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=158, 9=141.
- This truss 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.



August 5, 2021

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

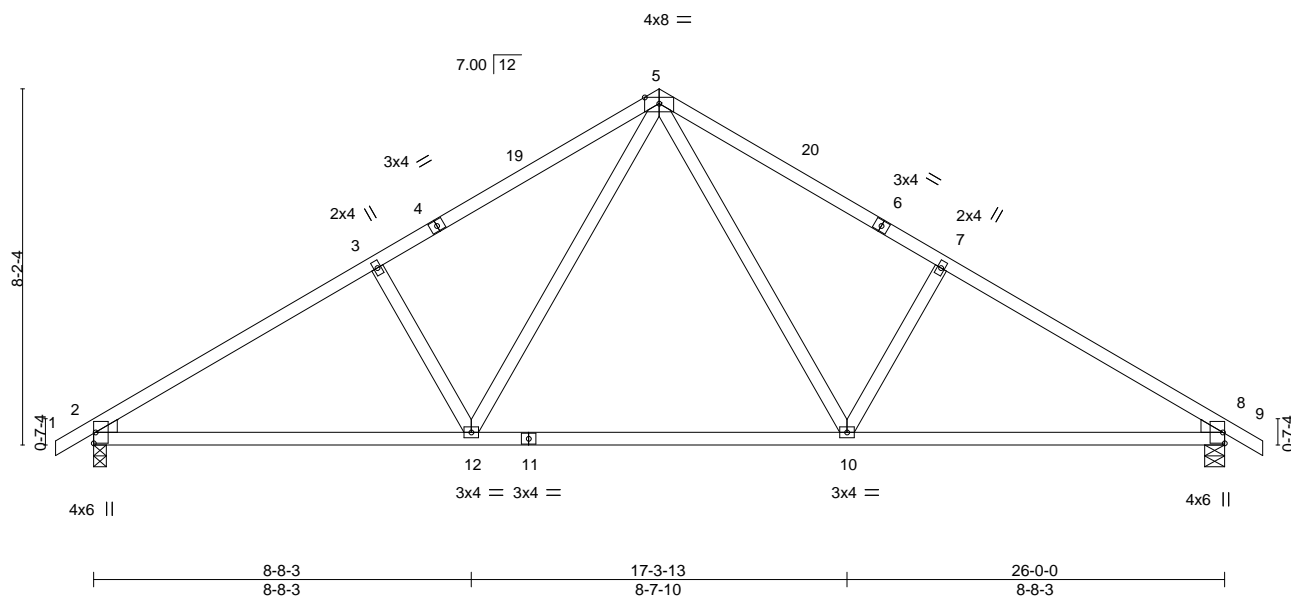
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss A5	Truss Type Common	Qty 6	Ply 1	SUMMIT/STONE CREEK #126/MO 147327100
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:07 2021 Page 1
 ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-q8LiOVv2DbdL3srgdWtd8d4BUFnBNPIMm5SeQuyvqJc



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) -0.09 10-12 >999 240	MT20	197/144
TCDL 10.0		Lumber DOL 1.15	BC 0.58	Vert(CT) -0.22 10-12 >999 180		
BCLL 0.0		Rep Stress Incr YES	WB 0.21	Horz(CT) 0.05 8 n/a n/a		
BCDL 10.0		Code IRC2018/TPI2014	Matrix-AS		Weight: 98 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

REACTIONS.

(size) 2=0-3-8, 8=0-5-8
 Max Horz 2=190(LC 11)
 Max Uplift 2=158(LC 12), 8=158(LC 13)
 Max Grav 2=1231(LC 1), 8=1231(LC 1)

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

TOP CHORD 2-3=-1773/228, 3-5=-1575/273, 5-7=-1575/273, 7-8=-1773/228
 BOT CHORD 2-12=-225/1446, 10-12=-48/976, 8-10=-104/1446
 WEBS 5-10=-145/612, 7-10=-415/223, 5-12=-145/612, 3-12=-415/223

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-0-0, Exterior(2R) 13-0-0 to 16-0-0, Interior(1) 16-0-0 to 26-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) except (jt=lb) 2=158, 8=158.
- 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.



August 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

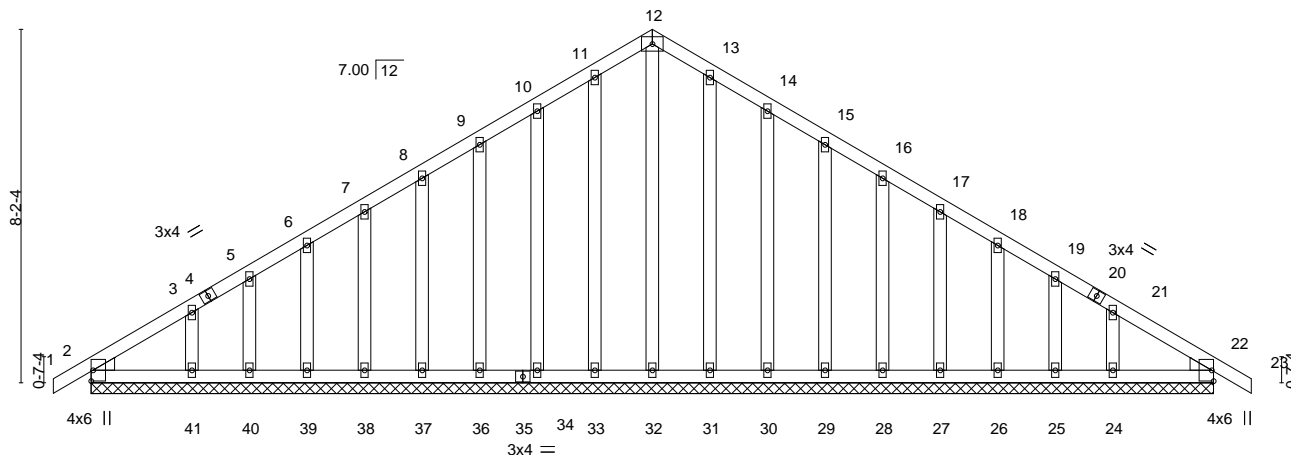
Job 2894229	Truss A6	Truss Type Common Supported Gable	Qty 1	Ply 1	SUMMIT/STONE CREEK #126/MO 147327101
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

0-10-8 13-0-0 26-0-0 26-10-8
0-10-8 13-0-0 13-0-0 0-10-8

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:10 2021 Page 1
ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-Ei0q0WxwWW?wwKaFJeQKmGioPTyXan_oS3gl1DyqvJZ

4x6 =

Scale = 1:53.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	0.00 22	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00 22	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.01 22	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 152 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

REACTIONS.

All bearings 26-0-0.

(lb) - Max Horz 2=190(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 41, 31, 30, 29, 28, 27, 26, 25, 24

Max Grav All reactions 250 lb or less at joint(s) 2, 32, 33, 34, 36, 37, 38, 39, 40, 41, 31, 30, 29, 28, 27, 26, 25, 24, 22

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-4-0, Exterior(2N) 2-4-0 to 13-0-0, Corner(3R) 13-0-0 to 16-0-0, Exterior(2N) 16-0-0 to 26-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 33, 34, 36, 37, 38, 39, 40, 41, 31, 30, 29, 28, 27, 26, 25, 24.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss B1	Truss Type Common Structural Gable	Qty 1	Ply 1	SUMMIT/STONE CREEK #126/MO 147327102
Job Reference (optional)					

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

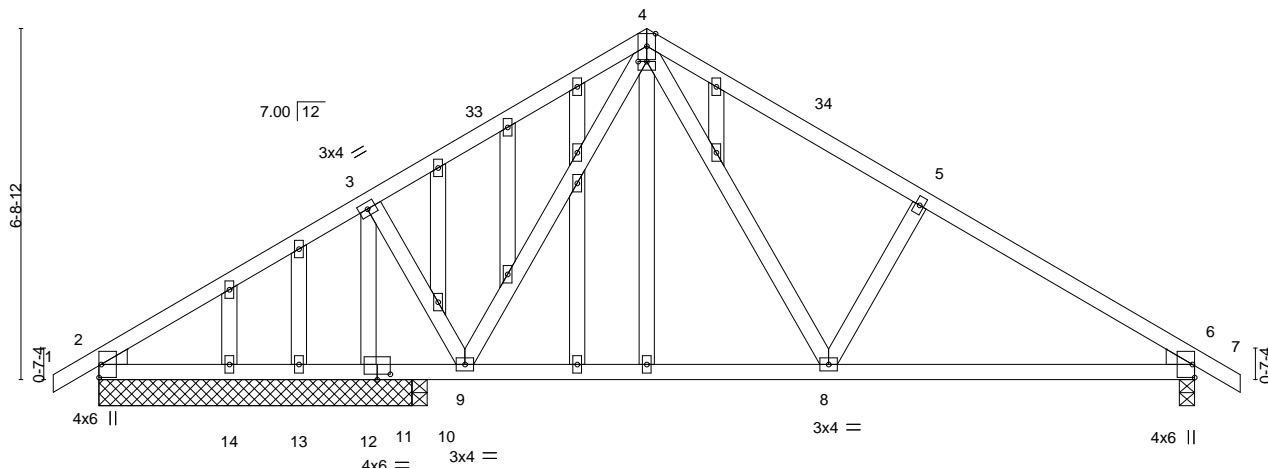
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:12 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-B58bRCzB27Fe9dkeQ3Sorhn4ZGTg2hS5vN9P66yqvJX

0-10-8 5-3-4 10-6-0 15-8-12 21-0-0 21-10-8
0-10-8 5-3-4 5-2-12 5-2-12 5-3-4 0-10-8

4x6 ||

Scale = 1:44.2



6-0-0 7-0-3 13-11-13 21-0-0
6-0-0 1-0-3 6-11-10 7-0-3

Plate Offsets (X,Y)-- [4:0-2-0,0-0-0], [11:0-3-0,0-1-4]									
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	0.27	Vert(LL)	-0.06 8-9 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.14 8-9 >999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.02 6 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS					
								Weight: 109 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 , Right: 2x4 SPF No.2

BRACING-

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

REACTIONS.

All bearings 6-0-0 except (jt=length) 6=0-3-8, 10=0-3-8.

(lb) - Max Horz 2=-156(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 14 except 6=-118(LC 13),
12=-486(LC 1), 10=-140(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 12, 13, 14 except 2=617(LC 1),
6=841(LC 1), 10=891(LC 1), 2=617(LC 1)

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

TOP CHORD 2-3=-770/101, 3-4=-615/137, 4-5=-953/196, 5-6=-1108/159

BOT CHORD 2-14=-97/617, 13-14=-97/617, 12-13=-97/617, 10-12=-97/617, 9-10=-97/617, 8-9=0/504,
6-8=-53/890

WEBS 4-8=-116/508, 5-8=-330/179, 3-9=-326/178

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-6-0, Exterior(2R) 10-6-0 to 13-6-0, Interior(1) 13-6-0 to 21-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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 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) 2, 14, 2 except (jt=lb) 6=118, 12=486, 10=140.
- 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.



August 5, 2021

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #126/MO	147327103
2894229	B2	Common	2	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

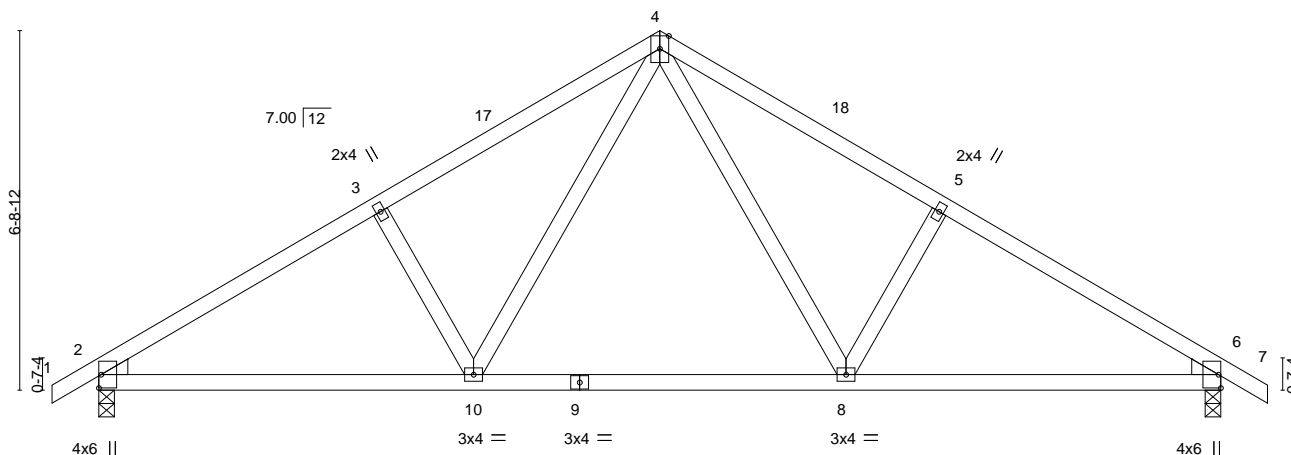
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:14 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqv4-7UGLsu_RZkVLOxu0YUUVGw6sP54DoWbSONgeVA?yqvJV

0-10-8 5-3-4 10-6-0 15-8-12 21-0-0 21-10-8
0-10-8 5-3-4 5-2-12 5-2-12 5-3-4 0-10-8

4x6 ||

Scale = 1:43.1



7-0-3 7-0-3		13-11-13 6-11-10		21-0-0 7-0-3	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.06 8-10 >999 240
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.13 8-10 >999 180
BCLL 0.0	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.03 6 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS		
				PLATES	GRIP
				MT20	197/144
				Weight: 80 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

REACTIONS.

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

Max Horz 2=156(LC 11)

Max Uplift 2=131(LC 12), 6=131(LC 13)

Max Grav 2=1006(LC 1), 6=1006(LC 1)

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

TOP CHORD 2-3=-1403/181, 3-4=-1247/218, 4-5=-1247/218, 5-6=-1403/181

BOT CHORD 2-10=-177/1141, 8-10=-37/781, 6-8=-82/1141

WEBS 4-8=-115/477, 5-8=-323/177, 4-10=-114/477, 3-10=-323/177

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-6-0, Exterior(2R) 10-6-0 to 13-6-0, Interior(1) 13-6-0 to 21-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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) except (jt=lb) 2=131, 6=131.

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.



August 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss B3	Truss Type Roof Special	Qty 5	Ply 1	SUMMIT/STONE CREEK #126/MO 147327104
Job Reference (optional)					

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

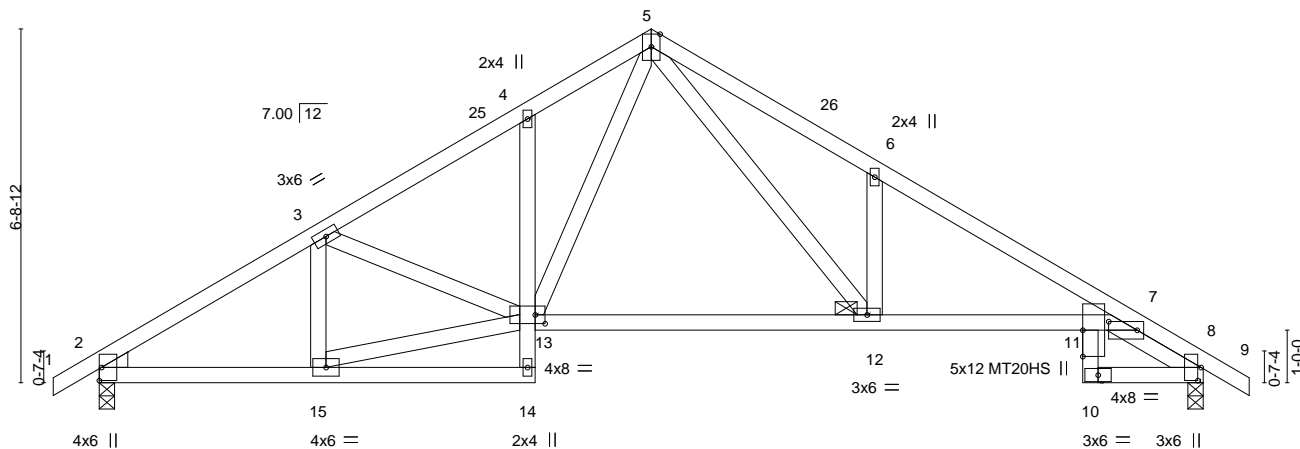
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:15 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-bggj3E?3K2dC05TD5B0VTJPvcUSRF?JXcKO3iRyqvJU

0-10-8	4-2-0	8-3-8	10-6-0	14-7-4	18-8-8	21-0-0	21-10-8
0-10-8	4-2-0	4-1-8	2-2-8	4-1-4	4-1-4	2-3-8	0-10-8

4x6 ||

Scale = 1:43.8



4-2-0	8-3-8	10-6-0	13-6-0	14-7-4	18-8-8	21-0-0
4-2-0	4-1-8	2-2-8	3-0-0	1-1-4	4-1-4	2-3-8

Plate Offsets (X,Y)-- [7:0-6-8,0-1-15], [8:0-3-0,0-0-12], [11:0-6-0,0-0-0], [13:0-2-4,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.18 11-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.88	Vert(CT)	-0.32 11-12	>786	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.27	Horz(CT)	0.13 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 97 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 "Except"
 7-13: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2
 SLIDER Right 2x4 SPF No.2 1-10-14

BRACING-

TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied. Except:
 10-0-0 oc bracing: 12-13, 11-12
 JOINTS 1 Brace at Jt(s): 12

REACTIONS.

(size) 2=0-3-8, 8=0-3-8
 Max Horz 2=156(LC 10)
 Max Uplift 2=130(LC 12), 8=132(LC 13)
 Max Grav 2=999(LC 1), 8=1010(LC 1)

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

TOP CHORD 2-3=-1409/174, 3-4=-1404/186, 4-5=-1374/253, 5-6=-1843/300, 6-7=-1761/186,
 7-8=-955/138
 BOT CHORD 2-15=-183/1152, 12-13=-38/899, 11-12=-77/1510, 7-11=-40/1009, 8-10=-55/501
 WEBS 13-15=-169/1099, 6-12=-446/193, 5-13=-157/648, 5-12=-214/991

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-6-0, Exterior(2R) 10-6-0 to 13-6-0, Interior(1) 13-6-0 to 21-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=130, 8=132.
- 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.



August 5, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #126/MO	147327105
2894229	B4	Common Girder	1	2	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:17 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqv4-X3yUUw1JstwFPcbDc2zYkUp_HFLjn5q3et9nJyqvJS

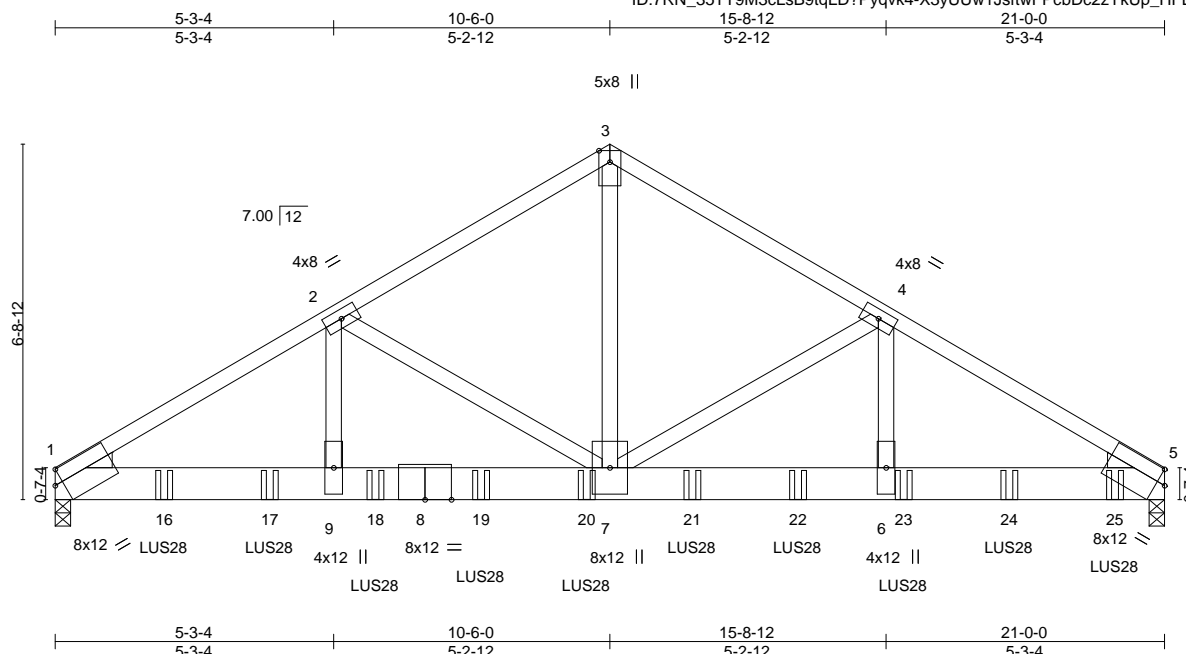


Plate Offsets (X,Y)-- [1:Edge,0-3-3], [5:Edge,0-3-3]							
LOADING (psf)	SPACING	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.74	Vert(LL)	-0.14	7-9	>999
TCDL 10.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.24	7-9	>999
BCLL 0.0	Rep Stress Incr	NO	WB 0.83	Horz(CT)	0.04	5	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS				
				PLATES		GRIP	
				MT20		197/144	
				Weight: 241 lb		FT = 20%	

LUMBER-

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

Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-2-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
Max Horz 1=144(LC 25)
Max Uplift 1=820(LC 8), 5=900(LC 9)
Max Grav 1=6382(LC 1), 5=6998(LC 1)

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

TOP CHORD 1-2=-10124/1306, 2-3=-7153/963, 3-4=-7154/964, 4-5=-10205/1318
BOT CHORD 1-9=-1154/8675, 7-9=-1154/8675, 6-7=-1068/8747, 5-6=-1068/8747
WEBS 3-7=-862/6744, 4-7=-3129/517, 4-6=-327/2827, 2-7=-3043/505, 2-9=-315/2747

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 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=820, 5=900.
- This truss 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 LUS28 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 20-0-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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



August 5, 2021

Continued on page 2

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #126/MO	I47327105
2894229	B4	Common Girder	1	2	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:17 2021 Page 2
ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-X3yUUw1JsftwFPcbDc2zYkUp_HFLjn5q3et9nJyqvJS

LOAD CASE(S) Standard

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 16=-1149(B) 17=-1149(B) 18=-1149(B) 19=-1149(B) 20=-1149(B) 21=-1149(B) 22=-1149(B) 23=-1149(B) 24=-1149(B) 25=-1150(B)

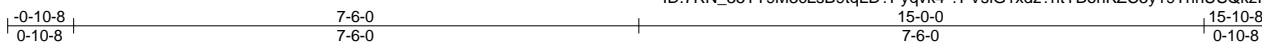


Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #126/MO	147327106
2894229	B5	Common Supported Gable	1	1	Job Reference (optional)	

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

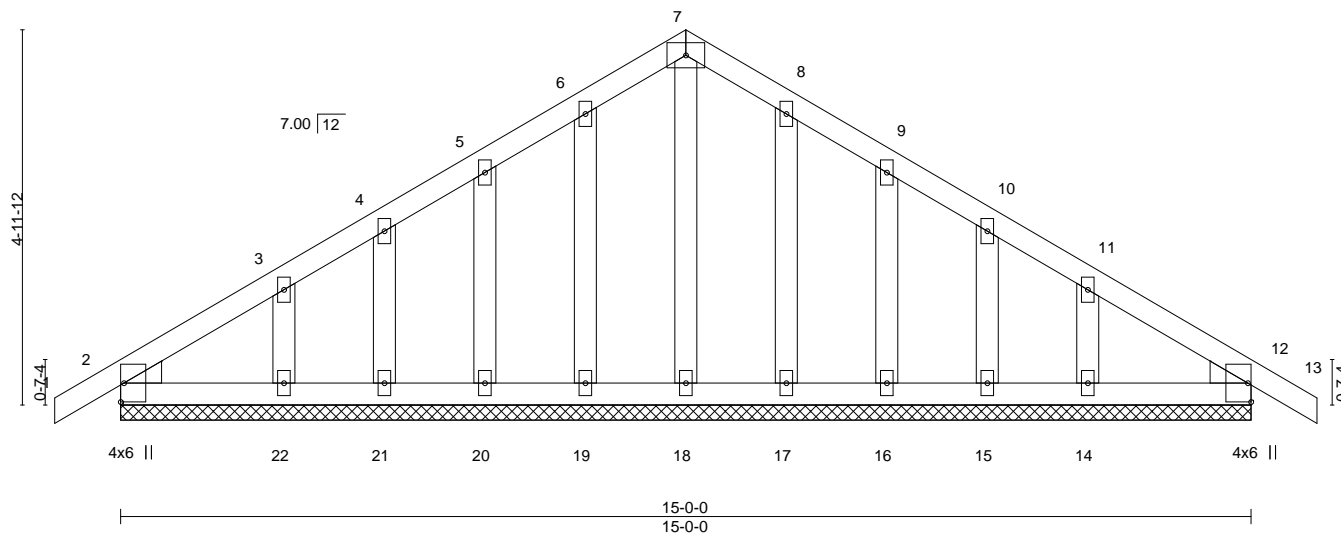
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:18 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-?FVsiG1xdz?ntYBonKZC5y19ThhUSQkzIcJmyqvJR



4x6 =

Scale = 1:30.6



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 0.05	Vert(LL)	-0.00	12	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	12	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 68 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.

REACTIONS.

All bearings 15-0-0.

(lb) - Max Horz 2=-115(LC 10)

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-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-2-0, Exterior(2N) 2-2-0 to 7-6-0, Corner(3R) 7-6-0 to 10-6-0, Exterior(2N) 10-6-0 to 15-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) 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) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14.

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.



August 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

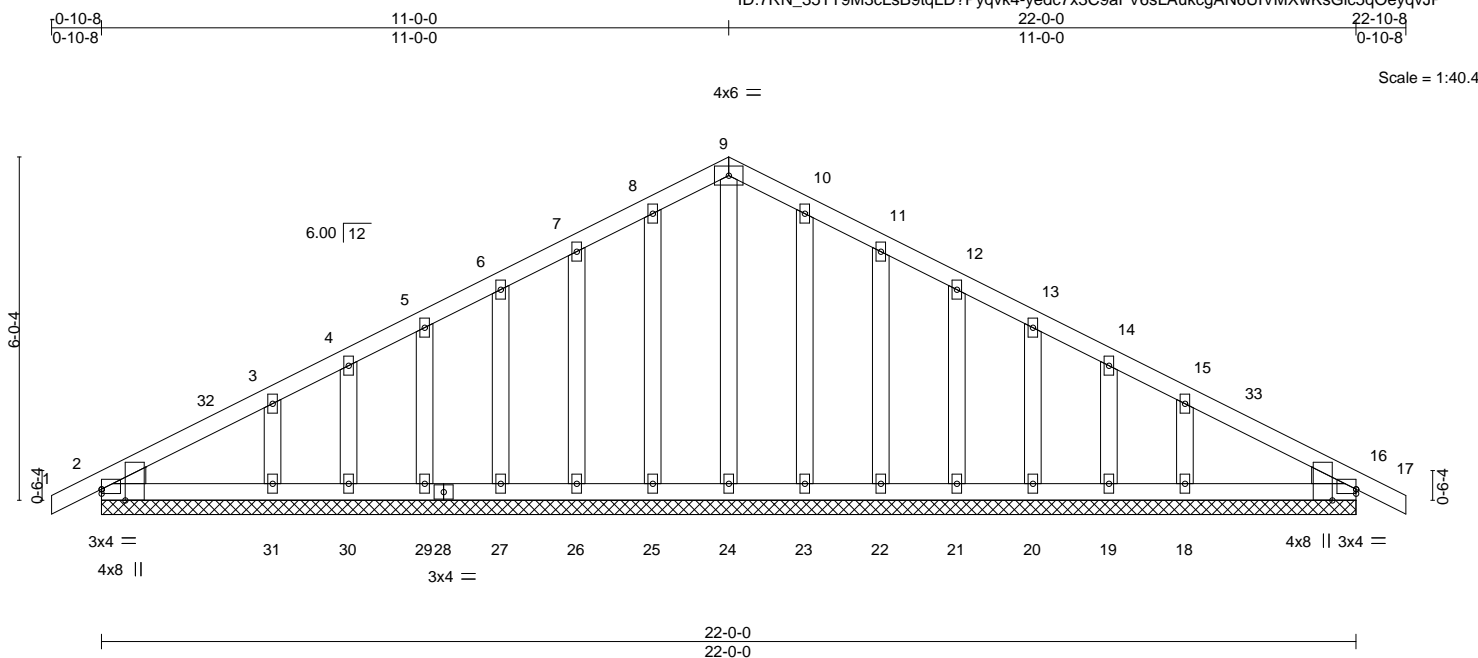


Plate Offsets (X,Y)-- [2:0-0,0-0-15], [2:0-2-5,Edge], [16:0-0-0,0-0-15], [16:0-2-5,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d					PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	17	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	0.00	17	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 106 lb	FT = 20%

LUMBER-

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

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.

REACTIONS.

DNS. All bearings 22-0-0.
(lb) - Max Horz 2=94(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 29, 30, 23, 22, 21, 20, 19, 16 except
31=256(LC 25). 18=256(LC 26)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 11-0-0, Corner(3R) 11-0-0 to 14-0-0, Exterior(2N) 14-0-0 to 22-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) 2, 25, 26, 27, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16.
- 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.



August 5, 2021

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

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

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 #126/MO	147327108
2894229	C2	Common	4	1		

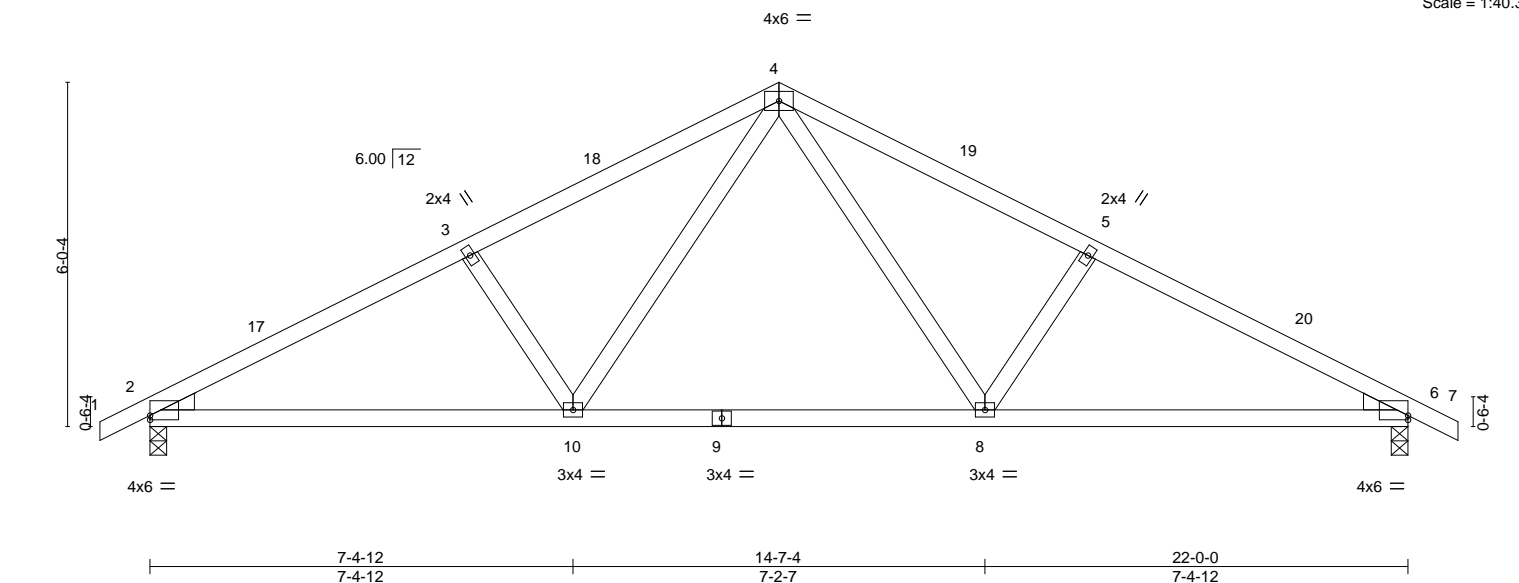
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:21 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-QqB_KH4qwuNMk0wNSS7vjafoqvBsfzP_GrNw5yqvJO

0-10-8 5-7-3 11-0-0 16-4-13 22-0-0 22-10-8
0-10-8 5-7-3 5-4-13 5-4-13 5-7-3 0-10-8

Scale = 1:40.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.30	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(LL) -0.08 8-10 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.16 8-10 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.04 6 n/a n/a		
	Code IRC2018/TPI2014			Weight: 80 lb	FT = 20%

LUMBER-

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

Left: 2x4 SP No.3, Right: 2x4 SP No.3

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=94(LC 12)
Max Uplift 2=-141(LC 12), 6=-141(LC 13)
Max Grav 2=1051(LC 1), 6=1051(LC 1)

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

TOP CHORD 2-3=-1666/292, 3-4=-1465/307, 4-5=-1465/307, 5-6=-1666/292
BOT CHORD 2-10=-210/1414, 8-10=-61/962, 6-8=-189/1414
WEBS 4-8=-107/531, 5-8=-361/177, 4-10=-107/531, 3-10=-361/177

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 22-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=141, 6=141.
- This truss 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.



August 5, 2021

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss CJ1	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	SUMMIT/STONE CREEK #126/MO I47327109
----------------	--------------	-----------------------------------	----------	----------	---

Builders FirstSource (Valley Center),

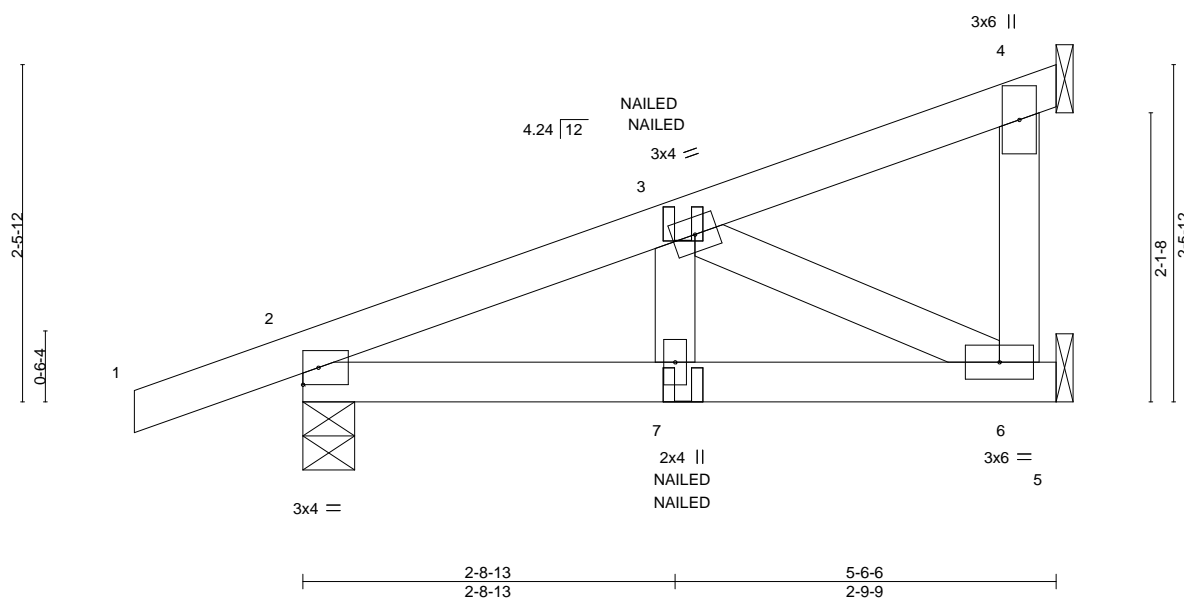
Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:23 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqv4-MDJllz54SVe4zK4IZt9No?k?BiN47hjiRaKU?zyqvJM



Scale = 1:16.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.01	7	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 21 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-4-9, 6=Mechanical
Max Horz 2=89(LC 7)
Max Uplift 4=-23(LC 4), 2=-87(LC 4), 6=-22(LC 8)
Max Grav 4=76(LC 1), 2=336(LC 1), 6=159(LC 1)

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

TOP CHORD 2-3=-316/44
BOT CHORD 2-7=-50/268, 6-7=-50/268
WEBS 3-6=-296/74

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 6.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 5-8=-20
Concentrated Loads (lb)
Vert: 7=-5(F=-2, B=-2)



August 5, 2021

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

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

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

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



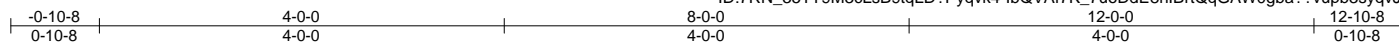
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #126/MO	147327110
2894229	D1	Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:25 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-lbQVaf7K_7uoDdE8hlBrtQqGAW0gba??vupb3syqvJK



Scale = 1:22.8

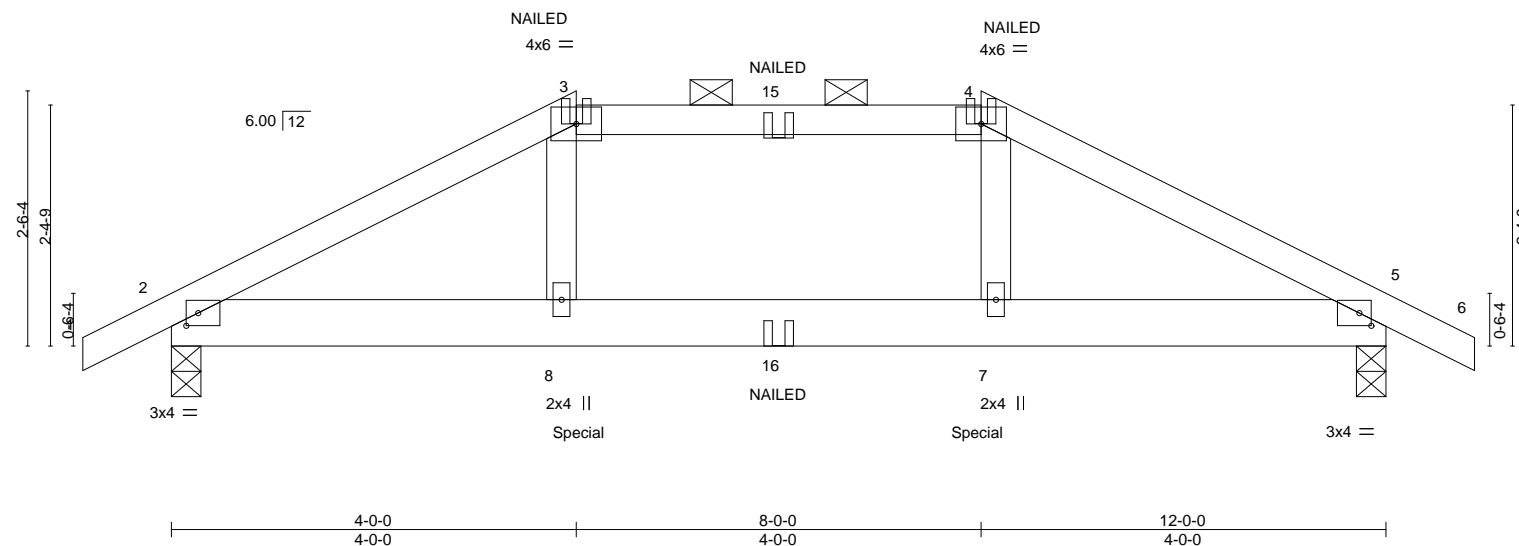


Plate Offsets (X,Y)-- [2:0-1-7,0-1-8], [5:0-1-7,0-1-8]							
LOADING (psf)	SPACING	2-0-0	CSI	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.40	Vert(LL)	-0.03	8	>999
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.05	7-8	>999
BCLL 0.0	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.01	5	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS				
				PLATES		GRIP	
				MT20		197/144	
				Weight: 43 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 5=0-3-8
Max Horz 2=37(LC 9)
Max Uplift 2=166(LC 8), 5=166(LC 9)
Max Grav 2=852(LC 1), 5=852(LC 1)

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

TOP CHORD 2-3=-1380/261, 3-4=-1178/246, 4-5=-1380/261
BOT CHORD 2-8=-196/1195, 7-8=-198/1178, 5-7=-198/1195
WEBS 3-8=-0/287, 4-7=0/287

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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=166, 5=166.
- This truss 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) 160 lb down and 50 lb up at 4-0-0, and 160 lb down and 50 lb up at 7-11-4 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 9-12=-20
Concentrated Loads (lb)
Vert: 3=-51(B) 4=-51(B) 8=-160(B) 7=-160(B) 15=-51(B) 16=-30(B)



August 5, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss D2	Truss Type Common	Qty 3	Ply 1	SUMMIT/STONE CREEK #126/MO 147327111
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:26 2021 Page 1
ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-mn_tN?8zIQ0eqnoKF?j4PeMSXwL0K2K97YY8blyqvJJ

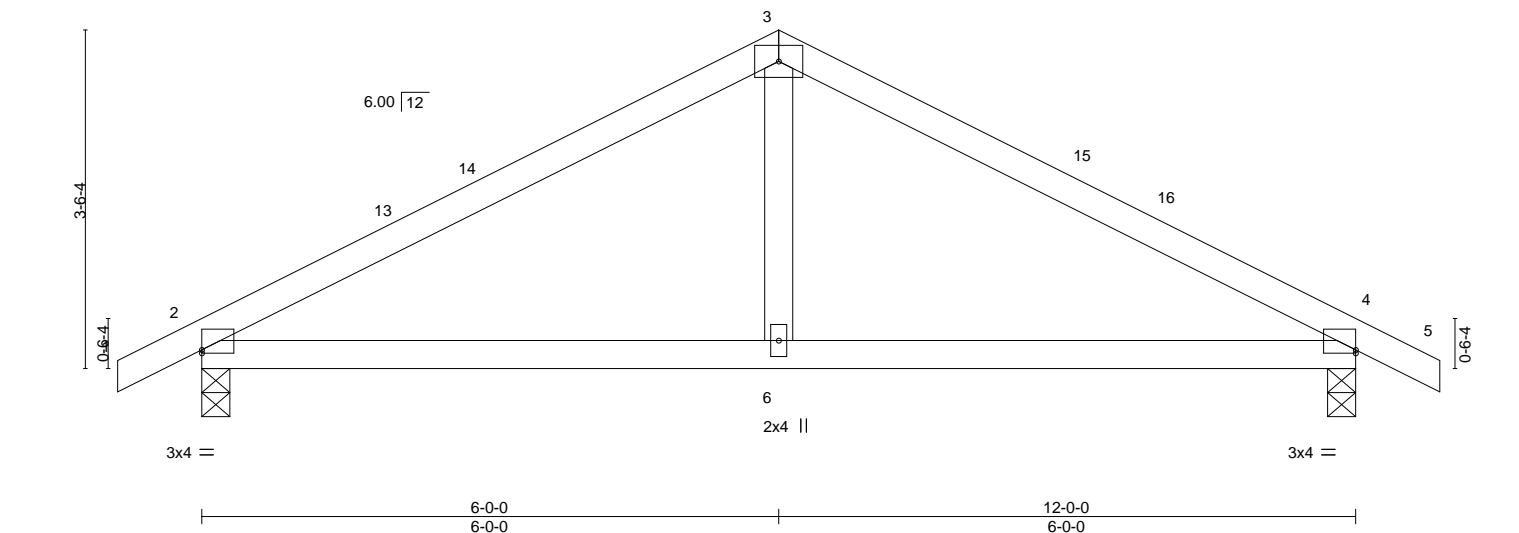
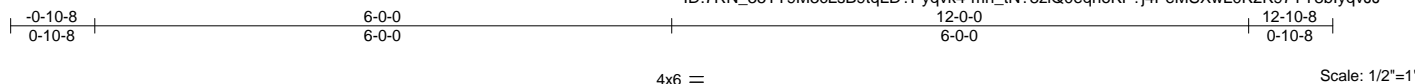


Plate Offsets (X,Y)-- [2:0-0-0,0-0-7], [4:Edge,0-0-7]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.04 6-9 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07 6-9 >999 180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01 2 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS					
								Weight: 35 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=54(LC 12)
Max Uplift 2=-84(LC 12), 4=-84(LC 13)
Max Grav 2=601(LC 1), 4=601(LC 1)

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

TOP CHORD 2-3=-733/238, 3-4=-733/238
BOT CHORD 2-6=-100/577, 4-6=-100/577
WEBS 3-6=0/261

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.
- 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.



August 5, 2021

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

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

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

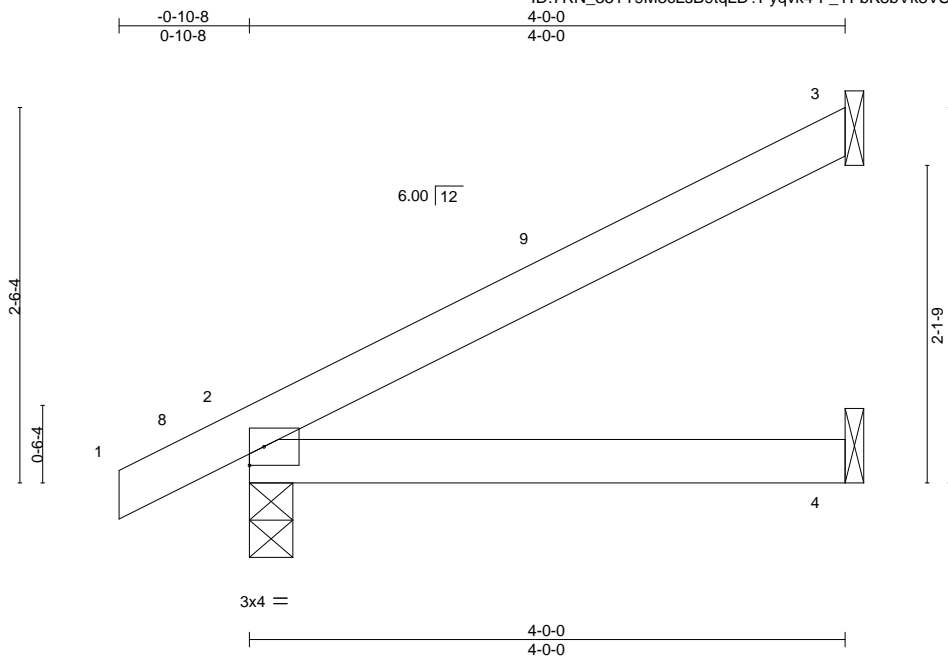
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss J1	Truss Type Jack-Open	Qty 3	Ply 1	SUMMIT/STONE CREEK #126/MO I47327112
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:27 2021 Page 1
ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-F_YFbK8bVv8VSxNWoiEJyrvfoJw3VUIMCih8kyqvJI



Scale = 1:15.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.01	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.02	4-7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=86(LC 12)
Max Uplift 3=56(LC 12), 2=29(LC 12)
Max Grav 3=121(LC 1), 2=245(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) 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.
- 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.



August 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss J2	Truss Type Jack-Open	Qty 4	Ply 1	SUMMIT/STONE CREEK #126/MO I47327113
----------------	-------------	-------------------------	----------	----------	---

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

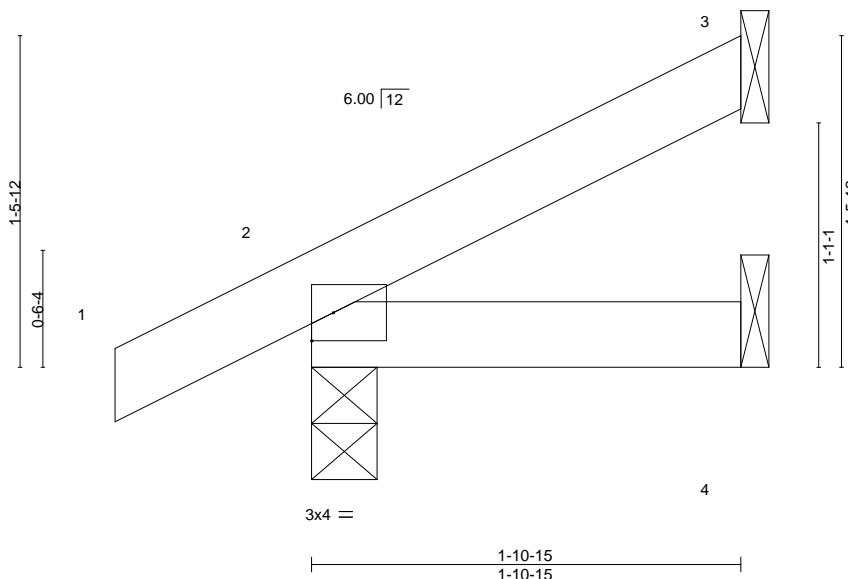
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:27 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-F_YFbK8bVv8VSxNWoiEJyrv8Jld3VUIMCih8kyqvJl

-0-10-8
0-10-8

1-10-15
1-10-15

Scale = 1:10.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-15 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=49(LC 12)
Max Uplift 3=26(LC 12), 2=24(LC 12)
Max Grav 3=52(LC 1), 2=161(LC 1), 4=33(LC 3)

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

NOTES-

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



August 5, 2021

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

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

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

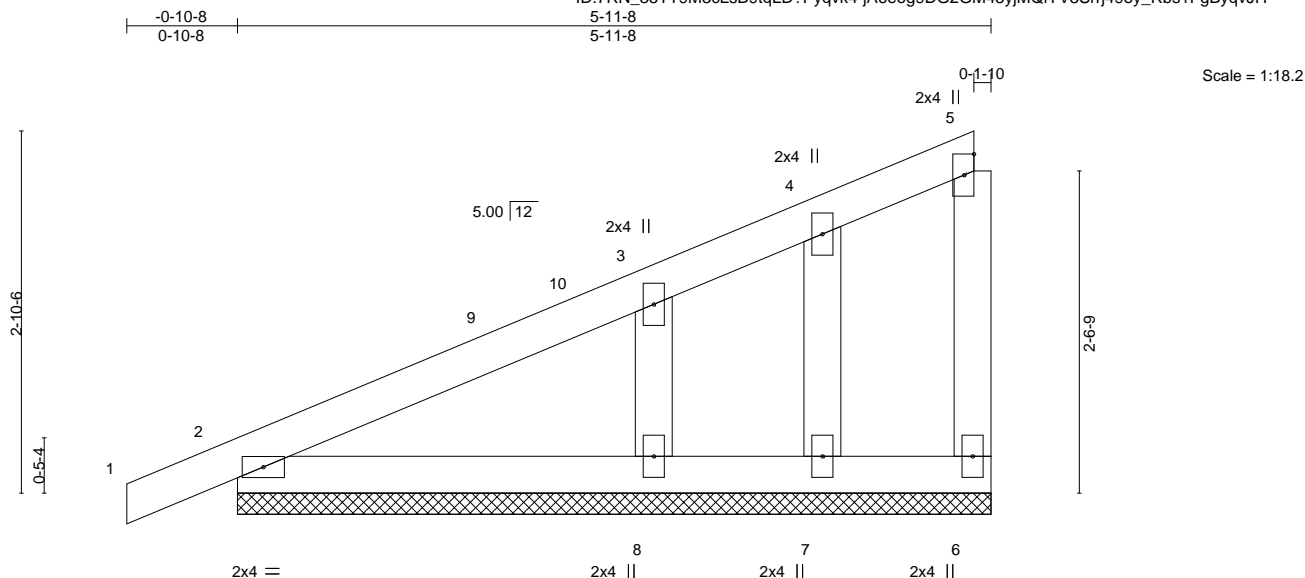
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss M1	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	SUMMIT/STONE CREEK #126/MO 147327114
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:28 2021 Page 1
ID:7RN_35TT9M3cLSB9tqLD?Pyqvk4-jA6eog9DG2GM45yjMQIYV3Srrj49oy_Rbs1FgByqvJH



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	-0.00	1	n/r	120	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	0.00	1	n/r	120	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						
								Weight: 21 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 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=104(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=289(LC 1)

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

WEBS 3-8=-219/275

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 5-9-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.



August 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

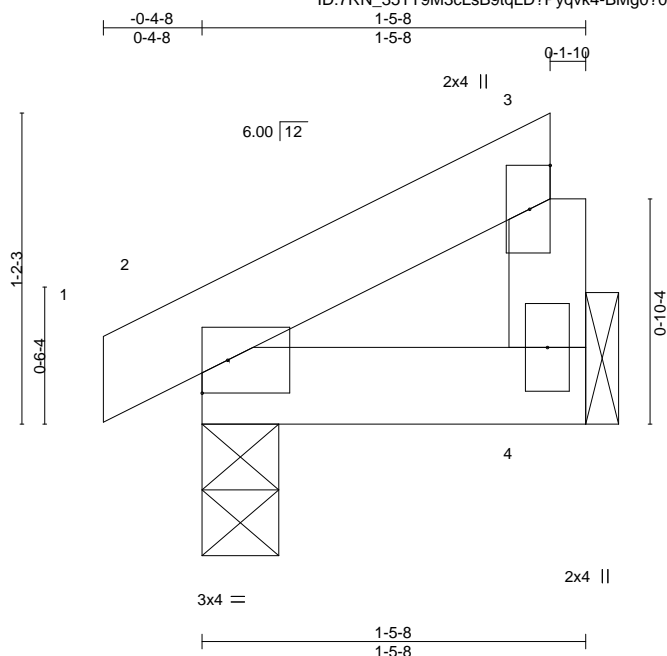
Job 2894229	Truss M3	Truss Type Monopitch	Qty 4	Ply 1	SUMMIT/STONE CREEK #126/MO I47327116
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:29 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-BMg070Ar1LODhFXvw7Go1G_1B7RCXP_bqWnoCdyqvJG



Scale = 1:8.8

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.02	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 5 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=33(LC 11)
Max Uplift 4=15(LC 12), 2=-14(LC 12)
Max Grav 4=55(LC 1), 2=89(LC 1)

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

NOTES-

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



August 5, 2021

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

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

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

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



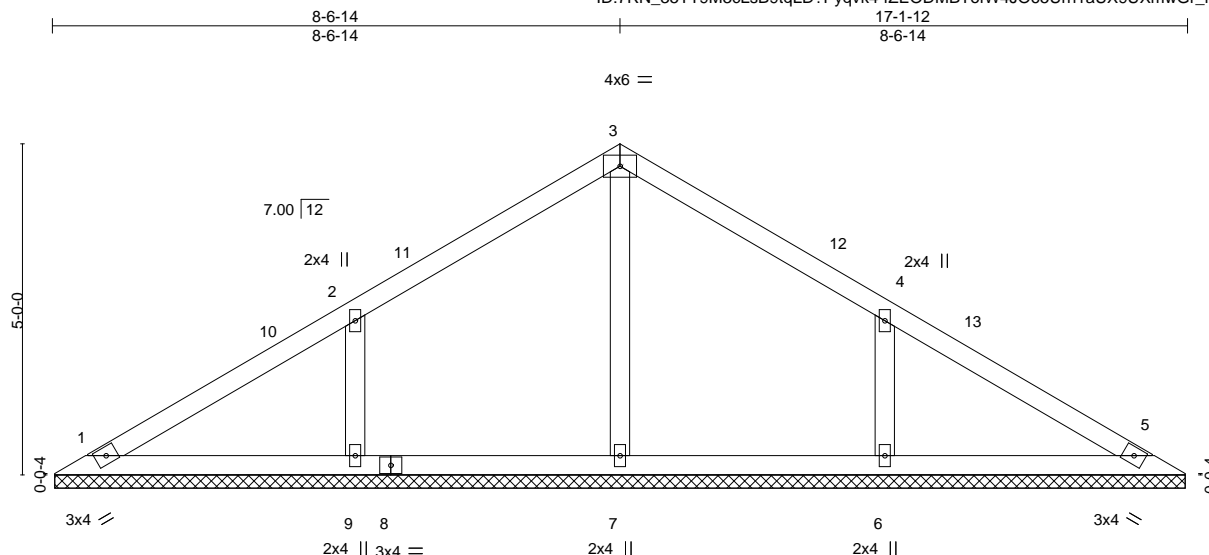
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #126/MO	147327117
2894229	V1	Valley	1	1	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:30 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-fZEODMBTofW4JO65Um1aUX9UXmwGr_k2AWMk3yqvJF



Scale = 1:34.8

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a				
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							
								Weight: 51 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" oc purlins.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS.

All bearings 17'-0"-14'.
(lb) - Max Horz 1=110(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=142(LC 12), 6=141(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=276(LC 1), 9=434(LC 19), 6=434(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=334/173, 4-6=334/173

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 8-6-14, Exterior(2R) 8-6-14 to 11-6-14, Interior(1) 11-6-14 to 16-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=142, 6=141.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5, 2021

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

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

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

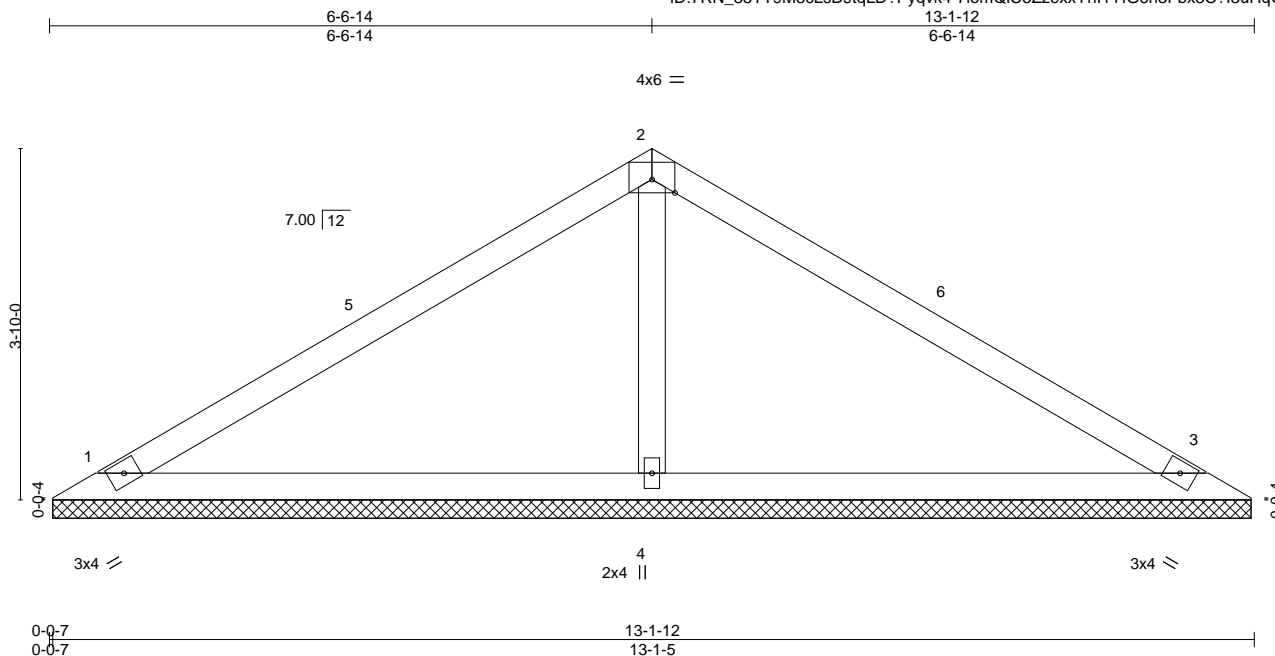
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2894229	Truss V2	Truss Type Valley	Qty 1	Ply 1	SUMMIT/STONE CREEK #126/MO 147327118
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:31 2021 Page 1
ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-7lomQiC5ZzexxYh1YIG6h3Fbx3C?I3uHqGvHvYqvJE



Scale = 1:25.1

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 0.54	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 35 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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=13-0-14, 3=13-0-14, 4=13-0-14
Max Horz 1=83(LC 8)
Max Uplift 1=47(LC 12), 3=58(LC 13), 4=38(LC 12)
Max Grav 1=257(LC 25), 3=257(LC 26), 4=572(LC 1)

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

WEBS 2-4=-389/111

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 6-6-14, Exterior(2R) 6-6-14 to 9-6-14, Interior(1) 9-6-14 to 12-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.



August 5, 2021

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

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

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

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



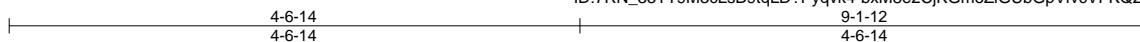
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/STONE CREEK #126/MO	147327119
2894229	V3	Valley	1	1	Job Reference (optional)	

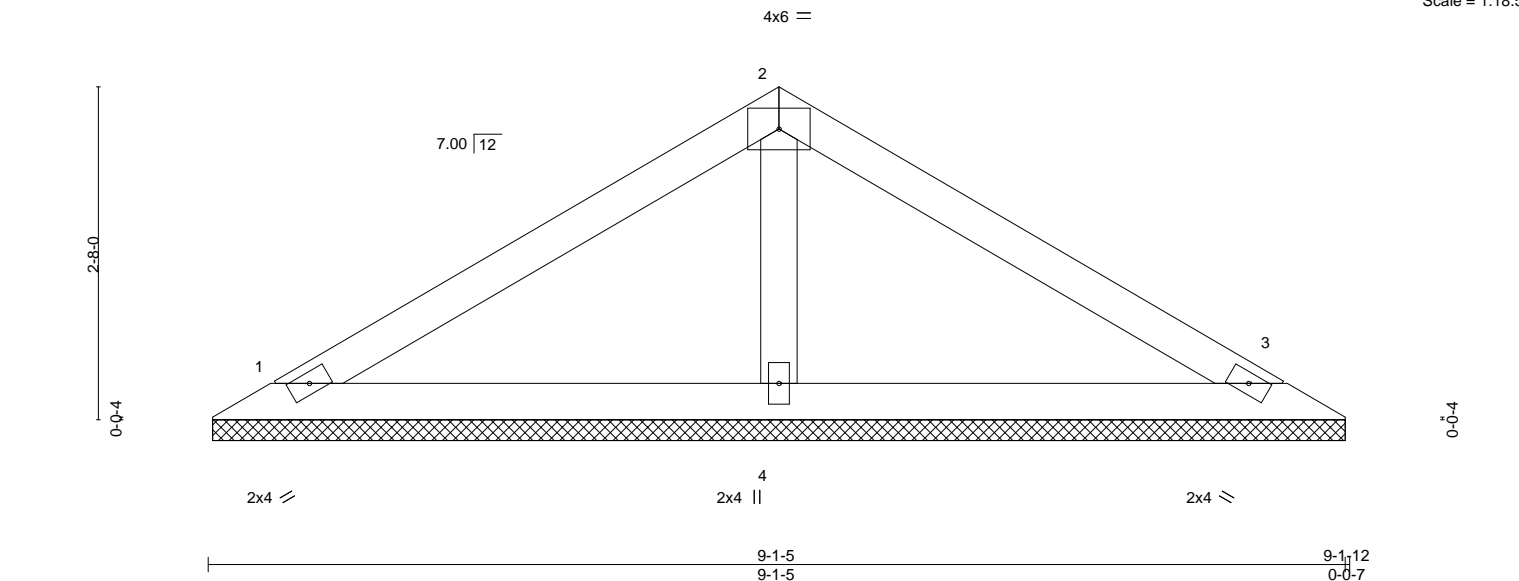
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:32 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqvk4-bxM8e2CjKGmoZiGUbGpVfvcVFKQ2ki71WU?SpyyqvJD



Scale = 1:18.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999	197/144
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-S						
									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=9-0-14, 3=9-0-14, 4=9-0-14
Max Horz 1=55(LC 9)
Max Uplift 1=31(LC 12), 3=39(LC 13), 4=26(LC 12)
Max Grav 1=172(LC 25), 3=172(LC 26), 4=382(LC 1)

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

WEBS 2-4=-260/103

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 4-6-14, Exterior(2R) 4-6-14 to 7-6-14, Interior(1) 7-6-14 to 8-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 5, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

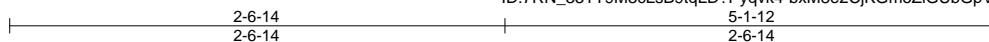
Job 2894229	Truss V4	Truss Type Valley	Qty 1	Ply 1	SUMMIT/STONE CREEK #126/MO 147327120
----------------	-------------	----------------------	----------	----------	---

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

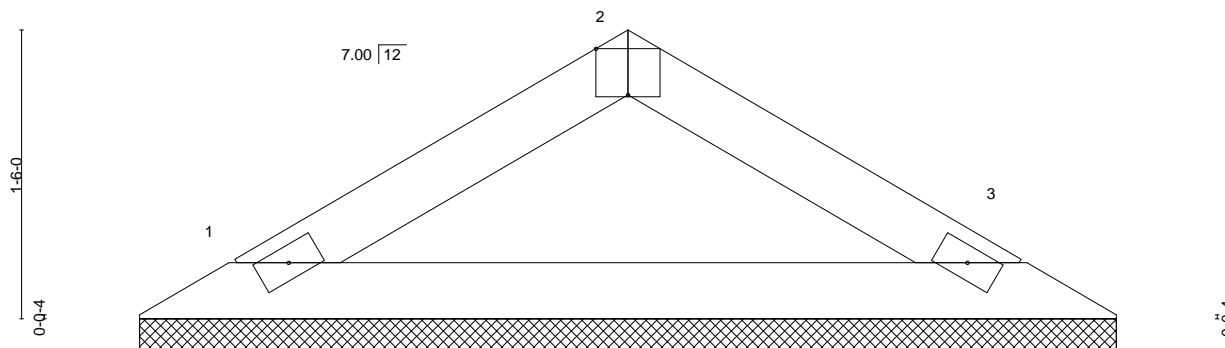
8.430 s Jun 2 2021 MiTek Industries, Inc. Thu Aug 5 12:00:32 2021 Page 1

ID:7RN_35TT9M3cLsB9tqLD?Pyqv4-bxM8e2CjKGmoZiGUbGpVfvcXcKQTklk1WU?SpyyqvJD



3x4 =

Scale: 1"=1'



2x4

2x4

0-0-7
0-0-7

5-1-12
5-1-5

Plate Offsets (X,Y)--		[2:0-2-0,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							
										Weight: 11 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-0-14, 3=5-0-14
Max Horz 1=28(LC 10)
Max Uplift 1=22(LC 12), 3=22(LC 13)
Max Grav 1=183(LC 1), 3=183(LC 1)

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

NOTES-

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



August 5, 2021

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

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

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

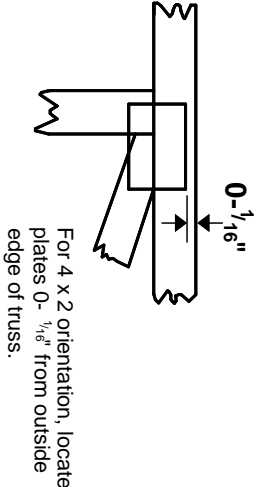
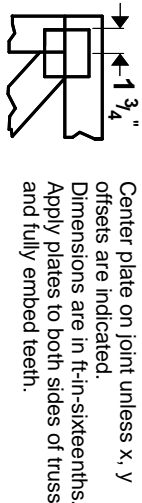
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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

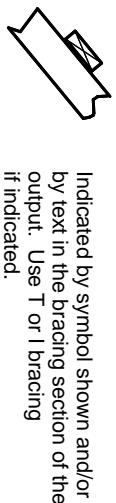
This symbol indicates the required direction of slots in connector plates.

PLATE SIZE

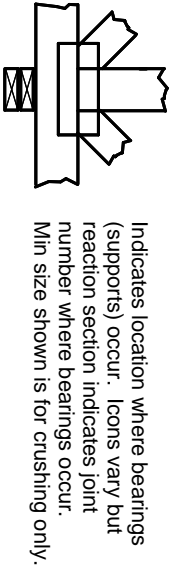
4 X 4

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

LATERAL BRACING LOCATION

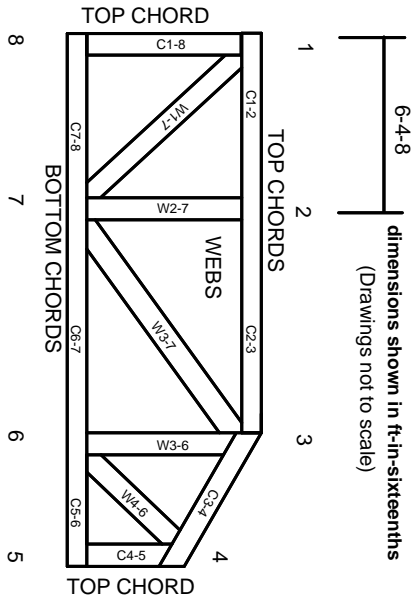


BEARING



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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:
ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

© 2012 MITek® All Rights Reserved



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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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