



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

Re: 2684960
Summit/93 Manor

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

03/09/2021

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

Pages or sheets covered by this seal: I44965958 thru I44966033

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

Missouri COA: Engineering 001193



February 25, 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	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965958
2684960	A1	Hip Girder	1	1		

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

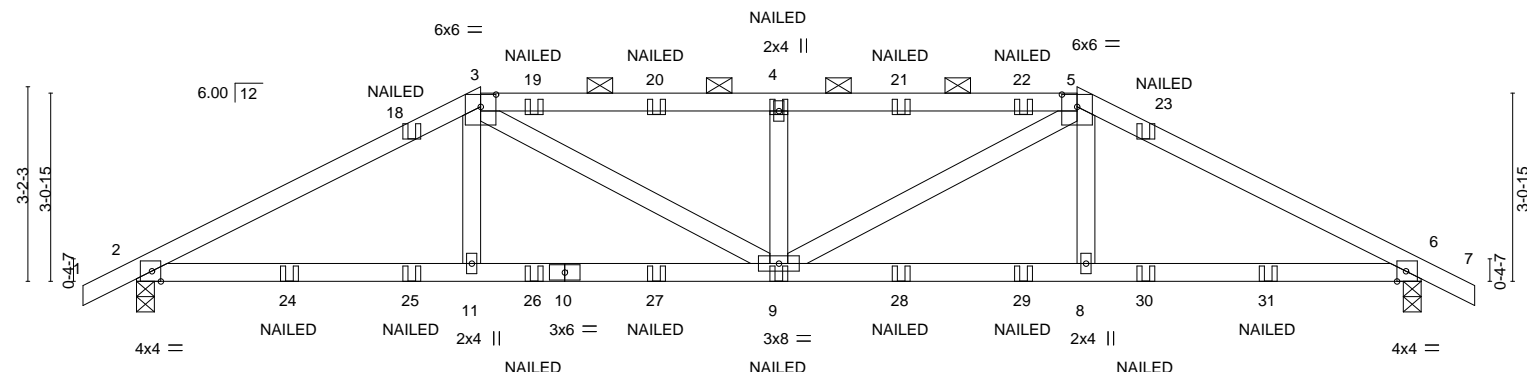
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:05:32 2021 Page 1

ID:3GmZIGCHwWZGARvEueXVyXyPZ34-CF_2RtZBROoXyAfRoGD2HRvx2TuUAMAKxzuAVzhb21

Job Reference (optional)

0-10-8 5-7-8 10-6-0 15-4-8 21-0-0 21-10-8
0-10-8 5-7-8 4-10-8 4-10-8 5-7-8 0-10-8

Scale = 1:37.7



	5-7-8	10-6-0	15-4-8	21-0-0
	5-7-8	4-10-8	4-10-8	5-7-8

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.12	9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.21	9	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.18	Horz(CT)	0.06	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 73 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-2 oc purlins, except
2-0-0 oc purlins (3-1-7 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=-50(LC 30)
Max Uplift 2=-334(LC 8), 6=-334(LC 9)
Max Grav 2=1481(LC 1), 6=1481(LC 1)

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

TOP CHORD 2-3=-2524/574, 3-4=-2756/639, 4-5=-2756/639, 5-6=-2524/575
BOT CHORD 2-11=-487/2217, 9-11=-485/2198, 8-9=-435/2198, 6-8=-437/2217
WEBS 3-11=-28/372, 3-9=-208/739, 4-9=-552/272, 5-9=-208/739, 5-8=-28/372

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 334 lb uplift at joint 2 and 334 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-5=-70, 5-7=-70, 12-15=-20
Concentrated Loads (lb)
Vert: 9=-30(F) 4=-50(F) 19=-50(F) 20=-50(F) 21=-50(F) 22=-50(F) 24=-153(F) 25=-121(F) 26=-30(F) 27=-30(F) 28=-30(F)
29=-30(F) 30=-121(F) 31=-153(F)



February 25, 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/93 Manor	144965959
2684960	A2	Hip	1	1		

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

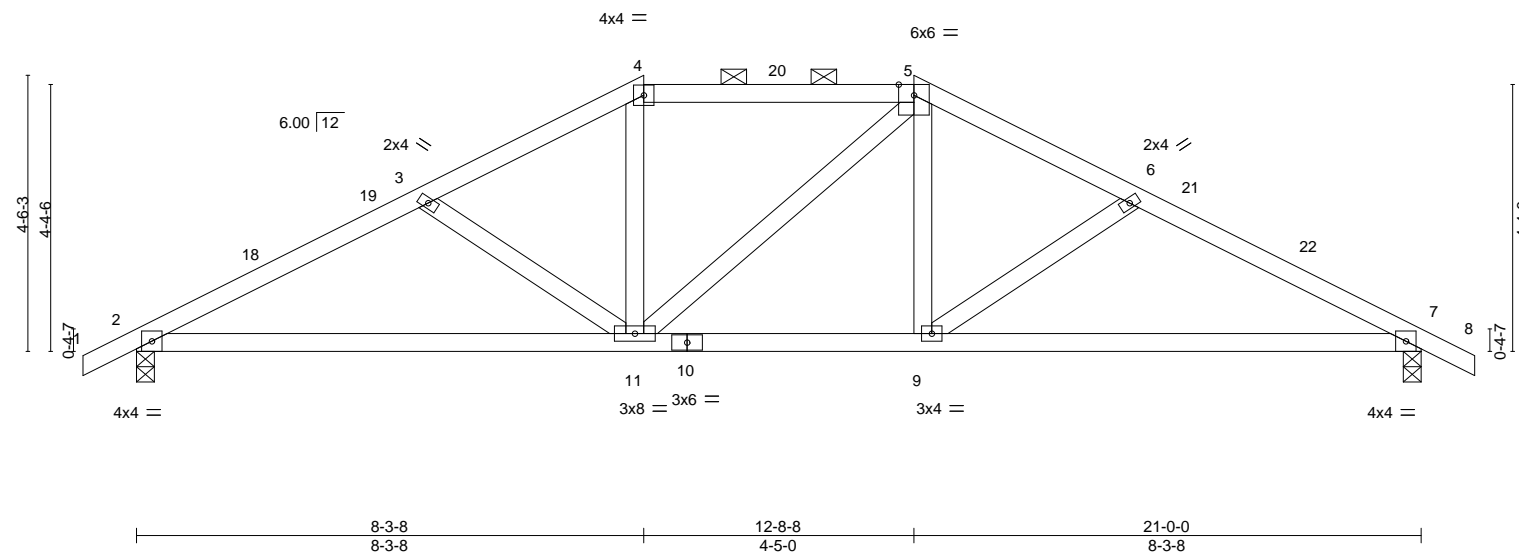
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:05:34 2021 Page 1

ID:3GmZIGChWZGARvEueXyPZ34-8d6osZbSz?2EBTpqw4lh7iWMUsDry5BTnES_F0zhb2?

Job Reference (optional)

0-10-8	4-9-3	8-3-8	12-8-8	16-2-13	21-0-0	21-10-8
0-10-8	4-9-3	3-6-5	4-5-0	3-6-5	4-9-3	0-10-8

Scale = 1:37.7



LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCCL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.10	9-17	>999	240	MT20	197/144
BCLL 10.0	Lumber DOL	1.15	BC 0.51	Vert(CT)	-0.22	9-17	>999	180		
BCCL 0.0	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.04	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 77 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (5-0-14 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-71(LC 17)
Max Uplift 2=-140(LC 12), 7=-140(LC 13)
Max Grav 2=1006(LC 1), 7=1006(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1640/285, 3-4=-1376/248, 4-5=-1177/249, 5-6=-1375/248, 6-7=-1640/285
BOT CHORD 2-11=-206/1434, 9-11=-103/1176, 7-9=-196/1434
WEBS 3-11=-304/135, 4-11=-14/322, 5-9=-27/323, 6-9=-304/135

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-3-8, Exterior(2E) 8-3-8 to 12-8-8, Exterior(2R) 12-8-8 to 16-11-7, Interior(1) 16-11-7 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
 - 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 140 lb uplift at joint 2 and 140 lb uplift at joint 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965960
2684960	A3	Common	1	1	Job Reference (optional)	

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

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ID:3GmZIGCHwWZGARvEueXVyXyPZ34-8d6osZbSz?2EBTpqw4lh7IWJ8s86y3OTnES_F0zhhb2?

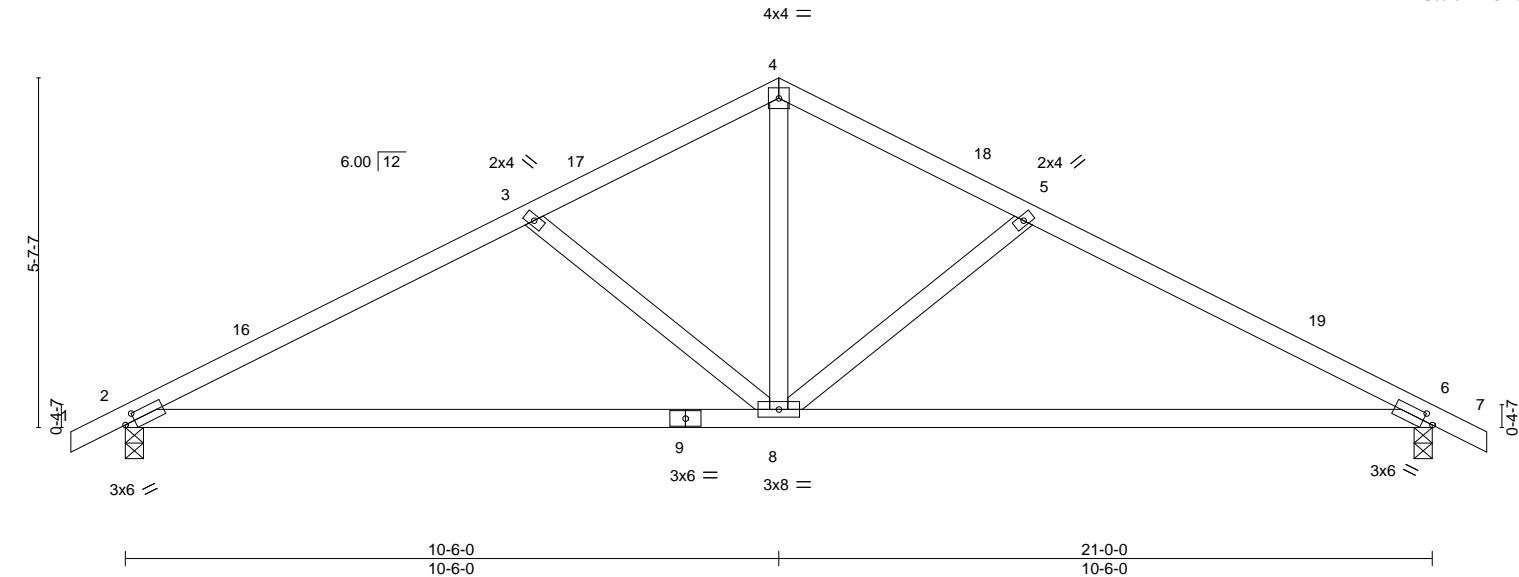
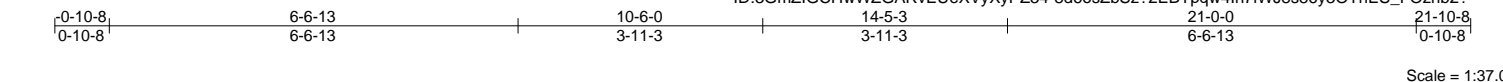


Plate Offsets (X,Y)--		[2:0-2-0,0-1-8], [6:0-2-0,0-1-8]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.49	Vert(LL)	-0.19	8-12	>999	240	MT20	197/144	
TCDL 10.0	Lumber DOL	1.15	BC 0.88	Vert(CT)	-0.42	8-12	>598	180			
BCLL 0.0	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.04	6	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS								
									Weight: 70 lb	FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=90(LC 12)
Max Uplift 2=136(LC 12), 6=136(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=-1531/296, 3-4=-1181/251, 4-5=-1181/251, 5-6=-1531/296
BOT CHORD 2-8=-181/1321, 6-8=-178/1321
WEBS 4-8=-130/799, 5-8=-450/187, 3-8=-450/187

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 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
- 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 136 lb uplift at joint 2 and 136 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor
2684960	A4	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)

ID:3GmZIG-CHW/WZGAPvEllaYV/yYvB734-BY15taDB2Hbsl_Caf6lxqW6dKObuyztyl/SCNV/M8zb7rN

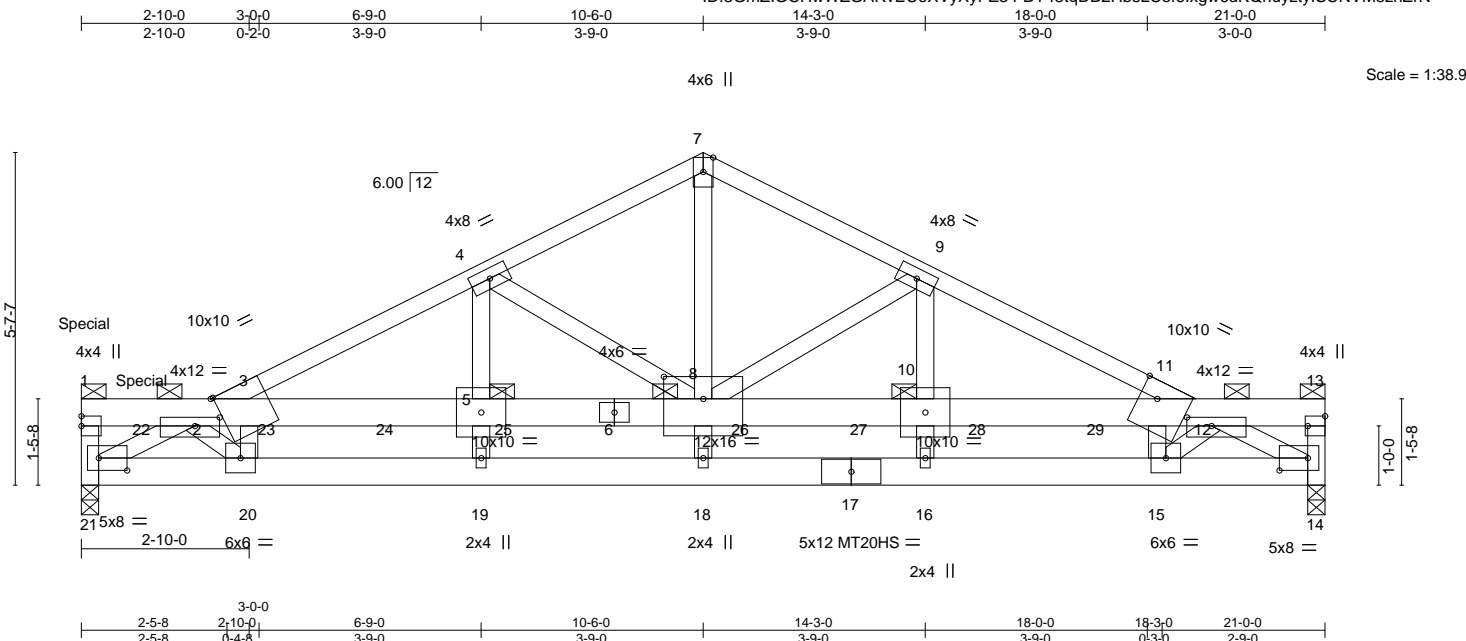


Plate Offsets (X,Y)-- [2:0-5-0,0-1-12], [3:0-0-8,Edge], [8:0-8-0,0-4-8], [11:0-3-8,Edge], [12:0-5-0,0-1-12], [13:Edge,0-3-8], [14:0-5-12,0-2-8], [21:0-5-12,0-2-8]												
LOADING (psf)		SPACING-- 2-0-0		CSI.		DEFL. in (loc) I/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.18	18	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.32	18	>774	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.10	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 250 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
 1-6,6-13: 2x6 SPF 2100F 1.8E
BOT CHORD 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2

BRACING- TOP CHORD	Structural wood sheathing directly applied or 3-6-5 oc purlins, except end verticals, and 2-0-0 oc purlins (5-5-4 max.): 1-13.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 13. 1. 8. 5. 10

REACTIONS. (size) 21=0-3-8, 14=0-3-8
 Max Horiz 21=71(LC 7)
 Max Uplift 21=-972(LC 8), 14=-868(LC 8)
 Max Gray 21=7332(LC 1), 14=5963(LC 1)

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

TOP CHORD 3-4=-8707/1562, 4-7=-6046/1102, 7-9=-6046/1105, 9-11=-8873/1543, 13-14=-646/90,
2-3=-12647/2061, 3-23=-5206/830, 23-24=-5206/830, 5-24=-5206/830, 5-25=-5206/830,
6-25=-5206/830, 6-8=-5206/830, 8-26=-5064/857, 26-27=-5064/857, 10-27=-5064/857,
10-28=-5064/857, 28-29=-5064/857, 11-29=-5064/857, 11-12=-12647/2087, 12-13=-659/99

BOT CHORD 20-21=-1562/9564, 19-20=-2073/12647, 18-19=-2073/12647, 17-18=-2073/12647,
16-17=-2073/12647, 15-16=-2073/12647, 14-15=-1451/9596

WEBS 1-21=-1825/97, 7-8=-904/5112, 4-8=-2538/545, 4-5=-466/2812, 8-9=-2635/528,
9-10=-450/2943, 5-19=-39/481, 10-16=-19/475, 12-14=-10096/1542, 11-15=-4803/926,
12-15=-1008/5359, 2-21=-10804/1705, 3-20=-4650/881, 2-20=-938/4995

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-4-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 12-14 2x4 - 1 row at 0-4-0 oc, member 15-11 2x4 - 1 row at 0-4-0 oc, member 2-21 2x4 - 1 row at 0-4-0 oc, member 20-3 2x4 - 1 row at 0-4-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Bearing at joint(s) 21, 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 972 lb uplift at joint 21 and 868 lb uplift at joint 14.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

10/ This truss is designed in accordance with the 2010 International Residential Code sections R602.11.1 and R602.10.2 and referenced standard ANSI/TPI 1.

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February 25, 2021



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44965961
2684960	A4	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

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- NOTES-**
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 992 lb down and 16 lb up at 0-1-12, and 1003 lb down and 38 lb up at 1-0-6, and 977 lb down and 28 lb up at 19-1-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 3-7=-70, 7-11=-70, 14-21=-20, 1-3=-70, 11-13=-70
- Concentrated Loads (lb)
 - Vert: 1=-992(B) 6=-963(B) 12=-966(B) 22=-1003(B) 23=-946(B) 24=-933(B) 25=-963(B) 26=-1891(B) 27=-945(B) 28=-915(B) 29=-915(B)

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965963
2684960	B2	Common	1	1	Job Reference (optional)	

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

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ID:3GmZIGCHwWZGARvEueXVyXyPZ34-1OMJixey1EZgg57b9vNdlYh2NTcVuta3isQCN9zhb1x

0-10-8 5-8-12 11-2-0 16-7-4 22-4-0 23-2-8
0-10-8 5-8-12 5-5-4 5-5-4 5-8-12 0-10-8

4x6 ||

Scale = 1:49.9

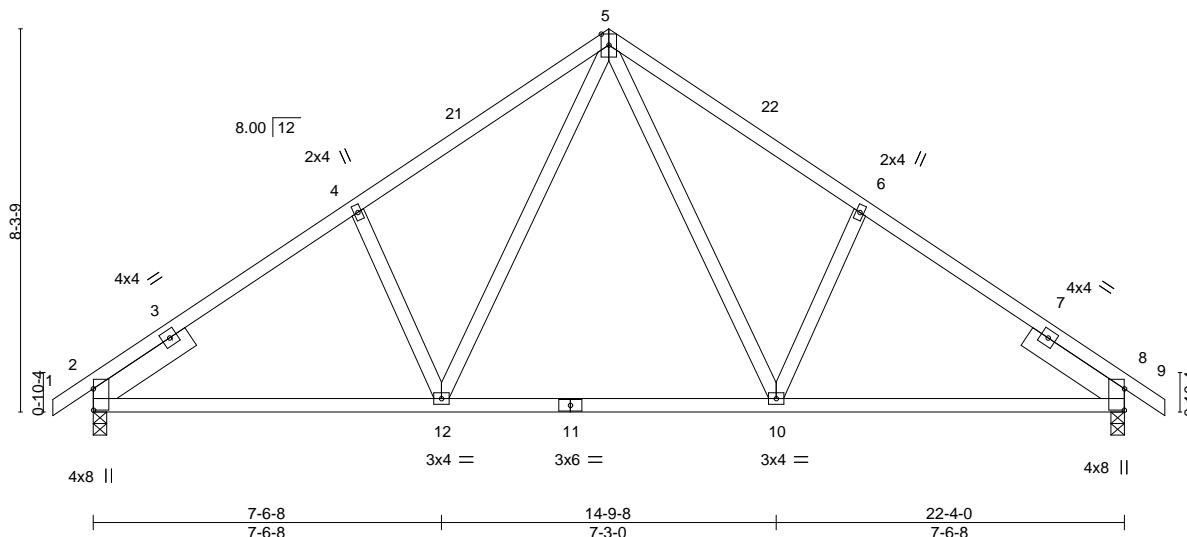


Plate Offsets (X,Y)-- [2:0-5-9,0-0-1], [8:0-5-9,0-0-1]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.05 10-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.12 10-12	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.03 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
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 -t 2-6-0, Right 2x6 SPF No.2 -t 2-6-0

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 8=0-3-8
Max Horz 2=188(LC 11)
Max Uplift 2=132(LC 12), 8=132(LC 13)
Max Grav 2=1066(LC 1), 8=1066(LC 1)

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

TOP CHORD 2-4=-1278/178, 4-5=-1178/243, 5-6=-1178/243, 6-8=-1278/178
BOT CHORD 2-12=-166/1008, 10-12=-24/711, 8-10=-58/1006
WEBS 5-10=-146/472, 6-10=-312/205, 5-12=-146/472, 4-12=-312/205

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 23-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=132, 8=132.
- 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.



February 25, 2021

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684960	Truss B3	Truss Type GABLE	Qty 1	Ply 1	Summit/93 Manor Job Reference (optional)	I44965964
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:05:40 2021 Page 1
ID:3GmZIGCHwWZGARvEueXyXyPZ34-znT37dgDZrpOvOGzGKP5NzmJ5HIYMknM9AvJR2zhb1v

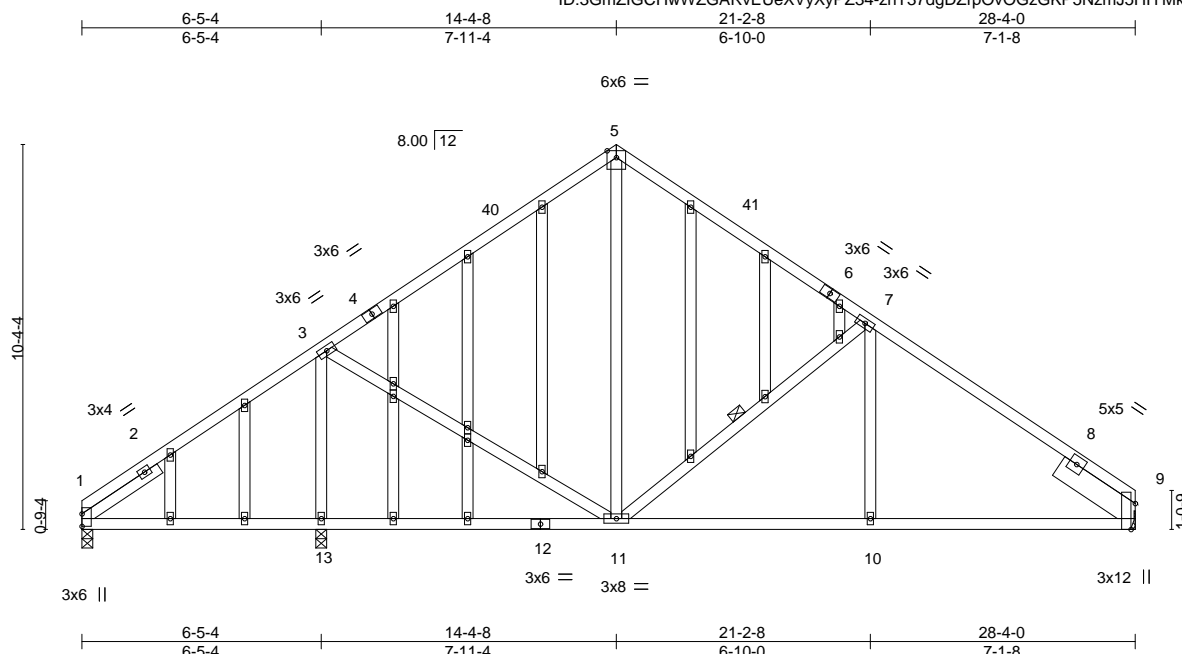


Plate Offsets (X,Y)--	[9:0-8-6,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.07 11-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.13 11-13	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.03 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 166 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 -t 2-6-0, Right 2x8 SP 2400F 2.0E -t 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-11

REACTIONS. (size) 1=0-3-8, 13=0-3-8, 9=Mechanical
Max Horz 1=224(LC 9)
Max Uplift 1=90(LC 13), 13=95(LC 12), 9=145(LC 13)
Max Grav 1=360(LC 25), 13=1202(LC 1), 9=1002(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-5=-828/238, 5-7=-796/220, 7-9=-1224/211
BOT CHORD 1-13=-158/271, 11-13=-158/271, 10-11=-71/938, 9-10=-71/938
WEBS 3-13=-1031/147, 3-11=0/441, 5-11=-112/334, 7-11=-533/232, 7-10=0/254

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 14-4-8, Exterior(2R) 14-4-8 to 17-4-8, Interior(1) 17-4-8 to 28-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13 except (jt=lb) 9=145.
 - This truss 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.



February 25, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965965
2684960	B4	Common	4	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:05:40 2021 Page 1
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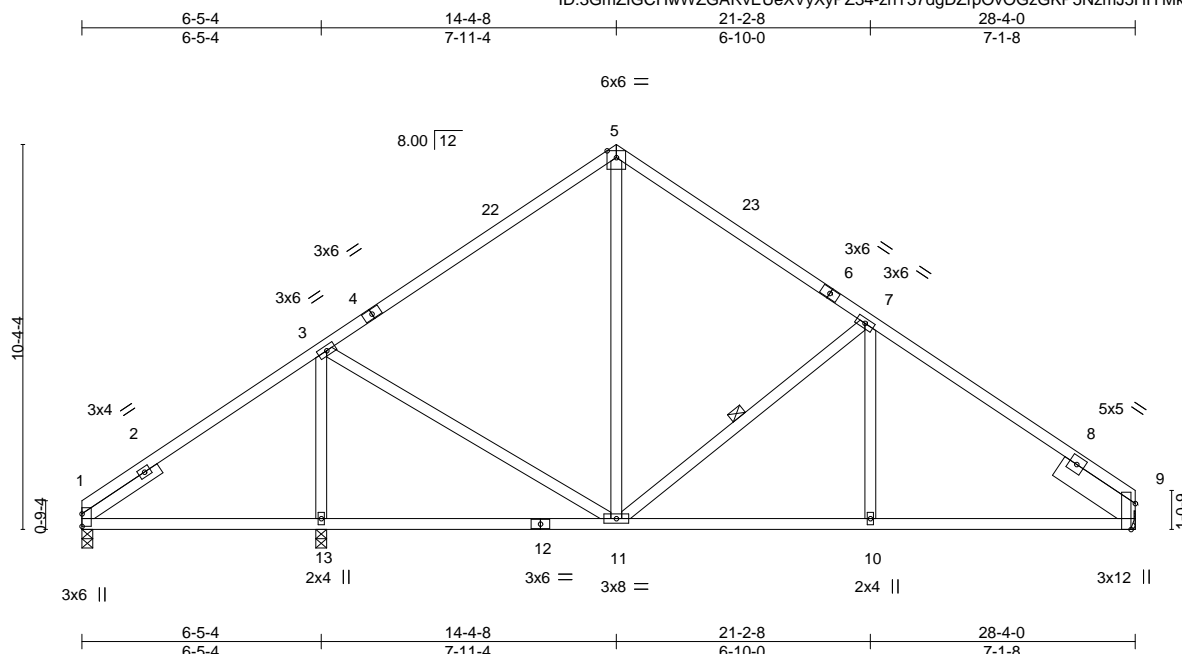


Plate Offsets (X,Y)--	[9:0-8-6,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.07 11-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.13 11-13	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.41	Horz(CT)	0.03 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
SLIDER Left 2x4 SPF No.2 -t 2-6-0, Right 2x8 SP 2400F 2.0E -t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-11

REACTIONS.

(size) 1=0-3-8, 13=0-3-8, 9=Mechanical
Max Horz 1=224(LC 9)
Max Uplift 1=-90(LC 13), 13=-95(LC 12), 9=-145(LC 13)
Max Grav 1=360(LC 25), 13=1202(LC 1), 9=1002(LC 1)

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

TOP CHORD 3-5=-828/238, 5-7=-796/220, 7-9=-1224/211
BOT CHORD 1-13=-158/271, 11-13=-158/271, 10-11=-71/938, 9-10=-71/938
WEBS 3-13=-1031/147, 3-11=0/441, 5-11=-112/334, 7-11=-533/232, 7-10=0/254

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) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 14-4-8, Exterior(2R) 14-4-8 to 17-4-8, Interior(1) 17-4-8 to 28-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) 1, 13 except (jt=lb) 9=145.
- 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.



February 25, 2021

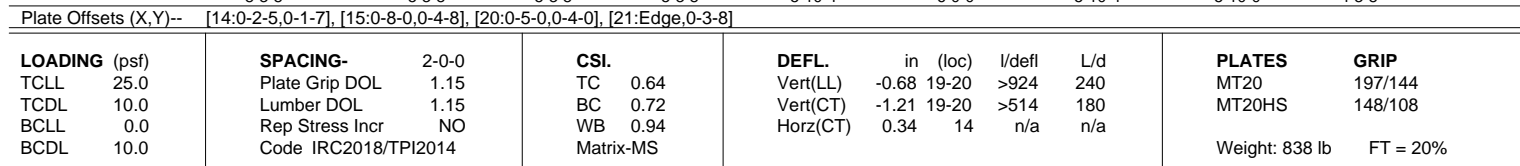
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:05:50 2021 Page 1
 ID:3GmZIGCHwWZGARvEUEXVxyPZ34-gi4rD1nUCw3z6x1usRaSn4B?hJeNi7zqSKLroSzhb1l
 -0-10-8 4-4-14 8-3-8 13-7-0 18-10-8 24-2-0 30-0-4 36-0-4 41-10-8 47-8-8 52-0-0
 0-10-8 4-4-14 3-10-10 5-3-8 5-3-8 5-3-8 5-10-4 6-0-0 5-10-4 5-10-0 4-3-8
 Scale: 1/8"=1'



REACTIONS. (size) 14=0-3-8, 2=0-3-8
 Max Horz 2=46(LC 12)
 Max Uplift 14=-741(LC 9), 2=-1033(LC 8)
 Max Grav 14=4005(LC 1), 2=4511(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-8360/2062, 3-4=-8243/2121, 4-5=-10695/2870, 5-6=-12670/3364, 6-8=-17414/4502, 8-9=-17585/4544, 9-11=-17394/4246, 11-12=-14911/3358, 12-13=-11682/2419, 13-14=-16275/3160
BOT CHORD	2-25=-1789/7275, 23-25=-1853/7404, 22-23=-2793/10692, 21-22=-362/1493, 20-21=-34/285, 8-20=-507/219, 19-20=-4170/17394, 17-19=-3281/14908, 16-17=-2189/10806, 15-16=-2763/14347, 14-15=-2898/15090
WEBS	3-25=-134/260, 4-25=-31/302, 4-23=-1222/4270, 5-23=-2403/767, 5-22=-650/2592, 6-22=-3671/1035, 20-22=-3008/11483, 6-20=-1311/5485, 9-20=-411/506, 9-19=-752/294, 11-19=-1011/2908, 11-17=-2281/680, 12-17=-1254/4833, 12-16=-163/1258, 13-16=-3542/601, 13-15=-515/3011

- NOTES-**
- 1) 3-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - 3) Unbalanced roof live loads have been considered for this design.
 - 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) All plates are MT20 plates unless otherwise indicated.
 - 7) All plates are 4x6 MT20 unless otherwise indicated.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TP1 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb)



February 25, 2021

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44965967
2684960	C1	HIP GIRDER	1	3	Job Reference (optional)	

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

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:05:51 2021 Page 2

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-8ueDQNo6zEBqj5c5Q86hJHjAQjzcRaDzhO4OKvzhb1k

NOTES-

- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-12=-70, 12-14=-70, 21-29=-20, 15-20=-20, 15-26=-20

Concentrated Loads (lb)

Vert: 21=-58(B) 8=-115(B) 18=-45(B) 15=-44(B) 23=-58(B) 5=-115(B) 9=-19(B) 19=-152(B) 11=-120(B) 17=-45(B) 12=-120(B) 16=-45(B) 32=-97(B) 33=-79(B) 34=-73(B) 35=-88(B) 36=-115(B) 37=-115(B) 38=-115(B) 39=-115(B) 40=-115(B) 41=-115(B) 43=-19(B) 44=-19(B) 45=-120(B) 46=-120(B) 47=-120(B) 48=-120(B) 49=-62(B) 50=-81(B) 51=-91(B) 52=-126(B) 53=-58(B) 54=-58(B) 55=-58(B) 56=-58(B) 57=-58(B) 58=-58(B) 59=-152(B) 60=-152(B) 61=-45(B) 62=-45(B) 63=-45(B) 64=-45(B) 65=-45(B) 66=-62(B)

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44965968
2684960	C2	Hip	1	1		

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

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:00 2021 Page 1

ID:3GmZIGCHwWZGARvEueXVyXyPZ34-NdhdJSvIr?KYJTopRXmoBBbiuL?82fjmHmM9tzhb1b

-0-10-8	5-7-8	10-11-8	17-6-12	24-2-0	31-5-1	38-8-2	43-2-5	47-8-8	52-0-0
0-10-8	5-7-8	5-4-0	6-7-4	6-7-4	7-3-1	7-3-1	4-6-3	4-6-3	4-3-8

Scale: 1/8"=1'

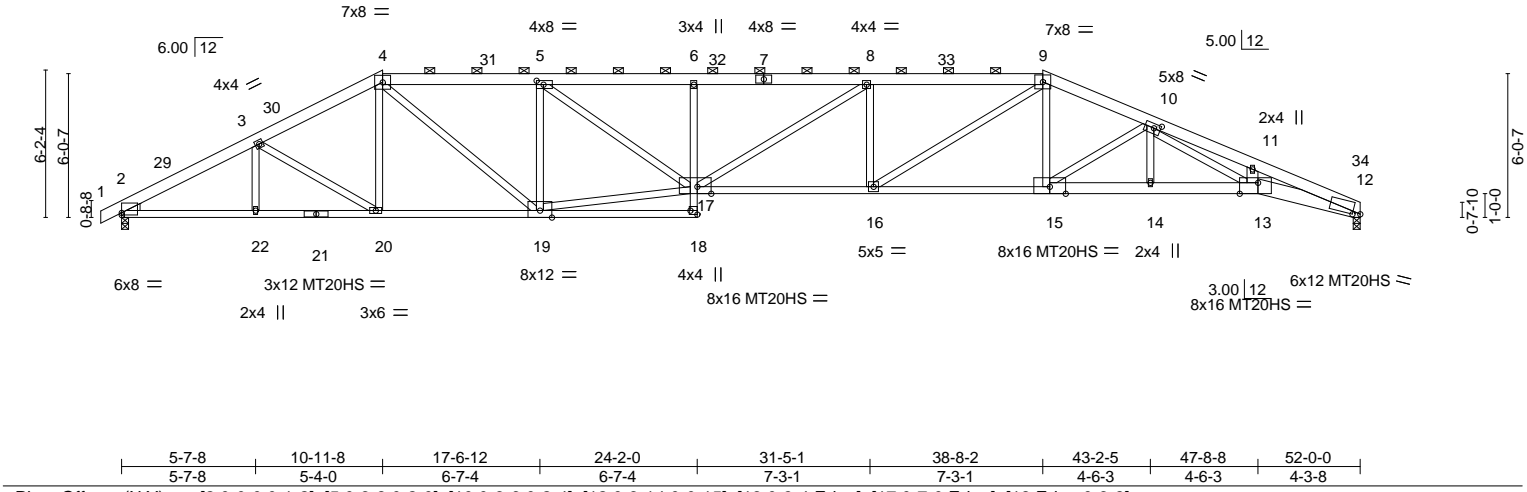


Plate Offsets (X, Y)--		[2:0-0-0,0-1-2], [5:0-3-8,0-2-0], [10:0-3-6,0-2-4], [12:0-3-14,0-0-15], [13:0-9-4,Edge], [17:0-7-0,Edge], [18:Edge,0-3-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.66	Vert(LL)	-0.69 16-17 >902 240	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-1.28 16-17 >487 180	MT20HS	148/108		
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.45 12 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 279 lb	FT = 20%		

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 9-12: 2x6 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-5-2 max.): 4-9.
BOT CHORD 2x4 SP 2400F 2.0E *Except* 6-18,18-21: 2x4 SPF No.2, 12-13: 2x8 SP 2400F 2.0E 13-15: 2x6 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2 *Except* 17-19: 2x4 SPF 1650F 1.5E, 11-13: 2x6 SPF No.2	
WEDGE Left: 2x4 SP No.3	

REACTIONS.	(size) 12=0-3-8, 2=0-3-8 Max Horz 2=59(LC 16) Max Uplift 12=-74(LC 13), 2=-70(LC 12) Max Grav 12=2339(LC 1), 2=2402(LC 1)
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FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-4278/473, 3-4=-4034/488, 4-5=-4831/588, 5-6=-6469/739, 6-8=-6522/741, 8-9=-6323/728, 9-10=-5459/624, 10-11=-8656/958, 11-12=-8944/930
BOT CHORD	2-22=-367/3682, 20-22=-367/3682, 19-20=-305/3591, 18-19=-32/350, 6-17=-469/111, 16-17=-564/6321, 15-16=-430/4959, 14-15=-596/6192, 13-14=-596/6189, 12-13=-815/8292
WEBS	4-20=0/291, 4-19=-164/1745, 5-19=-1674/230, 17-19=-397/4565, 5-17=-186/1989, 8-17=-101/397, 8-16=-794/153, 9-16=-160/1777, 9-15=-45/788, 10-14=-7/431, 10-15=-1435/202, 11-13=0/438, 10-13=-256/2165

- 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) interior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-11-8, Exterior(2R) 10-11-8 to 15-2-7, Interior(1) 15-2-7 to 38-8-2, Exterior(2R) 38-8-2 to 43-2-6, Interior(1) 43-2-6 to 52-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheathing be applied directly to the bottom chord.



February 25, 2021

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44965968
2684960	C2	Hip	1	1	Job Reference (optional)	

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



Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965969
2684960	C3	Hip	1	1		

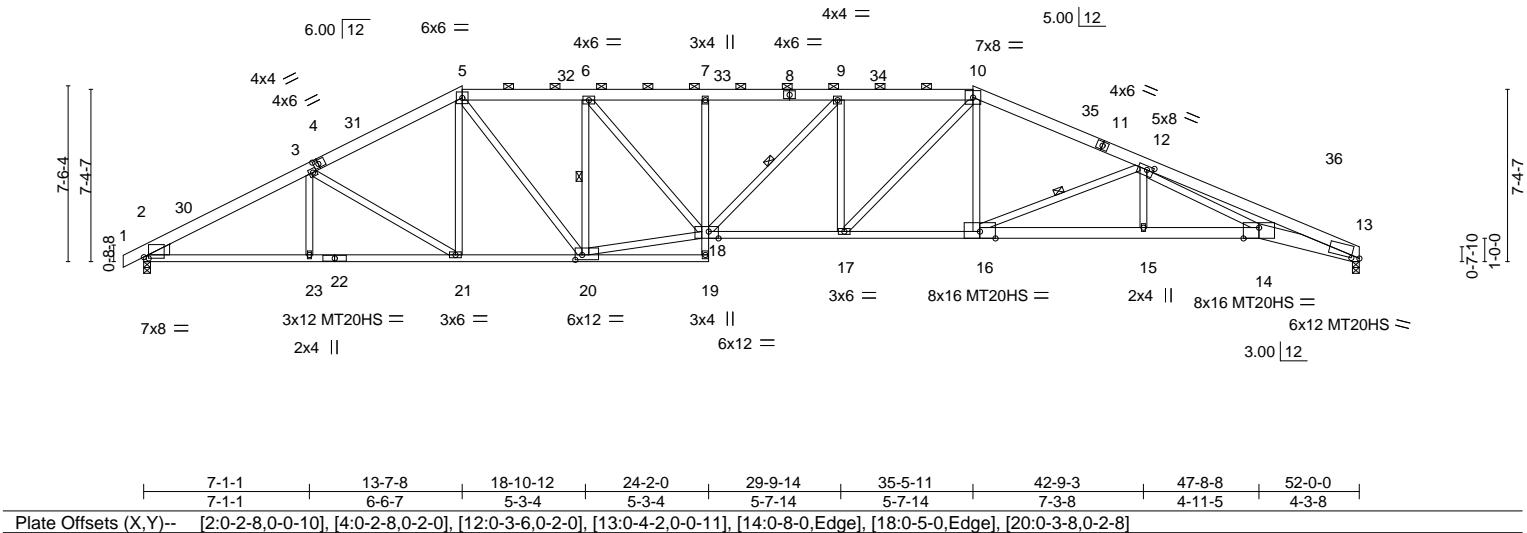
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:3GmZIGCHwWZGARvEUEXVyXyPZ34-K0oOk8x0NcaGYnyCZyoGGcg2O8hoWYmbDbFTDmzhb1Z

0-10-8	7-1-1	13-7-8	18-10-12	24-2-0	29-9-14	35-5-11	42-9-3	47-8-8	52-0-0
0-10-8	7-1-1	6-6-7	5-3-4	5-3-4	5-7-14	5-7-14	7-3-8	4-11-5	4-3-8

Scale = 1:98.6



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 0.66	Vert(LL)	-0.55 17-18	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.94	Vert(CT)	-1.02 17-18	>613	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.95	Horz(CT)	0.44 13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 289 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 11-13: 2x6 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-0-5 max.): 5-10.
BOT CHORD 2x4 SPF No.2 *Except* 2-22: 2x4 SP 2400F 2.0E, 16-18: 2x4 SPF 1650F 1.5E 13-14: 2x8 SP 2400F 2.0E, 14-16: 2x6 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 6-20, 9-18, 12-16
WEDGE Left: 2x6 SP No.2	

REACTIONS.	(size) 2=0-3-8, 13=0-3-8 Max Horz 2=72(LC 10) Max Uplift 2=68(LC 12), 13=74(LC 13) Max Grav 2=2402(LC 1), 13=2339(LC 1)
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FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=4306/480, 3-5=3843/485, 5-6=4030/532, 6-7=5035/621, 7-9=5059/623, 9-10=5000/621, 10-12=4880/579, 12-13=8884/947
BOT CHORD	2-23=362/3708, 21-23=362/3708, 20-21=269/3379, 7-18=384/90, 17-18=418/4997, 16-17=356/4391, 15-16=581/6049, 14-15=581/6049, 13-14=809/8293
WEBS	3-21=402/108, 5-21=10/376, 5-20=114/1225, 6-20=1558/199, 18-20=315/3874, 6-18=137/1528, 9-18=80/266, 9-17=651/115, 10-17=90/1084, 10-16=36/750, 12-16=1772/244, 12-15=0/466, 12-14=255/2480

- 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) interior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-7-8, Exterior(2R) 13-7-8 to 17-10-7, Interior(1) 17-10-7 to 35-5-11, Exterior(2R) 35-5-11 to 39-8-10, Interior(1) 39-8-10 to 52-0-0 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) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965970
2684960	C4	HIP	1	1	Job Reference (optional)	

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

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ID:3GmZIGCHwWZGARvEueXVyXyPZ34-oCMmxUxe8wi7AxOX07fJVppD9lY3OF2qkSF_1lCzhh1Y

4-3-8

8-3-8

16-3-6

24-3-5

31-11-14

39-8-8

44-0-0

4-3-8

4-0-0

7-11-14

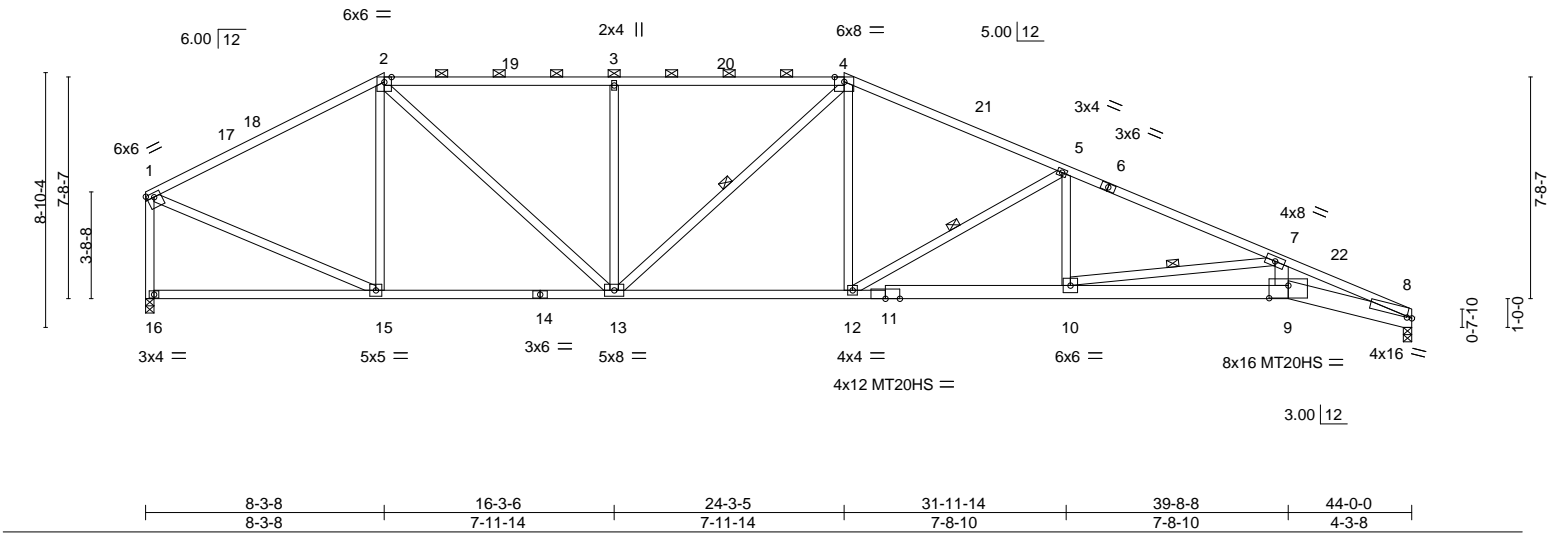
7-11-14

7-8-10

7-8-10

4-3-8

Scale = 1:80.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.45	MT20	197/144		
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.83	MT20HS	148/108		
BCLL	0.0	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.31				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							
								Weight: 211 lb		FT = 20%	

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E *Except*
1-2: 2x4 SP 2400F 2.0E
BOT CHORD 2x4 SPF 1650F 1.5E *Except*
14-16: 2x4 SPF No.2, 8-9: 2x8 SP 2400F 2.0E
9-11: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
7-9: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 2-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-13, 5-12, 7-10

REACTIONS. (size) 8=0-3-8, 16=0-3-8
Max Horz 16=-211(LC 8)
Max Uplift 8=-298(LC 13), 16=-214(LC 12)
Max Grav 8=1967(LC 1), 16=1967(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2103/303, 2-3=-2778/452, 3-4=-2779/452, 4-5=-3234/507, 5-7=-4562/676,
7-8=-7815/1147, 1-16=-1893/262
BOT CHORD 13-15=-91/1788, 12-13=-212/2873, 10-12=-479/4136, 9-10=-959/6658, 8-9=-1019/7177
WEBS 1-15=-195/1859, 2-15=-572/151, 2-13=-240/1428, 3-13=-682/234, 4-12=-89/807,
5-12=-1436/322, 5-10=-19/648, 7-10=-2551/485, 7-9=-164/1654

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-3-8, Exterior(2R) 8-3-8 to 12-6-7, Interior(1) 12-6-7 to 24-3-5, Exterior(2R) 24-3-5 to 28-6-3, Interior(1) 28-6-3 to 43-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 8, 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=298, 16=214.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI

ANDREW THOMAS JOHNSON

NUMBER

PE-2017018993

PROFESSIONAL ENGINEER

February 25,2021

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965971
2684960	C5	Hip	1	1	Job Reference (optional)	

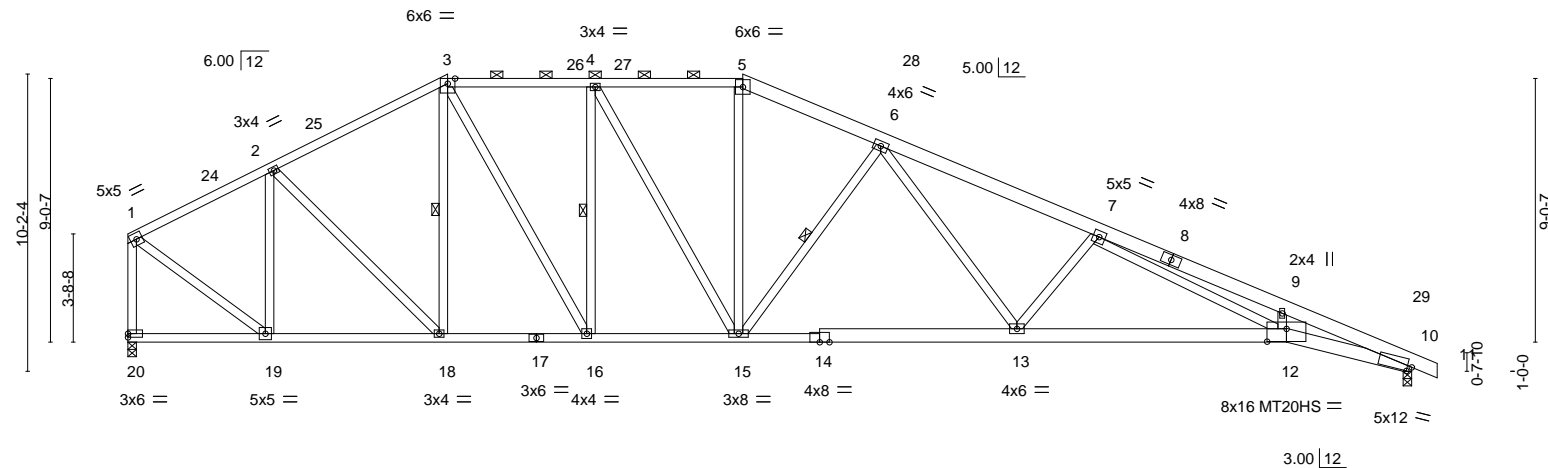
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:3GmZIGCHwWZGARvEueXVyXyPZ34-GPw89qyGvDq_n46bgNqkL1mN1yQ8_Xfugvkalezhb1X

4-10-4	10-11-8	15-10-7	21-0-14	25-9-10	33-1-12	39-8-8	44-0-0	44-10-8
4-10-4	6-1-3	4-10-15	5-2-7	4-8-12	7-4-2	6-6-12	4-3-8	0-10-8

Scale = 1:79.0



4-10-4	10-11-8	15-10-7	21-0-14	30-5-10	39-8-8	44-0-0
4-10-4	6-1-3	4-10-15	5-2-7	9-4-12	9-2-14	4-3-8

Plate Offsets (X,Y)-- [10:0-1-13,0-1-15], [12:0-8-0,0-5-4]

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 0.71	Vert(LL)	-0.41 12-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.69	Vert(CT)	-0.76 12-13	>695	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.61	Horz(CT)	0.25 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 244 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-5-5 max.): 3-5.
5-8: 2x6 SPF No.2, 8-11: 2x6 SPF 2100F 1.8E	
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied.
10-12,12-14: 2x6 SPF 2100F 1.8E	
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-18, 4-16, 6-15

REACTIONS. (size) 20=0-3-8, 10=0-3-8
Max Horz 20=-234(LC 8)
Max Uplift 20=-163(LC 9), 10=-281(LC 13)
Max Grav 20=1973(LC 1), 10=2035(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1698/250, 2-3=-2148/342, 3-4=-2298/387, 4-5=-2480/398, 5-6=-2730/412,
6-7=-4325/564, 7-9=-7207/984, 9-10=-7428/909, 1-20=-1928/248
BOT CHORD 18-19=-66/1466, 16-18=-40/1846, 15-16=-87/2296, 13-15=-210/3107, 12-13=-449/4504,
10-12=-785/6850
WEBS 2-19=-956/173, 2-18=-87/606, 3-18=-309/108, 3-16=-148/1014, 4-16=-788/166,
4-15=-121/441, 5-15=-66/667, 6-15=-1095/289, 6-13=-187/1364, 7-13=-1017/293,
7-12=-381/2467, 9-12=0/338, 1-19=-202/1791

- 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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-11-8 to 15-2-7, Interior(1) 15-2-7 to 21-0-14, Exterior(2R) 21-0-14 to 25-3-13, Interior(1) 25-3-13 to 44-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=163, 10=281.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 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/93 Manor	144965972
2684960	C6	PIGGYBACK BASE	1	1	Job Reference (optional)	

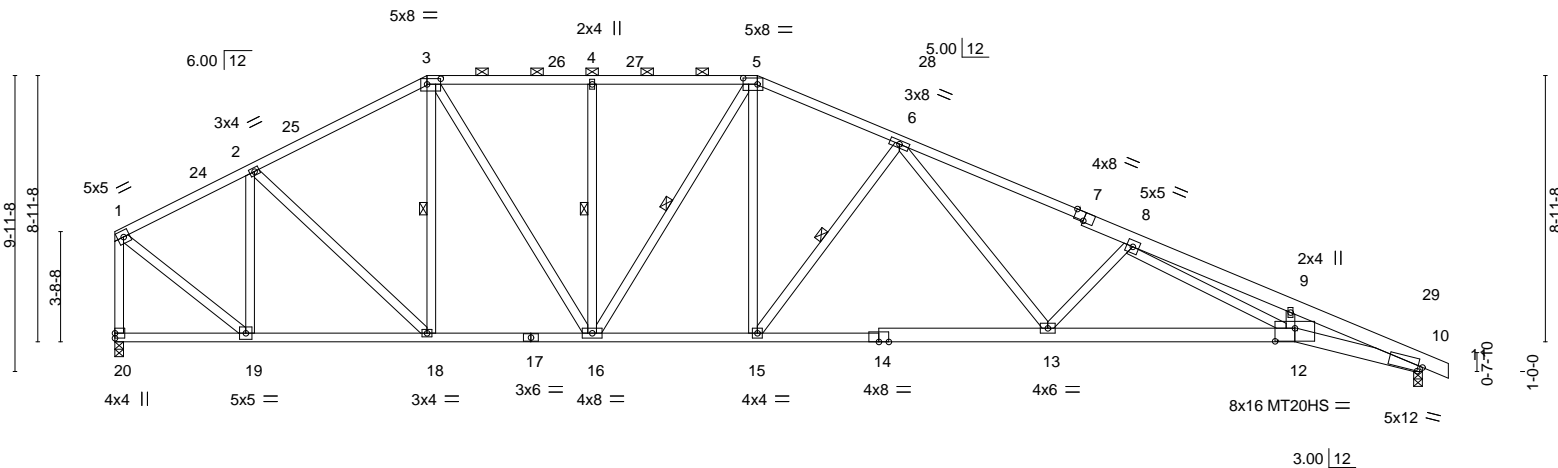
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:3GmZIGCHwWZGARvEueXVyXyPZ34-kbUWMAzugXyrPEhnE4MzuEIWCMikj_M1vZT7q5zhh1W

4-6-10	10-6-1	16-0-12	21-7-7	26-4-13	34-1-5	39-8-8	44-0-0	44-10-8
4-6-10	5-11-7	5-6-11	5-6-11	4-9-6	7-8-8	5-7-3	4-3-8	0-10-8

Scale = 1:77.5



4-6-10	10-6-1	16-0-12	21-7-7	31-4-12	39-8-8	44-0-0
4-6-10	5-11-7	5-6-11	5-6-11	9-9-4	8-3-12	4-3-8

Plate Offsets (X,Y)-- [3:0-5-8,0-2-4], [5:0-5-12,0-2-8], [7:0-4-0,Edge], [10:0-1-13,0-1-15], [12:0-8-0,0-5-4]

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 0.88	Vert(LL)	-0.39 12-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.72 12-13	>735	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.25 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 232 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
7-11: 2x6 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except*
10-12,12-14: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-5-13 max.): 3-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-18, 4-16, 5-16, 6-15

REACTIONS.

(size) 20=0-3-8, 10=0-3-8
Max Horz 20=-231(LC 8)
Max Uplift 20=-208(LC 12), 10=-314(LC 13)
Max Grav 20=1973(LC 1), 10=2035(LC 1)

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

TOP CHORD 1-2=-1640/243, 2-3=-2144/338, 3-4=-2334/388, 4-5=-2334/388, 5-6=-2776/463,
6-8=-4452/688, 8-9=-7255/1096, 9-10=-7486/1056, 1-20=-1932/246
BOT CHORD 18-19=-106/1418, 16-18=-75/1825, 15-16=-102/2513, 13-15=-263/3145, 12-13=-602/4683,
10-12=-918/6909
WEBS 2-19=-996/177, 2-18=-94/635, 3-18=-311/114, 3-16=-196/1031, 4-16=-429/156,
5-16=-400/124, 5-15=-161/990, 6-15=-1088/286, 6-13=-206/1382, 8-13=-1066/324,
9-12=0/299, 1-19=-202/1778, 8-12=-346/2349

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-6-1, Exterior(2R) 10-6-1 to 14-8-15, Interior(1) 14-8-15 to 21-7-7, Exterior(2R) 21-7-7 to 25-10-6, Interior(1) 25-10-6 to 44-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=208, 10=314.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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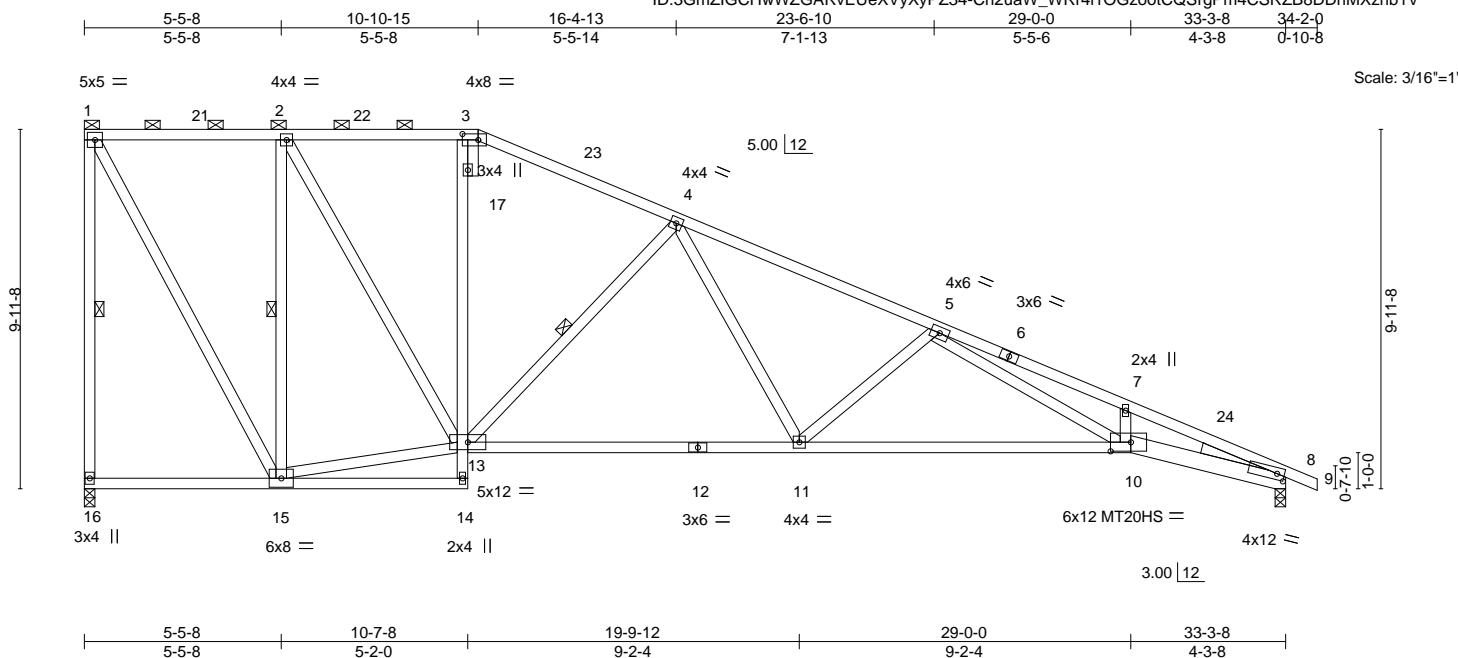
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965973
2684960	C7	PIGGYBACK BASE	1	1	Job Reference (optional)	

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

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ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-Cn2uaW_WRr4i1OGzootCQSrgPm4CSRZB8DDhMXzhb1V



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.91	Vert(LL)	-0.39 10-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.82 10-11	>483	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.23 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 178 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 8-10: 2x6 SPF 2100F 1.8E, 10-12: 2x4 SPF 1650F 1.5E
 WEBS 2x4 SPF No.2
 WEDGE
 Right: 2x4 SP No.3

BRACING-

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

REACTIONS.

(size) 16=0-3-8, 8=0-3-8
 Max Horz 16=-354(LC 13)
 Max Uplift 16=-227(LC 9), 8=-208(LC 13)
 Max Grav 16=1491(LC 1), 8=1554(LC 1)

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

TOP CHORD 1-16=-1441/243, 1-2=-702/103, 2-3=-1234/171, 3-4=-1417/159, 4-5=-2717/316,
 5-7=-5135/667, 7-8=-5210/585
 BOT CHORD 15-16=-155/353, 11-13=-12/1971, 10-11=-263/3096, 8-10=-488/4786
 WEBS 1-15=-214/1457, 2-15=-1312/206, 13-15=0/721, 2-13=-145/1039, 4-13=-1074/284,
 4-11=-106/941, 5-11=-905/267, 5-10=-271/1919

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-7-8, Exterior(2R) 10-7-8 to 13-7-8, Interior(1) 13-7-8 to 34-2-0 zone; cantilever left and right exposed; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 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) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=227, 8=208.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 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 2684960	Truss C7A	Truss Type Piggyback Base	Qty 2	Ply 1	Summit/93 Manor Job Reference (optional)	I44965974
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-gzcGnr_8C8CZeYqAMVORzfOrO9QTBuqKNtyEvzzhb1U

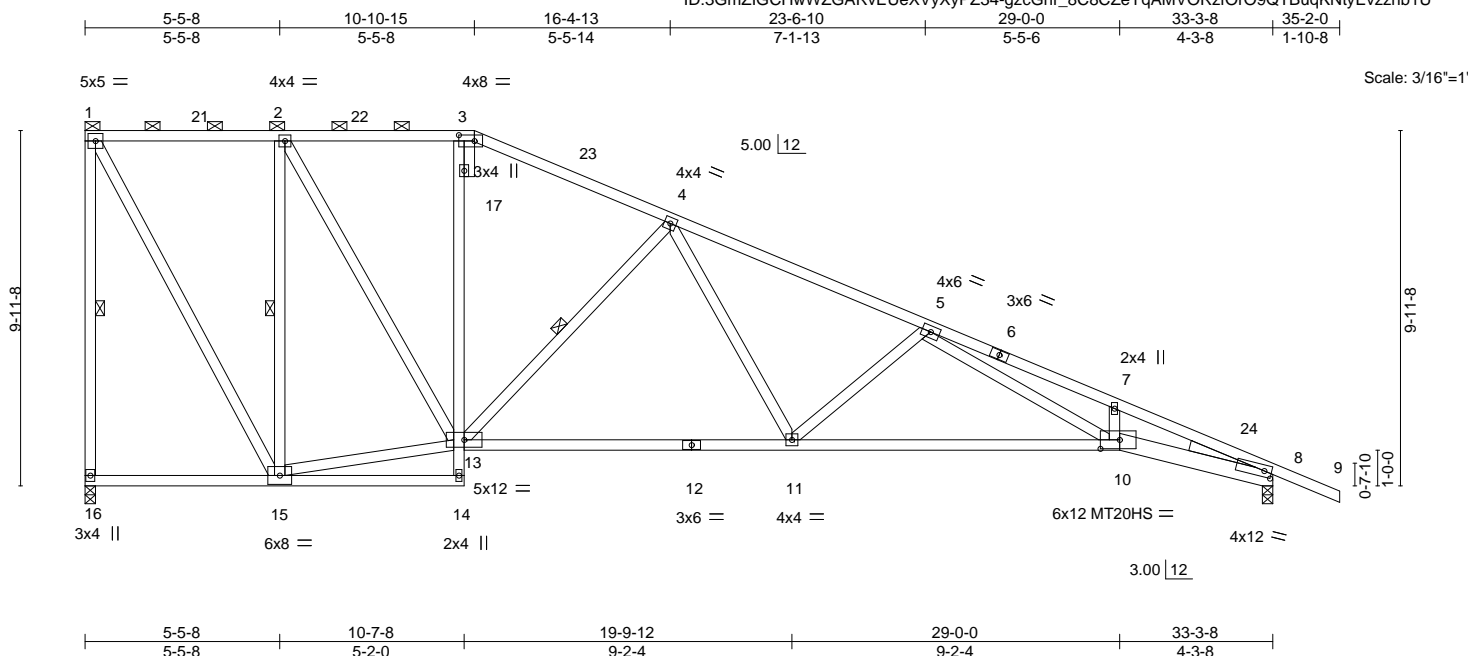


Plate Offsets (X,Y)-- [3:0-5-4,0-2-0], [8:0-2-8,0-2-0], [10:0-6-8,0-3-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.90	Vert(LL)	-0.39 10-11	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.82 10-11	>485	180
BCLL 0.0	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.22 8	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				PLATES		GRIP	
				MT20		197/144	
				MT20HS		148/108	
				Weight: 179 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 8-10: 2x6 SPF 2100F 1.8E, 10-12: 2x4 SPF 1650F 1.5E
 WEBS 2x4 SPF No.2
 WEDGE
 Right: 2x4 SP No.3

BRACING-

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

REACTIONS.

(size) 16=0-3-8, 8=0-3-8
 Max Horz 16=367(LC 13)
 Max Uplift 16=225(LC 9), 8=229(LC 13)
 Max Grav 16=1488(LC 1), 8=1627(LC 1)

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

TOP CHORD 1-16=1438/242, 1-2=700/103, 2-3=1231/168, 3-4=1414/156, 4-5=2705/309,
 5-7=5053/630, 7-8=5129/548
 BOT CHORD 15-16=161/366, 11-13=0/1963, 10-11=240/3075, 8-10=439/4705
 WEBS 1-15=213/1453, 2-15=1309/201, 13-15=0/719, 2-13=141/1036, 4-13=1068/281,
 4-11=102/933, 5-11=893/262, 5-10=243/1853

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-7-8, Exterior(2R) 10-7-8 to 13-7-8, Interior(1) 13-7-8 to 35-2-0 zone; cantilever left and right exposed; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 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) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=225, 8=229.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965975
2684960	C8	Piggyback Base	1	1	Job Reference (optional)	

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

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ID:3GmZIGChwWZGARvEueXyXyPZ34-8AAf?B?nzSKQGIPMvDvgWtw2HZnwwL?UbXioRQzhhb1T

5-3-12	10-10-15	16-11-5	22-6-0	29-0-0	33-3-8	34-2-0
5-3-12	5-7-3	6-0-6	5-6-12	6-6-0	4-3-8	0-10-8

Scale = 1:67.0

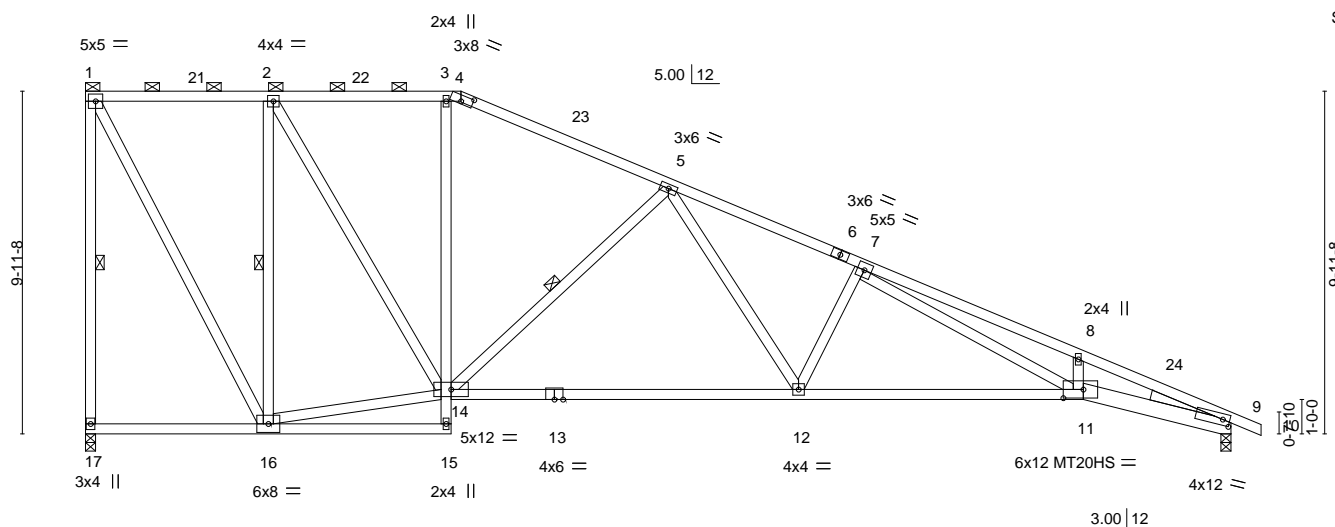


Plate Offsets (X, Y)--	[4:0-4-1,0-2-2], [9:0-2-8,0-2-0], [11:0-7-0,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.82	Vert(LL)	-0.40 11-12	>986	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.76	Vert(CT)	-0.78 11-12	>511	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.58	Horz(CT)	0.23 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 177 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-10: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
9-11: 2x6 SPF 2100F 1.8E, 11-13: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and
2-0-0 oc purlins (4-9-7 max.): 1-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 1-17, 2-16, 5-14

REACTIONS.

(size) 17=0-3-8, 9=0-3-8
Max Horz 17=-354(LC 13)
Max Uplift 17=-229(LC 9), 9=-207(LC 13)
Max Grav 17=1491(LC 1), 9=1554(LC 1)

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

TOP CHORD 1-17=-1443/245, 1-2=-686/102, 2-3=-1238/168, 3-4=-1240/169, 4-5=-1425/150,
5-7=-2892/358, 7-8=-5178/714, 8-9=-5208/608
BOT CHORD 16-17=-155/353, 12-14=-22/2025, 11-12=-203/2929, 9-11=-512/4788
WEBS 1-16=-216/1457, 2-16=-1320/207, 14-16=0/738, 2-14=-146/1056, 5-14=-1083/286,
5-12=-148/1081, 7-12=-758/232, 7-11=-371/2104

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-10-15, Exterior(2R) 10-10-15 to 13-10-15, Interior(1) 13-10-15 to 34-2-0 zone; cantilever left and right exposed; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=229, 9=207.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

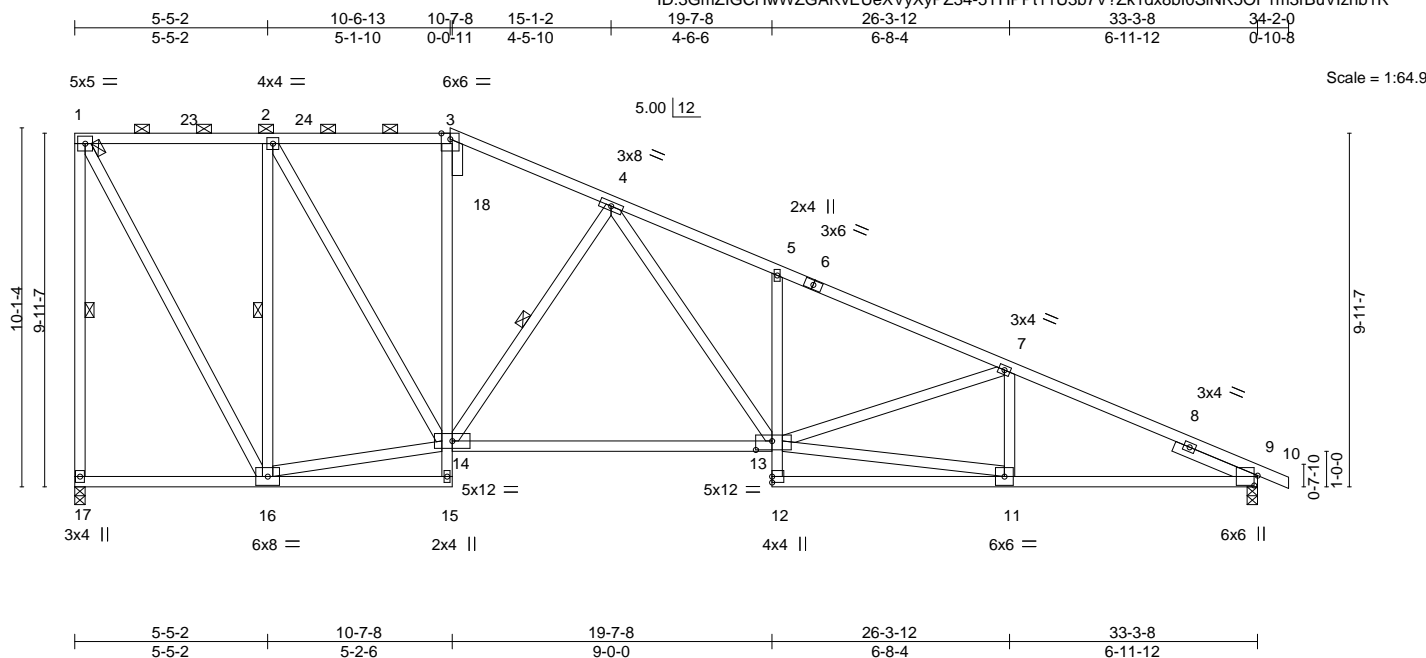


Plate Offsets (X,Y)-- [9:0-3-5,0-1-2], [13:0-5-8,0-3-0]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.24	13-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.56	13-14	>714	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 187 lb	FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (5-0-4 max.): 1-3.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Right 2x4 SPF No.2 - t 2-6-0	WEBS	1 Row at midpt 1-17, 2-16, 4-14

REACTIONS. (size) 17=0-3-8, 9=0-3-8
 Max Horz 17=-355(LC 13)
 Max Uplift 17=-226(LC 9), 9=-208(LC 13)
 Max Grav 17=1491(LC 1), 9=1554(LC 1)

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

TOP CHORD 1-17=-1441/243, 1-2=-700/103, 2-3=-1232/170, 3-4=-1391/161, 4-5=-2726/386,
5-7=-2733/307, 7-9=-2862/365

BOT CHORD 16-17=-155/354, 3-14=0/257, 13-14=0/1766, 5-13=-421/170, 9-11=-255/2581

WEBS 1-16=-214/1457, 2-16=-1322/205, 14-16=0/766, 2-14=-141/1029, 4-14=-959/266,
4-13=-232/1223, 11-13=-231/2498, 7-11=-284/89

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; BCDF=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-7-8, Exterior(2R) 10-7-8 to 15-1-2, Interior(1) 15-1-2 to 34-2-0 zone; cantilever left and right exposed; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=226, 9=208.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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

WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 3f, 9f, 10f, 11f, 12f, 13f, 14f, 15f, 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f, 56f, 57f, 58f, 59f, 60f, 61f, 62f, 63f, 64f, 65f, 66f, 67f, 68f, 69f, 70f, 71f, 72f, 73f, 74f, 75f, 76f, 77f, 78f, 79f, 80f, 81f, 82f, 83f, 84f, 85f, 86f, 87f, 88f, 89f, 90f, 91f, 92f, 93f, 94f, 95f, 96f, 97f, 98f, 99f, 100f, 101f, 102f, 103f, 104f, 105f, 106f, 107f, 108f, 109f, 110f, 111f, 112f, 113f, 114f, 115f, 116f, 117f, 118f, 119f, 120f, 121f, 122f, 123f, 124f, 125f, 126f, 127f, 128f, 129f, 130f, 131f, 132f, 133f, 134f, 135f, 136f, 137f, 138f, 139f, 140f, 141f, 142f, 143f, 144f, 145f, 146f, 147f, 148f, 149f, 150f, 151f, 152f, 153f, 154f, 155f, 156f, 157f, 158f, 159f, 160f, 161f, 162f, 163f, 164f, 165f, 166f, 167f, 168f, 169f, 170f, 171f, 172f, 173f, 174f, 175f, 176f, 177f, 178f, 179f, 180f, 181f, 182f, 183f, 184f, 185f, 186f, 187f, 188f, 189f, 190f, 191f, 192f, 193f, 194f, 195f, 196f, 197f, 198f, 199f, 200f, 201f, 202f, 203f, 204f, 205f, 206f, 207f, 208f, 209f, 210f, 211f, 212f, 213f, 214f, 215f, 216f, 217f, 218f, 219f, 220f, 221f, 222f, 223f, 224f, 225f, 226f, 227f, 228f, 229f, 230f, 231f, 232f, 233f, 234f, 235f, 236f, 237f, 238f, 239f, 240f, 241f, 242f, 243f, 244f, 245f, 246f, 247f, 248f, 249f, 250f, 251f, 252f, 253f, 254f, 255f, 256f, 257f, 258f, 259f, 260f, 261f, 262f, 263f, 264f, 265f, 266f, 267f, 268f, 269f, 270f, 271f, 272f, 273f, 274f, 275f, 276f, 277f, 278f, 279f, 280f, 281f, 282f, 283f, 284f, 285f, 286f, 287f, 288f, 289f, 290f, 291f, 292f, 293f, 294f, 295f, 296f, 297f, 298f, 299f, 300f, 301f, 302f, 303f, 304f, 305f, 306f, 307f, 308f, 309f, 310f, 311f, 312f, 313f, 314f, 315f, 316f, 317f, 318f, 319f, 320f, 321f, 322f, 323f, 324f, 325f, 326f, 327f, 328f, 329f, 330f, 331f, 332f, 333f, 334f, 335f, 336f, 337f, 338f, 339f, 340f, 341f, 342f, 343f, 344f, 345f, 346f, 347f, 348f, 349f, 350f, 351f, 352f, 353f, 354f, 355f, 356f, 357f, 358f, 359f, 360f, 361f, 362f, 363f, 364f, 365f, 366f, 367f, 368f, 369f, 370f, 371f, 372f, 373f, 374f, 375f, 376f, 377f, 378f, 379f, 380f, 381f, 382f, 383f, 384f, 385f, 386f, 387f, 388f, 389f, 390f, 391f, 392f, 393f, 394f, 395f, 396f, 397f, 398f, 399f, 400f, 401f, 402f, 403f, 404f, 405f, 406f, 407f, 408f, 409f, 410f, 411f, 412f, 413f, 414f, 415f, 416f, 417f, 418f, 419f, 420f, 421f, 422f, 423f, 424f, 425f, 426f, 427f, 428f, 429f, 430f, 431f, 432f, 433f, 434f, 435f, 436f, 437f, 438f, 439f, 440f, 441f, 442f, 443f, 444f, 445f, 446f, 447f, 448f, 449f, 450f, 451f, 452f, 453f, 454f, 455f, 456f, 457f, 458f, 459f, 460f, 461f, 462f, 463f, 464f, 465f, 466f, 467f, 468f, 469f, 470f, 471f, 472f, 473f, 474f, 475f, 476f, 477f, 478f, 479f, 480f, 481f, 482f, 483f, 484f, 485f, 486f, 487f, 488f, 489f, 490f, 491f, 492f, 493f, 494f, 495f, 496f, 497f, 498f, 499f, 500f, 501f, 502f, 503f, 504f, 505f, 506f, 507f, 508f, 509f, 510f, 511f, 512f, 513f, 514f, 515f, 516f, 517f, 518f, 519f, 520f, 521f, 522f, 523f, 524f, 525f, 526f, 527f, 528f, 529f, 530f, 531f, 532f, 533f, 534f, 535f, 536f, 537f, 538f, 539f, 540f, 541f, 542f, 543f, 544f, 545f, 546f, 547f, 548f, 549f, 550f, 551f, 552f, 553f, 554f, 555f, 556f, 557f, 558f, 559f, 560f, 561f, 562f, 563f, 564f, 565f, 566f, 567f, 568f, 569f, 570f, 571f, 572f, 573f, 574f, 575f, 576f, 577f, 578f, 579f, 580f, 581f, 582f, 583f, 584f, 585f, 586f, 587f, 588f, 589f, 590f, 591f, 592f, 593f, 594f, 595f, 596f, 597f, 598f, 599f, 600f, 601f, 602f, 603f, 604f, 605f, 606f, 607f, 608f, 609f, 610f, 611f, 612f, 613f, 614f, 615f, 616f, 617f, 618f, 619f, 620f, 621f, 622f, 623f, 624f, 625f, 626f, 627f, 628f, 629f, 630f, 631f, 632f, 633f, 634f, 635f, 636f, 637f, 638f, 639f, 640f, 641f, 642f, 643f, 644f, 645f, 646f, 647f, 648f, 649f, 650f, 651f, 652f, 653f, 654f, 655f, 656f, 657f, 658f, 659f, 660f, 661f, 662f, 663f, 664f, 665f, 666f, 667f, 668f, 669f, 670f, 671f, 672f, 673f, 674f, 675f, 676f, 677f, 678f, 679f, 680f, 681f, 682f, 683f, 684f, 685f, 686f, 687f, 688f, 689f, 690f, 691f, 692f, 693f, 694f, 695f, 696f, 697f, 698f, 699f, 700f



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965977
2684960	C10	Roof Special	1	1	Job Reference (optional)	

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

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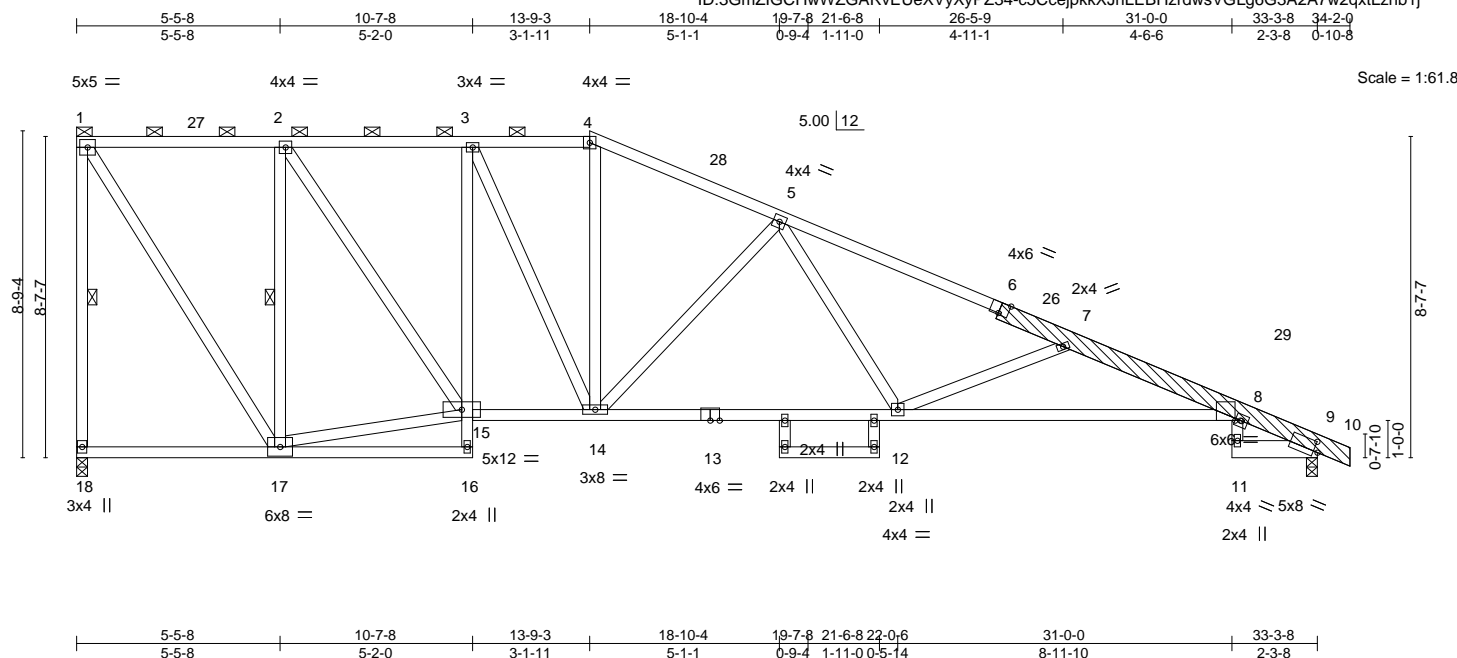


Plate Offsets (X,Y)-- [6:0-3-0,Edge], [8:0-1-11,0-0-0], [9:0-1-6,0-3-4]									
LOADING (psf)	SPACING	2-0-0	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.67	Vert(LL)	-0.33 8-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.90	Vert(CT)	-0.71 8-12	>561	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.89	Horz(CT)	0.26 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 202 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-10: 2x6 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
9-11: 2x6 SPF No.2, 8-13: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
OTHERS 2x6 SPF 2100F 1.8E
LBR SCAB 6-10 2x6 SPF 2100F 1.8E one side

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-14 max.): 1-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 1-18, 2-17

REACTIONS.

(size) 18=0-3-8, 9=0-3-8
Max Horz 18=330(LC 10)
Max Uplift 18=239(LC 8), 9=220(LC 13)
Max Grav 18=1491(LC 1), 9=1560(LC 1)

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

TOP CHORD 1-18=1441/250, 1-2=814/212, 2-3=1456/277, 3-4=1645/289, 4-5=1857/296,
5-7=3124/395, 7-8=4258/638, 8-9=557/106
BOT CHORD 17-18=201/319, 3-15=700/155, 14-15=27/1459, 12-14=136/2305, 8-12=538/4090
WEBS 8-11=39/374, 1-17=235/1510, 2-17=1322/242, 15-17=0/755, 2-15=121/1110,
3-14=110/434, 4-14=36/435, 5-14=962/254, 5-12=94/888, 7-12=1443/402

NOTES-

- 1) Attached 10-3-8 scab 6 to 10, front face(s) 2x6 SPF 2100F 1.8E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 0-0-0 from end at joint 6, nail 2 row(s) at 7" o.c. for 3-1-15; starting at 5-11-6 from end at joint 6, nail 2 row(s) at 4" o.c. for 4-3-10.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 13-9-3, Exterior(2R) 13-9-3 to 16-9-3, Interior(1) 16-9-3 to 34-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=239, 9=220.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 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/93 Manor	144965978
2684960	C11	Roof Special	1	1	Job Reference (optional)	

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

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:05:53 2021 Page 1

ID:3GmZIGCHWZGARvEueXVyXyPZ34-4Hm_r3qMvRSyOmTXZ89PipWCWc5vX2G9iZVPnzhb1i

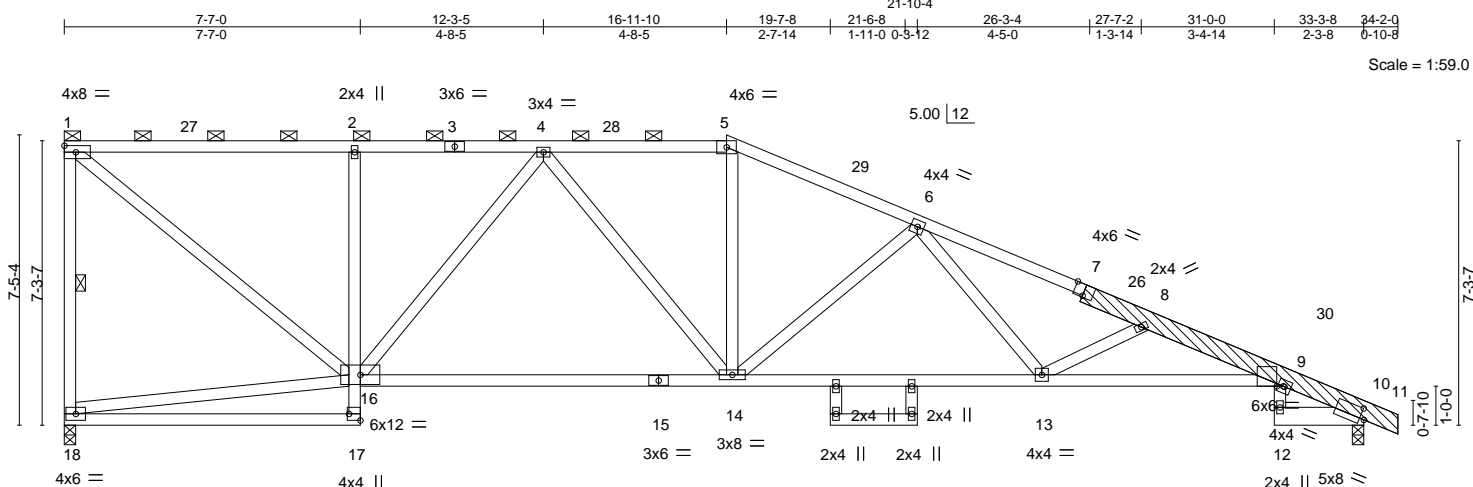


Plate Offsets (X,Y)--	[7:0-3-0,Edge], [9:0-1-15,0-0-0], [10:0-1-6,0-3-4], [17:Edge,0-3-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.69	Vert(LL)	-0.29	9-13	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.59	14-16	>669		
BCLL 0.0	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.26	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 180 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
7-11: 2x6 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
10-12: 2x6 SPF No.2, 9-15: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
OTHERS 2x6 SPF 2100F 1.8E
LBR SCAB 7-11 2x6 SPF 2100F 1.8E one side

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-5-10 max.): 1-5.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 1-18

REACTIONS.

(size) 18=0-3-8, 10=0-3-8
Max Horz 18=-277(LC 10)
Max Uplift 18=-248(LC 8), 10=-202(LC 13)
Max Grav 18=1491(LC 1), 10=1560(LC 1)

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

TOP CHORD 1-18=-1424/249, 1-2=-1480/270, 2-4=-1473/263, 4-5=-2085/310, 5-6=-2325/318,
6-8=-3714/427, 8-9=-4594/587, 9-10=-557/100
BOT CHORD 2-16=-481/177, 14-16=-141/1910, 13-14=-208/2748, 9-13=-500/4436
WEBS 9-12=-35/374, 1-16=-266/1878, 4-16=-696/148, 4-14=-72/274, 5-14=-30/541,
6-14=-862/233, 6-13=-112/958, 8-13=-1247/301

NOTES-

- Attached 8-9-14 scab 7 to 11, front face(s) 2x6 SPF 2100F 1.8E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 0-0-0 from end at joint 7, nail 2 row(s) at 7" o.c. for 2-10-12; starting at 4-5-12 from end at joint 7, nail 2 row(s) at 3" o.c. for 4-3-10.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 16-11-10, Exterior(2R) 16-11-10 to 19-11-10, Interior(1) 19-11-10 to 34-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=248, 10=202.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965979
2684960	C12	Roof Special	1	1		

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

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ID:3GmZIGCHwWZGARvEUEXVyXyPZ34-ZTKM3Pq?G9aPaYlg5GfOxwLgNwyee1DQNMJ2xEzhh1h

Job Reference (optional)

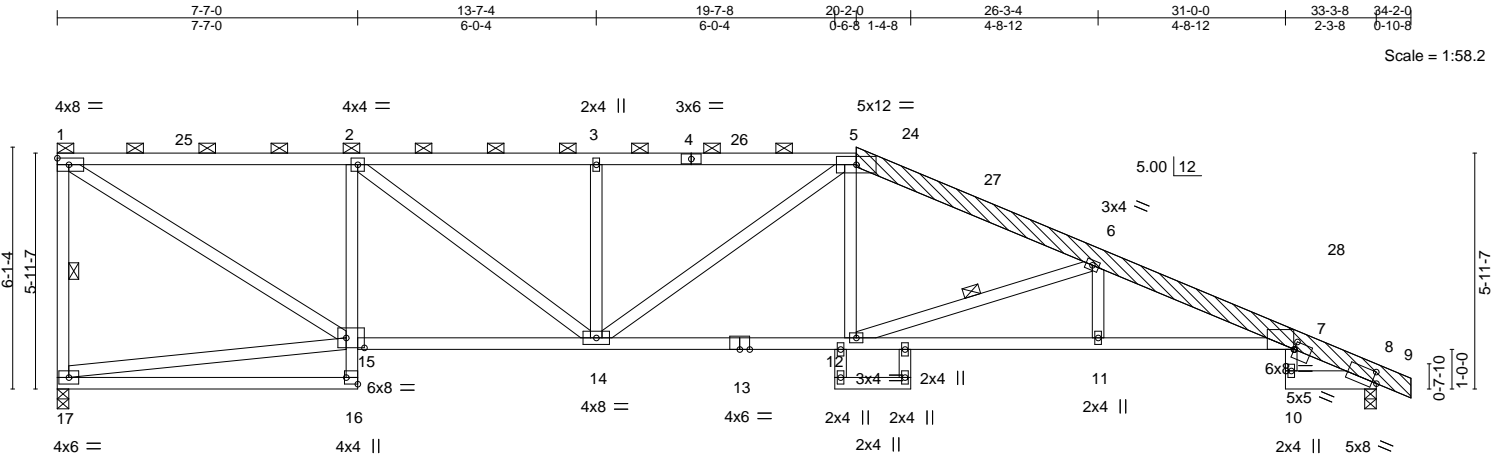


Plate Offsets (X,Y)--	[7:0-0-3,0-0-0], [7:0-0-1,0-2-7], [8:0-1-6,0-3-4], [15:0-5-8,0-3-0], [16:Edge,0-3-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.31 7-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.95	Vert(CT)	-0.56 11-12	>704	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.29 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 188 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 5-9: 2x6 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-10-10 max.): 1-5.
BOT CHORD 2x4 SPF No.2 *Except* 8-10: 2x6 SPF No.2, 7-13: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 1-17, 6-12
OTHERS 2x6 SPF 2100F 1.8E	
LBR SCAB 5-9 2x6 SPF 2100F 1.8E one side	

REACTIONS. (size) 17=0-3-8, 8=0-3-8
Max Horz 17=-226(LC 10)
Max Uplift 17=-256(LC 8), 8=-179(LC 13)
Max Grav 17=1491(LC 1), 8=1560(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-17=-1414/266, 1-2=-1894/347, 2-3=-2618/437, 3-5=-2618/437, 5-6=-2861/405,
6-7=-4145/471, 7-8=-556/101
BOT CHORD 2-15=-1054/264, 14-15=-184/1889, 12-14=-238/2590, 11-12=-378/3936, 7-11=-378/3936
WEBS 7-10=-29/374, 1-15=-344/2199, 2-14=-135/914, 3-14=-444/158, 6-12=-1444/281,
6-11=0/268, 5-12=-38/601

- NOTES-**
- 1) Attached 15-4-5 scab 5 to 9, front face(s) 2x6 SPF 2100F 1.8E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 5-7-6 from end at joint 5, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 10-11-0 from end at joint 5, nail 2 row(s) at 3" o.c. for 4-3-10.
 - 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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 20-2-0, Exterior(2R) 20-2-0 to 23-2-0, Interior(1) 23-2-0 to 34-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=256, 8=179.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965980
2684960	C13	HALF HIP GIRDER	1	2	Job Reference (optional)	

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

8.430 s Feb 12 2021
MiTek Industries, Inc.
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Page 1

ID:3GmZIGCHwWZGARvEueXVyXyPZ34-vR7F66u74hChhJDduqFZez3SQxeXJK59Xd0pcRzhb1c

3-11-4
3-11-4

7-7-0
3-7-12

11-4-14
3-9-14

15-4-8
3-11-10

19-4-2
3-11-10

19-7-8
0-3-6

21-6-8
1-11-0

23-2-0
1-7-8

27-1-0
3-11-0

31-0-0
3-11-0

33-3-8
2-3-8

34-2-0
0-10-8

Scale = 1:59.7

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Plate Offsets (X,Y)-- [9:0-1-4,Edge], [10:0-6-14,Edge], [10:0-1-4,0-1-2], [11:0-1-2,0-2-12], [20:0-6-0,0-3-0]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES		GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.37 16	>999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.68 15-16	>587 180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.34 11	n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 358 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
9-12: 2x6 SPF 2100F 1.8E

BOT CHORD 2x4 SPF No.2 *Except*
10-17: 2x4 SP 2400F 2.0E

WEBS 2x4 SPF No.2

OTHERS 2x6 SPF 2100F 1.8E

LBR SCAB 9-12 2x6 SPF 2100F 1.8E one side

REACTIONS. (size) 23=0-3-8, 11=0-3-8

Max Horz 23=-178(LC 6)

Max Uplift 23=-1027(LC 4), 11=-716(LC 5)

Max Grav 23=2925(LC 1), 11=2823(LC 1)

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

TOP CHORD 1-23=-2830/1022, 1-2=-2212/799, 2-3=-4741/1635, 3-4=-6200/2108, 4-5=-6835/2286,
5-7=-6835/2286, 7-8=-6718/2194, 8-9=-6339/1939, 9-10=-8124/2254, 10-11=-1279/353

BOT CHORD 3-20=-1647/614, 19-20=-1528/4798, 18-19=-1983/6200, 16-18=-2068/6716,
15-16=-1676/5751, 14-15=-2119/7868, 10-14=-2117/7839, 10-13=-79/361

WEBS 1-22=-1164/3377, 2-22=-2994/1084, 20-22=-645/2113, 2-20=-1169/3538, 3-19=-618/1861,
4-19=-977/356, 4-18=-249/841, 5-18=-410/182, 8-15=-231/1154, 9-15=-2290/516,
9-14=-13/331, 7-16=-678/327, 8-16=-531/1366

- NOTES-**
- 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Attached 7-8-8 scab 9 to 12, back face(s) 2x6 SPF 2100F 1.8E with 2 row(s) of Simpson SDS 1/4 x 4-1/2 screws spaced 9" o.c.except : starting at 0-0-7 from end at joint 9, nail 2 row(s) at 7" o.c. for 3-0-0; starting at 3-2-15 from end at joint 9, nail 2 row(s) at 4" o.c. for 4-3-14.
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)



February 25,2021

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44965980
2684960	C13	HALF HIP GIRDER	1	2	Job Reference (optional)	

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

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:05:59 2021 Page 2
ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-vR7F66u74hChhJDduqFZez3SQxeXJK59Xd0pcRzhb1c

NOTES-

- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 80 lb down and 45 lb up at 0-1-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-8=-70, 8-10=-70, 10-12=-70, 21-23=-20, 16-20=-20, 10-16=-20, 13-27=-20

Concentrated Loads (lb)

Vert: 1=-36 9=-71(F) 10=-169(F) 15=-70(F) 14=-90(F) 7=-74(F) 16=-91(F) 8=-89(F) 31=-118(F) 32=-115(F) 33=-115(F) 34=-115(F) 35=-74(F) 36=-74(F) 37=-74(F) 38=-74(F) 39=-74(F) 40=-115(F) 41=-62(F) 42=-88(F) 43=-59(F) 44=-58(F) 45=-58(F) 46=-58(F) 47=-91(F) 48=-91(F) 49=-91(F) 50=-91(F) 51=-91(F) 52=-58(F) 53=-102(F) 54=-72(F)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

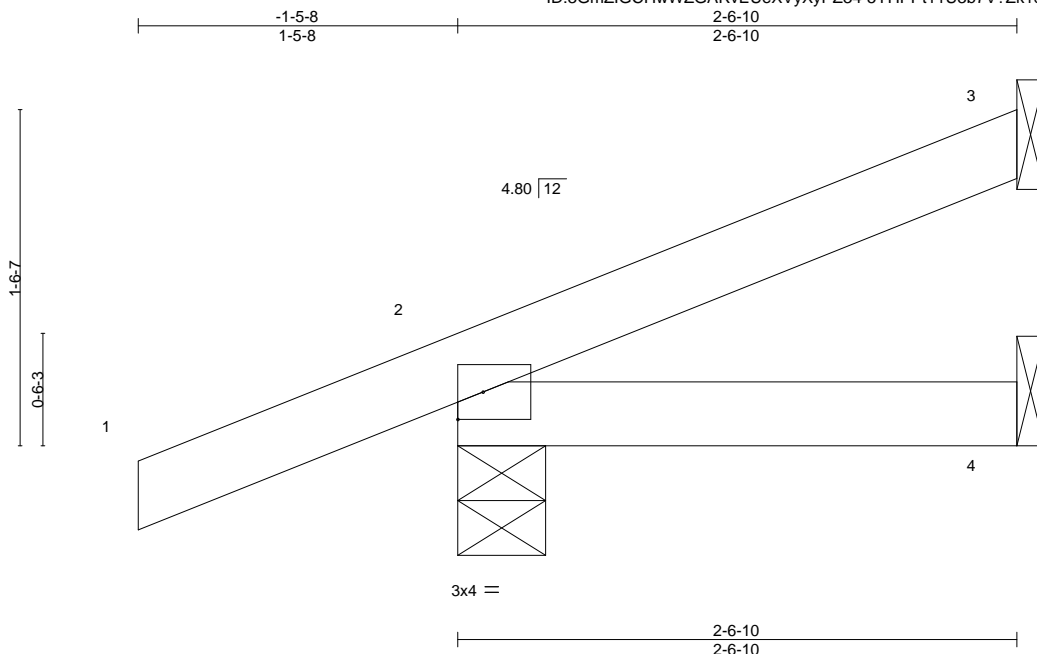
Job 2684960	Truss CJ1	Truss Type Jack-Open Girder	Qty 2	Ply 1	Summit/93 Manor Job Reference (optional)	I44965981
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:10 2021 Page 1

ID:3GmZIGCHwWZGARvEueXVyXyPZ34-5YHPP11U3b7V?Zk1dx8bI0Y7NdbOOOm3rBuVlzhb1R



Scale = 1:10.5

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 0.16	Vert(LL)	-0.00	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-7	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-4-13, 4=Mechanical
Max Horz 2=55(LC 12)
Max Uplift 3=-28(LC 12), 2=-60(LC 8)
Max Grav 3=63(LC 1), 2=244(LC 1), 4=42(LC 3)

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

NOTES-

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



February 25, 2021

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

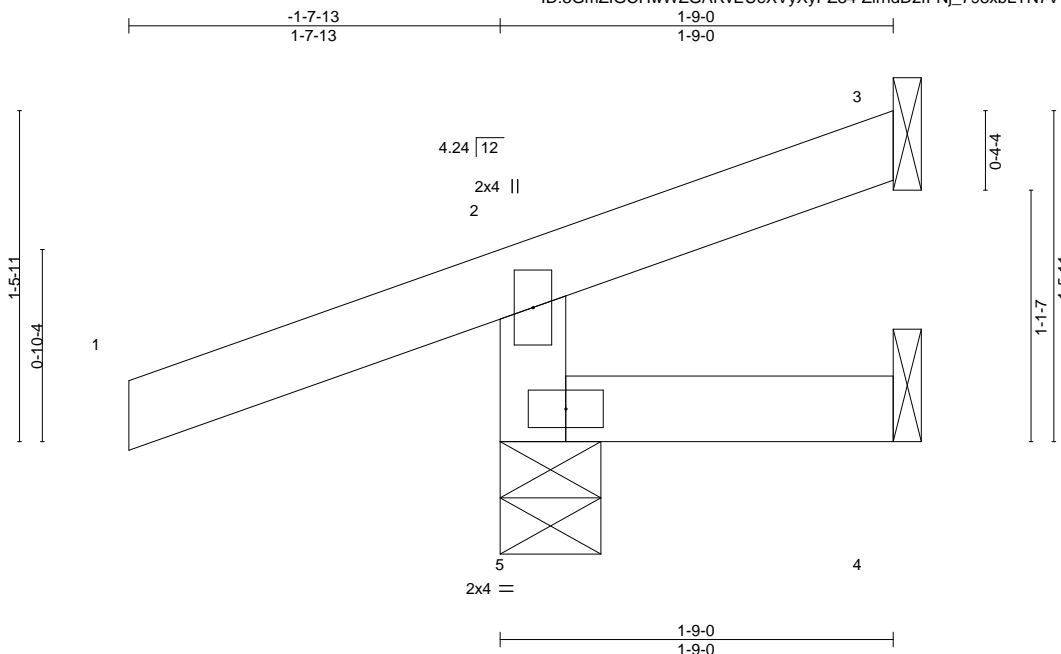
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44965983
2684960	CJ3	Jack-Open	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:11 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-ZlrdD2fFNj_798xbLTN7VYi_nza7rrwVwS2lzhb1Q



Scale = 1:10.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	0.00	5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 7 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-9-0 oc purlins, except end verticals.

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

REACTIONS.

(size) 5=0-5-6, 3=Mechanical, 4=Mechanical

Max Horz 5=43(LC 8)

Max Uplift 5=101(LC 8), 3=-12(LC 12), 4=-5(LC 1)

Max Grav 5=268(LC 1), 3=6(LC 22), 4=24(LC 3)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed;

MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right

exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

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

4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=101.

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.



February 25, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

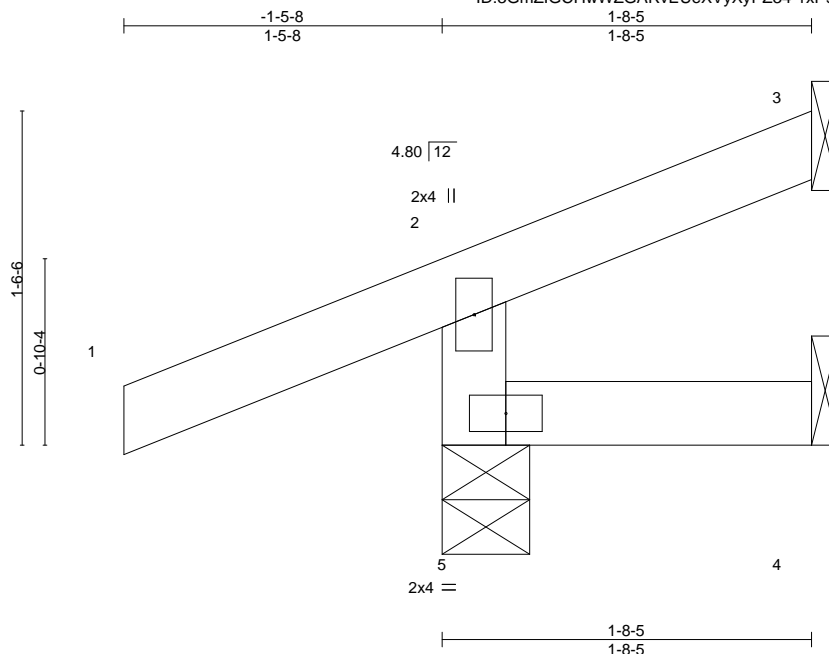
Job 2684960	Truss CJ4	Truss Type Jack-Open Girder	Qty 1	Ply 1	Summit/93 Manor Job Reference (optional)	I44965984
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:12 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-1xP9qZ2H0hrrlJj782_cgi5t2AJysl53W9g?aBzhhb1P



Scale = 1:10.6

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 0.20	Vert(LL)	0.00	5	>999	240	MT20	197/144
BCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	0.00	5	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-4-13, 3=Mechanical, 4=Mechanical
Max Horz 5=39(LC 9)
Max Uplift 5=66(LC 8), 3=15(LC 12), 4=1(LC 1)
Max Grav 5=240(LC 1), 3=11(LC 1), 4=24(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; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 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.



February 25, 2021

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

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



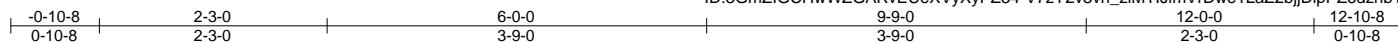
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684960	Truss D1	Truss Type Hip Girder	Qty 1	Ply 1	Summit/93 Manor Job Reference (optional)	144965985
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:13 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-V7zY2v3vn_ziMTIJimVrDwe1LaZ2bjjDlpPZ6dzhb1O



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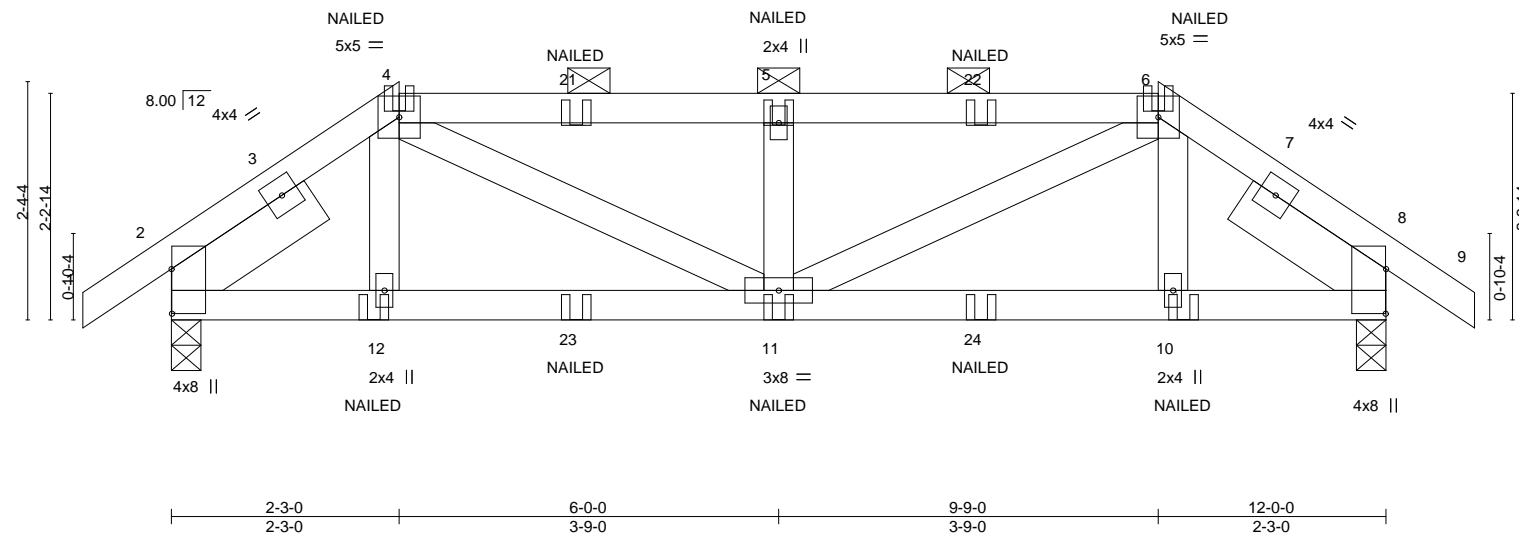


Plate Offsets (X,Y)-- [2:0-5-5,0-0-1], [8:0-5-5,0-0-1]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	-0.03 11	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.06 10-11	>999	180
BCLL 0.0	Rep Stress Incr	NO	WB 0.17	Horz(CT)	0.01 8	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 52 lb	FT = 20%		

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x6 SPF No.2 -t 1-8-5, Right 2x6 SPF No.2 -t 1-8-5

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-5-11 oc purlins, except
 2-0-0 oc purlins (4-8-13 max.): 4-6.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 8=0-3-8
 Max Horz 2=48(LC 28)
 Max Uplift 2=-174(LC 8), 8=-174(LC 9)
 Max Grav 2=875(LC 1), 8=875(LC 1)

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

TOP CHORD 2-4=-1003/207, 4-5=-1374/261, 5-6=-1374/261, 6-8=-1003/208
 BOT CHORD 2-12=-158/792, 11-12=-158/784, 10-11=-124/784, 8-10=-123/792
 WEBS 4-11=-149/687, 5-11=-448/170, 6-11=-149/687

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=174, 8=174.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-70, 4-6=-70, 6-9=-70, 13-17=-20
 Concentrated Loads (lb)
 Vert: 12=-144(B) 11=-33(B) 5=-53(B) 10=-144(B) 21=-53(B) 22=-53(B) 23=-33(B) 24=-33(B)



February 25, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2684960	Truss D2	Truss Type Hip	Qty 1	Ply 1	Summit/93 Manor 144965986
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:14 2021 Page 1
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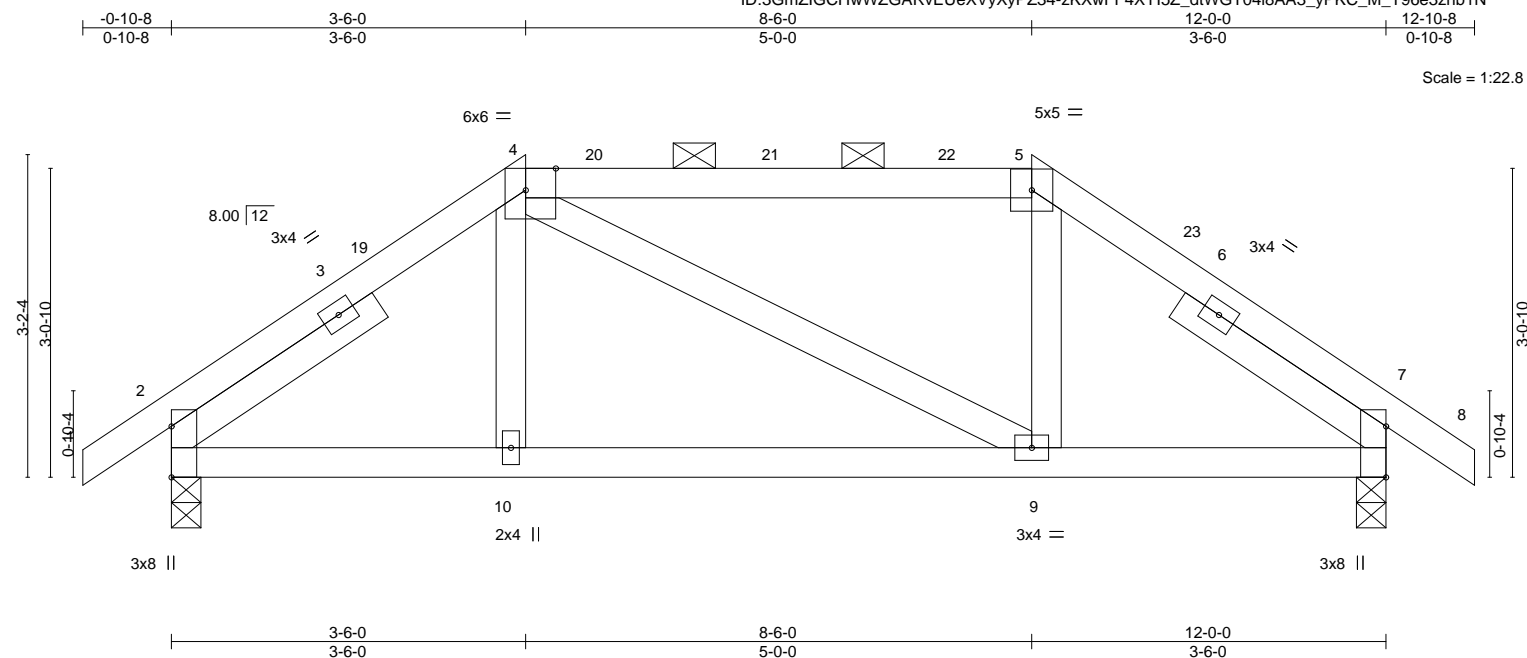


Plate Offsets (X,Y)-- [4:0-3-9,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.36	Vert(LL)	-0.02 9-10	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	-0.06 9-10	>999	180
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.01 7	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 50 lb	FT = 20%		

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x4 SPF No.2 -t 2-6-0, Right 2x4 SPF No.2 -t 2-6-0	

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=67(LC 11)
Max Uplift 2=-86(LC 12), 7=-86(LC 13)
Max Grav 2=601(LC 1), 7=601(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-620/144, 4-5=-500/146, 5-7=-620/140
BOT CHORD 2-10=-63/504, 9-10=-65/500, 7-9=-43/504

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=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 3-6-0, Exterior(2R) 3-6-0 to 7-8-15, Interior(1) 7-8-15 to 8-6-0, Exterior(2E) 8-6-0 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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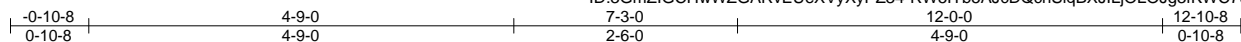
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965987
2684960	D3	Hip	1	1	Job Reference (optional)	

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

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:15 2021 Page 1

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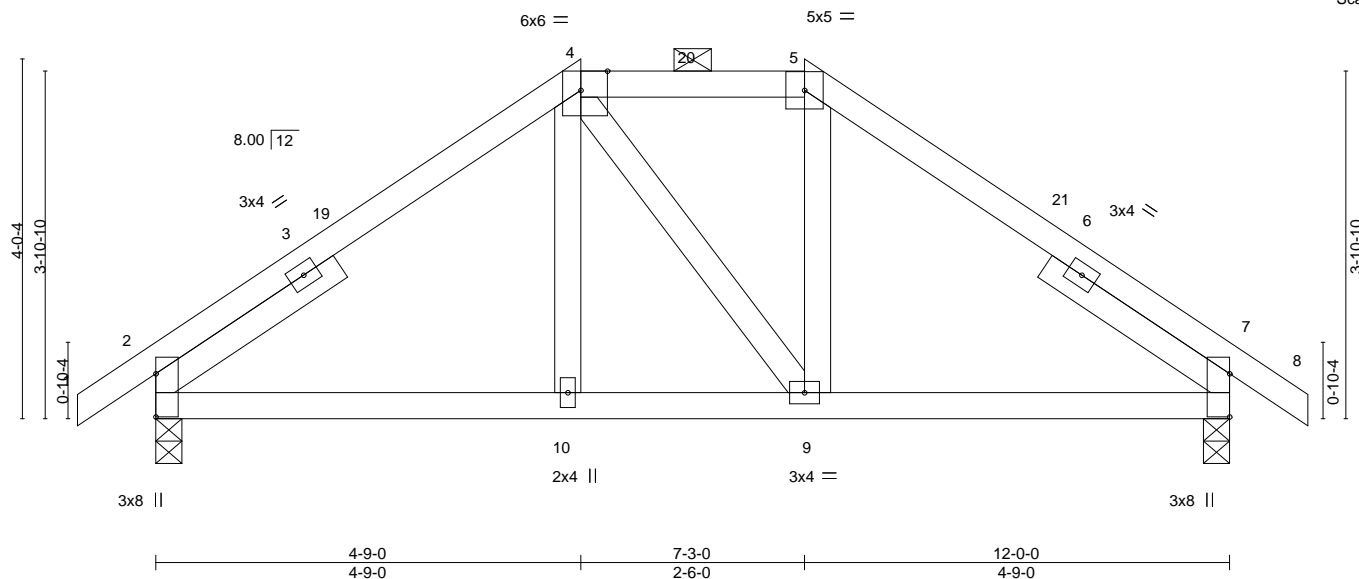


Plate Offsets (X,Y)-- [4:0-3-9,Edge]		4-9-0		7-3-0		12-0-0	
		4-9-0		2-6-0		4-9-0	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	-0.01 10-13	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.02 10-13	>999	180
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.01 7	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 51 lb		FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x4 SPF No.2 -t 2-6-0, Right 2x4 SPF No.2 -t 2-6-0	

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=86(LC 11)
Max Uplift 2=82(LC 12), 7=82(LC 13)
Max Grav 2=601(LC 1), 7=601(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-556/142, 4-5=-438/159, 5-7=-556/140
BOT CHORD 2-10=-40/440, 9-10=-40/437, 7-9=-17/441

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-9-0, Exterior(2E) 4-9-0 to 7-3-0, Exterior(2R) 7-3-0 to 12-0-0, Interior(1) 12-0-0 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

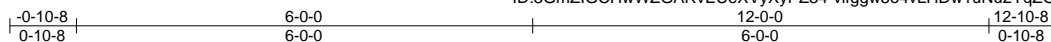
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44965988
2684960	D4	Common	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

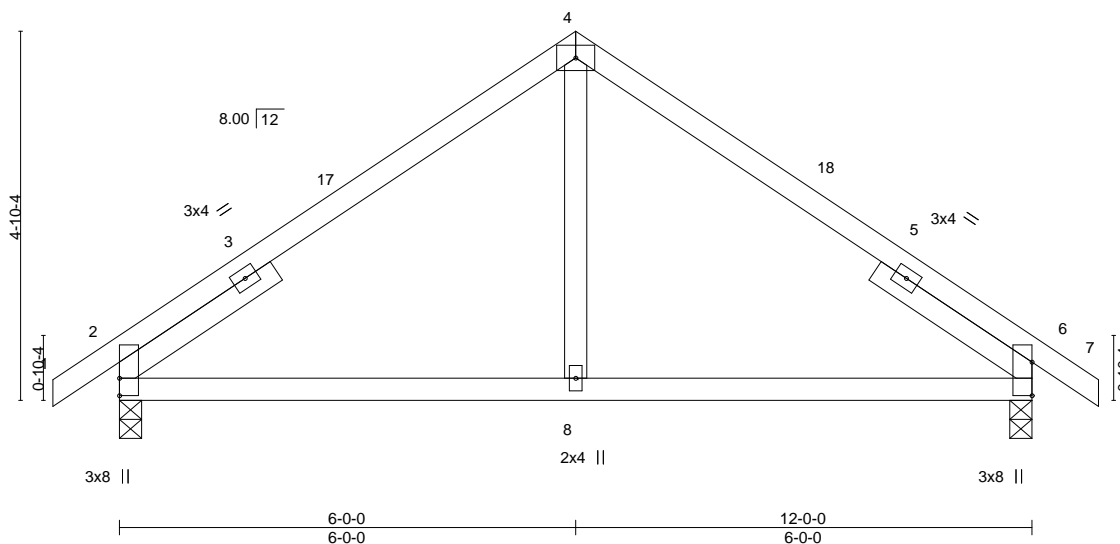
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:16 2021 Page 1

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4x6 =

Scale = 1:30.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	-0.04	8-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.06	8-11	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.02	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 43 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
 Max Horz 2=107(LC 11)
 Max Uplift 2=-78(LC 12), 6=-78(LC 13)
 Max Grav 2=601(LC 1), 6=601(LC 1)

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

TOP CHORD 2-4=-496/152, 4-6=-496/152
 BOT CHORD 2-8=-21/404, 6-8=-21/404
 WEBS 4-8=0/252

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 25, 2021

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

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



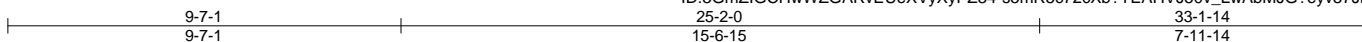
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965989
2684960	LG1	GABLE	1	1	Job Reference (optional)	

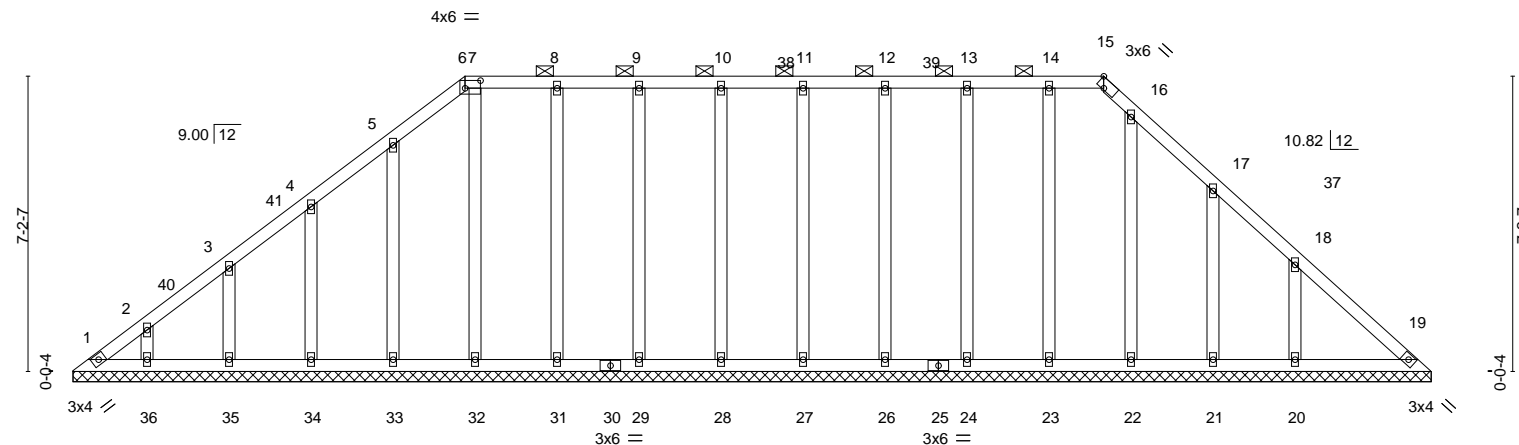
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:18 2021 Page 1

ID:3GmZIGCHwWZGARvEueXVyXyPZ34-s5mR5c72cXb?TEAHVJ50v_LwAbMJG?eyv57Jnrzhb1J



Scale = 1:56.2



0-0-5	33-1-14
0-0-5	33-1-9

Plate Offsets (X,Y)-- [6:0-4-8,0-2-4], [15:Edge,0-2-10]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a - n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a - n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01 19 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 169 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 33-1-9.
(lb) - Max Horz 1=162(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 36, 35, 34, 33, 32, 31, 29, 28, 27, 26, 24, 23, 22, 21 except 20=136(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 19, 1, 36, 35, 34, 33, 32, 31, 29, 28, 27, 26, 24, 23, 22, 21 except 20=288(LC 20)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 9-7-1, Exterior(2R) 9-7-1 to 13-10-0, Interior(1) 13-10-0 to 25-2-0, Exterior(2R) 25-2-0 to 29-4-15, Interior(1) 29-4-15 to 32-9-5 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 36, 35, 34, 33, 32, 31, 29, 28, 27, 26, 24, 23, 22, 21 except (it=lb) 20=136.
- This truss 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.



February 25, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684960	Truss LG2	Truss Type GABLE	Qty 1	Ply 1	Summit/93 Manor 144965990
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:19 2021 Page 1
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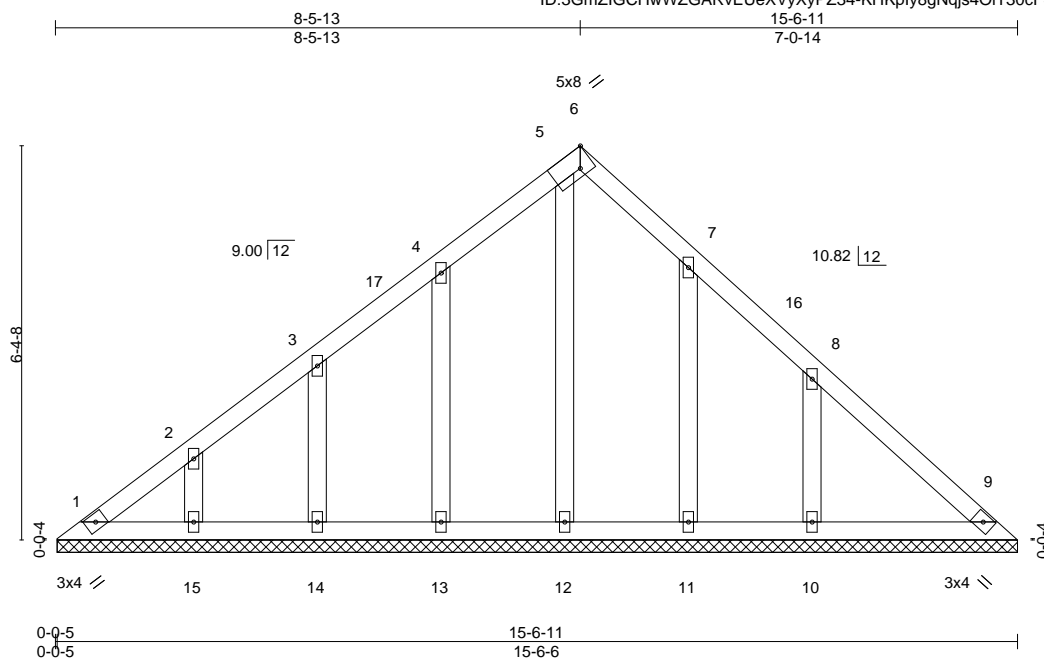


Plate Offsets (X,Y)-- [6:0-2-10,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a
BCLL 0.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	9	n/a
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 63 lb	FT = 20%		

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 15-6-6.
(lb) - Max Horz 1=142(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 14, 13, 11 except 10=-144(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 9, 1, 15, 14, 13, 12, 11 except 10=291(LC 20)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 8-5-13, Exterior(2R) 8-5-13 to 11-5-13, Interior(1) 11-5-13 to 15-2-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 14, 13, 11 except (jt=lb) 10=144.
- 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.



February 25, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

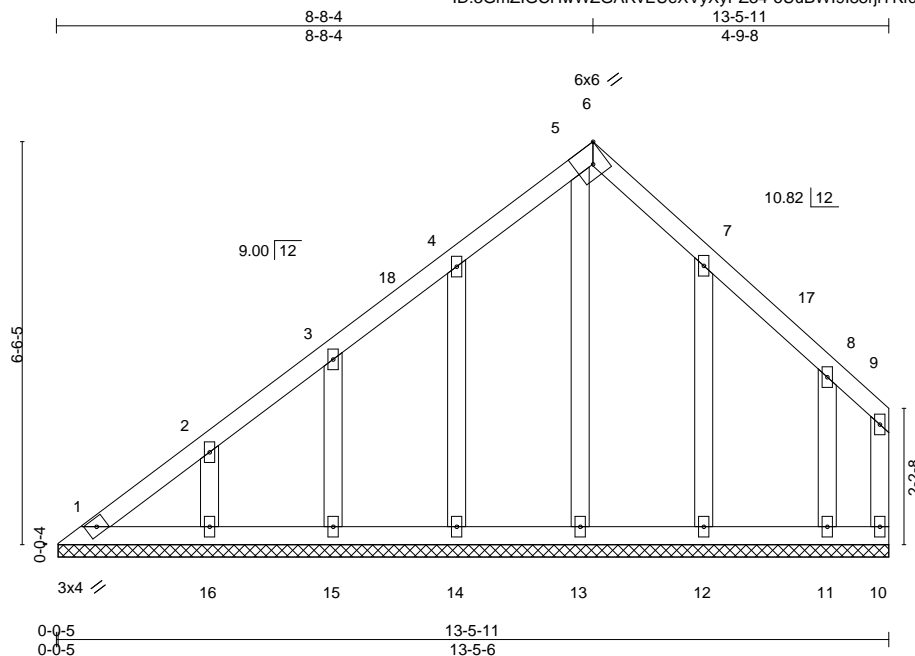
Job 2684960	Truss LG3	Truss Type GABLE	Qty 1	Ply 1	Summit/93 Manor 144965991
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:20 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-oUuBWl9l88rjiYKfck7U?PQGyP28kvAFMOcQsjzhh1H



Scale = 1:37.3

Plate Offsets (X,Y)--		[6:0-2-10,Edge]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	-0.00	10	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
								PLATES	GRIP
								MT20	197/144
								Weight: 61 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-5-6.

(lb) - Max Horz 1=170(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 16, 15, 14, 13, 12 except 11=109(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 10, 1, 16, 15, 14, 13, 12, 11

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 8-8-4, Exterior(2R) 8-8-4 to 11-8-4, Interior(1) 11-8-4 to 13-3-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 16, 15, 14, 13, 12 except (jt=lb) 11=109.
- 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.



February 25, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

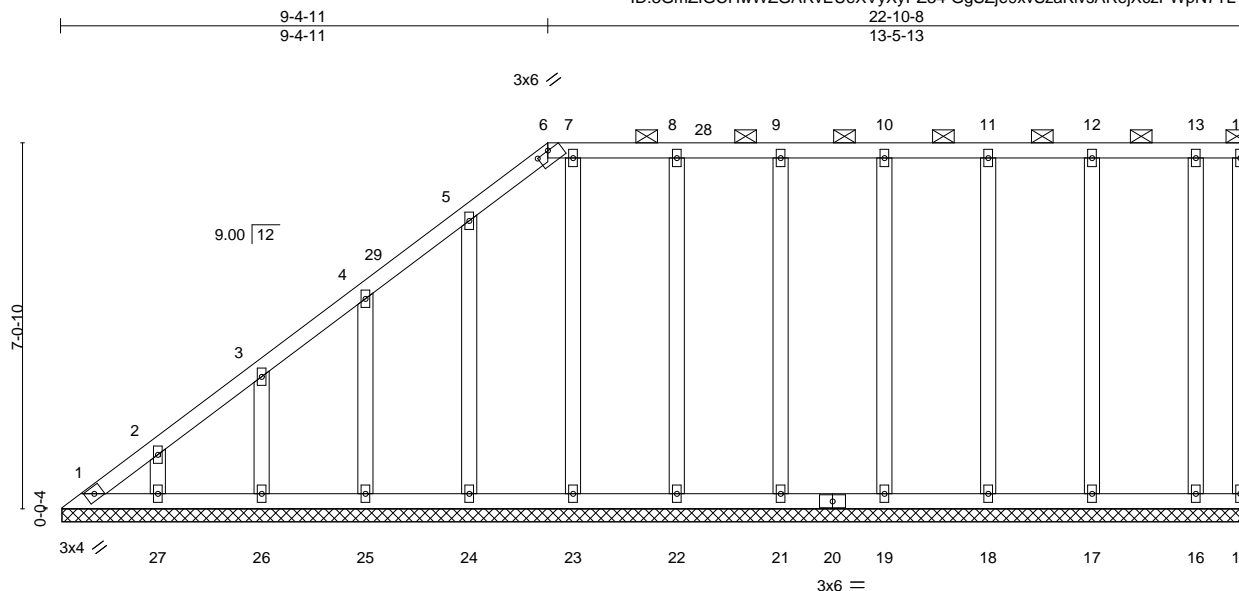
Job 2684960	Truss LG4	Truss Type GABLE	Qty 1	Ply 1	Summit/93 Manor 144965992
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:21 2021 Page 1

ID:3GmZIGCHwWZGARvEueXVyXyPZ34-GgSZje9xvSzaKivsARejXczPWpN7TLTOb2L_O9zhh1G



Scale = 1:44.4

Plate Offsets (X,Y)-- [6:0-3-0,0-0-1]		22-10-8		22-10-3	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	in (loc) l/defl L/d	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(LL) n/a - n/a 999	GRIP 197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.12	Vert(CT) n/a - n/a 999	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S	Horz(CT) -0.00 15 n/a n/a	
				Weight: 127 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-14.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 22-10-3.

(lb) - Max Horz 1=242(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 15, 1, 27, 26, 25, 24, 23, 22, 21, 19, 18, 17, 16

Max Grav All reactions 250 lb or less at joint(s) 15, 1, 27, 26, 25, 24, 23, 22, 21, 19, 18, 17, 16

FORCES.

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

TOP CHORD 1-2=-322/255, 2-3=-275/222

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 9-4-11, Exterior(2R) 9-4-11 to 12-4-11, Interior(1) 12-4-11 to 22-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 1, 27, 26, 25, 24, 23, 22, 21, 19, 18, 17, 16.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44965993
2684960	LG5	GABLE	1	1	Job Reference (optional)	

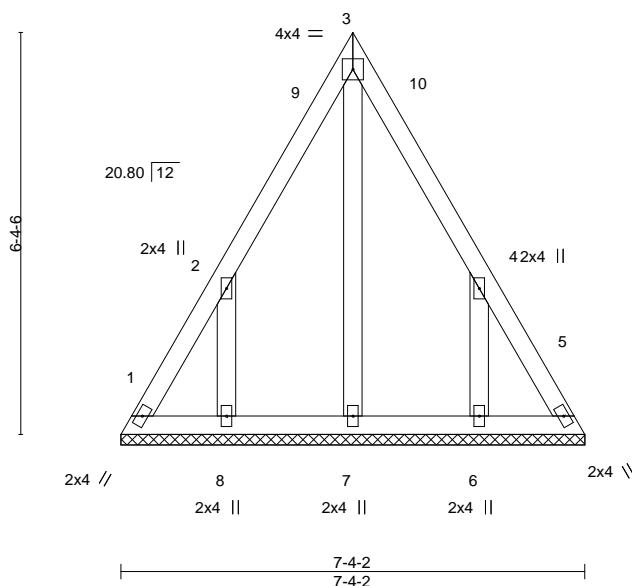
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:22 2021 Page 1
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3-8-1 7-4-2
3-8-1 3-8-1

Scale = 1:36.5



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 0.10	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 36 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 7-4-2.
(lb) - Max Horz 1=160(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 5 except 1=110(LC 10), 8=273(LC 12), 6=273(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=274(LC 19), 6=274(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-329/347, 4-6=-329/347

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(3) 0-3-0 to 3-3-0, Exterior(2) 3-3-0 to 4-1-1, Corner(3) 4-1-1 to 7-1-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 5 except (jt=lb) 1=110, 8=273, 6=273.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 25, 2021

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

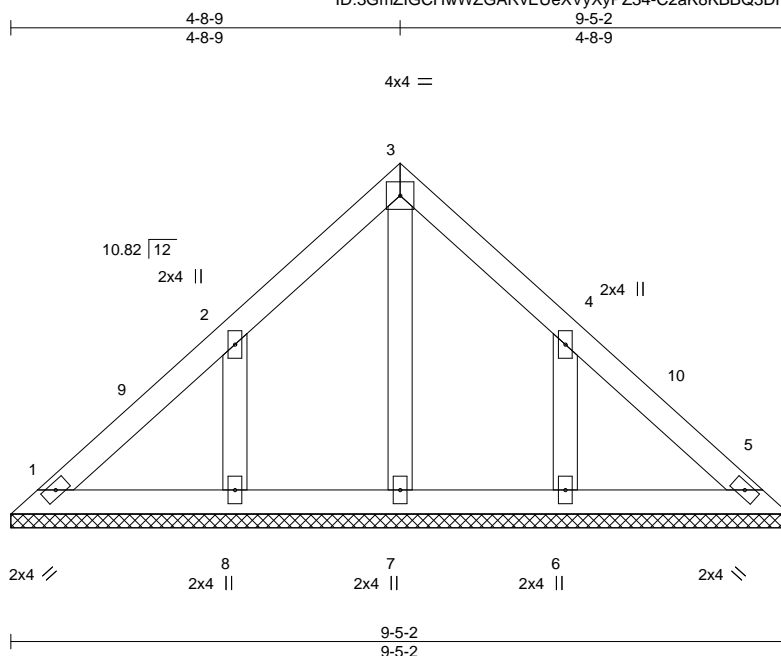
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684960	Truss LG6	Truss Type GABLE	Qty 1	Ply 1	Summit/93 Manor 144965994
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:23 2021 Page 1					
Job Reference (optional)					



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 33 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 9-5-2.
(lb) - Max Horz 1=92(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=121(LC 12), 6=121(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6 except 8=250(LC 19)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-9 to 3-4-9, Interior(1) 3-4-9 to 4-8-9, Exterior(2R) 4-8-9 to 7-8-9, Interior(1) 7-8-9 to 9-0-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 except (jt=lb) 8=121, 6=121.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 25, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

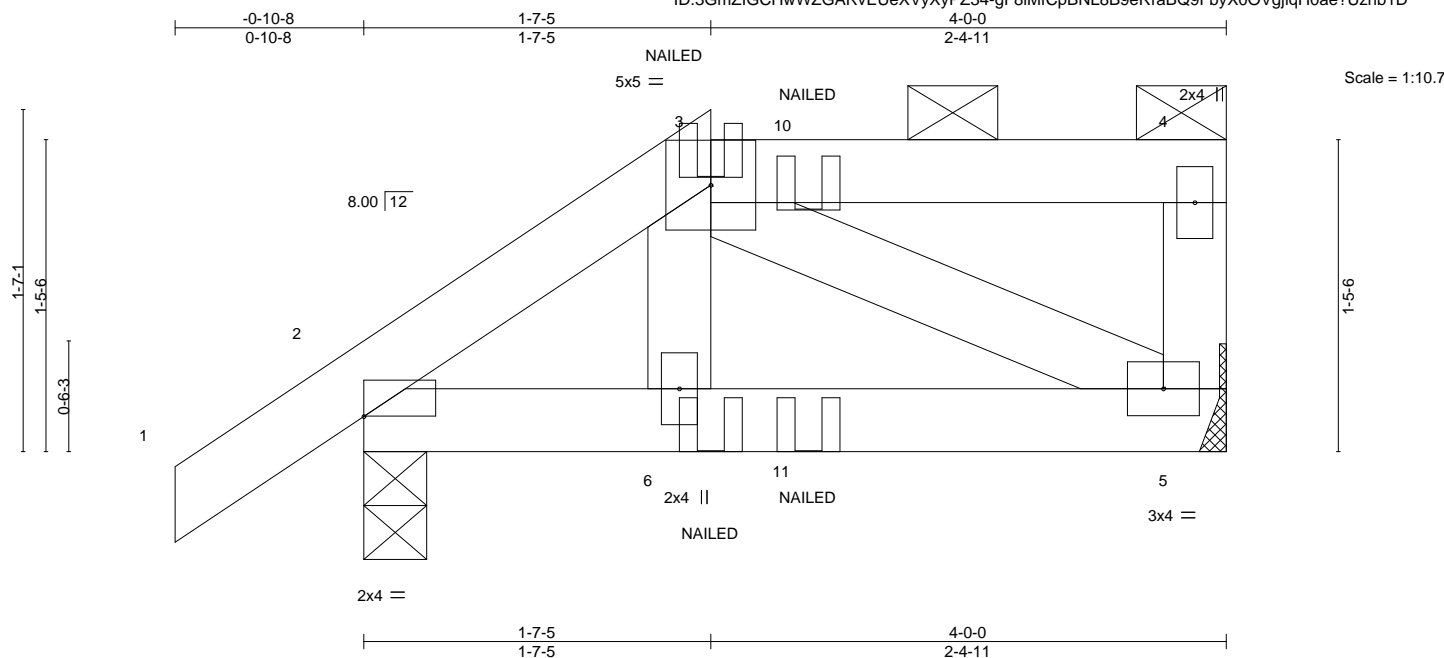


Plate Offsets (X,Y)-- [2:0-0,0-0,0-0]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	5-6	>999	240	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	5-6	>999	180			
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.00	5	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 16 lb	FT = 20%	

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

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

REACTIONS. (size) 2=0-3-8, 5=Mechanical
Max Horz 2=48(LC 7)
Max Uplift 2=-45(LC 8), 5=-36(LC 5)
Max Grav 2=247(LC 1), 5=173(LC 1)

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; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 6=1(B) 10=-2(B) 11=-11(B)



February 25, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

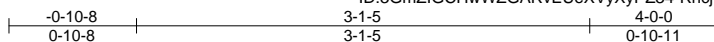
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144965996
2684960	M2	Jack-Open	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

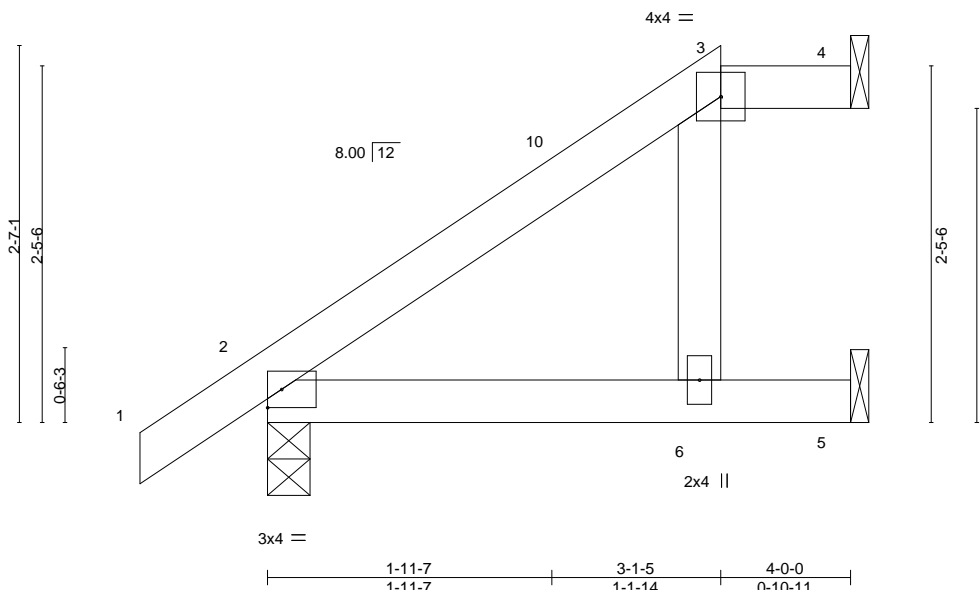
Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:32 2021 Page 1

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Scale = 1:15.8



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 0.15	Vert(LL)	-0.02	6-9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	-0.04	6-9	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.03	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 13 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=91(LC 12)
Max Uplift 4=10(LC 8), 2=28(LC 12), 5=36(LC 12)
Max Grav 4=29(LC 1), 2=245(LC 1), 5=141(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-1-5, Exterior(2E) 3-1-5 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684960	Truss M3	Truss Type Jack-Open	Qty 5	Ply 1	Summit/93 Manor 144965997
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:40 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-CK5li8OrQHMT6csVnxUApdFfyTrBQy0ByWSUYZzhb0z

0-10-8 4-0-0
0-10-8 4-0-0

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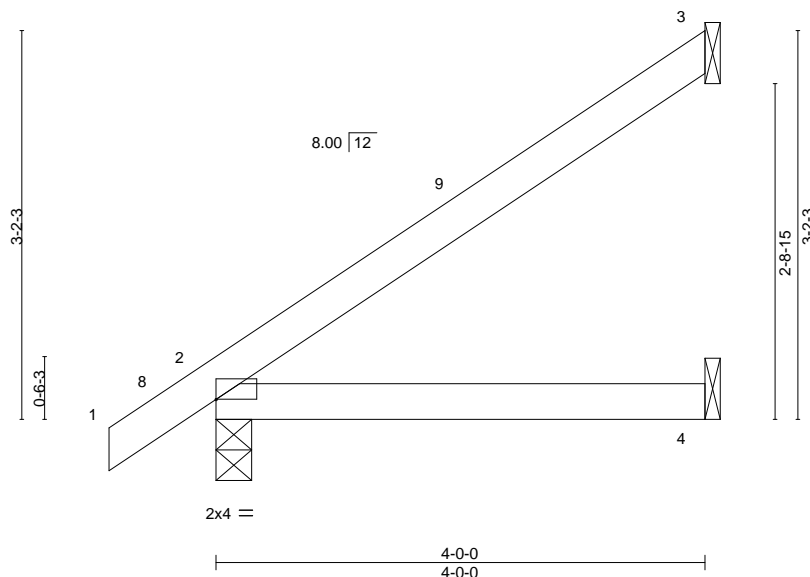


Plate Offsets (X,Y)-- [2:0-0-0,0-0-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-7	>999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.02	4-7	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	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=114(LC 12)
Max Uplift 3=68(LC 12), 2=-15(LC 12)
Max Grav 3=124(LC 19), 2=245(LC 1), 4=73(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.



February 25, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

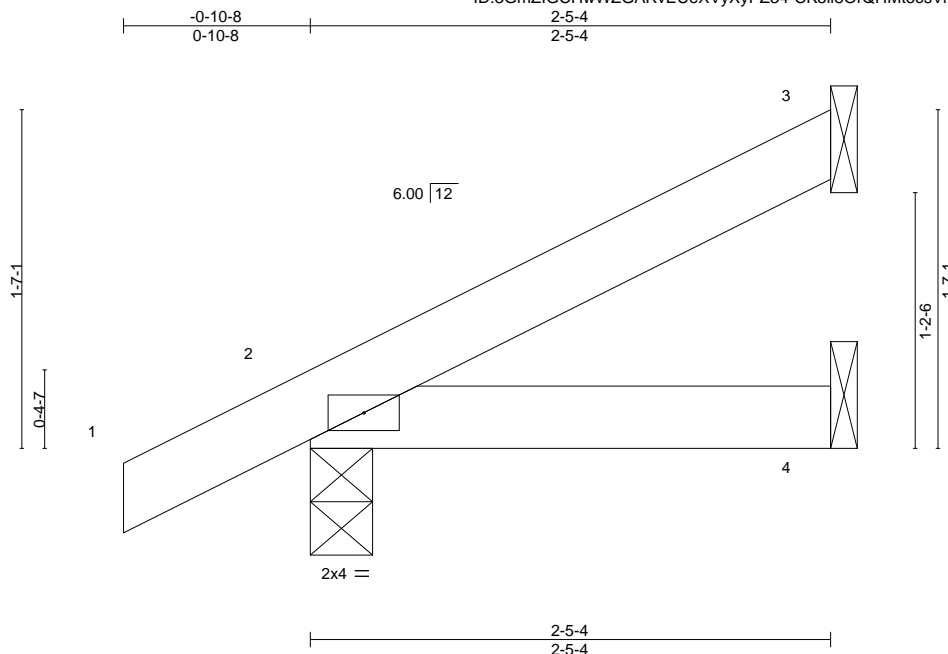
Job 2684960	Truss M4	Truss Type Jack-Open	Qty 2	Ply 1	Summit/93 Manor Job Reference (optional)	I44965998
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:40 2021 Page 1

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Scale = 1:10.8

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.06	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 7 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=57(LC 12)
Max Uplift 3=29(LC 12), 2=28(LC 12)
Max Grav 3=65(LC 1), 2=179(LC 1), 4=42(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.



February 25, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684960	Truss M5	Truss Type Jack-Open	Qty 13	Ply 1	Summit/93 Manor 144965999
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:41 2021 Page 1

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

Scale = 1:27.5

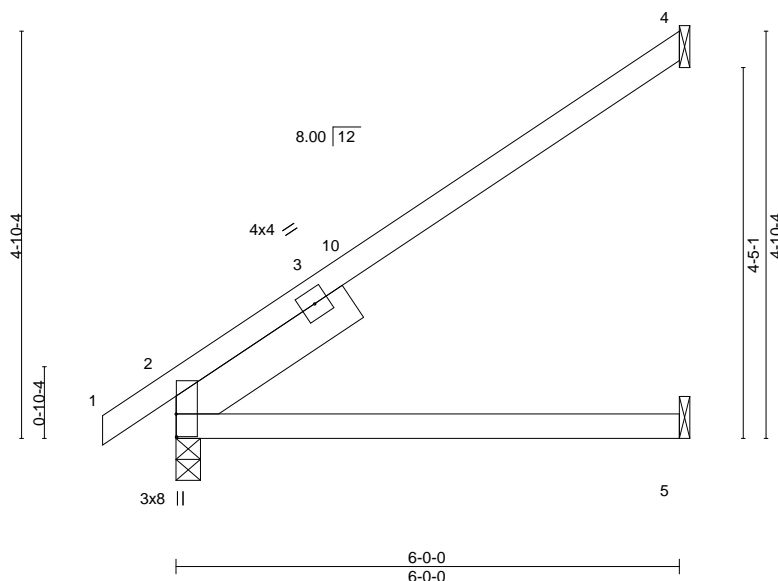


Plate Offsets (X,Y)-- [2:0-3-4,0-0-1]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	0.08	5-8	>849	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.13	5-8	>551	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	2	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 21 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=163(LC 12)
Max Uplift 4=107(LC 12), 2=-4(LC 12), 5=-2(LC 12)
Max Grav 4=192(LC 19), 2=333(LC 1), 5=105(LC 3)

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

TOP CHORD 2-4=-319/89

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5 except (jt=lb) 4=107.
- 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.



February 25, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684960	Truss M6	Truss Type Jack-Open	Qty 6	Ply 1	Summit/93 Manor 144966000
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Builders FirstSource (Valley Center),

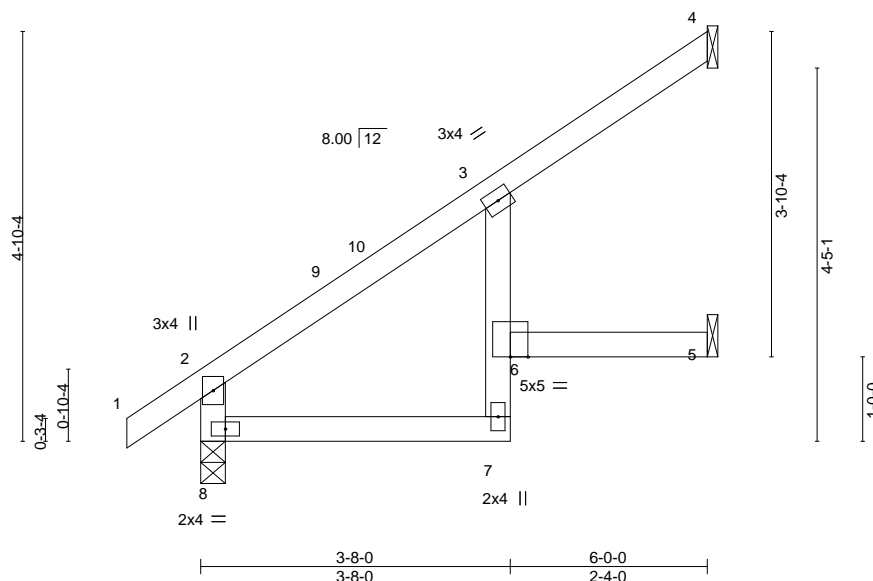
Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:41 2021 Page 1

ID:3GmZIGCHwWZGARvEueXyXyPZ34-hWf7wTPTBbVkjmrile?PLqopTi7z9PGKBAB14?zhb0y

-0-10-8 3-8-0 6-0-0
0-10-8 3-8-0 2-4-0

Scale = 1:27.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	0.06	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.09	6	>799	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 8=0-3-8
Max Horz 8=155(LC 12)
Max Uplift 4=-72(LC 12), 5=-37(LC 12), 8=-5(LC 12)
Max Grav 4=149(LC 19), 5=117(LC 19), 8=338(LC 1)

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

TOP CHORD 2-8=-305/95

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 8.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



February 25, 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

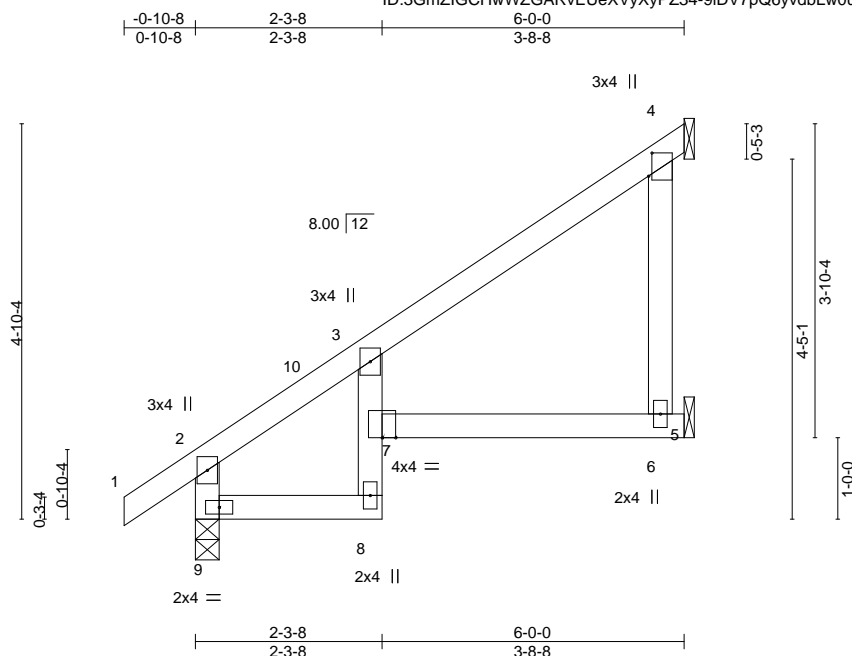


Plate Offsets (X,Y)-- [4:0-3-7,0-0-8]													
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d					PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	0.08	6-7	>837	240	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.11	6-7	>599	180			
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.05	6	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 22 lb	FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 6=Mechanical, 4=Mechanical, 9=0-3-8
 Max Horz 9=149(LC 12)
 Max Uplift 6=-14(LC 12), 4=-88(LC 12), 9=-5(LC 12)
 Max Grav 6=109(LC 3), 4=166(LC 19), 9=328(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-299/95

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-12, Interior(1) 2-0-12 to 5-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4, 9.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



February 25, 2021

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

WARNING – Velly design parameters are listed below and included within key reference 1. See MIF-1419.1 for 3/15/2020 per ONE USE.
 Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for the 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

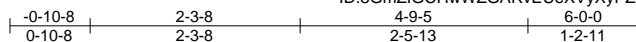
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44966002
2684960	M8	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

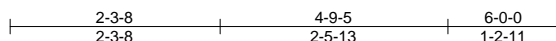
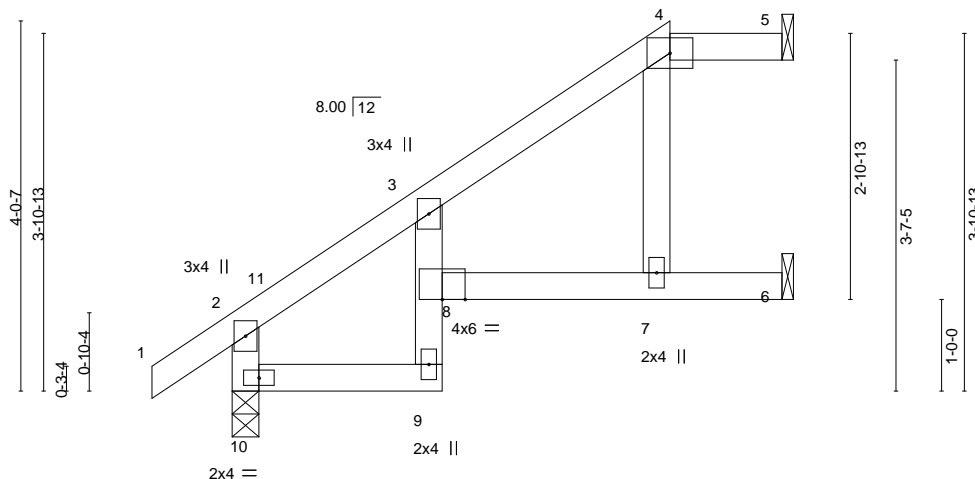
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:43 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-dvntL9QkjCISz4b4T31tQFt7GgoPdJcdeUg89uzhb0w



4x6 =

Scale = 1:25.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.39	Vert(LL)	0.09	7-8	>766	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.14	7-8	>495	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.10	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 21 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins: 4-5.

BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=Mechanical, 6=Mechanical, 10=0-3-8

Max Horz 10=123(LC 12)

Max Uplift 5=-35(LC 12), 6=-35(LC 12), 10=-26(LC 12)

Max Grav 5=132(LC 1), 6=122(LC 25), 10=338(LC 25)

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

TOP CHORD 2-10=-309/117

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 2-0-12, Interior(1) 2-0-12 to 4-9-5, Exterior(2E) 4-9-5 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 10.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

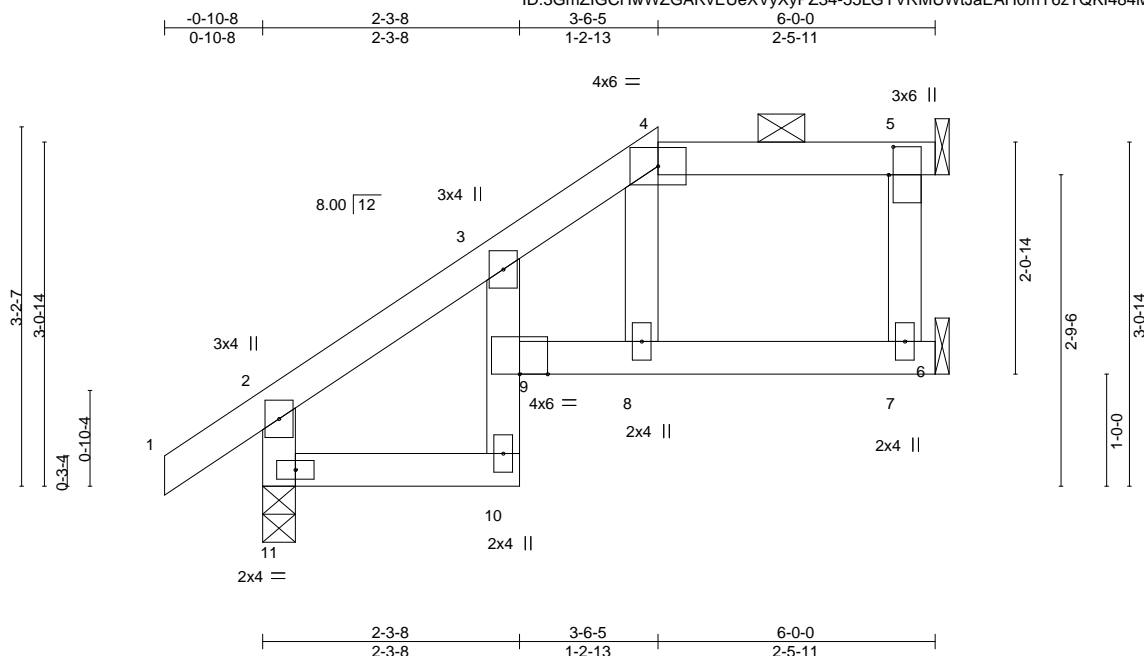
Job 2684960	Truss M9	Truss Type Jack-Open	Qty 1	Ply 1	Summit/93 Manor Job Reference (optional)	I44966003
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:44 2021 Page 1

ID:3GmZIGCHwWZGARvEueXVyXyPZ34-55LGYVRMUWtJaEAH0mY6zTQKI484Mmunt7QihKzhb0v



Scale = 1:20.6

Plate Offsets (X,Y)--		[5:0-3-0,0-0-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.31	Vert(LL)	0.07 8-9 >953 240	MT20		197/144	
TCDL	10.0	Lumber DOL 1.15		BC	0.39	Vert(CT)	-0.12 8-9 >550 180				
BCLL	0.0	Rep Stress Incr YES		WB	0.01	Horz(CT)	0.11 5 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 22 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 7=Mechanical, 5=Mechanical, 11=0-3-8
Max Horz 11=93(LC 12)
Max Uplift 7=-11(LC 12), 5=-37(LC 9), 11=-35(LC 12)
Max Grav 7=110(LC 25), 5=141(LC 1), 11=329(LC 1)

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

TOP CHORD 2-11=-300/130

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 2-0-12, Interior(1) 2-0-12 to 3-6-5, Exterior(2E) 3-6-5 to 5-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



February 25, 2021

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

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



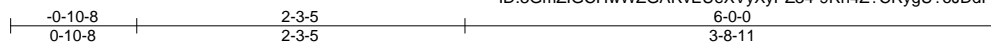
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144966004
2684960	M10	Jack-Open	1	1	Job Reference (optional)	

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

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:25 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-9Rh4Z?CRygU?oJDdPHjfiS72qQfkPAJ_WgJBXzxb1C



Scale: 3/4"=1'

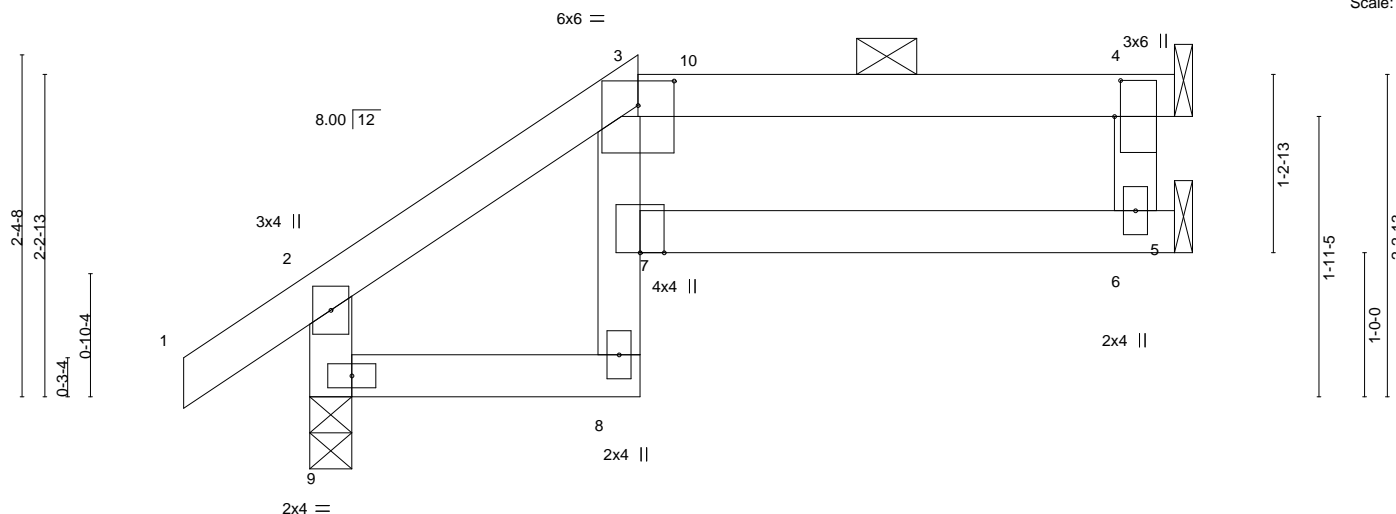


Plate Offsets (X,Y)-- [3:0-3-0,0-2-1], [4:0-3-0,0-0-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.39	Vert(LL)	-0.06	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.12	6-7	>574	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.10	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 19 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 4=Mechanical, 9=0-3-8
Max Horz 9=62(LC 12)
Max Uplift 4=47(LC 9), 9=38(LC 12)
Max Grav 6=110(LC 3), 4=158(LC 1), 9=329(LC 1)

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

TOP CHORD 2-9=-298/144

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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



February 25, 2021

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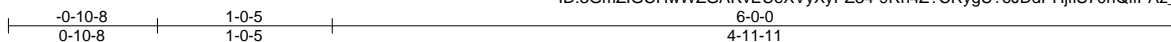
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44966005
2684960	M11	Jack-Open Girder	1	1	Job Reference (optional)	

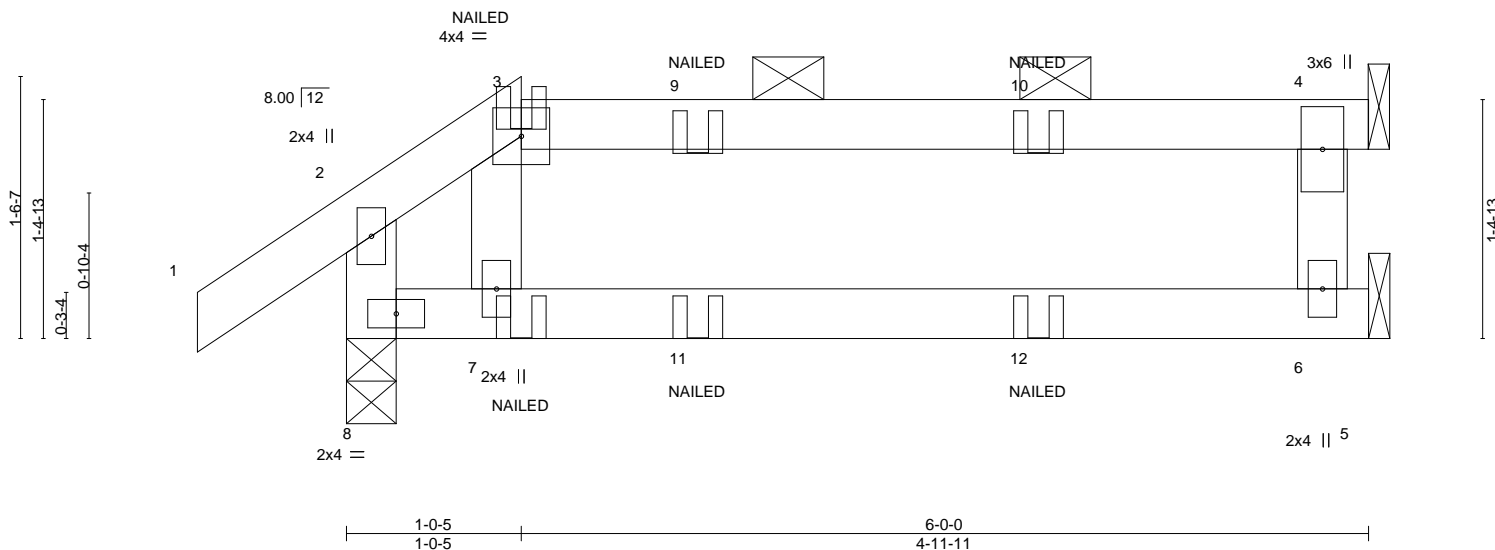
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:25 2021 Page 1

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Scale = 1:13.5



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 0.52	Vert(LL)	-0.06	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.12	6-7	>570	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.02	Horz(CT)	0.09	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 4=Mechanical, 8=0-3-8
Max Horz 8=32(LC 5)
Max Uplift 4=57(LC 5), 8=49(LC 8)
Max Grav 6=119(LC 3), 4=171(LC 22), 8=336(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-8=-20
Concentrated Loads (lb)
Vert: 9=-1(F) 10=-1(F) 11=-6(F) 12=-6(F)



February 25, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684960	Truss M12	Truss Type Jack-Open	Qty 2	Ply 1	Summit/93 Manor Job Reference (optional)	I44966006
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:26 2021 Page 1

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

Scale = 1:10.6

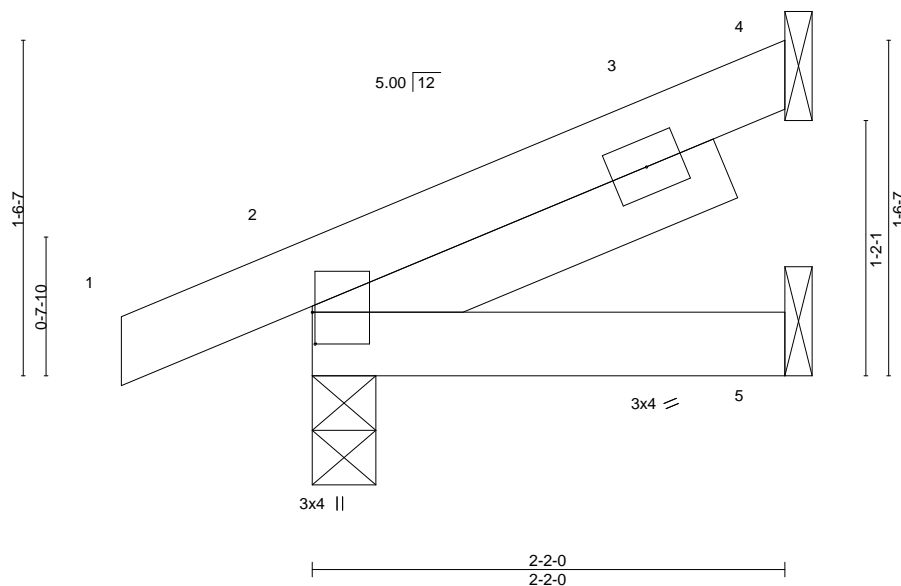


Plate Offsets (X,Y)-- [2:0-1-12,0-0-2]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00	8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 9 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=44(LC 12)
Max Uplift 4=-26(LC 12), 2=-25(LC 12)
Max Grav 4=59(LC 1), 2=169(LC 1), 5=32(LC 3)

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

NOTES-

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



February 25, 2021

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

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16023 Swingley Ridge Rd
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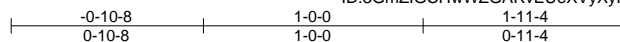
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44966007
2684960	M13	Jack-Open Girder	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

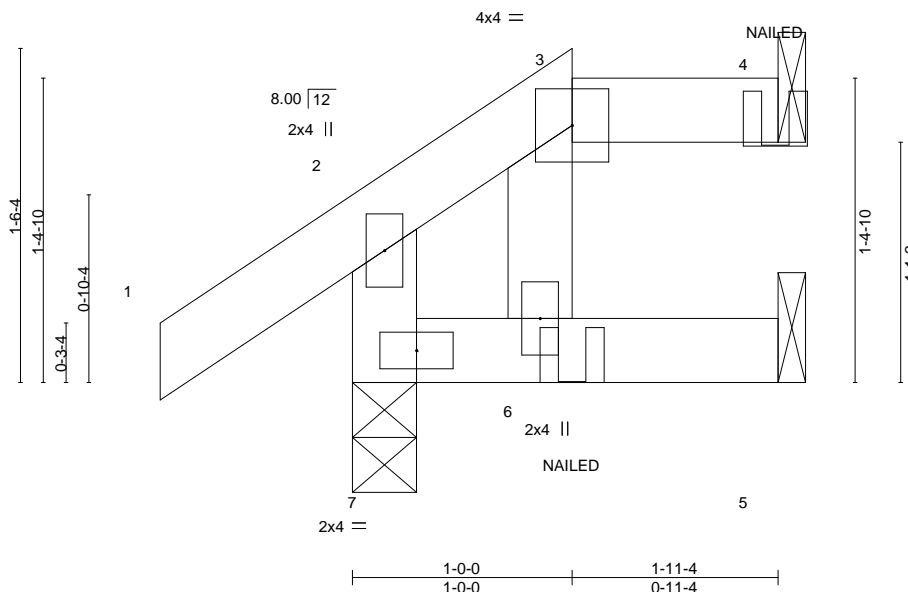
Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:27 2021 Page 1

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Scale = 1:10.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	6	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-11-4 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=32(LC 5)
Max Uplift 4=20(LC 5), 5=1(LC 5), 7=25(LC 8)
Max Grav 4=44(LC 22), 5=27(LC 3), 7=172(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



February 25, 2021

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16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144966008
2684960	M14	Jack-Open Girder	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:28 2021 Page 1

ID:3GmZIGChwWZGARvEUeXVyXyPZ34-Z0NDB1FKFbsagmxC4PGMJ5lcPdkcXmQCeYr8Fzhhb19

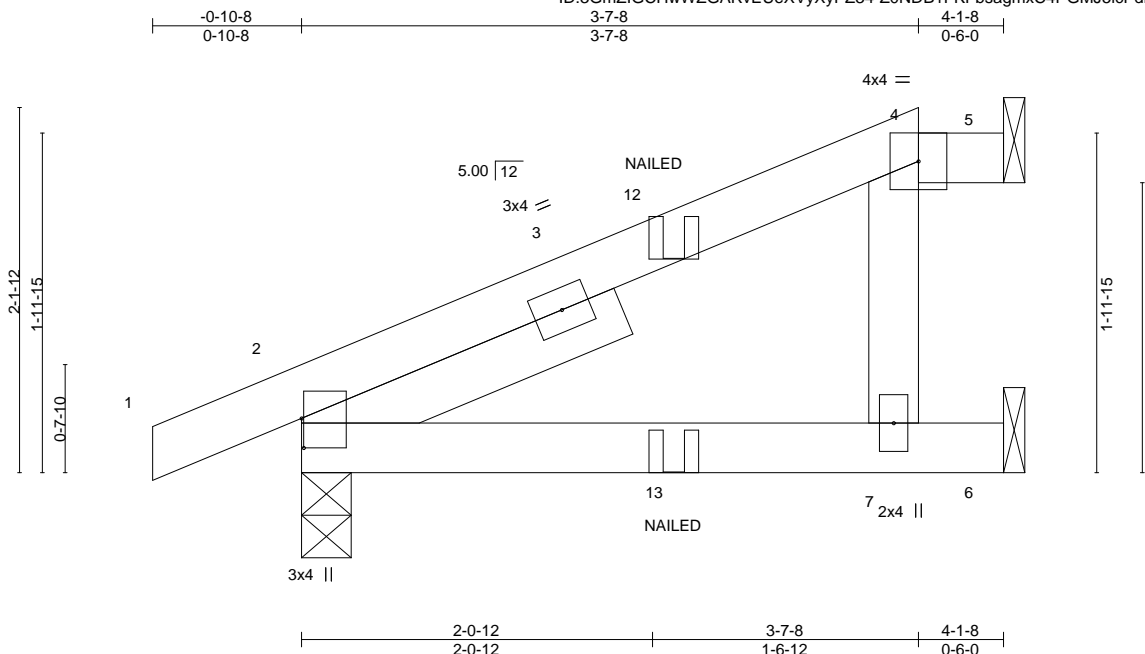


Plate Offsets (X,Y)--	[2:0-2-1,0-0-2]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	-0.02 7-10	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.23	Vert(CT)	-0.04 7-10	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.02	Horz(CT)	0.02 5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-8 oc purlins, except 2-0-0 oc purlins: 4-5.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 5=Mechanical, 2=0-3-8, 6=Mechanical
 Max Horz 2=63(LC 8)
 Max Uplift 5=6(LC 4), 2=42(LC 8), 6=41(LC 8)
 Max Grav 5=15(LC 1), 2=253(LC 1), 6=164(LC 1)

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; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-70, 4-5=-70, 6-8=-20
 Concentrated Loads (lb)
 Vert: 13=-6(F)



February 25, 2021

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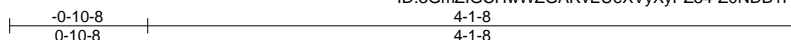
Job 2684960	Truss M15	Truss Type Jack-Open	Qty 3	Ply 1	Summit/93 Manor Job Reference (optional)	I44966009
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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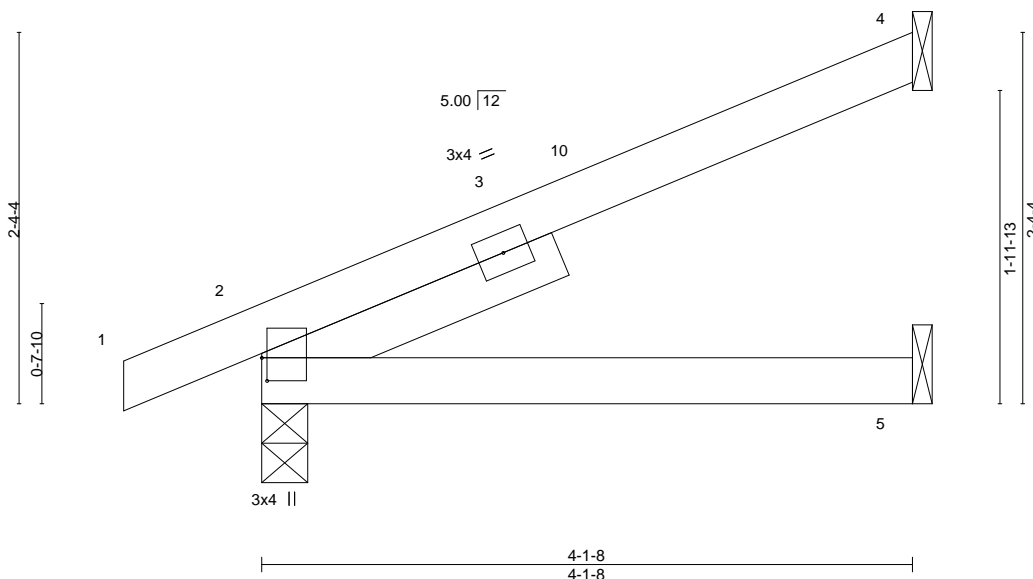


Plate Offsets (X,Y)-- [2:0-1-12,0-0-6]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.02	5-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.03	5-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 13 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=73(LC 12)
Max Uplift 4=51(LC 12), 2=33(LC 12)
Max Grav 4=123(LC 1), 2=251(LC 1), 5=70(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 25, 2021

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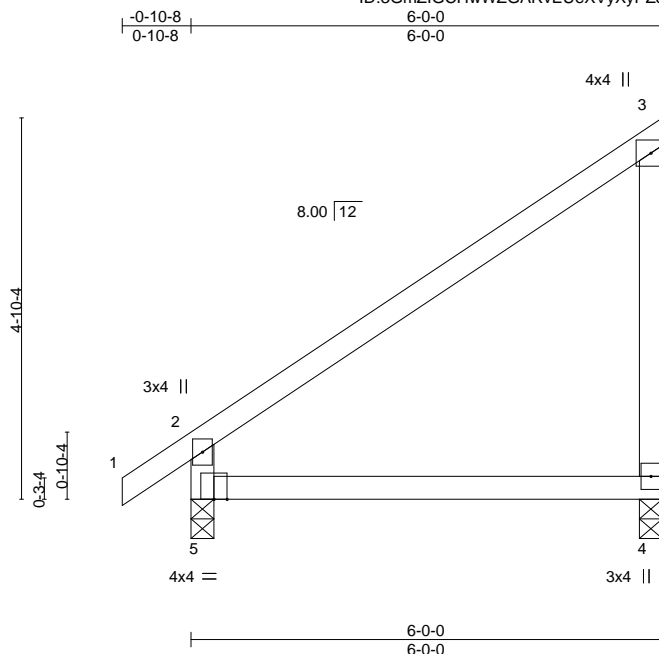
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144966010
2684960	M16	Monopitch	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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Scale = 1:29.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	-0.04	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.07	4-5	>919	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 22 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 4=0-3-8
Max Horz 5=168(LC 11)
Max Uplift 5=-36(LC 12), 4=-76(LC 12)
Max Grav 5=335(LC 1), 4=273(LC 19)

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

TOP CHORD 2-5=-296/182

NOTES-

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



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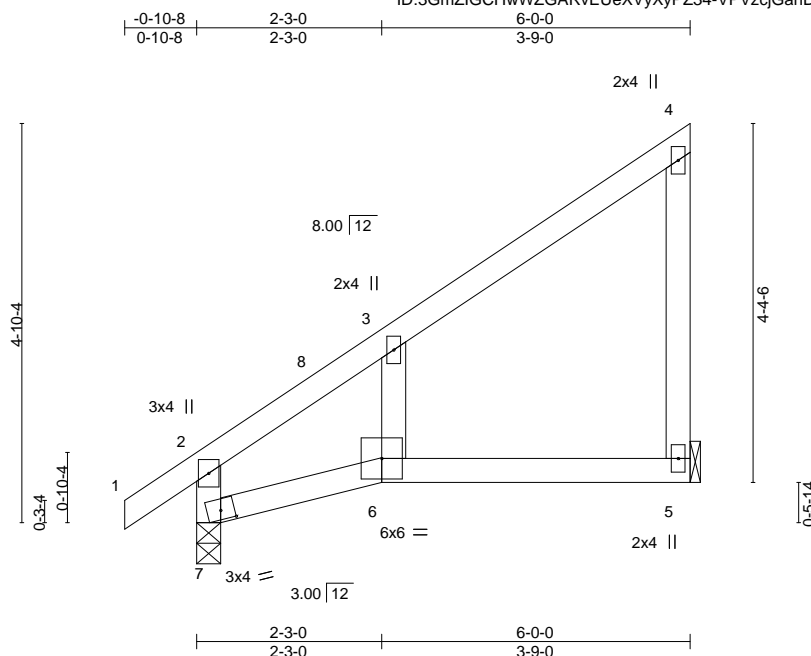


Plate Offsets (X,Y)-- [7:0-2-0,0-1-6]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d					PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	0.11	6	>598	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.15	5-6	>465	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.04	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 23 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 5=Mechanical, 7=0-3-8
Max Horz 7=152(LC 12)
Max Uplift 5=-108(LC 12), 7=-5(LC 12)
Max Grav 5=262(LC 19), 7=335(LC 1)

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 Exterior(2E) -0-10-8 to 2-4-12, Interior(1) 2-4-12 to 5-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 5=108.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 25, 2021

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

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



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Chesterfield, MO 63017

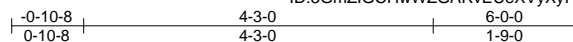
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44966012
2684960	M18	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:30 2021 Page 1

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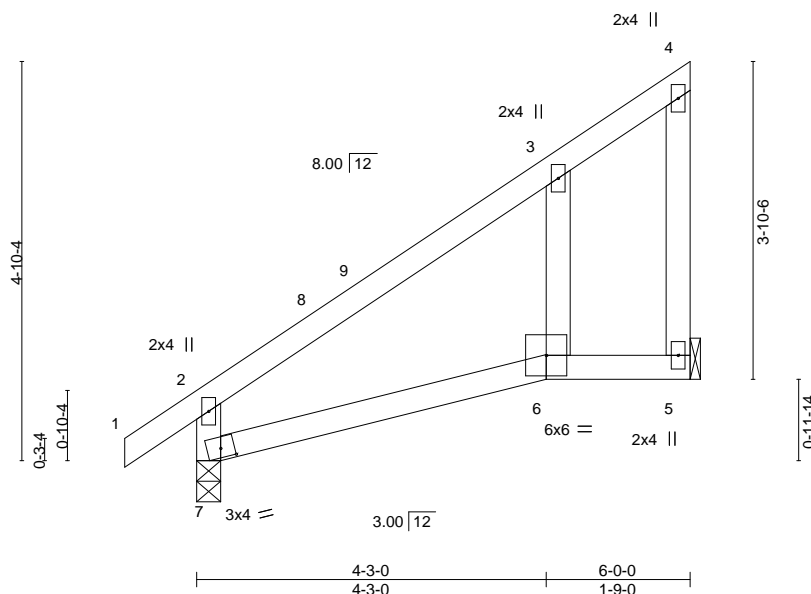


Plate Offsets (X,Y)-- [7:0-2-0,0-1-6]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	0.10	6-7	>685	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.13	6-7	>512	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.03	5	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 23 lb FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 7=0-3-8
Max Horz 7=152(LC 12)
Max Uplift 5=108(LC 12), 7=5(LC 12)
Max Grav 5=262(LC 19), 7=335(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-268/75

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 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 5=108.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 25, 2021

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

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

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



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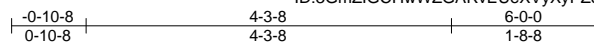
Job 2684960	Truss M19	Truss Type Jack-Open	Qty 8	Ply 1	Summit/93 Manor 144966013
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:31 2021 Page 1

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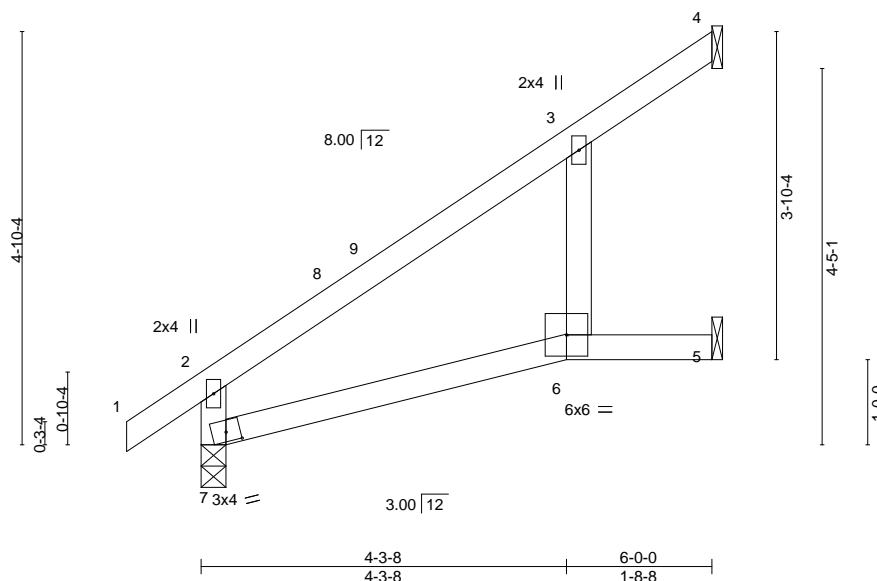


Plate Offsets (X,Y)--		[7:0-2-0,0-1-6]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.40	Vert(LL)	0.11	6-7	>658	240	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.37	Vert(CT)	-0.14	6-7	>495	180	
BCLL	0.0	Rep Stress Incr YES		WB	0.02	Horz(CT)	0.05	4	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 20 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=154(LC 12)
Max Uplift 4=60(LC 12), 5=49(LC 12), 7=5(LC 12)
Max Grav 4=142(LC 19), 5=123(LC 19), 7=338(LC 1)

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

TOP CHORD 2-7=-263/73

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 25, 2021

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

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



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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144966014
2684960	M20	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

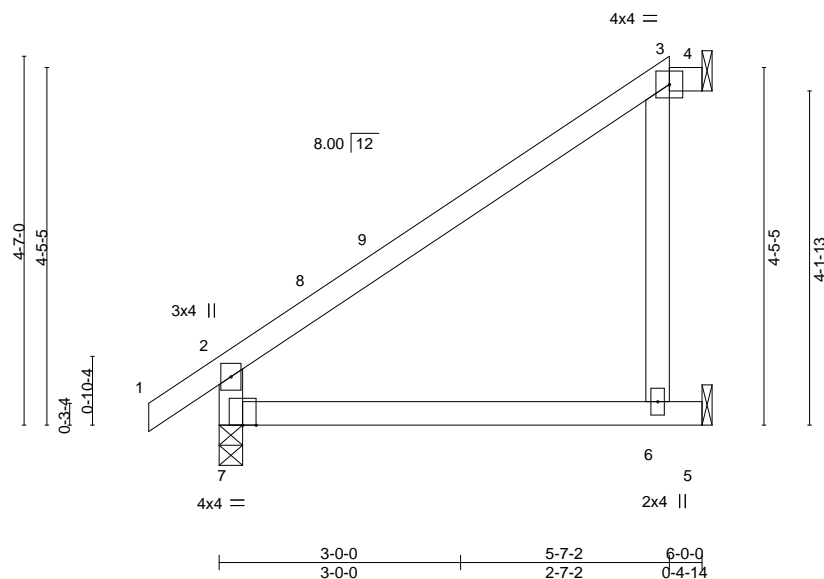
Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:32 2021 Page 1

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0-10-8 5-7-2 6-0-0
0-10-8 5-7-2 0-4-14

Scale = 1:28.6



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 0.45	Vert(LL)	0.08 6-7	>869	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.11 6-7	>611	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.07 4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 21 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=143(LC 12)
Max Uplift 5=109(LC 12), 7=14(LC 12)
Max Grav 4=211(LC 3), 5=132(LC 1), 7=338(LC 1)

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

TOP CHORD 2-7=-285/105

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-7-2, Exterior(2E) 5-7-2 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 5=109.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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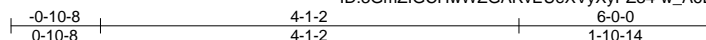
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144966015
2684960	M21	Jack-Open	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

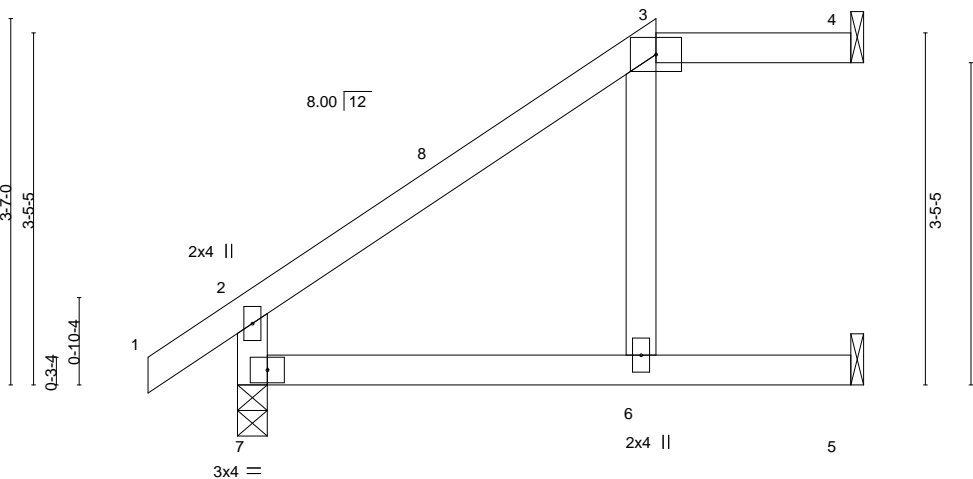
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:33 2021 Page 1

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4x6 =

Scale = 1:22.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.39	Vert(LL)	0.09	6-7	>783	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.14	6-7	>496	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.14	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=106(LC 12)
Max Uplift 4=32(LC 9), 5=27(LC 12), 7=33(LC 12)
Max Grav 4=143(LC 1), 5=111(LC 1), 7=338(LC 1)

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

TOP CHORD 2-7=-259/108

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-1-2, Exterior(2E) 4-1-2 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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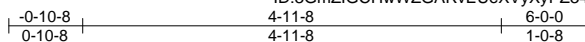
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44966016
2684960	M22	Jack-Open	3	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

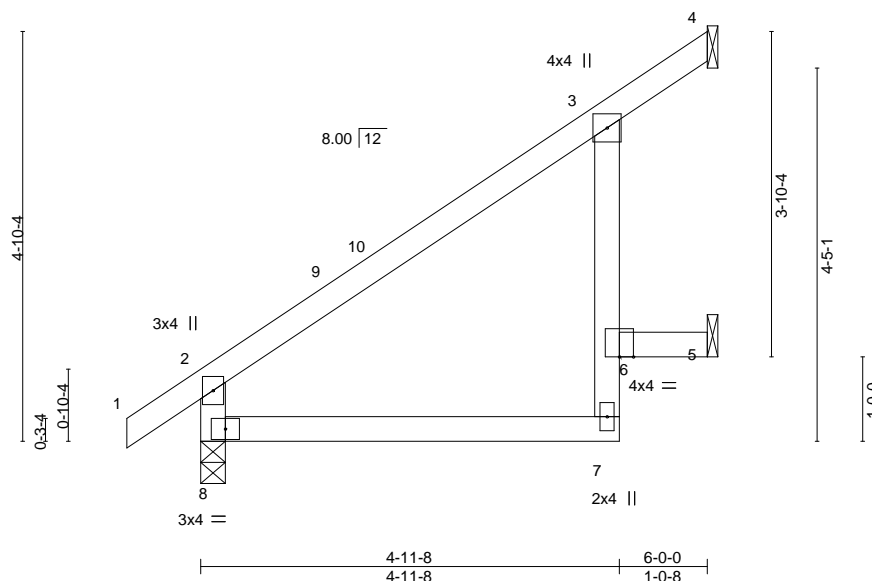
Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:34 2021 Page 1

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Scale = 1:27.3



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 0.19	Vert(LL)	-0.02	7-8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.33	Vert(CT)	-0.04	7-8	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.02	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 21 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 8=0-3-8
Max Horz 8=155(LC 12)
Max Uplift 4=24(LC 12), 5=84(LC 12), 8=5(LC 12)
Max Grav 4=83(LC 19), 5=182(LC 19), 8=338(LC 1)

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

TOP CHORD 2-8=-298/98

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 8.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



February 25, 2021

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

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



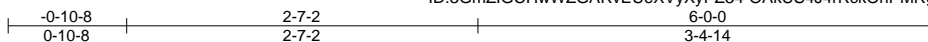
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44966017
2684960	M23	Jack-Open	1	1	Job Reference (optional)	

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

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:34 2021 Page 1

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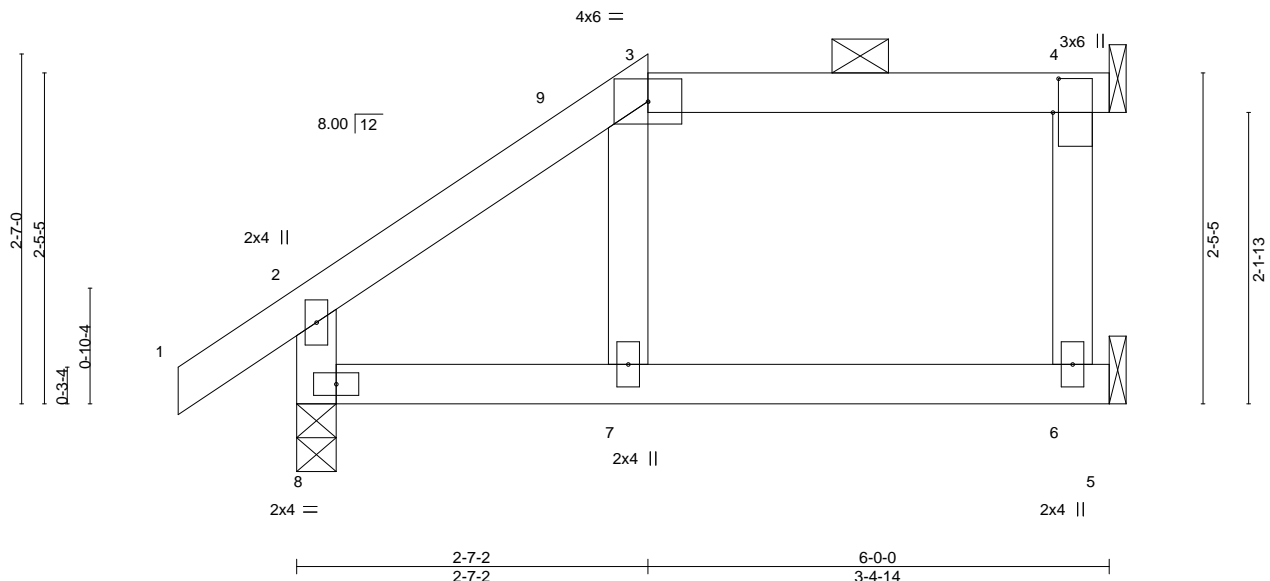


Plate Offsets (X,Y)--	[4:0-3-0,0-0-8]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.07 6-7	>916 240
TCDL 10.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.14 6-7	>496 180
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.14 4	n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS			
				PLATES	GRIP	
				MT20	197/144	
				Weight: 20 lb	FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 4=Mechanical, 8=0-3-8
Max Horz 8=70(LC 12)
Max Uplift 4=44(LC 9), 8=38(LC 12)
Max Grav 6=112(LC 3), 4=149(LC 1), 8=329(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-7-2, Exterior(2E) 2-7-2 to 5-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 8.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



February 25, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144966018
2684960	M24	Jack-Open Girder	1	1	Job Reference (optional)	

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

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:35 2021 Page 1
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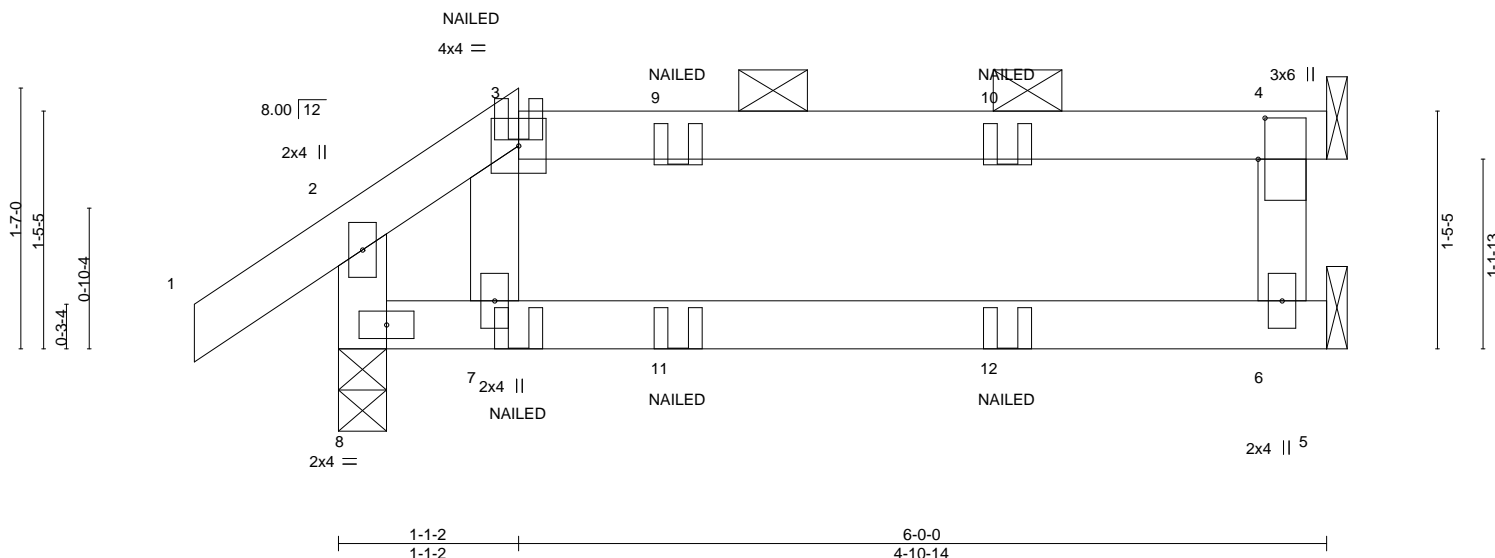


Plate Offsets (X,Y)--		[4:0-3-0,0-0-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.05 6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.11 6-7	>610	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.09 4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 4=Mechanical, 8=0-3-8
Max Horz 8=33(LC 8)
Max Uplift 4=55(LC 5), 8=42(LC 8)
Max Grav 6=118(LC 3), 4=167(LC 30), 8=320(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-8=-20
Concentrated Loads (lb)
Vert: 7=8(F) 11=2(F) 12=2(F)



February 25, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor
2684960	M25	GABLE	1	1	I44966019
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

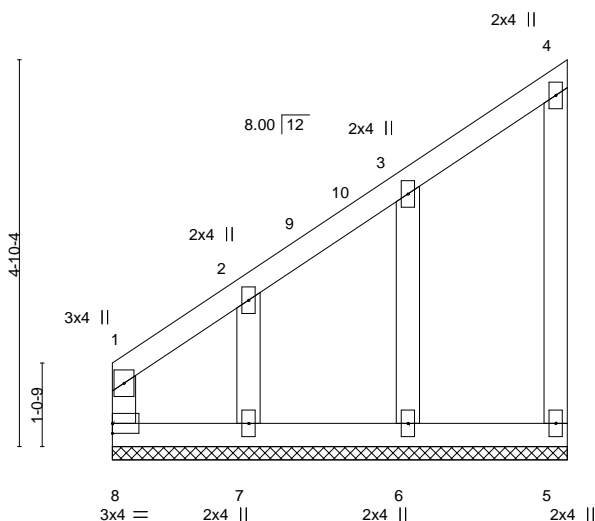
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:37 2021 Page 1

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5-8-8

5-8-8

Scale = 1:28.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 5-8-8.

(lb) - Max Horz 8=157(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 8, 5, 6 except 7=130(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 8, 5, 6, 7

FORCES.

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

TOP CHORD 1-2=-386/250

WEBS 2-7=-190/265

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) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 5-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Truss to be fully sheathed on one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 5, 6 except (jt=lb) 7=130.
- 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.



February 25, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

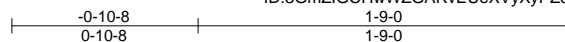
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44966020
2684960	M26	Jack-Open	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

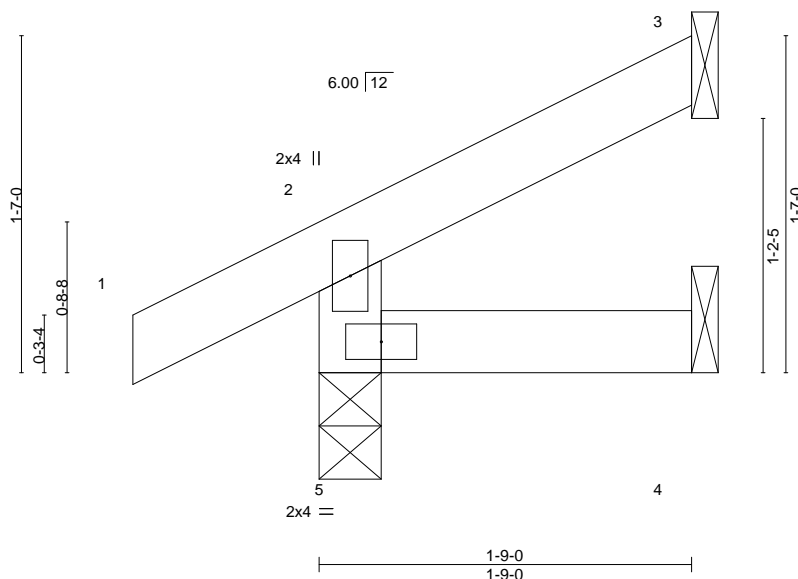
Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:39 2021 Page 1

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Scale = 1:10.8



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 0.07	Vert(LL)	-0.00	5	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	5	>999	180	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-MR						
								Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=39(LC 12)
Max Uplift 3=24(LC 12), 5=22(LC 12)
Max Grav 3=38(LC 1), 4=28(LC 3), 5=166(LC 1)

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

NOTES-

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



February 25, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44966021
2684960	PB1	Piggyback	1	1	Job Reference (optional)	

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

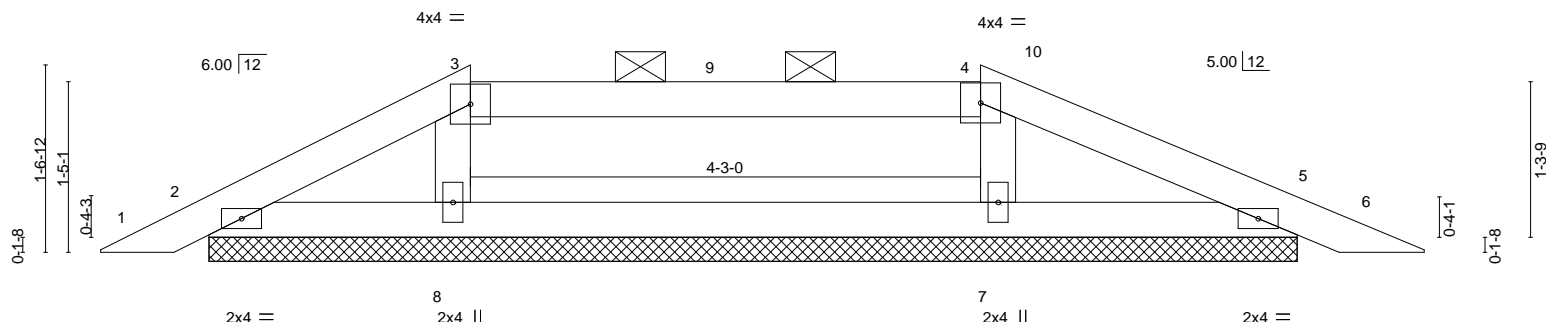
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11-1-6

11-1-6

Scale = 1:19.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	0.00	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.00				
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							
								Weight: 26 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 10-0-0 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

All bearings 9-0-12.
(lb) - Max Horz 2=21(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 8, 7
Max Grav All reactions 250 lb or less at joint(s) 2, 5 except 8=328(LC 25), 7=343(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-7=-259/148

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) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5, 8, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144966022
2684960	PB2	GABLE	3	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:47 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-Vg0OAXTErFtrRhusiv6pb52pHHEYZ79DZ5eMlfzho0s

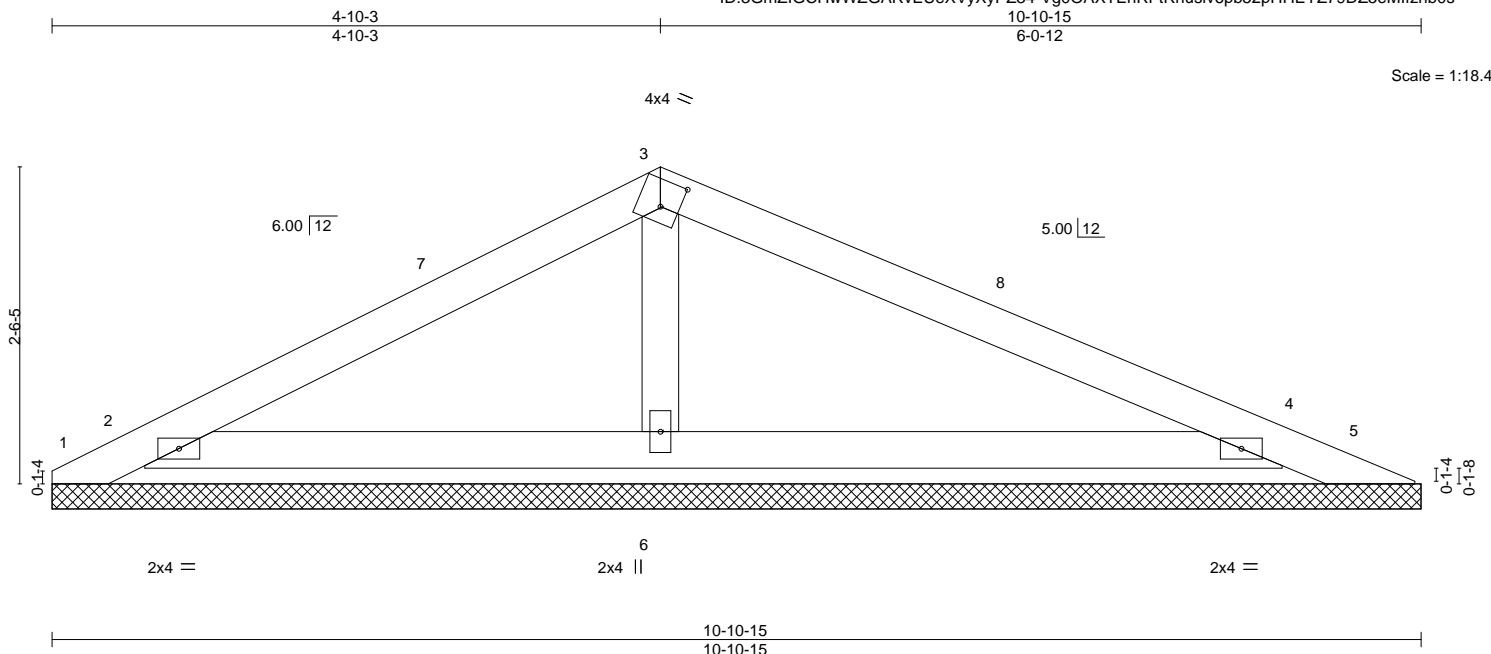


Plate Offsets (X,Y)--		[3:0-1-12,0-2-8]		10-10-15		10-10-15	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	n/a -	n/a	999
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a -	n/a	999
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00 5	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 26 lb	FT = 20%		

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 10-10-15.

(lb) - Max Horz 1=-38(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 6 except 1=-204(LC 25), 5=-214(LC 26), 2=-156(LC 12),

4=-149(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 2=450(LC 25), 4=523(LC 26), 6=381(LC 1)

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

WEBS 3-6=-269/168

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) 0-2-11 to 3-2-11, Exterior(2N) 3-2-11 to 4-10-3, Corner(3R) 4-10-3 to 7-10-3, Exterior(2N) 7-10-3 to 10-6-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 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) 6 except (jt=lb) 1=204, 5=214, 2=156, 4=149.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 25, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	144966023
2684960	PB3	Piggyback	1	1	Job Reference (optional)	

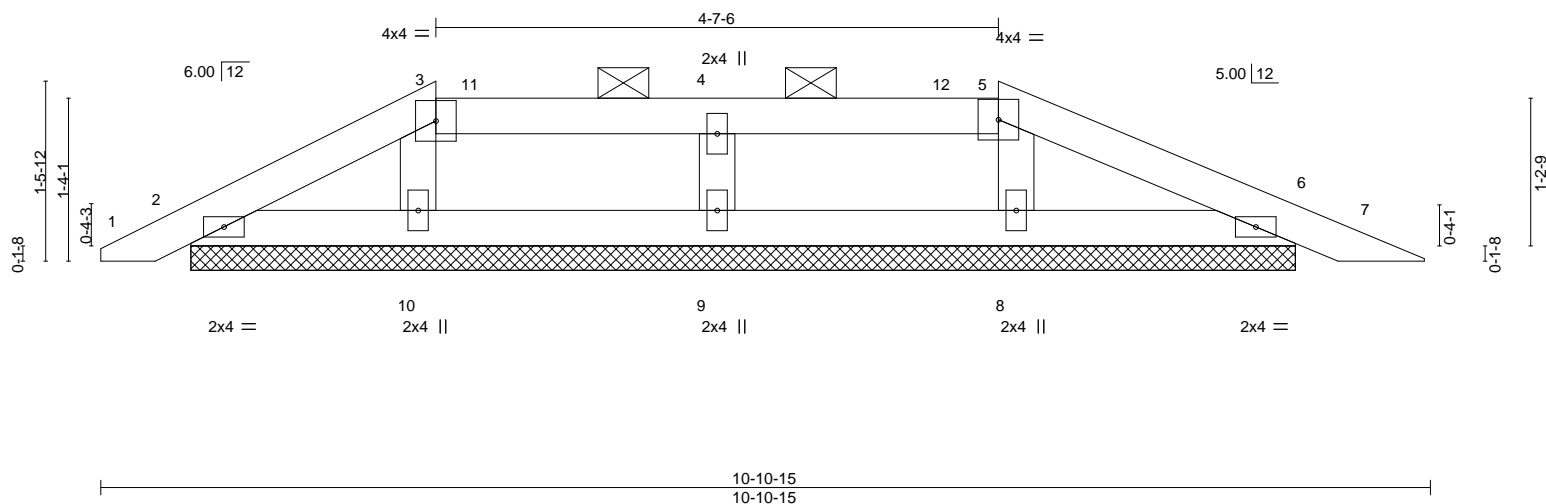
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:48 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-zsamOtUsYkNk3rT2Fcd27Ja2whbaaeMolOvq5zhb0r

10-10-15
10-10-15

Scale = 1:18.9



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	0.00	6	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	7	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 26 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 9-0-12.
(lb) - Max Horz 2=-19(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8, 9
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 10, 8, 9

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-11 to 2-9-0, Exterior(2R) 2-9-0 to 6-11-15, Interior(1) 6-11-15 to 7-4-6, Exterior(2E) 7-4-6 to 10-6-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 25, 2021

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

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



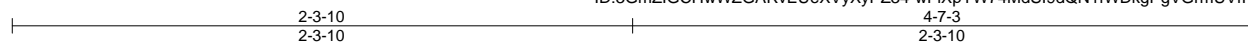
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684960	Truss V2	Truss Type Valley	Qty 1	Ply 1	Summit/93 Manor Job Reference (optional)	I44966025
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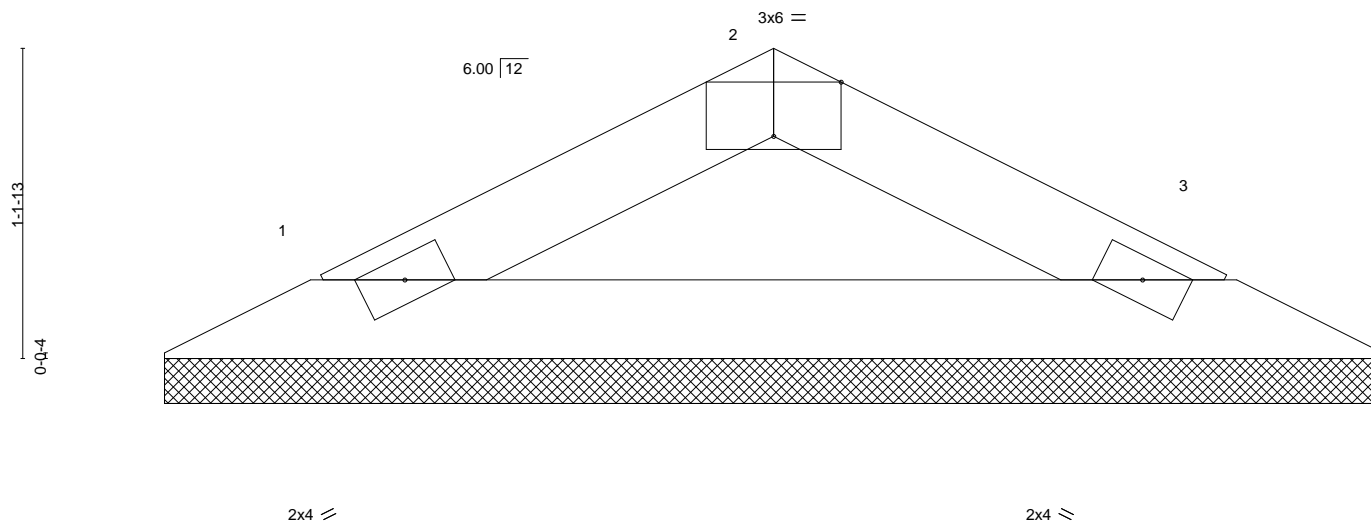
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:50 2021 Page 1

ID:3GmZIGChwWZGARvEUeXvYxYPZ34-wFiXpYW74MdSI9dQN1fWDkgPgVGrmUVf3t0v_zhb0p



Scale = 1:8.5



0-0.8		4-7-3							
0-0.8		4-6-11							
Plate Offsets (X,Y)--		[2:0-3-0,Edge]							
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.06	Vert(LL)	n/a - n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.12	Vert(CT)	n/a - n/a	999	
BCLL	0.0	Rep Stress Incr YES		WB	0.00	Horz(CT)	0.00 3 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 9 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-7-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-6-3, 3=4-6-3
Max Horz 1=13(LC 12)
Max Uplift 1=-19(LC 12), 3=-19(LC 13)
Max Grav 1=150(LC 1), 3=150(LC 1)

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

NOTES-

- 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.



February 25, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684960	Truss V3	Truss Type Valley	Qty 1	Ply 1	Summit/93 Manor I44966026
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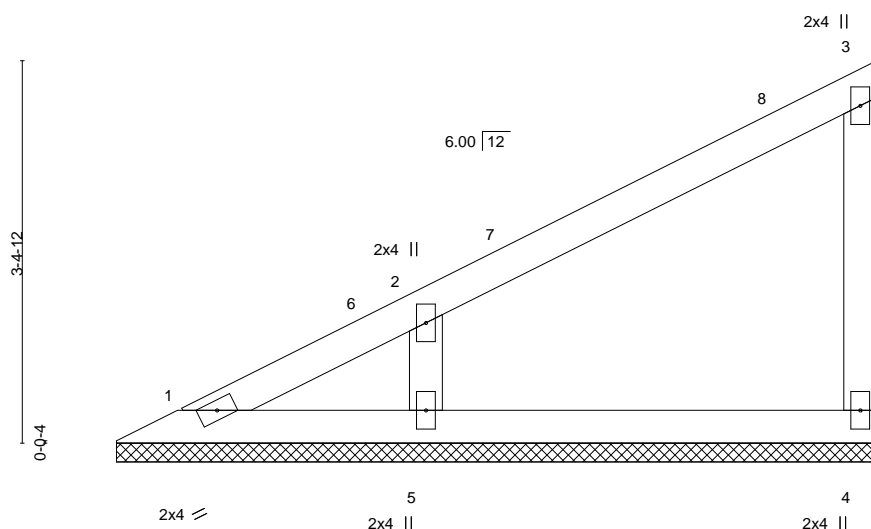
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:50 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-wFiXpYW74MdSI9dQN1fWDkgNjVG6mUsfF3t0v_zhb0p

6-9-7
6-9-7



Scale = 1:20.4

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 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-8-15, 4=6-8-15, 5=6-8-15
Max Horz 1=113(LC 9)
Max Uplift 4=23(LC 9), 5=101(LC 12)
Max Grav 1=57(LC 20), 4=141(LC 1), 5=361(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-281/234

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-7-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=101.
- 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.



February 25, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

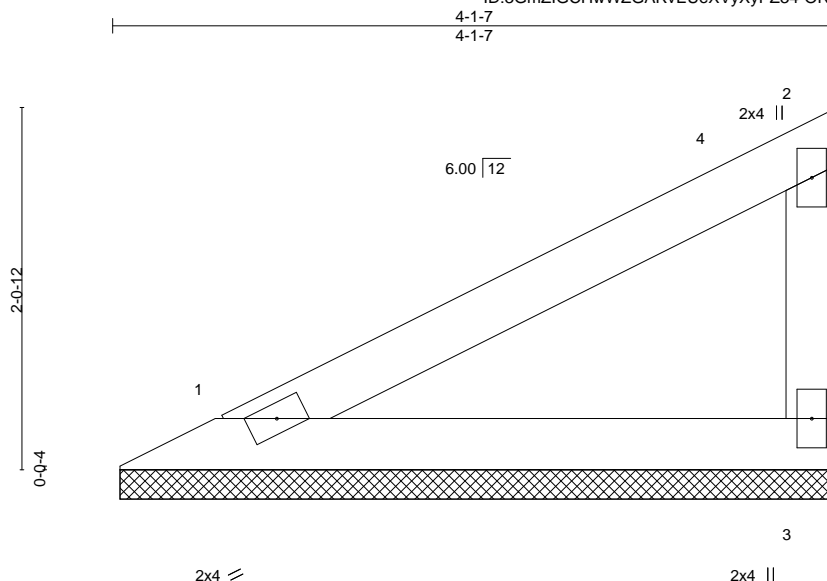
Job 2684960	Truss V4	Truss Type Valley	Qty 1	Ply 1	Summit/93 Manor Job Reference (optional)	I44966027
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:51 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-ORGv0uXlqfJwJCdxlAllxCX8vcAVxpUjcZRQzhb0o



Scale = 1:13.1

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 0.20	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 11 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-0-15, 3=4-0-15
Max Horz 1=63(LC 11)
Max Uplift 1=19(LC 12), 3=35(LC 12)
Max Grav 1=151(LC 1), 3=151(LC 1)

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

NOTES-

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



February 25, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor	I44966028
2684960	V5	Valley	1	1	Job Reference (optional)	

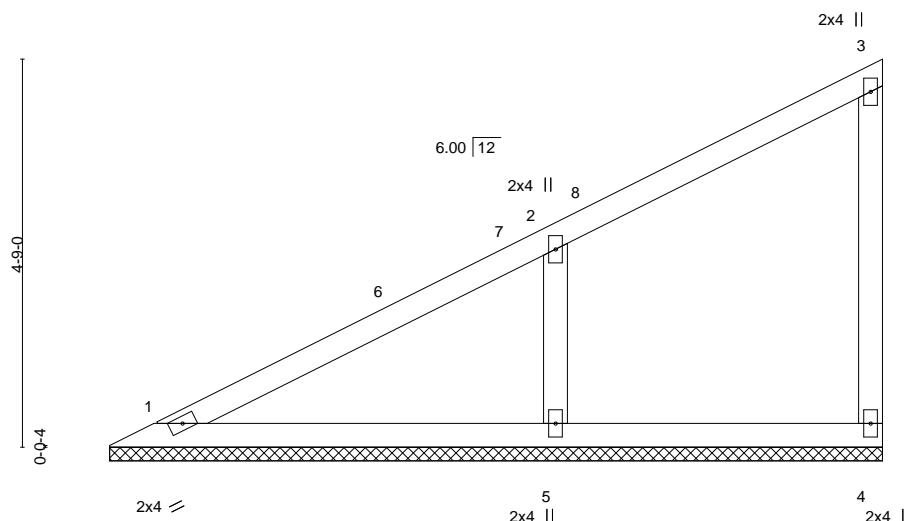
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:52 2021 Page 1

ID:3GmZIGChwWZGARvEUeXVyXyPZ34-seqHEEXNbztAYSnPUSI_I9lhLlxEO5yNM7zshb0n

9-5-15
9-5-15



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	n/a	-	n/a	999	MT20
BCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	-0.00	4	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
								Weight: 29 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=9-5-7, 4=9-5-7, 5=9-5-7
Max Horz 1=163(LC 9)
Max Uplift 4=27(LC 9), 5=116(LC 12)
Max Grav 1=177(LC 1), 4=120(LC 1), 5=488(LC 1)

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

WEBS 2-5=-370/239

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 9-4-3 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=116.
- 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.



February 25, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

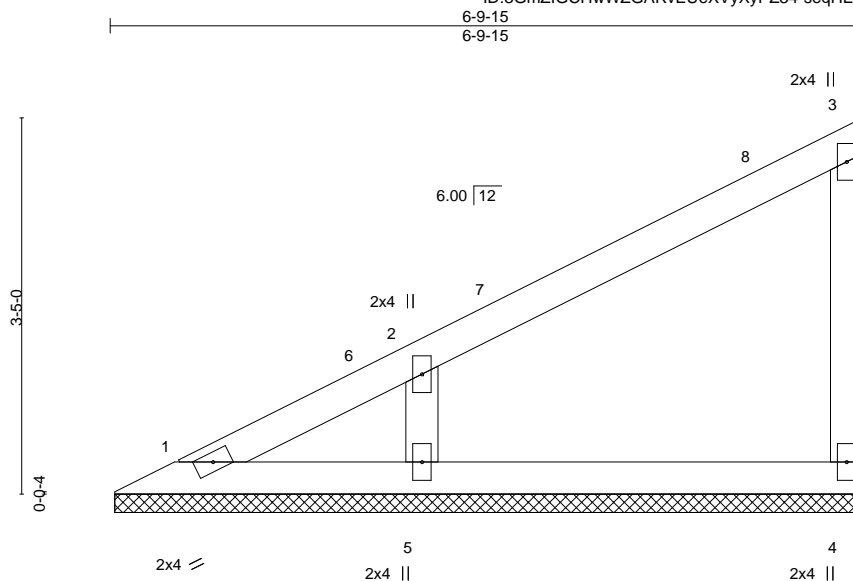
Job 2684960	Truss V6	Truss Type Valley	Qty 1	Ply 1	Summit/93 Manor 144966029
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:52 2021 Page 1

ID:3GmZIGCHwWZGARvEUeXVyXyPZ34-seqHEEXNbztAYSnPUSi_l9ljClyaEOLyNM7zsZhb0n



Scale = 1:20.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-9-7, 4=6-9-7, 5=6-9-7
Max Horz 1=113(LC 9)
Max Uplift 4=23(LC 9), 5=101(LC 12)
Max Grav 1=59(LC 20), 4=141(LC 1), 5=362(LC 1)

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

WEBS 2-5=-282/234

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-8-3 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=101.
- 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.



February 25, 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 2684960	Truss V7	Truss Type Valley	Qty 1	Ply 1	Summit/93 Manor Job Reference (optional)	I44966030
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

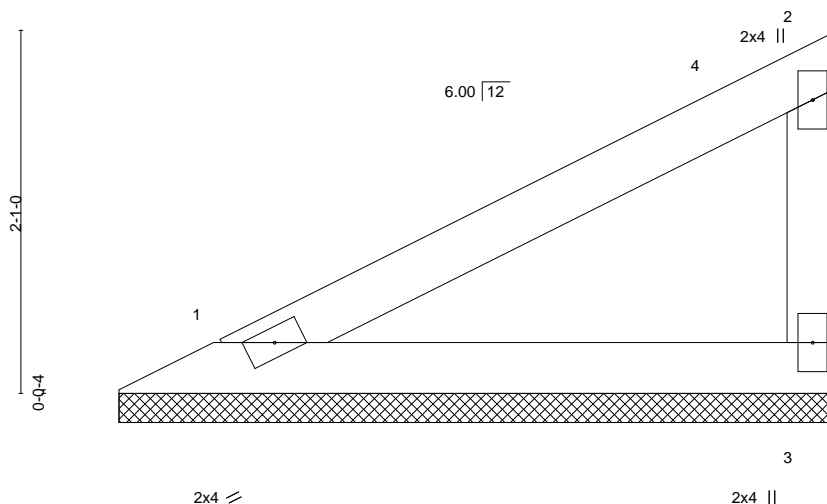
8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:53 2021 Page 1

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4-1-15

4-1-15

Scale = 1:13.2



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 11 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-15 oc purlins, except end verticals.

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

REACTIONS.

(size) 1=4-1-7, 3=4-1-7

Max Horz 1=64(LC 9)

Max Uplift 1=20(LC 12), 3=36(LC 12)

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

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

NOTES-

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



February 25, 2021

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

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Chesterfield, MO 63017

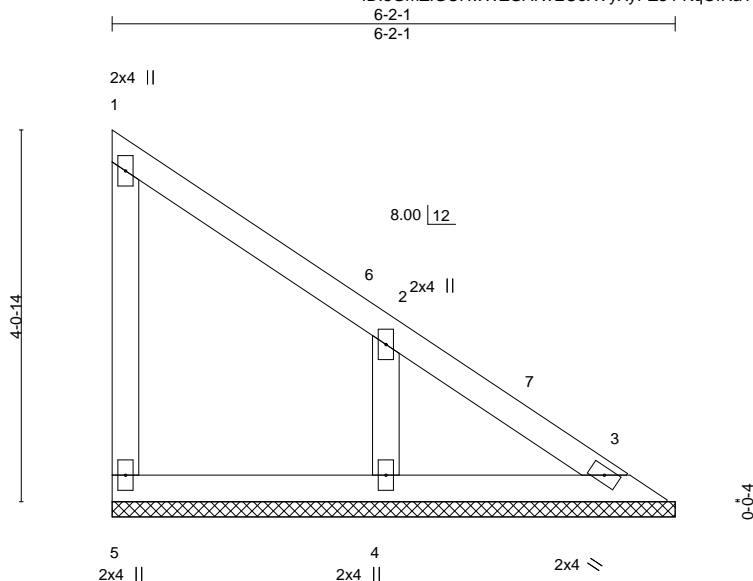
Job	Truss	Truss Type	Qty	Ply	Summit/93 Manor
2684960	V8	GABLE	1	1	I44966031
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:53 2021 Page 1

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Scale = 1:25.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=6-2-1, 3=6-2-1, 4=6-2-1
Max Horz 5=-131(LC 8)
Max Uplift 5=-29(LC 8), 3=-7(LC 9), 4=-111(LC 13)
Max Grav 5=109(LC 20), 3=106(LC 19), 4=315(LC 20)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 5-7-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 5, 3 except (jt=lb) 4=111.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 25, 2021

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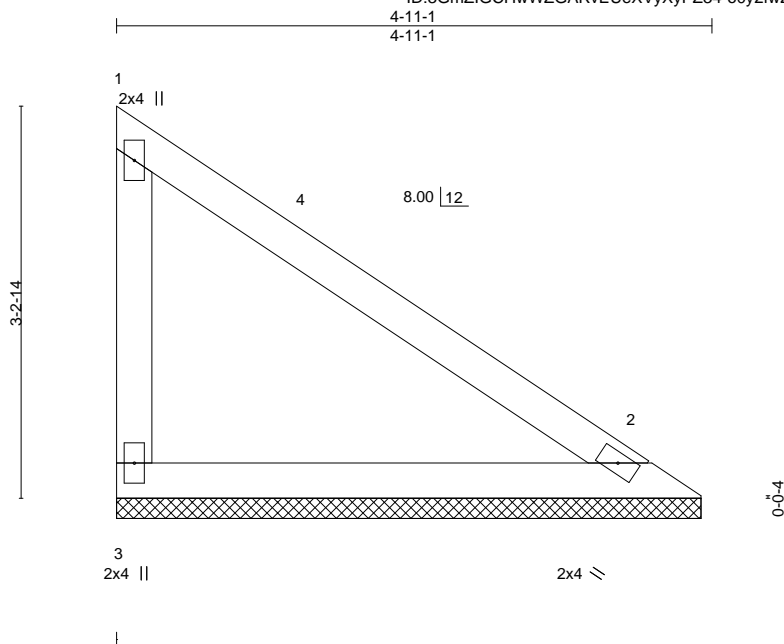
Job 2684960	Truss V9	Truss Type Valley	Qty 1	Ply 1	Summit/93 Manor I44966032
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:54 2021 Page 1

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Scale = 1:19.0

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 0.34	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-11-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=4-10-0, 2=4-10-0
Max Horz 3=-101(LC 8)
Max Uplift 3=-52(LC 13), 2=-17(LC 13)
Max Grav 3=201(LC 20), 2=191(LC 1)

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

NOTES-

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



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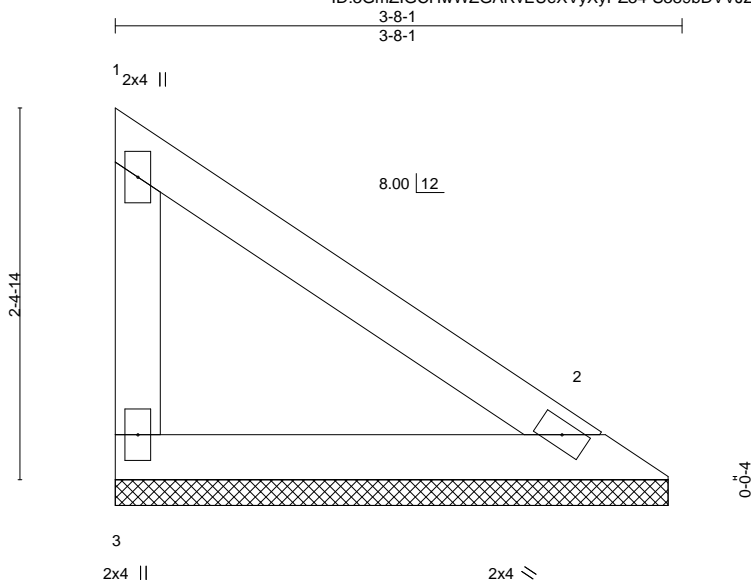
Job 2684960	Truss V10	Truss Type Valley	Qty 1	Ply 1	Summit/93 Manor I44966033
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Feb 12 2021 MiTek Industries, Inc. Thu Feb 25 13:06:49 2021 Page 1

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Scale = 1:14.9

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 10 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-1 oc purlins, except end verticals.

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

REACTIONS.

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

Max Horz 3=-71(LC 8)

Max Uplift 3=-37(LC 13), 2=-12(LC 13)

Max Grav 3=141(LC 20), 2=134(LC 1)

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

NOTES-

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



February 25, 2021

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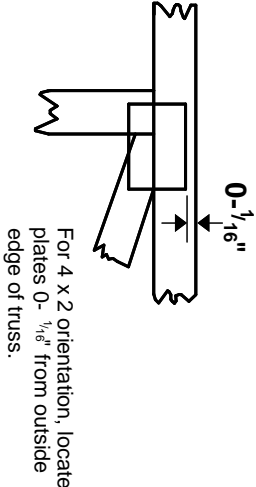
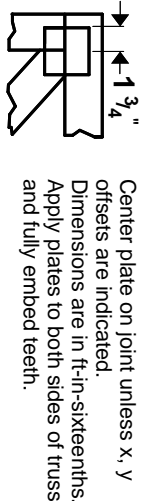
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Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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

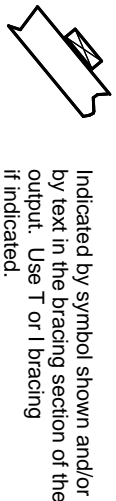
For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

PLATE SIZE

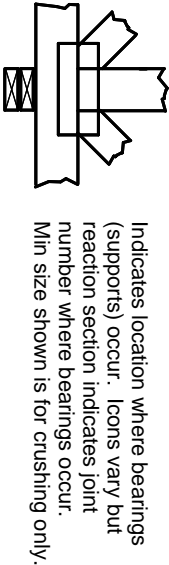
4 X 4

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

LATERAL BRACING LOCATION



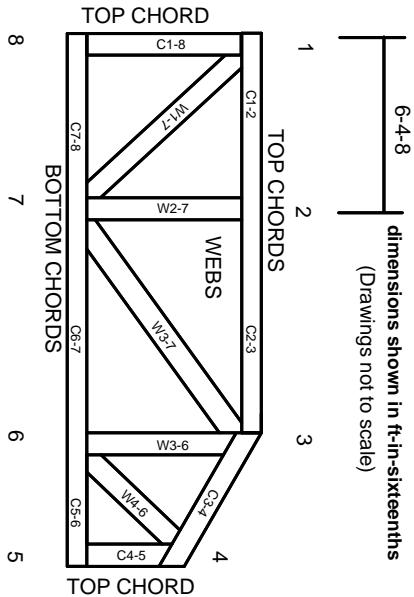
BEARING



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

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

Numbering System



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

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

PRODUCT CODE APPROVALS

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.