



10/18/2021

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

Re: 2933941
SUMMIT/WOODSIDE RIDGE #31/MO

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

Pages or sheets covered by this seal: I47923577 thru I47923638

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

Missouri COA: Engineering 001193



September 17, 2021

Sevier, Scott ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A1	ROOF SPECIAL GIRDER	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:16:53 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-iG9jQqCz4_Ph0cWKR2Q35PLXtVRZKHVX?KFPyKZL

Scale = 1:104.4

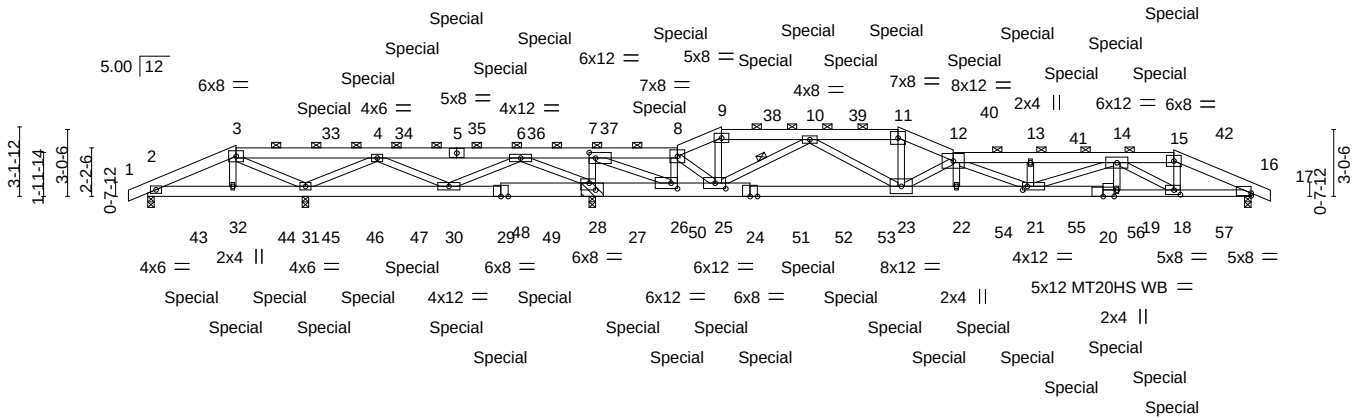


Plate Offsets (X,Y)--	[7:0-3-8,0-3-0], [16:0-0-0,0-1-6], [18:0-3-8,0-2-8], [21:0-2-8,0-2-0], [25:0-5-12,0-3-0], [26:0-3-8,0-3-0], [28:0-3-8,0-3-12]
-----------------------	---

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.82	Vert(LL) -0.41	21-22	>864	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.97	Vert(CT) -0.90	21-22	>394	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr NO	WB 0.90	Horz(CT) 0.09	16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 268 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 3-5,12-15,5-8: 2x6 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 2-6-13 oc purlins, except 2-0-0 oc purlins (2-8-15 max.): 3-8, 9-11, 12-15.
BOT CHORD 2x6 SPF 2100F 1.8E *Except* 24-29: 2x8 SP 2400F 2.0E, 16-20: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 3-10-7 oc bracing.
WEBS 2x4 SPF No.2 *Except* 7-26: 2x4 SP 2400F 2.0E	WEBS 1 Row at midpt 10-25
OTHERS 2x4 SPF No.2	

REACTIONS. All bearings 0-3-8 except (jt=length) 28=0-4-12 (input: 0-3-8 + bearing block).
 (lb) - Max Horz 2=30(LC 33)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=118(LC 8), 31=181(LC 5),
 28=1054(LC 4), 16=427(LC 5)
 Max Grav All reactions 250 lb or less at joint(s) except 2=837(LC 1), 31=919(LC 21),
 28=5702(LC 1), 16=2336(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1029/154, 3-4=-57/271, 4-6=-513/2699, 6-7=-1468/7739, 7-8=-336/1839,
 8-9=-1294/261, 9-10=-1196/253, 10-11=-5811/1147, 11-12=-6414/1250,
 12-13=-9355/1804, 13-14=-9352/1803, 14-15=-3977/797, 15-16=-4681/902
 BOT CHORD 2-32=-132/890, 31-32=-124/844, 30-31=-876/155, 28-30=-4816/926, 26-28=-7739/1509,
 25-26=-1596/349, 23-25=-785/4035, 22-23=-1832/9706, 21-22=-1835/9725,
 19-21=-1264/6639, 18-19=-1264/6638, 16-18=-777/4132
 WEBS 3-32=-97/588, 3-31=-1250/238, 10-25=-3378/698, 10-23=-375/2106, 11-23=-366/2015,
 12-23=-4558/871, 15-18=-330/1808, 4-31=-244/909, 4-30=-2146/455, 6-30=-422/2440,
 6-28=-3346/684, 8-26=-3007/563, 7-28=-3250/608, 8-25=-701/3685, 7-26=-1240/6488,
 13-21=-495/130, 14-18=-3093/600, 14-21=-538/2914, 12-21=-480/107

- NOTES-**
- 2x8 SP 2400F 2.0E bearing block 12" long at jt. 28 attached to front face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners. Bearing is assumed to be SP 2400F 2.0E.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior 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 MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 2, 181 lb uplift at joint 31, 1054 lb uplift at joint 28 and 427 lb uplift at joint 16.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A1	ROOF SPECIAL GIRDER	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:16:58 2021 Page 2
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-ASj5eACbqIXYdmbjt9Zn5xCuxD8AQZRRBnrmrydKEX

NOTES-

- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 80 lb down and 56 lb up at 8-0-12, 80 lb down and 56 lb up at 10-0-12, 80 lb down and 56 lb up at 12-0-12, 80 lb down and 56 lb up at 14-0-12, 80 lb down and 56 lb up at 16-0-12, 80 lb down and 56 lb up at 18-0-12, 43 lb down and 32 lb up at 24-0-0, 113 lb down and 82 lb up at 26-0-0, 99 lb down and 82 lb up at 28-0-12, 99 lb down and 82 lb up at 30-0-0, 99 lb down and 82 lb up at 31-11-4, 113 lb down and 82 lb up at 34-0-0, 43 lb down and 33 lb up at 35-11-4, 95 lb down and 63 lb up at 39-11-4, 93 lb down and 62 lb up at 41-11-4, 93 lb down and 62 lb up at 43-11-4, and 93 lb down and 62 lb up at 45-11-4, and 85 lb down and 49 lb up at 46-6-0 on top chord, and 308 lb down and 89 lb up at 2-0-12, 296 lb down and 73 lb up at 4-0-12, 304 lb down and 88 lb up at 6-0-12, 56 lb down and 31 lb up at 8-0-12, 56 lb down and 31 lb up at 10-0-12, 56 lb down and 31 lb up at 12-0-12, 56 lb down and 31 lb up at 14-0-12, 56 lb down and 31 lb up at 16-0-12, 56 lb down and 31 lb up at 18-0-12, 334 lb down and 103 lb up at 22-0-12, 217 lb down and 51 lb up at 24-0-12, 111 lb down and 47 lb up at 26-0-12, 111 lb down and 47 lb up at 28-0-12, 111 lb down and 47 lb up at 30-0-0, 111 lb down and 47 lb up at 31-11-4, 111 lb down and 47 lb up at 33-11-4, 217 lb down and 51 lb up at 35-11-4, 322 lb down and 94 lb up at 37-11-4, 61 lb down and 24 lb up at 39-11-4, 55 lb down and 23 lb up at 41-11-4, 55 lb down and 23 lb up at 43-11-4, and 55 lb down and 23 lb up at 45-11-4, and 126 lb down and 59 lb up at 46-6-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) 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=-90, 3-8=-90, 8-9=-90, 9-11=-90, 11-12=-90, 12-15=-90, 15-17=-90, 2-16=-20

Concentrated Loads (lb)

Vert: 5=-30(F) 9=-90(F) 11=-90(F) 15=-0(F) 29=-56(F) 32=-296(F) 25=-111(F) 10=-90(F) 23=-111(F) 18=-126(F) 26=-217(F) 13=-45(F) 21=-61(F) 14=-43(F) 19=-55(F) 33=-30(F) 34=-30(F) 35=-30(F) 36=-30(F) 37=-30(F) 38=-90(F) 39=-90(F) 41=-43(F) 42=-43(F) 43=-308(F) 44=-304(F) 45=-56(F) 46=-56(F) 47=-56(F) 48=-56(F) 49=-56(F) 50=-334(F) 51=-111(F) 52=-111(F) 53=-111(F) 54=-217(F) 55=-322(F) 56=-55(F) 57=-55(F)

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:23 2021 Page 1
 ID:ggMHuYjvKTSNSQSRK_pqYByzXhju-ajwfqjS87R2j1rZ2MwLXmcc75xsVpNkRbLbOnyKZ6
 0-10-8 6-0-0 10-4-5 16-9-7 20-1-2 26-0-0 28-0-0 32-0-0 34-8-6 39-8-6 44-8-6 50-0-0 50-10-8
 0-10-8 6-0-0 4-4-5 6-5-2 3-4-5 5-10-4 2-0-0 4-0-0 2-8-6 5-0-0 5-0-0 5-3-10 0-10-8

Technical drawing of a roof truss structure. The drawing shows a side elevation of the truss with various dimensions and material specifications. The roof pitch is indicated by a triangle with a vertical side of 3.11 and a horizontal side of 12. The overall width of the structure is 5.00. The drawing includes numerous dimensions for the truss members and their connections, such as 3.6, 4.6, 5.8, 7.8, 10.37, 11.38, 12.6, 13.39, 14.5, 15.3, 16.7, 17.16, 18.5, 19.5, 20.6, 21.5, 22.6, 23.5, 24.6, 25.6, 26.6, 27.6, 28.6, 29.6, 30.6, 31.6, 32.6, 33.6, 34.6, 35.6, 36.6, 37.6, 38.6, 39.6, 40.6, 41.6, 42.6, 43.6, 44.6, 45.6, 46.6, 47.6, 48.6, 49.6, 50.6, 51.6, 52.6, 53.6, 54.6, 55.6, 56.6, 57.6, 58.6, 59.6, 60.6, 61.6, 62.6, 63.6, 64.6, 65.6, 66.6, 67.6, 68.6, 69.6, 70.6, 71.6, 72.6, 73.6, 74.6, 75.6, 76.6, 77.6, 78.6, 79.6, 80.6, 81.6, 82.6, 83.6, 84.6, 85.6, 86.6, 87.6, 88.6, 89.6, 90.6, 91.6, 92.6, 93.6, 94.6, 95.6, 96.6, 97.6, 98.6, 99.6, 100.6. The drawing also includes material specifications such as 4x6, 5x8, 7x8, 10x12, 12x12, 14x12, 16x12, 18x12, 20x12, 22x12, 24x12, 26x12, 28x12, 30x12, 32x12, 34x12, 36x12, 38x12, 40x12, 42x12, 44x12, 46x12, 48x12, 50x12, 52x12, 54x12, 56x12, 58x12, 60x12, 62x12, 64x12, 66x12, 68x12, 70x12, 72x12, 74x12, 76x12, 78x12, 80x12, 82x12, 84x12, 86x12, 88x12, 90x12, 92x12, 94x12, 96x12, 98x12, 100x12. The drawing is a detailed technical drawing of a roof truss structure, showing the internal members and their connections. The drawing includes numerous dimensions and material specifications, providing a comprehensive view of the structure's design and construction.

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 0.83	Vert(LL) -0.29 18-20	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.73 18-20	>490	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.82	Horz(CT) 0.08 16	n/a	n/a		
BCDL 10.0	Code IRC2018/TP12014	Matrix-AS				Weight: 218 lb	FT = 20%

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-37(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16 except 26=-166(LC 26),
23=-125(LC 8)
Max Grav All reactions 250 lb or less at joint(s) except 2=603(LC 1), 26=435(LC 25),
16=1420(LC 1), 23=3422(LC 1)

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=4.2psf; h=25ft; 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 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 28-0-0, Exterior(2R) 28-0-0 to 31-0-0, Interior(1) 31-0-0 to 32-0-0, Exterior(2E) 32-0-0 to 34-8-6, Interior(1) 34-8-6 to 44-8-6, Exterior(2R) 44-8-6 to 47-8-6, Interior(1) 47-8-6 to 50-10-8 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) 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) 2, 16 except (jt=lb) 26=166, 23=125.
- 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.



September 17, 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, 2602 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A3	ROOF SPECIAL	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:20 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-Wh2PFhTPf2IRG6HxAnyprysx10/4K00goc43ZydkZB
 0-10-8 8-0-0 14-0-0 20-1-12 21-4-0 24-0-0 28-0-0 30-0-0 32-10-13 37-10-13 42-10-13 50-0-0 50-10-8
 0-10-8 8-0-0 6-0-0 6-1-12 1-2-4 2-8-0 4-0-0 2-0-0 2-10-13 5-0-0 5-0-0 7-1-3 0-10-8

Scale = 1:90.9

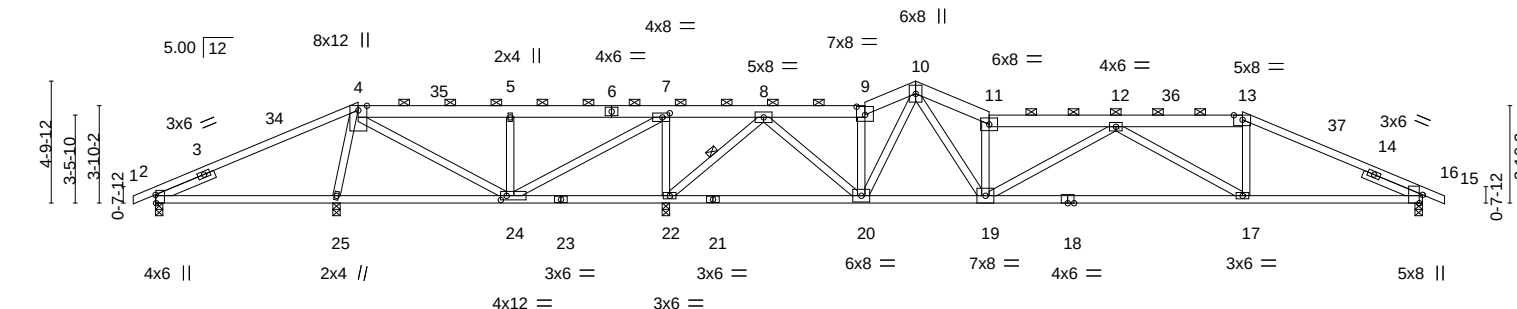


Plate Offsets (X,Y)--	[2:0-3-15,Edge], [4:0-2-3,Edge], [7:0-3-8,0-2-0], [9:0-4-0,0-3-15], [13:0-4-2,Edge], [15:0-3-15,Edge], [24:0-2-12,0-2-0]
-----------------------	--

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.89	Vert(LL)	-0.29 17-19	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.98	Vert(CT)	-0.69 17-19	>523	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.88	Horz(CT)	0.06 15	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS					Weight: 221 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 1-4,13-16: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (4-6-8 max.): 4-9, 11-13.
BOT CHORD 2x4 SPF No.2 *Except* 21-23: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 8-22
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0	

REACTIONS. All bearings 0-3-8.
 (lb) - Max Horz 2=-46(LC 17)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=-115(LC 12), 15=-104(LC 13),
 22=-143(LC 12), 25=-135(LC 26)
 Max Grav All reactions 250 lb or less at joint(s) 25 except 2=804(LC 25), 15=1444(LC
 1), 22=3440(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-840/294, 4-5=-195/562, 5-7=-189/559, 7-8=-191/2246, 8-9=-931/211,
 9-10=-1069/255, 10-11=-2512/418, 11-12=-2331/368, 12-13=-2195/359, 13-15=-2402/354
 BOT CHORD 2-25=-194/779, 24-25=-180/761, 22-24=-2246/308, 20-22=-553/69, 19-20=-104/1216,
 17-19=-352/2734, 15-17=-242/2211
 WEBS 4-24=-1043/218, 5-24=-538/135, 9-20=-631/161, 10-20=-713/29, 10-19=-263/1991,
 11-19=-1280/242, 12-19=-550/118, 12-17=-638/139, 13-17=-1/534, 7-22=-1673/284,
 7-24=-347/2330, 4-25=-57/329, 8-20=-209/1891, 8-22=-2380/321

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 30-0-0, Exterior(2E) 30-0-0 to 32-10-13, Interior(1) 32-10-13 to 42-10-13, Exterior(2R) 42-10-13 to 45-10-13, Interior(1) 45-10-13 to 50-10-8 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 115 lb uplift at joint 2, 104 lb uplift at joint 15, 143 lb uplift at joint 22 and 135 lb uplift at joint 25.
 - This truss 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.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A4	Roof Special	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:08 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-?tcnT1U1QMQuHulsKUT2H9C6q3wmp1Op:50ydkZA

0-10-8 5-1-12 10-0-0 12-9-1 15-0-0 17-8-3 20-1-12 23-4-0 25-1-12 30-0-0 31-1-3 36-2-15 41-1-3 45-4-11 50-0-0 50-10-8
 0-10-8 5-1-12 4-10-4 2-9-1 2-2-15 2-8-3 2-5-9 3-2-4 1-9-12 4-10-4 1-1-3 5-1-12 4-10-4 4-3-10 4-7-2 0-10-8

Scale = 1:90.9

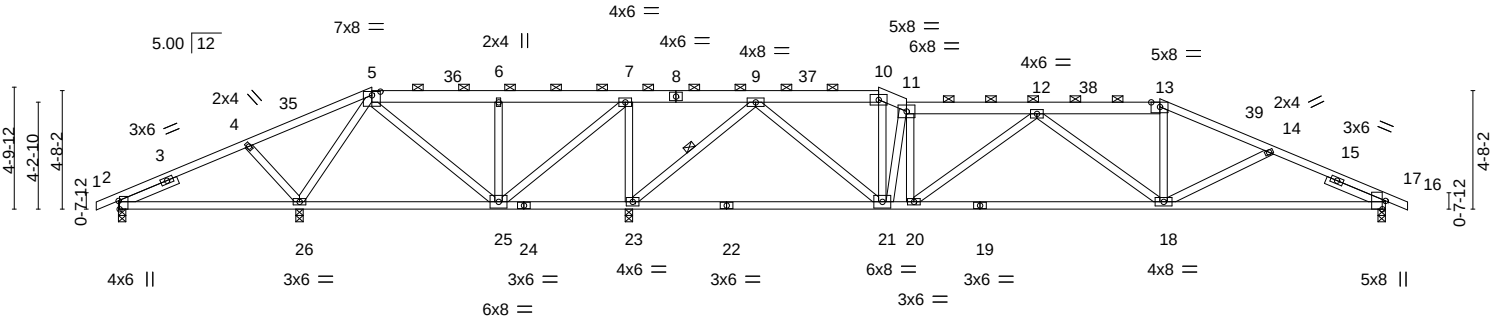


Plate Offsets (X,Y)--	[2:0-3-15,Edge], [5:0-4-0,0-1-12], [13:0-4-2,Edge], [16:0-3-15,Edge]
-----------------------	--

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.53	Vert(LL) -0.21	18-20	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.82	Vert(CT) -0.50	18-20	>710	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.05	16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 230 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 1-5,13-17: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-1-11 max.): 5-10, 11-13.
BOT CHORD 2x4 SPF No.2 *Except* 22-24: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 9-23
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0	

REACTIONS. All bearings 0-3-8.
 (lb) - Max Horz 2=47(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 26, 16 except 23=200(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) except 2=405(LC 25), 26=758(LC 25), 16=1429(LC 26), 23=3271(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-402/87, 4-5=0/286, 5-6=-25/747, 6-7=-26/741, 7-9=-182/1934, 9-10=-1238/245,
 10-11=-1344/253, 11-12=-1573/275, 12-13=-1983/327, 13-14=-2195/332,
 14-16=-2457/371
 BOT CHORD 23-25=-1934/337, 20-21=-132/1551, 18-20=-245/2126, 16-18=-278/2216
 WEBS 4-26=-493/144, 5-26=-252/121, 11-21=-1291/188, 11-20=-42/535, 12-20=-701/140,
 13-18=-6/442, 14-18=-253/111, 7-23=-1511/240, 9-21=-194/1748, 9-23=-2430/369,
 6-25=-443/115, 7-25=-212/1574, 5-25=-733/129

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 30-0-0, Exterior(2E) 30-0-0 to 31-1-3, Interior(1) 31-1-3 to 41-1-3, Exterior(2R) 41-1-3 to 44-1-3, Interior(1) 44-1-3 to 50-10-8 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, 26, 16 except (jt=lb) 23=200.
- This truss 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.



September 17, 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/WOODSIDE RIDGE #31/MO
2933941	A5	Roof Special	1	1	Job Reference (optional)

Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:18 2021 Page 1						
ID:ggMHuYjvKTSNSqRK_pqYBzXhju-T49AGNVfBgY8WSQfHB_HqNxxHCRpofH5ZfWZdsydkZ9										
-0-10-8	6-1-12	12-0-0	20-0-0	20-1-12	28-0-0	32-5-14	37-7-10	42-5-14	50-0-0	50-10-8
0-10-8	6-1-12	5-10-4	8-0-0	0-1-12	7-10-4	4-5-14	5-1-12	4-10-4	7-6-2	0-10-8

Scale = 1:89.4

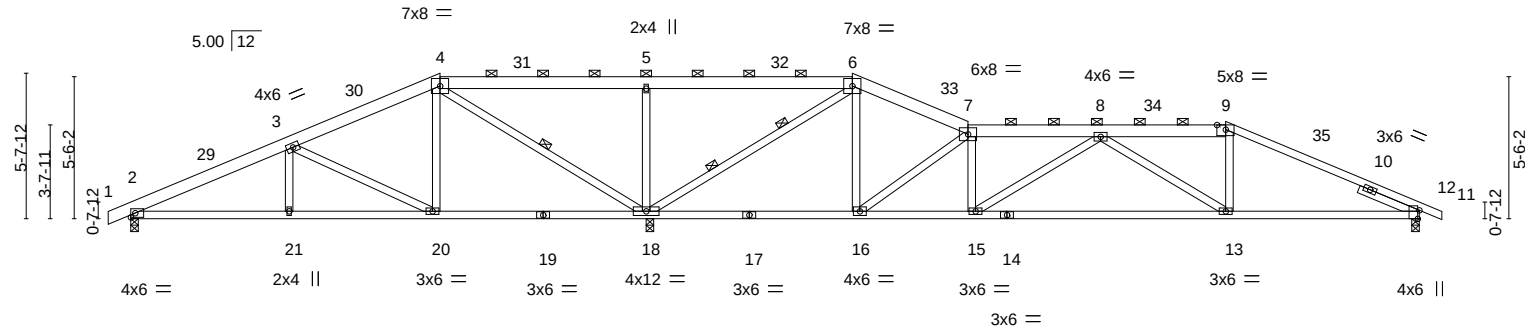


Plate Offsets (X,Y)--	[9:0-4-2,Edge], [11:0-3-15,Edge]
-----------------------	----------------------------------

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.89	Vert(LL) -0.25	13-15	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.84	Vert(CT) -0.58	13-15	>616	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.93	Horz(CT) 0.06	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 227 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 9-12: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-2-0 max.): 4-6, 7-9.
BOT CHORD 2x4 SPF No.2 *Except* 17-19: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 4-18
SLIDER Right 2x4 SPF No.2 2-6-0	2 Rows at 1/3 pts 6-18

REACTIONS. (size) 2=0-3-8, 18=0-3-8, 11=0-3-8
 Max Horz 2=57(LC 12)
 Max Uplift 2=78(LC 12), 18=178(LC 9), 11=108(LC 13)
 Max Grav 2=767(LC 25), 18=3735(LC 1), 11=1358(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1022/137, 3-4=-240/582, 4-5=-157/2142, 5-6=-157/2142, 6-7=-462/156,
 7-8=-1742/300, 8-9=-1993/345, 9-11=-2162/327
 BOT CHORD 2-21=-127/859, 20-21=-127/859, 18-20=-506/143, 16-18=0/334, 15-16=-180/1717,
 13-15=-274/2263, 11-13=-222/2002
 WEBS 3-20=-860/160, 4-20=-12/538, 4-18=-2191/283, 5-18=-816/185, 6-18=-2831/373,
 6-16=-112/1125, 7-16=-1701/252, 7-15=-6/526, 8-15=-664/136, 8-13=-330/84,
 9-13=0/419

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-0-0, Exterior(2R) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 28-0-0, Exterior(2R) 28-0-0 to 31-0-0, Interior(1) 31-0-0 to 42-5-14, Exterior(2R) 42-5-14 to 45-5-14, Interior(1) 45-5-14 to 50-10-8 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 except (jt=lb) 18=178, 11=108.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A6	Roof Special	1	1	Job Reference (optional)

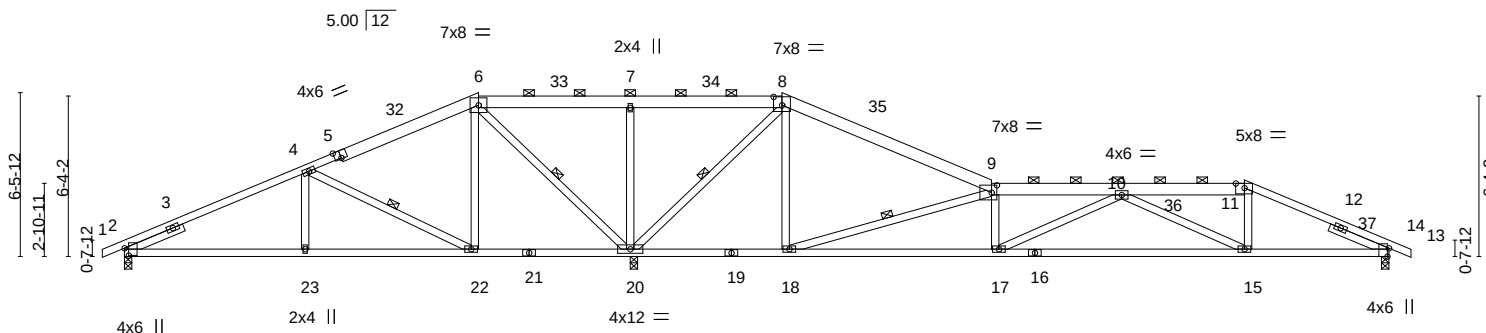
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:18 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-PSHw53XvjHcslmajPc1woc6P7*SBuGJEZmLykE7

0-10-8	7-1-12	14-0-0	20-0-0	20-1-12	26-0-0	30-1-12	34-3-7	39-5-3	44-3-7	50-0-0	50-10-8
0-10-8	7-1-12	6-10-4	6-0-0	0-1-12	5-10-4	4-1-12	4-1-12	5-1-12	4-10-4	5-8-9	0-10-8

Scale = 1:91.1



	7-1-12	14-0-0	20-1-12	26-0-0	34-3-7	44-3-7	50-0-0
	7-1-12	6-10-4	6-1-12	5-10-4	8-3-7	10-0-0	5-8-9
Plate Offsets (X,Y)--	[2:0-3-7,0-2-0], [5:0-3-0,Edge], [8:0-4-0,0-4-0], [9:0-2-8,0-3-8], [11:0-4-2,Edge], [13:0-3-15,Edge]						

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.82	Vert(LL) -0.24	15-17	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.86	Vert(CT) -0.60	15-17	>602	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.91	Horz(CT) 0.05	13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 228 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
 11-14,1-5: 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 19-21: 2x4 SP 2400F 2.0E
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (5-2-12 max.): 6-8, 9-11.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 4-22, 6-20, 8-20, 9-18

REACTIONS.

(size) 2=0-3-8, 20=0-3-8, 13=0-3-8
 Max Horz 2=-63(LC 13)
 Max Uplift 2=-100(LC 26), 20=-159(LC 9), 13=-98(LC 13)
 Max Grav 2=669(LC 25), 20=4097(LC 1), 13=1209(LC 26)

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

TOP CHORD 2-4=-612/764, 4-6=-71/1394, 6-7=-196/2640, 7-8=-196/2640, 8-9=-33/960,
 9-10=-1798/290, 10-11=-1796/299, 11-13=-2014/288
 BOT CHORD 2-23=-636/565, 22-23=-636/565, 20-22=-1268/215, 18-20=-773/168, 17-18=-197/1771,
 15-17=-290/2283, 13-15=-200/1812
 WEBS 4-23=0/314, 4-22=-1130/188, 6-22=-24/603, 6-20=-2205/281, 7-20=-567/121,
 8-20=-2642/339, 8-18=-54/903, 9-18=-2562/373, 9-17=0/534, 10-17=-585/128,
 10-15=-553/117, 11-15=0/436

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 17-0-0, Interior(1) 17-0-0 to 26-0-0, Exterior(2R) 26-0-0 to 29-0-0, Interior(1) 29-0-0 to 44-3-7, Exterior(2R) 44-3-7 to 47-3-7, Interior(1) 47-3-7 to 50-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 3x6 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13 except (jt=lb) 20=159.
- This truss 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.



September 17,2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:34 2021 Page 1
ID:ggMHuYjvKTSNSqRK pqYByzXhju-p1z3j4Zo?CARC0JH4laSXoe9cdB4TYjnPcGR3gydkZ4

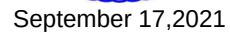
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:27:41 2021 Page 1
ID:ggMHuYivKTSNSqRk pgYByzXhju-p1z3j4Zo?CARCpJH4laSxQeScuB4YfYpCGK5jyqKZ4

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 0.80	Vert(LL) -0.32 21	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.64	Vert(CT) -0.57 21	>631	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.91	Horz(CT) -0.14 26	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS				Weight: 294 lb	FT = 20%

REACTIONS. (size) 2=0-3-8, 26=(0-3-8 + bearing block) (req. 0-4-5), 16=0-3-8
 Max Horz 2=-74(LC 30)
 Max Uplift 2=-489(LC 22), 26=-421(LC 5), 16=-358(LC 9)
 Max Grav 2=290(LC 18), 26=5232(LC 1), 16=1881(LC 22)

NOTES-

- 1) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 26 attached to front face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners. Bearing is assumed to be SP 2400F 2.0E.
- 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=25ft; 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
- 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) 2=489, 26=421, 16=358.
- 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.



Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A7	ROOF SPECIAL	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:18 2021 Page 2
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-p1z3j4Zo?CARC0JH4laSxQes6dB4FyJpCGK3gyaKE4

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

10/18/2021

NOTES-

- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 126 lb down and 79 lb up at 41-11-4, and 126 lb down and 79 lb up at 43-11-4, and 209 lb down and 135 lb up at 46-1-1 on top chord, and 723 lb down and 226 lb up at 40-0-12, 48 lb down and 19 lb up at 41-11-4, and 48 lb down and 19 lb up at 43-11-4, and 187 lb down and 75 lb up at 45-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-8=-90, 8-9=-90, 9-11=-90, 11-15=-90, 15-17=-90, 34-35=-20, 32-33=-20, 31-39=-20
- Concentrated Loads (lb)
- Vert: 15=-91(B) 18=-187(B) 14=-76(B) 19=-48(B) 42=-76(B) 43=-723(B) 44=-48(B)

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:12 2021 Page 2
 ID:ggMHuYjvKTSNSqRk_pqYBzXhju-HEXRxQaQmWJlNuUeS3n3ebH1XJC4AresougydkZ5
 0-10-8 2-9-8 5-3-0 7-1-10 11-7-8 18-0-0 22-0-0 27-10-13 30-10-4 33-9-11 40-9-2
 0-10-8 2-9-8 2-5-8 1-10-10 4-5-14 6-4-8 4-0-0 5-10-13 2-11-7 2-11-7 6-2-5

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-6: 2x4 SPF 1650F 1.5E, 10-13: 2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (10-0-0 max.): 8-9.
BOT CHORD	2x4 SPF No.2 *Except* 15-18: 2x4 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied or 5-11-14 oc bracing.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 17-21, 11-16, 9-17, 8-17
SLIDER	Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0	JOINTS	1 Brace at Jt(s): 22

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

TOP CHORD 2-4=-545/140, 5-7=-232/847, 7-8=-125/849, 8-9=-333/1867, 9-11=-361/1632,
11-13=-757/834

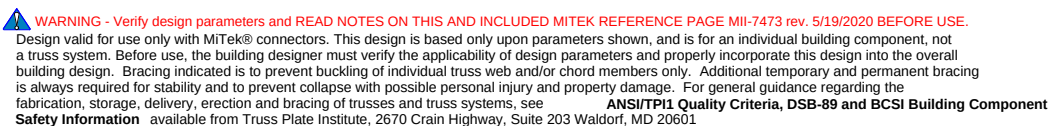
BOT CHORD 16-17=-1472/452, 14-16=-682/664, 13-14=-682/664

WEBS 7-21=-499/204, 17-21=-1489/400, 9-16=-103/688, 11-16=-1502/360, 8-21=-276/1171,
5-21=-907/241, 9-17=-1821/247, 8-17=-1623/390, 11-14=0/410

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 26-2-15, Interior(1) 26-2-15 to 40-0-0 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) All plates are 2x4 MT20 unless otherwise indicated.
- 6) The Fabrication Tolerance at joint 9 = 16%
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=1b) 17=586, 13=210.
- 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/TP1 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 17, 2021



Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A9	COMMON	1	1	Job Reference (optional)

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

Builders FirstSource (Valley Center),		Valley Center, KS - 67147,		8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:18 2021 Page 1	
0-10-8		6-10-5		ID:ggMHuYjvKTSNSqRK_pqYByzXhju-mQ5p8ma2XpR9XTgCAwcrjv8QrqaafSWIGNYyKZz	
0-10-8		6-10-5		147923585	
		6-6-13		26-6-13	
		6-6-13		33-1-11	
				6-6-13	
				6-6-13	
				6-10-5	

Scale = 1:67.5

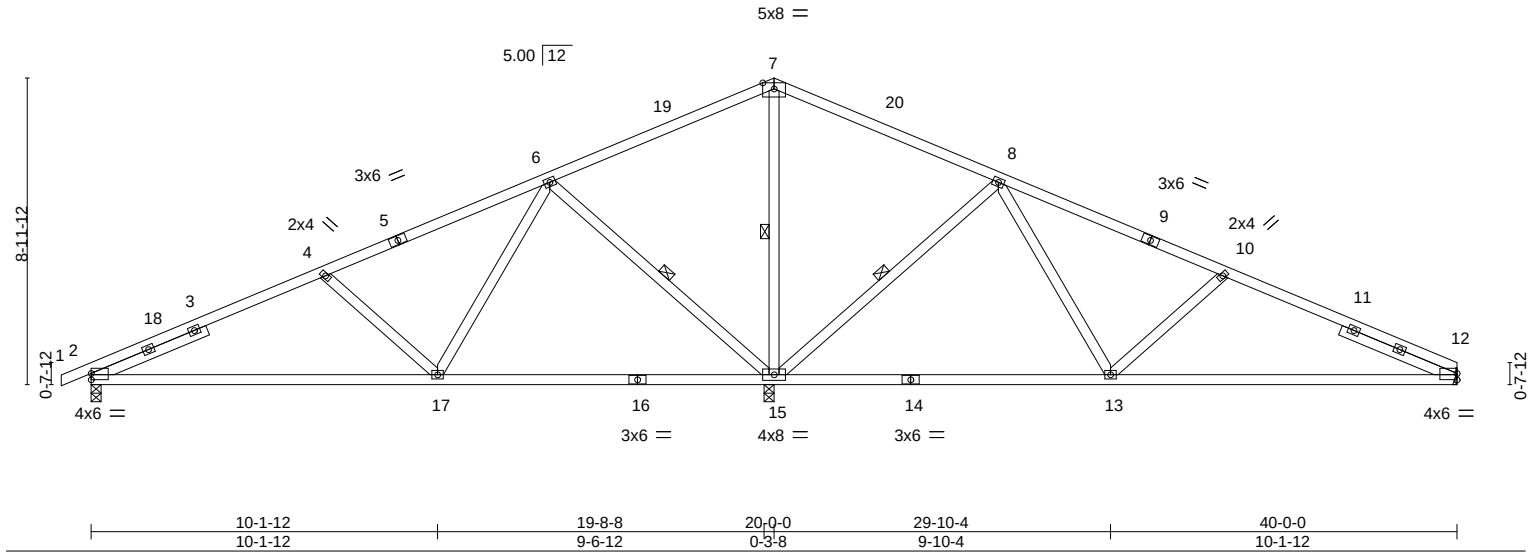


Plate Offsets (X,Y)--		[2:0-0-0,0-2-3], [12:0-0-0,0-2-3]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.24 12-13	>994	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.51 12-13	>471	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.03 12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 162 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-9 oc purlins.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
14-16: 2x4 SP 2400F 2.0E	WEBS 1 Row at midpt 7-15, 8-15, 6-15
WEBS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 3-7-13, Right 2x4 SPF No.2 3-7-13	

REACTIONS.	(size) 2=0-3-8, 15=0-3-8, 12=Mechanical
	Max Horz 2=154(LC 16)
	Max Uplift 2=164(LC 12), 15=-319(LC 12), 12=-170(LC 13)
	Max Grav 2=912(LC 25), 15=2888(LC 1), 12=832(LC 26)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-1248/248, 4-6=-773/177, 6-7=-31/922, 7-8=-10/922, 8-10=-780/241, 10-12=-1256/311
BOT CHORD	2-17=-297/1050, 15-17=-142/266, 13-15=-143/270, 12-13=-202/1060
WEBS	7-15=-1162/122, 8-15=-1152/323, 8-13=-87/728, 10-13=-618/242, 6-15=-1149/324, 6-17=-89/722, 4-17=-612/244

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are 3x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=164, 15=319, 12=170.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A10	ROOF SPECIAL	5	1	

Builders FirstSource (Valley Center), Valley Center, KS - 67147,			8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:16:52 2021 Page 1		
ID:ggMHuYjvKTSNSqRK_pqYByZxhju-6rqR2rEsMvnQt4I5?ab7xk1xHkyeejkcVEEskydKLV			147923586		
-0-10-8	4-3-8	8-2-13	12-1-12	20-0-0	26-6-13
0-10-8	4-3-8	3-11-5	3-10-15	7-10-4	6-6-13
					33-1-11
					6-6-13
					6-10-5
					0-10-8

Scale = 1:68.7

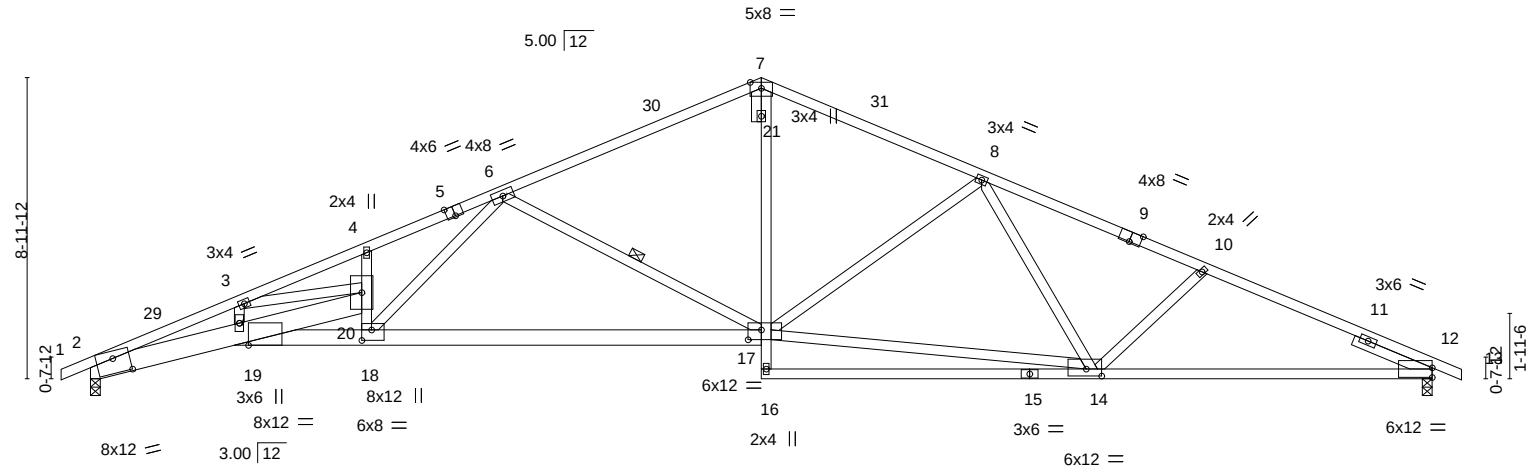


Plate Offsets (X,Y)--	[2:0-6-0,0-5-6], [5:0-3-0,Edge], [9:0-4-0,Edge], [12:0-0-0,0-3-7], [14:0-5-8,0-2-8], [17:0-4-12,0-3-8], [18:0-3-8,0-3-12], [19:0-3-4,Edge]
-----------------------	--

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 0.88	Vert(LL)	-0.40 14-16	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.71	Vert(CT)	-1.07 14-16	>447	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.99	Horz(CT)	0.32 12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 202 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 7-9,1-5: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except* 2-20: 2x8 SP 2400F 2.0E, 17-19: 2x6 SPF 2100F 1.8E 12-15: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2 *Except* 7-16: 2x4 SPF 1650F 1.5E	WEBS 1 Row at midpt 6-17
SLIDER Right 2x4 SPF No.2 2-6-0	

REACTIONS.	(size) 2=0-3-8, 12=0-3-8 Max Horz 2=-153(LC 13) Max Uplift 2=-325(LC 12), 12=-325(LC 13) Max Grav 2=2277(LC 1), 12=2277(LC 1)
-------------------	--

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-7348/1097, 3-4=-5832/754, 4-6=-5852/823, 6-7=-3309/496, 7-8=-3293/501, 8-10=-4026/556, 10-12=-4361/612
BOT CHORD	2-19=-1110/6759, 19-20=-356/1300, 18-19=-771/5555, 17-18=-597/4297, 12-14=-473/3937
WEBS	7-17=-197/1821, 3-19=-39/336, 6-17=-1577/402, 14-17=-350/3593, 8-17=-875/291, 8-14=-21/316, 10-14=-462/216, 18-20=-1033/272, 4-20=-291/107, 6-18=-196/1595, 3-20=-1384/378

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 325 lb uplift at joint 2 and 325 lb uplift at joint 12.
 - This truss 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.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A11	ROOF SPECIAL	2	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
Job Reference (optional)					

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:16:58 2021 Page 1
 ID:ggMHuYjvKTSNSqRK_pqYByzXhju-a1OEGBFU7Dv7UEKIZH6MTzhhnGennELeQzyGAYdKZ0
 0-10-8 4-3-8 9-7-8 12-3-8 14-9-12 20-0-0 22-3-8 25-2-4 28-0-8 30-4-8 33-9-8 35-8-8 40-0-0 4-3-8 0-10-8
 0-10-8 4-3-8 5-4-0 2-8-0 2-6-4 5-2-4 2-3-8 2-10-12 2-10-4 2-4-0 3-5-0 1-11-0 4-3-8 0-10-8

Scale = 1:68.8

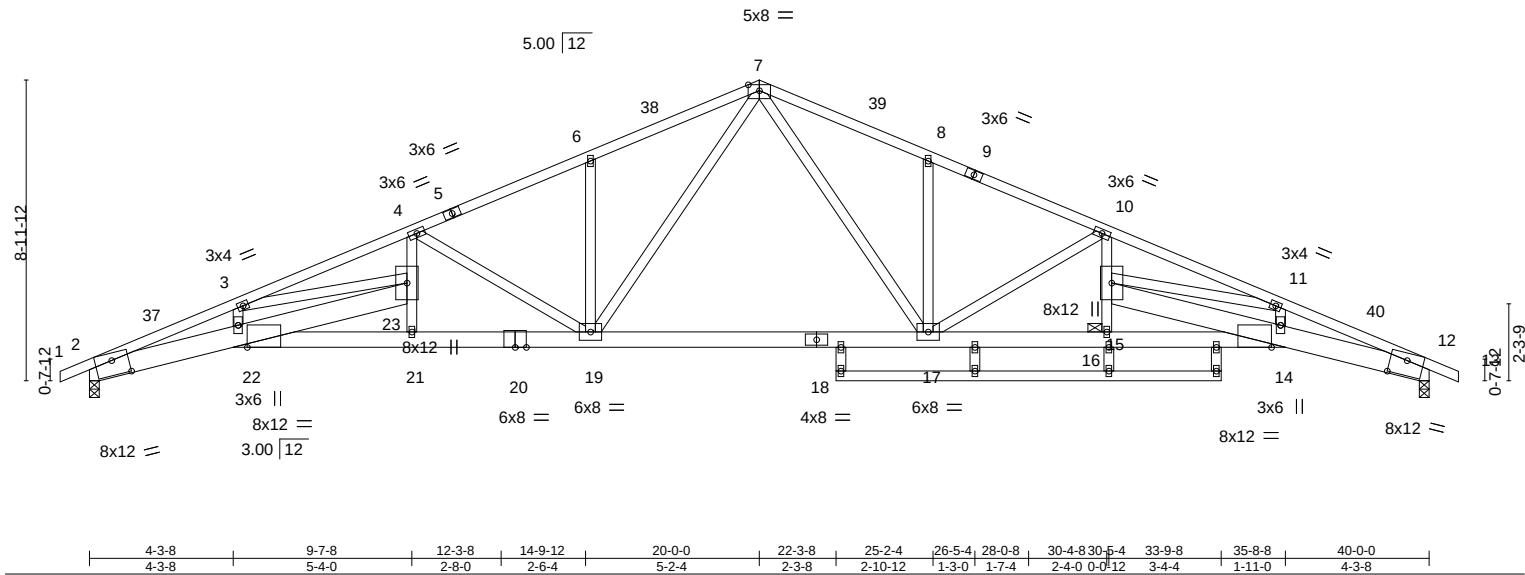


Plate Offsets (X,Y)--		[2:0-6-0,0-5-6], [12:0-6-0,0-5-6], [14:0-3-4,Edge], [22:0-3-4,Edge]										
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.42	17-19	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.97	17-19	>496	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.39	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 250 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SPF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied.
	2-23,12-15: 2x8 SP 2400F 2.0E, 20-22,14-18: 2x6 SPF 2100F 1.8E	JOINTS	1 Brace at Jt(s): 16
	18-20: 2x6 SPF No.2		
WEBS	2x4 SPF No.2		

REACTIONS.	
(size)	2=0-3-8, 12=0-3-8
Max Horz	2=-153(LC 17)
Max Uplift	2=-324(LC 12), 12=-324(LC 13)
Max Grav	2=2279(LC 1), 12=2279(LC 1)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-7454/1096, 3-4=-5467/757, 4-6=-4210/559, 6-7=-4202/656, 7-8=-4203/626, 8-10=-4211/550, 10-11=-5468/705, 11-12=-7454/967
BOT CHORD	2-22=-1110/6865, 22-23=-406/1959, 21-22=-716/4992, 19-21=-708/4964, 17-19=-245/2895, 16-17=-509/4966, 14-16=-517/4994, 14-15=-329/1957, 12-14=-833/6864
WEBS	3-22=0/377, 11-14=0/377, 6-19=-475/193, 4-19=-1368/320, 4-23=-83/688, 10-15=-65/688, 10-17=-1370/300, 8-17=-474/193, 11-15=-1827/317, 3-23=-1829/387, 7-19=-344/1631, 7-17=-328/1632

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-10-8 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
 - 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.
 - Bearing at joint(s) 2, 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 324 lb uplift at joint 2 and 324 lb uplift at joint 12.
 - This truss 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.



September 17, 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/WOODSIDE RIDGE #31/MO
2933941	A12	Hip	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:16:52 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-WQW_htGkf9rkKTGgi9qrMf1Qy_Lm1Ad1S233yKLS

10/18/2021

Scale = 1:72.8

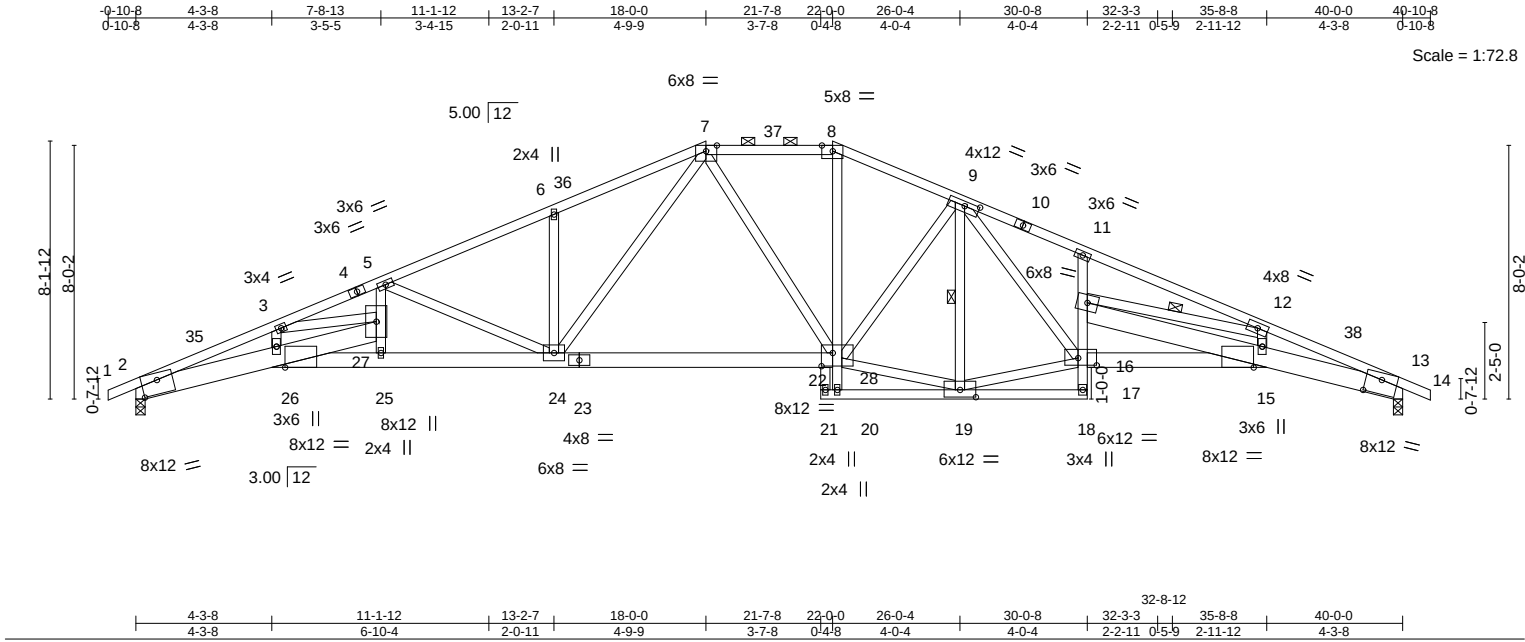


Plate Offsets (X,Y)-- [2:0-6-0,0-5-6], [7:0-4-2,Edge], [8:0-4-2,Edge], [9:0-5-10,0-1-12], [13:0-6-0,0-5-6], [15:0-3-4,Edge], [17:0-7-0,0-2-12], [19:0-6-0,0-2-12], [22:0-4-4,0-5-0], [26:0-3-4,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.95	Vert(LL)	-0.42	22-24	>999	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.71	Vert(CT)	-0.97	22-24	>497		
BCLL 0.0	Rep Stress Incr YES	WB 0.93	Horz(CT)	0.42	13	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 245 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 *Except*	2-0-0 oc purlins (3-0-2 max.): 7-8.
2-27,13-16: 2x8 SP 2400F 2.0E, 23-26,15-17: 2x6 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied.
22-23: 2x6 SPF No.2	WEBS 1 Row at midpt 9-19, 12-16
WEBS 2x4 SPF No.2	

REACTIONS. (size) 2=0-3-8, 13=0-3-8
 Max Horz 2=137(LC 12)
 Max Uplift 2=-326(LC 12), 13=-326(LC 13)
 Max Grav 2=2281(LC 1), 13=2281(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-7330/1077, 3-5=-6048/862, 5-6=-4587/608, 6-7=-4560/701, 7-8=-3270/523,
 8-9=-3584/539, 9-11=-5100/746, 11-12=-5225/702, 12-13=-7450/975
 BOT CHORD 2-26=-1074/6735, 26-27=-263/1265, 25-26=-823/5584, 24-25=-810/5523,
 22-24=-316/3251, 18-19=-49/415, 16-17=-1053/267, 11-16=-422/166, 15-17=-499/4907,
 15-16=-368/2112, 13-15=-843/6862
 WEBS 3-26=-32/393, 7-22=-206/284, 8-22=-116/957, 9-19=-1555/191, 17-19=-267/2953,
 9-17=-353/2286, 19-22=-315/3332, 12-15=0/326, 5-27=-102/754, 3-27=-1128/245,
 6-24=-436/189, 5-24=-1508/343, 7-24=-312/1542, 12-16=-2099/332

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 26-0-4, Interior(1) 26-0-4 to 40-10-8 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.
 - Bearing at joint(s) 2, 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 326 lb uplift at joint 2 and 326 lb uplift at joint 13.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE	31/MO	AS NOTED FOR PLAN REVIEW
2933941	A13	Hip	1	1			DEVELOPMENT SERVICE
Builders First Source, Valley Center, KS 67147					Job Reference (optional)	8.430 s Nov 30 2020 MITek Industries, Inc.	LEE'S SUMMIT, MISSOURI

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-5Dh924CdmuyJUUpmjG2G2hVX1XKVCf0WmH12uyym

0-10-8 4-3-8 10-1-12 16-0-0 21-7-8 24-0-0 30-0-8 32-8-12 35-8-8 40-0-0 40-10-8

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

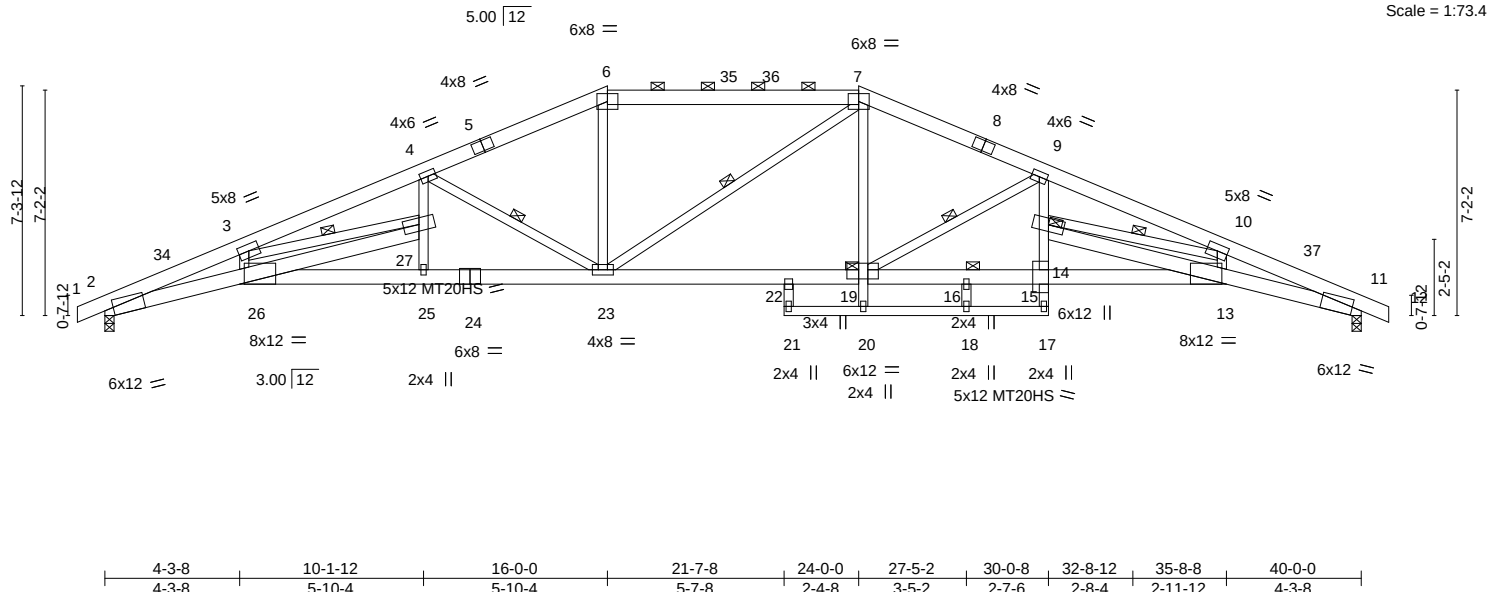


Plate Offsets (X,Y)--		[2:0-3-6,Edge], [11:0-6-0,Edge], [13:0-1-12,0-0-0], [15:0-6-0,0-1-12], [19:0-4-0,0-3-8], [26:0-1-12,Edge]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	25.0	Plate Grip DOL 1.15		TC	0.66	Vert(LL)	-0.35	22-23	>999	240	MT20	197/144	
TCDL	20.0	Lumber DOL 1.15		BC	0.94	Vert(CT)	-0.79	22-23	>608	180	MT20HS	148/108	
BCLL	0.0	Rep Stress Incr YES		WB	0.49	Horz(CT)	0.41	11	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 251 lb	FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x6 SPF 2100F 1.8E *Except*	2-0-0 oc purlins (2-10-6 max.): 6-7.
21-22,17-21,15-17: 2x4 SPF No.2, 13-19: 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied. Except:
19-24: 2x6 SPF No.2	10-0-0 oc bracing: 25-26
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 4-23, 7-23, 9-19, 3-27, 10-14
	JOINTS 1 Brace at Jt(s): 19, 14, 16

REACTIONS. (size) 2=0-3-8, 11=0-3-8
 Max Horz 2=-123(LC 13)
 Max Uplift 2=-324(LC 12), 11=-324(LC 13)
 Max Grav 2=2279(LC 1), 11=2279(LC 1)

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

TOP CHORD 2-34=-8211/1173, 3-34=-8123/1182, 3-4=-5493/741, 4-5=-4142/546, 5-6=-3963/569, 6-35=-3725/559, 35-36=-3725/559, 7-36=-3725/559, 7-8=-3933/565, 8-9=-4113/542, 9-10=-5495/697, 10-37=-8106/1066, 11-37=-8193/1057

BOT CHORD 2-26=-1165/7597, 26-27=-501/2695, 25-26=-665/4971, 24-25=-662/4985, 23-24=-662/4985, 22-23=-324/3700, 19-22=-298/3595, 16-19=-494/4874, 15-16=-494/4874, 13-15=-525/4979, 13-14=-427/2671, 11-13=-931/7580

WEBS 3-26=-36/716, 4-27=-60/689, 4-23=-1439/335, 6-23=-60/888, 7-23=-255/305, 7-19=-91/862, 10-13=-24/718, 9-19=-1474/321, 14-15=0/253, 9-14=-47/705, 3-27=-2535/483, 10-14=-2515/415

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 20-2-15, Interior(1) 20-2-15 to 24-0-0, Exterior(2R) 24-0-0 to 28-2-15, Interior(1) 28-2-15 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 2, 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 324 lb uplift at joint 2 and 324 lb uplift at joint 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.



September 17, 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/WOODSIDE RIDGE #31/MO
2933941	A14	Hip	1	1	

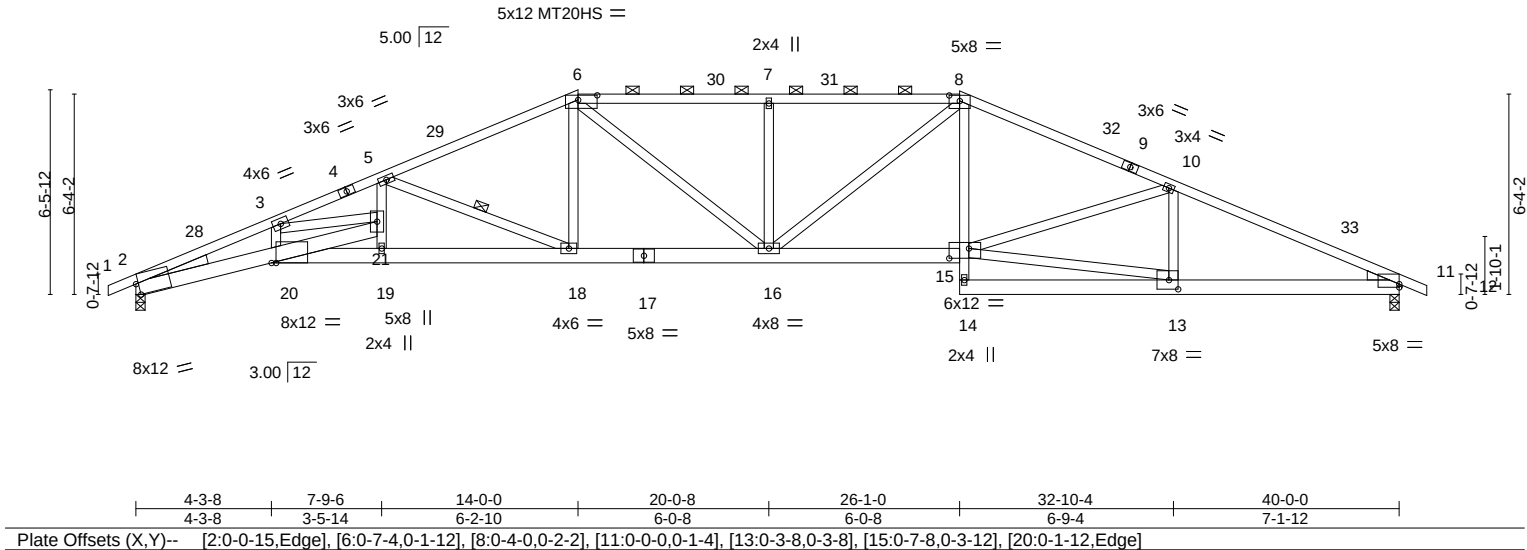
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:33 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-PBIVWFJfJ3fHD9nFvYDmjCpYzH1hUmmp3Q6GqyUKZ6

0-10-8 4-3-8 7-9-6 9-1-12 14-0-0 20-0-8 26-0-0 32-10-4 40-0-0
 0-10-8 4-3-8 3-5-14 1-4-6 4-10-4 6-0-8 5-11-8 6-10-4 7-1-12 0-10-8

Scale = 1:73.0



LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.94	Vert(LL) -0.39	16-18	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.99	Vert(CT) -0.85	16-18	>562	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.97	Horz(CT) 0.35	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 203 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 9-12: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-9-6 max.): 6-8.
BOT CHORD 2x6 SPF 2100F 1.8E *Except* 2-21: 2x6 SP 2400F 2.0E, 15-17: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 5-18
WEDGE Left: 2x4 SP No.3 , Right: 2x4 SP No.3	

REACTIONS.	(size) 2=0-3-8, 11=0-3-8 Max Horz 2=108(LC 16) Max Uplift 2=-271(LC 12), 11=-270(LC 13) Max Grav 2=2279(LC 1), 11=2279(LC 1)
-------------------	---

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-7228/846, 3-5=-6067/748, 5-6=-4483/599, 6-7=-4480/653, 7-8=-4479/652, 8-10=-4555/605, 10-11=-4465/559
BOT CHORD	2-20=-832/6600, 20-21=-219/1131, 19-20=-617/5561, 18-19=-607/5551, 16-18=-415/4033, 15-16=-412/4103, 11-13=-443/4004
WEBS	8-15=-80/838, 3-20=-21/405, 6-18=-84/779, 6-16=-119/784, 7-16=-643/197, 13-15=-437/3955, 10-15=-16/380, 10-13=-642/150, 8-16=-102/712, 5-18=-1617/342, 5-21=-577/747, 3-21=-995/211

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 18-2-15, Interior(1) 18-2-15 to 26-1-0, Exterior(2R) 26-1-0 to 30-3-15, Interior(1) 30-3-15 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 271 lb uplift at joint 2 and 270 lb uplift at joint 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.



September 17, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601	ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017
--	---

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A15	HIP	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-tNjkaKtUMn7qIMeTFk?FcmWozzeVwySv1IAp6SydKZn

0-10-8 4-3-8 6-9-5 12-0-0 19-0-8 26-1-0 28-0-0 33-10-4 40-0-0 0-10-8
0-10-8 4-3-8 2-5-13 5-2-11 7-0-8 7-0-8 1-11-0 5-10-4 6-1-12 0-10-8

Scale = 1:73.1

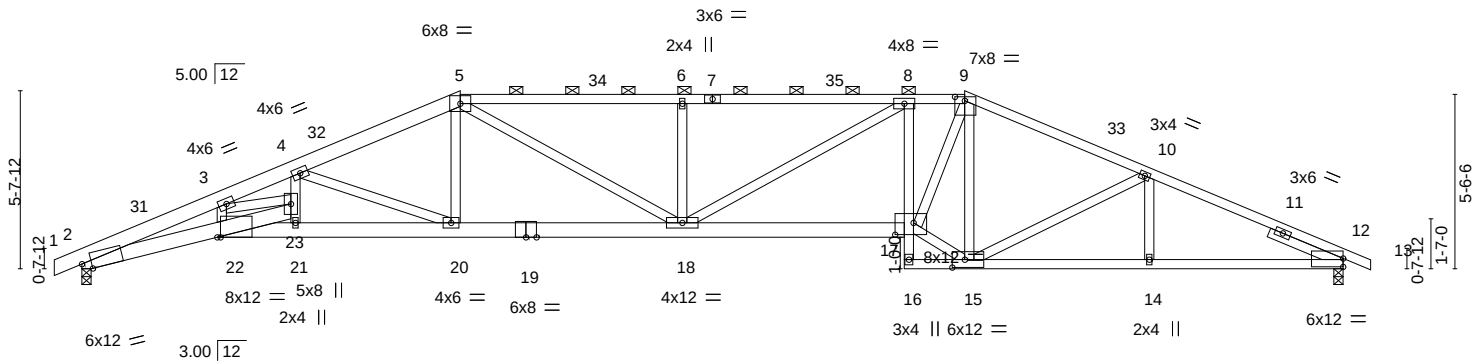


Plate Offsets (X,Y)--	[2:0-3-10,Edge], [9:0-3-12,0-1-8], [12:0-0-0,0-3-3], [15:0-4-12,0-3-0], [17:0-7-0,0-4-8], [22:0-1-4,Edge]
-----------------------	---

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL) -0.39	18	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.91	Vert(CT) -0.85	17-18	>563	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.94	Horz(CT) 0.36	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 206 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP 2400F 2.0E *Except* 1-5: 2x6 SPF No.2, 9-13: 2x4 SPF 1650F 1.5E	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-10-13 max.): 5-9.
BOT CHORD 2x6 SPF 2100F 1.8E *Except* 8-16: 2x4 SPF No.2, 17-19: 2x6 SPF No.2, 12-16: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Right 2x4 SPF No.2 2-6-0	

REACTIONS.	(size) 2=0-3-8, 12=0-3-8 Max Horz 2=96(LC 12) Max Uplift 2=293(LC 8), 12=293(LC 9) Max Grav 2=2279(LC 1), 12=2279(LC 1)
-------------------	--

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-8113/1012, 3-4=-6683/867, 4-5=-4978/715, 9-10=-3932/585, 10-12=-4343/572, 5-6=-5376/836, 6-8=-5376/836, 8-9=-4756/731
BOT CHORD 2-22=-908/7493, 22-23=-220/1515, 21-22=-742/6070, 20-21=-736/6105, 18-20=-545/4521, 17-18=-592/4822, 8-17=-919/217, 15-16=-58/256, 14-15=-455/3927, 12-14=-455/3927
WEBS 5-20=-72/803, 5-18=-195/1180, 6-18=-685/219, 8-18=-121/811, 15-17=-408/3841, 9-17=-430/2970, 9-15=-1570/223, 10-15=-440/196, 4-23=-67/804, 4-20=-1671/324, 3-22=-86/908, 3-23=-1287/207

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 28-0-0, Exterior(2R) 28-0-0 to 32-2-15, Interior(1) 32-2-15 to 40-10-8 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) 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) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 293 lb uplift at joint 2 and 293 lb uplift at joint 12.
 - 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.



September 17, 2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:32 2021 Page 1
 ID:ggMMHuYjvKtSNSqRk_pqYBzXhju-LatFwLVFgv_SSq1zEGe0u56M_LD_Fe2GFvngyGKZm
 -0-10-8 4-3-8 10-0-0 14-11-2 15-4-5 20-0-0 20-8-11 25-0-14 26-1-0 28-10-8 30-0-0 33-9-0 37-2-0 40-0-0 40-10-0
 0-10-8 4-3-8 5-8-8 4-11-2 0-5-3 4-7-11 0-8-11 4-4-3 1-0-2 2-9-8 1-1-8 3-9-0 3-5-8 2-9-8 0-10-8

Technical drawing of a roof truss structure. The drawing shows a side elevation of the truss with various members and supports. Key dimensions and specifications include:

- Dimensions:**
 - Overall height: 4.9-12 (top) and 4.8-2 (bottom).
 - Horizontal dimensions: 5.00 | 12, 3.00 | 12, 2.4-4, 0-7-12, 0-7-12.
 - Vertical dimensions: 4.8-2, 2.4-4, 0-7-12.
- Members and Connections:**
 - Top chord: 6x8 =, 3x4 =, 2x4 || 20-0-0, 4x8 =, 3x4 =, 8x12 =.
 - Bottom chord: 6x12 =, 8x12 =, 5x8 ||, 2x4 ||, 5x12 MT20HS =, 4x6 =, 4x8 =, 17 2x4 ||, 16 2x4 ||, 2x4 ||, 2x4 ||, 3x6 ||, 3x6 = 6x8 =.
 - Diagonal bracing: 5x8 = 35, 34, 38, 39.
 - Vertical bracing: 2x4 ||, 5x8 ||, 17 2x4 ||, 16 2x4 ||, 2x4 ||, 2x4 ||.
- Supports:**
 - Left support: 1, 2, 3, 24, 23, 25.
 - Right support: 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39.

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 0.75	Vert(LL) -0.58 20	>831	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.94	Vert(CT) -1.27 20	>378	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.43	Horz(CT) 0.55 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TP12014	Matrix-AS				Weight: 249 lb	FT = 20%

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-2-0 max.): 4-9.
BOT CHORD	Rigid ceiling directly applied. Except: 10-0-0 oc bracing: 23-24
WEBS	1 Row at midpt 3-25

(size) 2=0-3-8, 11=0-3-8
 Max Horz 2=85(LC 16)
 Max Uplift 2=-336(LC 12), 11=-315(LC 13)
 Max Grav 2=2278(LC 1), 11=2198(LC 1)

TOP CHORD	2-3=-8216/1205, 3-4=-5659/844, 4-5=-6240/1019, 5-6=-6668/1090, 6-8=-6668/1090, 8-9=-6219/1015, 9-10=-5485/808, 10-11=-1095/182
BOT CHORD	2-24=-1148/7604, 24-25=-496/2606, 23-24=-693/5065, 22-23=-689/5083, 20-22=-905/6240, 19-20=-894/6219, 18-19=-684/5146, 14-18=-683/5105, 13-14=-684/5146, 10-13=-683/5156, 10-12=-70/556
WEBS	3-24=-477/00, 23-25=0/297, 4-25=-777/86, 9-13=0/348, 6-20=-462/146, 5-20=-186/616, 5-22=-788/199, 4-22=-275/1536, 8-20=-187/639, 8-19=-787/198, 9-19=-265/1448, 3-25=-2378/471

- 1) Attached 11-1-0 scab 9 to 11, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 0-0-3 from end at joint 9, nail 2 row(s) at 4" o.c. for 2-0-0; starting at 6-6-11 from end at joint 9, nail 2 row(s) at 2" o.c. for 4-3-0.
- 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=25ft; 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 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 30-0-0, Exterior(2R) 30-0-0 to 34-2-15, Interior(1) 34-2-15 to 39-11-12 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
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 336 lb uplift at joint 2 and 315 lb uplift at joint 11.
- 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.



WARNING – verify design parameters and NOTES ON THIS AND INCLUDED WITHIN REFERENCE T-PLATE MFG-1413 (REV. 3/25/2020) BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601.



Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A16	Hip	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:34 2021 Page 2
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-pmRd9GM70_1r4cWpagnTLrRnmKs_uCV3fWcsydkZL

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

10/18/2021

NOTES-

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2933941	Truss A17	Truss Type HIP	Qty 1	Ply 1	SUMMIT/WOODSIDE RIDGE 31/MO	AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICE LEE'S SUMMIT, MISSOURI
Builders First Source, Valley Center, KS 67147						Job Reference (optional)

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-EziBbHqkfZIX00/TwLS9S5Scall30MYV0gNj0y0mum

8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Sep 17 09:02:15 2021 Page 1
 10/18/2021

Scale = 1:71.2

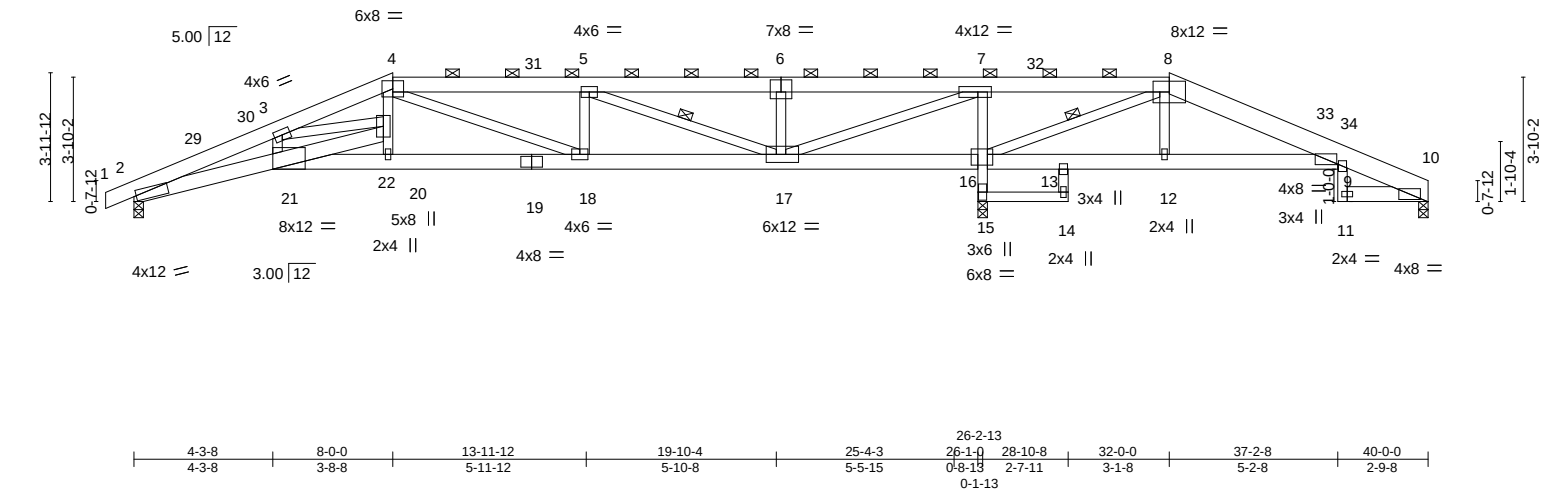


Plate Offsets (X,Y)-- [2:0-0-14,0-1-13], [6:0-4-0,0-4-8], [7:0-5-0,0-2-0], [9:0-0-6,0-0-3], [16:0-2-0,0-4-0], [17:0-3-12,0-3-0]

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 0.77	Vert(LL)	-0.16	18-20	>999	240	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.95	Vert(CT)	-0.34	18-20	>918	180	
BCLL 0.0	Rep Stress Incr	YES	WB 0.86	Horz(CT)	0.12	10	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
									Weight: 216 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
 8-10: 2x8 SP 2400F 2.0E
 BOT CHORD 2x6 SPF No.2 *Except*
 14-15: 2x4 SP 2400F 2.0E, 13-14,9-11: 2x4 SPF No.2
 WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
 2-0-0 oc purlins (4-2-3 max.): 4-8.
 BOT CHORD Rigid ceiling directly applied.
 WEBS 1 Row at midpt 5-17, 8-16

REACTIONS.

(size) 2=0-3-8, 15=0-3-8, 10=0-3-8
 Max Horz 2=69(LC 16)
 Max Uplift 2=-184(LC 8), 15=-461(LC 9), 10=-95(LC 13)
 Max Grav 2=1302(LC 25), 15=2923(LC 1), 10=312(LC 26)

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

TOP CHORD 2-29=-4179/562, 29-30=-4101/568, 3-30=-4093/571, 3-4=-2960/455, 4-31=-2740/514,
 5-31=-2743/514, 5-6=-1084/257, 6-7=-1084/257, 7-32=-280/2430, 8-32=-280/2430,
 8-33=-94/695, 33-34=-105/631, 9-34=-107/614
 BOT CHORD 2-21=-498/3859, 21-22=-243/1217, 13-16=-516/140, 12-13=-597/151, 9-12=-603/149,
 20-21=-356/2615, 19-20=-350/2641, 18-19=-350/2641, 17-18=-424/2740, 16-17=-2434/377
 WEBS 3-21=-31/440, 4-22=-39/556, 5-17=-1858/275, 6-17=-502/167, 7-17=-575/3515,
 15-16=-2889/470, 7-16=-1908/401, 8-16=-2118/259, 3-22=-1035/235

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 32-0-0, Exterior(2R) 32-0-0 to 36-2-15, Interior(1) 36-2-15 to 39-11-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 184 lb uplift at joint 2, 461 lb uplift at joint 15 and 95 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 17, 2021

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

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

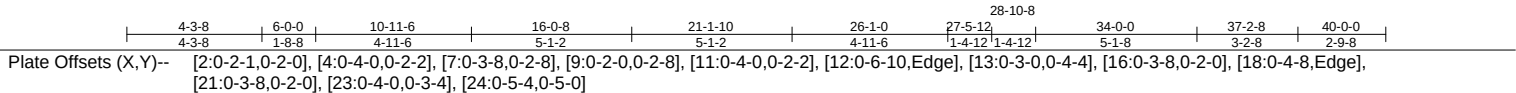
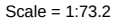


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:27:18 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-ewovPJQubqo?oKzAxxutaohETBPKOcv4t_6EQoydKZF



LUMBER-

WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x4 SPF No.2 2-8-11

REACTIONS.

(size) 2=0-3-8, 20=0-3-8, 13=0-3-8
 Max Horz 2=49(LC 29)
 Max Uplift 2=-541(LC 8), 20=-1430(LC 4), 13=-113(LC 9)
 Max Grav 2=2235(LC 21), 20=5991(LC 1), 13=422(LC 22)

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

TOP CHORD	2-3=-7870/1968, 3-4=-7415/1917, 4-5=-7630/1985, 5-6=-5716/1525, 6-7=-5716/1525, 7-9=-690/323, 9-10=-1762/7914, 10-11=-304/233, 11-12=-346/303, 12-13=-551/171
BOT CHORD	2-24=-1814/7231, 23-24=-1446/5773, 22-23=-1927/7633, 21-22=-289/690, 18-21=-8082/1857, 18-20=-5897/1424, 9-18=-3593/906, 17-18=-3081/698, 16-17=-3249/734, 12-16=-200/361
WEBS	3-24=-176/767, 4-24=-454/1780, 4-23=-542/1984, 5-22=-2118/490, 6-22=-684/204, 7-22=-1321/5405, 7-21=-2367/602, 9-21=-2154/8880, 11-16=-421/134, 10-18=-5056/1237, 10-16=-778/3735

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) The Fabrication Tolerance at joint 18 = 8%
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

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

WARNING – verify design parameters and NOTES ON THIS AND INCLUDED WITHIN REFERENCE T-PLATE MFG-1413 (REV. 3/25/2020) 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.

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



September 17, 2021



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	A18	HIP GIRDER	1	2	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:18 2021 Page 2
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-66MHdfRWM7wsPHYMVeP6-JEPDblZr38EerdyFydKZE

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

10/18/2021

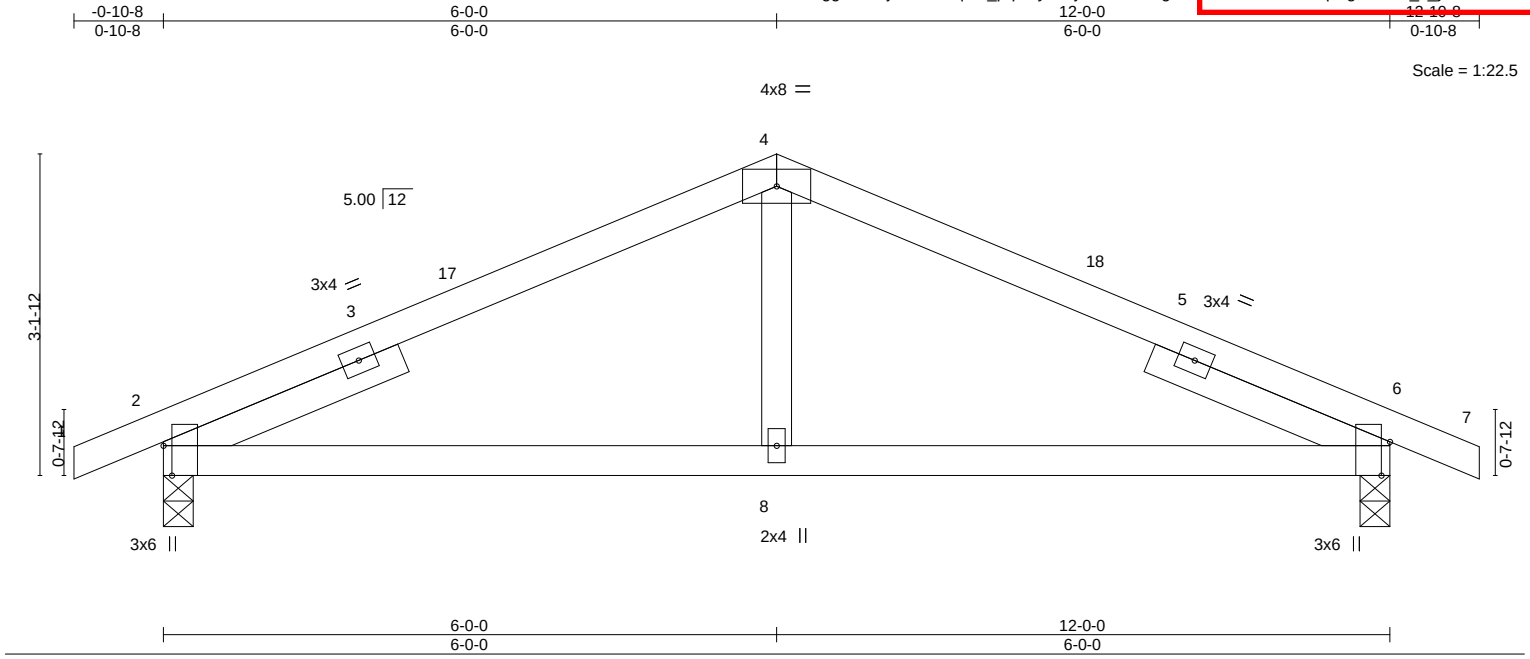
- NOTES-**
- 8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 541 lb uplift at joint 2, 1430 lb uplift at joint 20 and 113 lb uplift at joint 13.
 - 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 108 lb down and 70 lb up at 6-0-0, 101 lb down and 70 lb up at 8-0-12, 101 lb down and 70 lb up at 10-0-12, 101 lb down and 70 lb up at 12-0-12, 101 lb down and 70 lb up at 14-0-12, 101 lb down and 70 lb up at 16-0-12, 101 lb down and 70 lb up at 18-0-12, 101 lb down and 62 lb up at 20-0-0, 101 lb down and 70 lb up at 21-11-4, 101 lb down and 70 lb up at 23-11-4, 101 lb down and 70 lb up at 25-11-4, 99 lb down and 77 lb up at 27-11-4, 113 lb down and 90 lb up at 29-11-4, and 113 lb down and 90 lb up at 31-11-4, and 137 lb down and 90 lb up at 34-0-0 on top chord, and 473 lb down and 145 lb up at 6-0-0, 116 lb down and 56 lb up at 6-0-12, 116 lb down and 56 lb up at 8-0-12, 116 lb down and 56 lb up at 10-0-12, 116 lb down and 56 lb up at 12-0-12, 116 lb down and 56 lb up at 14-0-12, 116 lb down and 56 lb up at 16-0-12, 116 lb down and 56 lb up at 18-0-12, 116 lb down and 56 lb up at 20-0-0, 116 lb down and 56 lb up at 21-11-4, 116 lb down and 56 lb up at 23-11-4, 116 lb down and 56 lb up at 26-2-12, 111 lb down and 47 lb up at 27-11-4, 105 lb down and 33 lb up at 29-11-4, and 105 lb down and 33 lb up at 31-11-4, and 621 lb down and 206 lb up at 33-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-4=-90, 4-11=-90, 11-12=-90, 12-14=-90, 24-25=-20, 18-24=-20, 19-20=-20, 12-17=-20, 15-28=-20
 - Concentrated Loads (lb)
 - Vert: 4=-84(B) 8=-84(B) 9=-84(B) 18=-116 22=-116 6=-84(B) 11=-113(B) 16=-621(B) 10=-113(B) 32=-84(B) 33=-84(B) 34=-84(B) 35=-84(B) 36=-84(B) 37=-84(B) 38=-84(B) 39=-90(B) 40=-113(B) 41=-589(B=-473) 42=-116 43=-116 44=-116 45=-116 46=-116 47=-116 48=-116 49=-116 50=-111(B) 52=-105(B) 53=-105(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	B1	Common	3	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 16 16:17:10 2021 Page 1					
Job Reference (optional) ID:ggMHuYjvKTSNSqRK_pqYByzXhju-EceBL6bgl7Z0Th2slt8963Gn3qlCg786AVwYdK21 147923595					

10/18/2021



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.04 8-15 >999 240	MT20		197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.07 8-15 >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: 40 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		
SLIDER	Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0		

REACTIONS.	
(size)	2=0-3-8, 6=0-3-8
Max Horz	2=50(LC 12)
Max Uplift	2=-111(LC 12), 6=-111(LC 13)
Max Grav	2=739(LC 1), 6=739(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-4=-863/302, 4-6=-863/302
BOT CHORD	2-8=-171/786, 6-8=-171/786
WEBS	4-8=0/257

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 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) except (jt=lb) 2=111, 6=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.
 - 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.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	B2	Hip Girder	1	1	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:18 2021 Page 1
 ID:ggMHuYjvKTSNSqRK_pqYByzXhju-A?mymodwqkpk_BFtAdEUL4qevA8mRYU_5-tydKZ5 147923596

0-10-8 4-0-0 8-0-0 12-0-0 0-10-8
 0-10-8 4-0-0 4-0-0 4-0-0 0-10-8
 Scale = 1:22.9

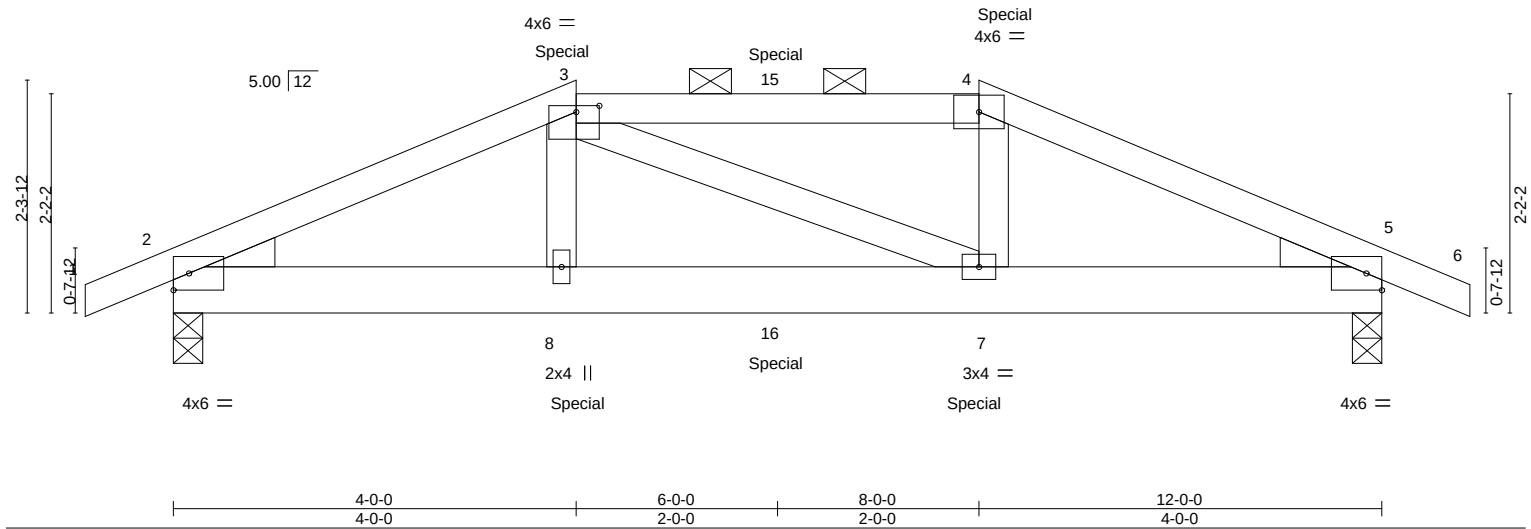


Plate Offsets (X,Y)--		[3:0-2-12,0-0-12]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.52	Vert(LL) -0.04 7-8 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.58	Vert(CT) -0.09 7-8 >999 180		
BCLL 0.0	Rep Stress Incr NO	WB 0.09	Horz(CT) 0.02 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 49 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-11-10 oc purlins, except
BOT CHORD 2x6 SPF No.2	2-0-0 oc purlins (3-10-14 max.); 3-4.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	
Left: 2x4 SP No.3 , Right: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 5=0-3-8
 Max Horz 2=-35(LC 34)
 Max Uplift 2=-253(LC 8), 5=-253(LC 9)
 Max Grav 2=1131(LC 1), 5=1131(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1962/451, 3-4=-1722/433, 4-5=-1953/449
 BOT CHORD 2-8=-395/1756, 7-8=-391/1729, 5-7=-366/1748
 WEBS 3-8=-61/346, 4-7=-65/348

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=253, 5=253.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 51 lb up at 4-0-0, and 63 lb down and 45 lb up at 6-0-0, and 63 lb down and 51 lb up at 8-0-0 on top chord, and 319 lb down and 122 lb up at 4-0-0, and 56 lb down and 31 lb up at 6-0-0, and 319 lb down and 122 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-90, 3-4=-90, 4-6=-90, 9-12=-20



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	B2	Hip Girder	1	1	147923596
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:18 2021 Page 2

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-A?mymodwqkpkLBFtIAdeUL4qevA67nRYU_5_tydkL2

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 4=-30(B) 8=-319(B) 7=-319(B) 3=-30(B) 15=-30(B) 16=-56(B)

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

10/18/2021



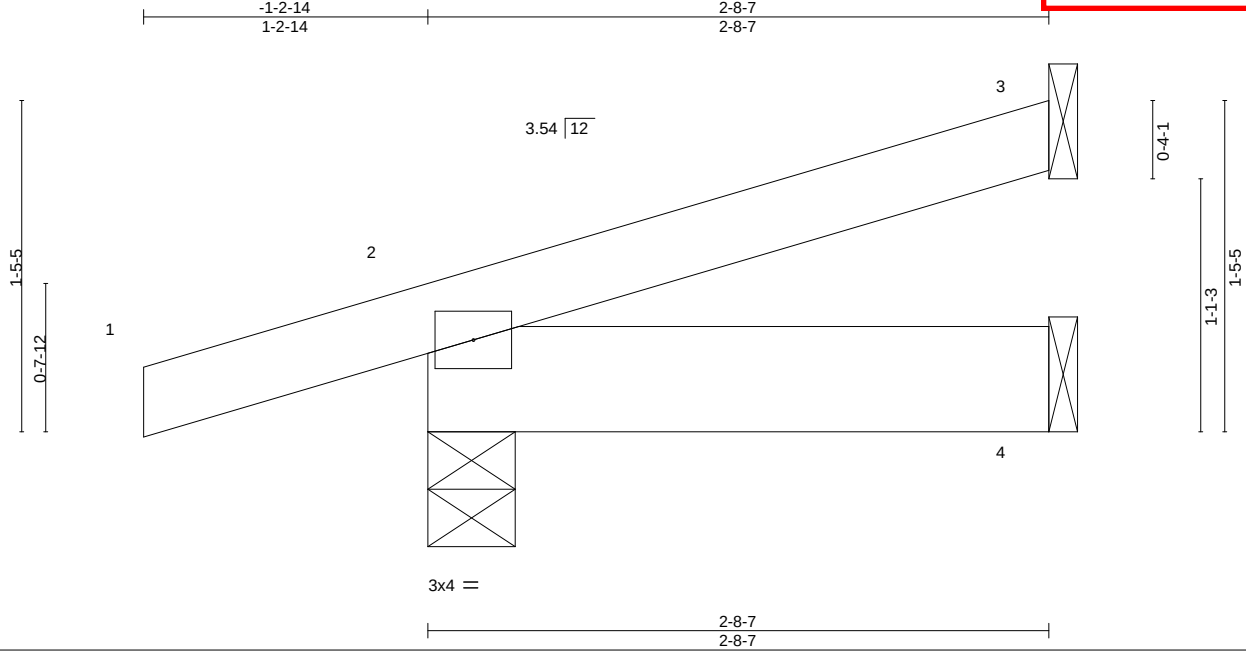
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	CJ1	Jack-Open	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:17 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-eBKK_7dYb2xaK8mRQ?hsmmMg2OytfMaoJewJydkZ_

10/18/2021



Scale = 1:10.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.13	Vert(LL) -0.00	7	>999	240		MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00	7	>999	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP							

Weight: 10 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=52(LC 8)
Max Uplift 3=-30(LC 12), 2=-83(LC 8)
Max Grav 3=83(LC 1), 2=283(LC 1), 4=54(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C 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.



September 17, 2021

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

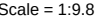
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:27:37 2021 Page 1
ID:aaMHUyivKTSNSqRK ppYBvzXhiu-eBKK 7dYb2xaK8mRO?hsnMgMoZ0VtMaRjeyW3vdK2

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:27:27 2021 Page 1



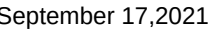
Weight: 9 lb FT = 20%

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

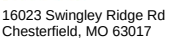
Max Horz 2=49(LC 8)
Max Uplift 3=-27(LC 12), 2=-82(LC 8)
Max Grav 3=76(LC 1), 2=275(LC 1), 4=50(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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.



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



Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:27:38 2021 Page 1
ID:ggMHuYivKTSNSqRK pgYByzXhju-6OuiBTbBMM3Ryl e jC5JvRWXRKEdwck00TB2mydK1z



REACTIONS. (size) 7=0-4-9, 6=Mechanical
 Max Horz 7=55(LC 9)
 Max Uplift 7=-93(LC 8), 6=-24(LC 12)
 Max Grav 7=287(LC 1), 6=105(LC 1)

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(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) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 6.
- 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.



September 17, 2021

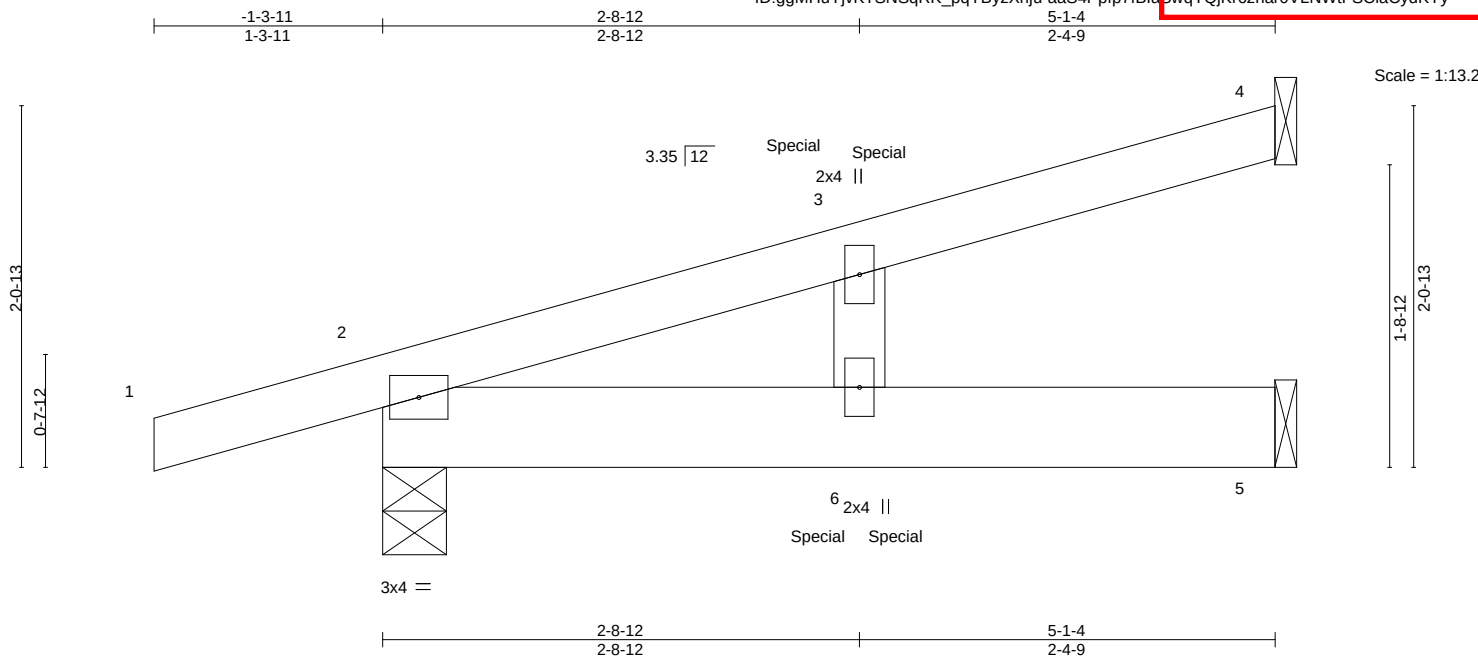
10/18/2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	CJ4	Diagonal Hip Girder	1	1	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:18 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-aaS4Pfp7fBlaswqYQjK6zha0VcNwMf-SciaCydkTy



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.16	Vert(LL) -0.02	6	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.29	Vert(CT) -0.04	6	>999	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.02	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP					Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 2=0-4-6, 5=Mechanical
 Max Horz 2=77(LC 4)
 Max Uplift 4=-39(LC 8), 2=-113(LC 4), 5=-32(LC 8)
 Max Grav 4=115(LC 1), 2=416(LC 1), 5=153(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 2=113.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 18 lb down and 25 lb up at 2-6-0, and 27 lb down and 33 lb up at 2-11-5 on top chord, and 7 lb down and 8 lb up at 2-6-0, and 15 lb down and 13 lb up at 2-11-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 Vert: 1-4=-90, 5-7=-20
- Concentrated Loads (lb)
 Vert: 6=-12(F=-2, B=-9)



September 17, 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/WOODSIDE RIDGE #31/MO
2933941	CJ5	Diagonal Hip Girder	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:48 2021 Page 1
 ID:ggMHuYjvKTSNSqRK_pqYByzXhju-aaS4Pfp7fBlSwqYQk6zgSr?SLNStf-SClaCydkTy



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.24	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.38	Vert(LL) -0.03 6 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.03	Vert(CT) -0.06 6 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MP	Horz(CT) 0.01 4 n/a n/a		
	Code IRC2018/TPI2014			Weight: 19 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-4-6, 5=Mechanical
 Max Horz 2=84(LC 4)
 Max Uplift 4=-45(LC 8), 2=-114(LC 4), 5=-28(LC 8)
 Max Grav 4=136(LC 1), 2=447(LC 1), 5=166(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 2=114.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 27 lb down and 33 lb up at 2-9-15, and 26 lb down and 34 lb up at 3-1-6 on top chord, and 15 lb down and 13 lb up at 2-9-15, and 5 lb down and 1 lb up at 3-1-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-90, 5-7=-20
 Concentrated Loads (lb)
 Vert: 6=-9(F=-9, B=1)



September 17, 2021

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

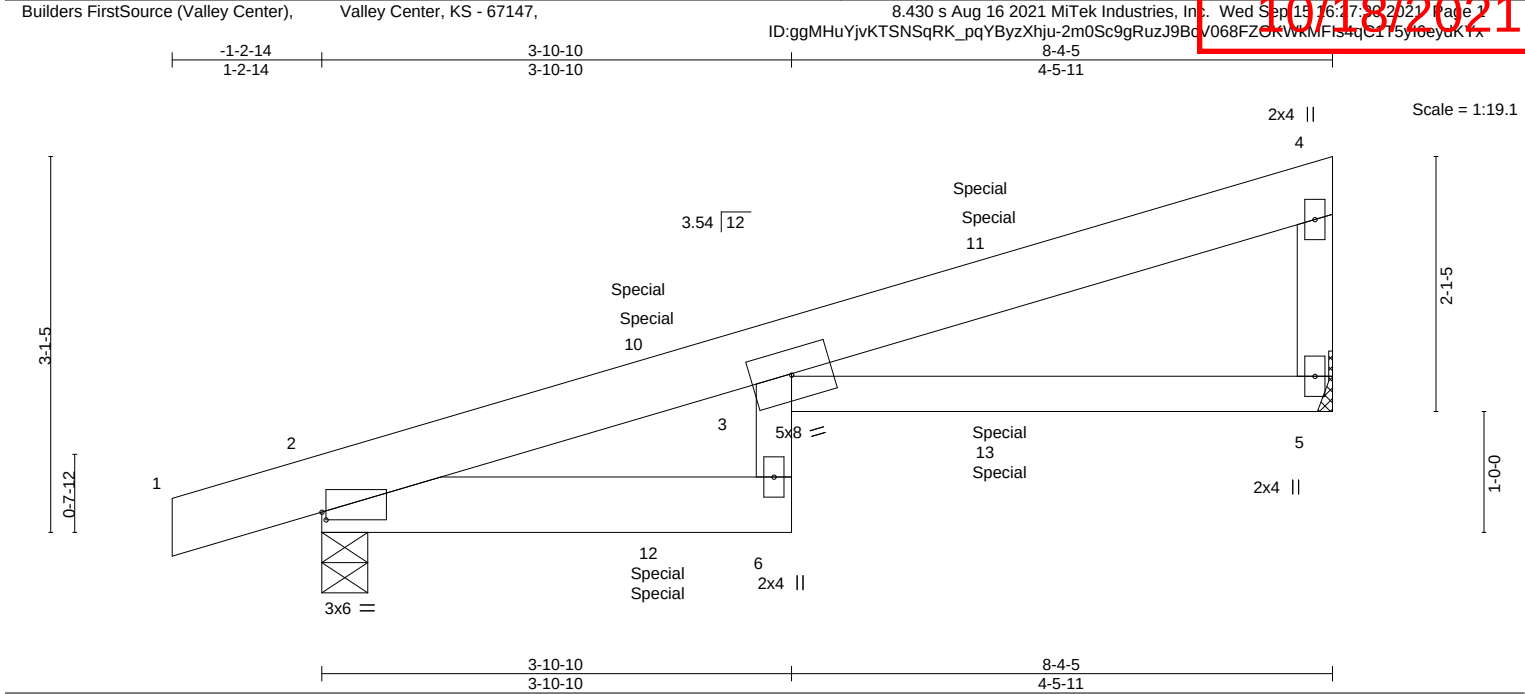
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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

10/18/2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	CJ6	Diagonal Hip Girder	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1					
Job Reference (optional) ID:ggMHuYjvKTSNSqRK_pqYByzXhju-2m0Sc9gRuzJ9BcV068FZCkVvKMFIs4qC115yioeyak1x					



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.15	MT20		197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.31				
BCLL	0.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.13				
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							
								Weight: 33 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF 2100F 1.8E	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SPF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SPF No.2		

REACTIONS.	
(size)	2=0-4-9, 5=Mechanical
Max Horz	2=119(LC 4)
Max Uplift	2=-145(LC 4), 5=-145(LC 8)
Max Grav	2=618(LC 1), 5=544(LC 1)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
WEBS	4-5=-435/135

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=145, 5=145.
 - 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 23 lb down and 32 lb up at 2-9-8, 23 lb down and 32 lb up at 2-9-8, and 50 lb down and 45 lb up at 5-7-7, and 50 lb down and 45 lb up at 5-7-7 on top chord, and 4 lb down and 1 lb up at 2-9-8, 4 lb down and 1 lb up at 2-9-8, and 74 lb down and 44 lb up at 5-7-7, and 74 lb down and 44 lb up at 5-7-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

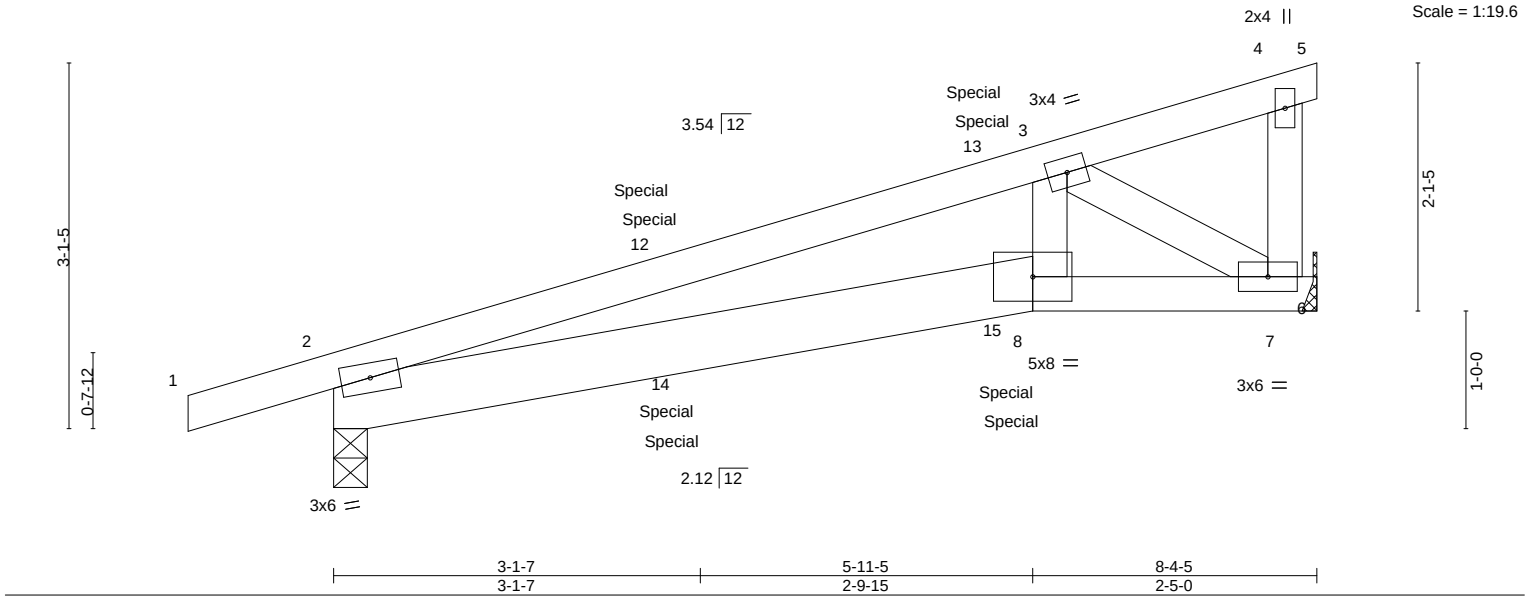
LOAD CASE(S) Standard	
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15	
Uniform Loads (plf)	
Vert: 1-3=-90, 3-4=-90, 6-7=-20, 3-5=-20	
Concentrated Loads (lb)	
Vert: 12=2(F=1, B=1) 13=-147(F=-74, B=-74)	



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	CJ7	Diagonal Hip Girder	1	1	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1
 ID:ggMHuYjvKTSNSqRK_pqYByzXhju-XyarpVh3fHROpm4CnmoxX3yrtxpFDAlInre4ydkTww



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.44	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.29	Vert(LL) -0.01 8-11 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.14	Vert(CT) -0.04 8-11 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MP	Horz(CT) 0.01 7 n/a n/a		
	Code IRC2018/TPI2014			Weight: 30 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-7-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 2-8: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. (size) 7=Mechanical, 2=0-3-7
 Max Horz 2=103(LC 5)
 Max Uplift 7=-117(LC 8), 2=-137(LC 4)
 Max Grav 7=501(LC 1), 2=585(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-945/200
 BOT CHORD 2-8=-216/863, 7-8=-207/805
 WEBS 3-8=-7/278, 3-7=-927/258

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=117, 2=137.
 - 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 23 lb down and 33 lb up at 2-9-8, 23 lb down and 33 lb up at 2-9-8, and 70 lb down and 71 lb up at 5-7-7, and 70 lb down and 71 lb up at 5-7-7 on top chord, and 4 lb down and 1 lb up at 2-9-8, 4 lb down and 1 lb up at 2-9-8, and 26 lb down at 5-7-7, and 26 lb down at 5-7-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-90, 4-5=-40, 8-9=-20, 6-8=-20
 Concentrated Loads (lb)
 Vert: 13=-36(F=-18, B=-18) 14=2(F=1, B=1) 15=-35(F=-18, B=-18)



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	CJ8	Diagonal Hip Girder	2	1	Job Reference (optional)

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

10/18/2021

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-?97D1rhhQaZtR/FPDZH11hb6034tYkexFRP6XydkTt

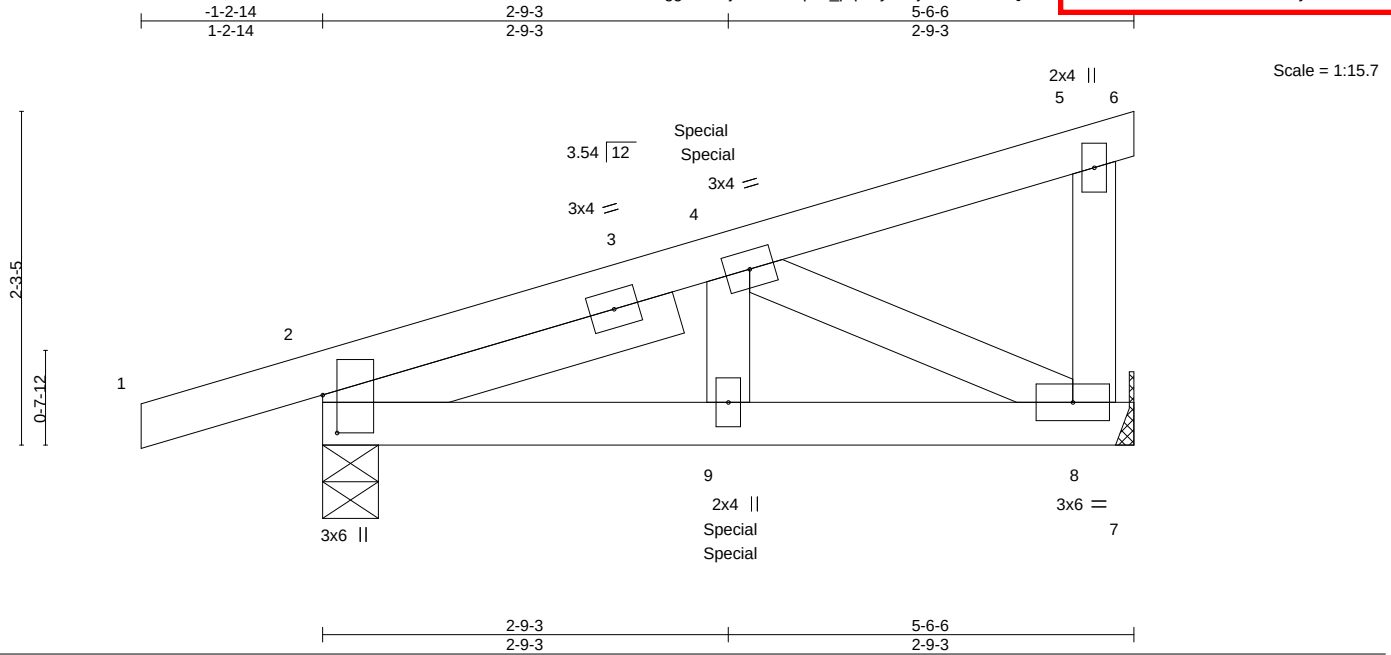


Plate Offsets (X,Y)-- [2:0-3,2:0-1-3]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	-0.00	9	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.01	9	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-4-9, 8=Mechanical
Max Horz 2=87(LC 7)
Max Uplift 2=-104(LC 4), 8=-62(LC 8)
Max Grav 2=412(LC 1), 8=292(LC 1)

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

TOP CHORD 2-4=-325/59
BOT CHORD 2-9=-62/330, 8-9=-62/330
WEBS 4-8=-364/89

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=104.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 23 lb down and 32 lb up at 2-9-8, and 23 lb down and 32 lb up at 2-9-8 on top chord, and 4 lb down and 1 lb up at 2-9-8, and 4 lb down and 1 lb up at 2-9-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-90, 5-6=-40, 7-10=-20
Concentrated Loads (lb)
Vert: 9=2(F=1, B=1)



September 17, 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

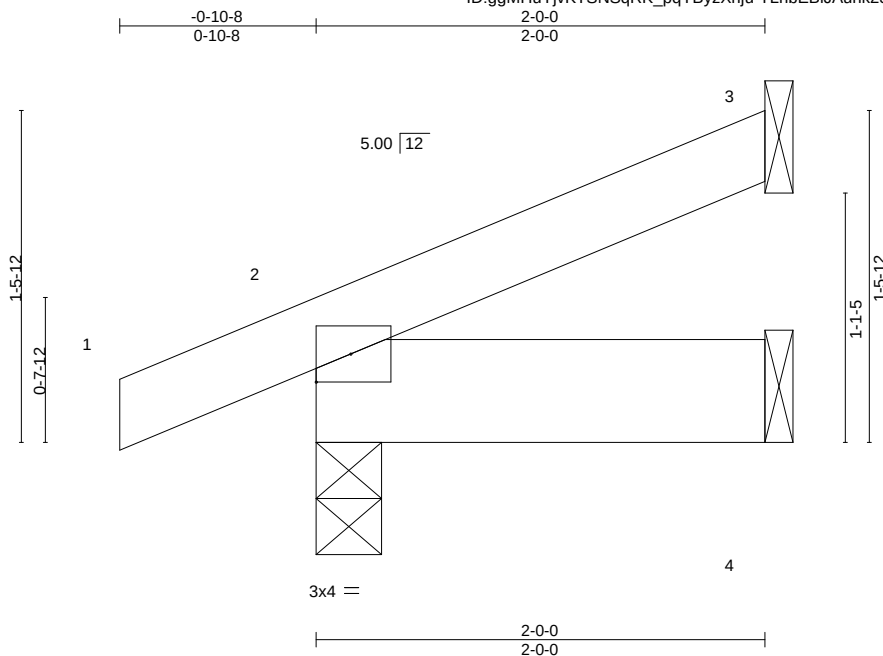
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J1	Jack-Open	3	1	
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:18 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-TLhbEBiJAuhk23EbnGoGoy8N5SRaHB7A3AjzyakFu

10/18/2021



Scale = 1:10.3

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 0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 7 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=47(LC 12)
Max Uplift 3=-26(LC 12), 2=-33(LC 8), 4=-2(LC 12)
Max Grav 3=63(LC 1), 2=205(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 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.



September 17, 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

10/18/2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J2	Half Hip Girder	1	1	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:34 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-EuAdwwoKLiblr7Fyx8LcTgphde500e7J6NwvydKym



Scale = 1:13.4

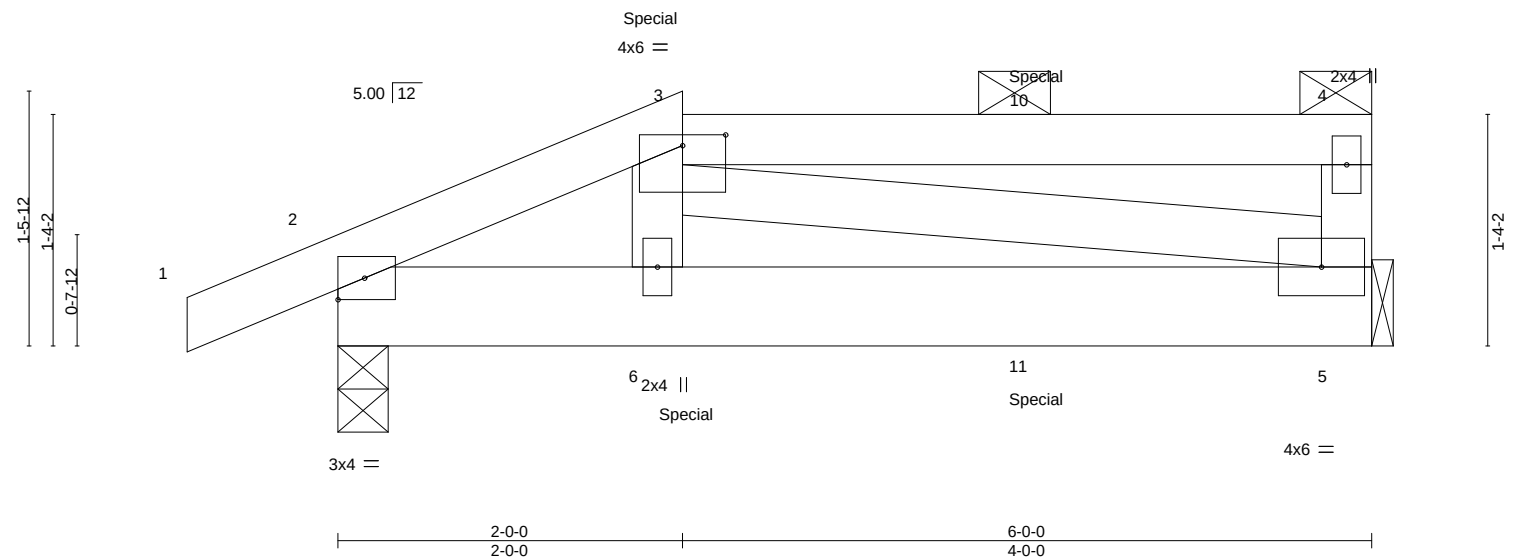


Plate Offsets (X,Y)-- [3:0-3:0,0-0-12]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.40	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.01	5-6	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.12	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 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) 5=Mechanical, 2=0-3-8
 Max Horz 2=45(LC 7)
 Max Uplift 5=-69(LC 5), 2=-80(LC 4)
 Max Grav 5=328(LC 1), 2=421(LC 1)

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

TOP CHORD 2-3=-446/69
 BOT CHORD 2-6=-79/385, 5-6=-83/383
 WEBS 3-5=-396/77

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 68 lb up at 2-0-0, and 28 lb down and 29 lb up at 4-0-12 on top chord, and 34 lb down and 12 lb up at 2-0-0, and 15 lb down and 12 lb up at 4-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-90, 3-4=-90, 5-7=-20
 Concentrated Loads (lb)
 Vert: 6=-18(B) 11=-9(B)



September 17, 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/WOODSIDE RIDGE #31/MO
2933941	J3	Half Hip	1	1	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1
 ID:ggMHuYjvKTSNSqRK_pqYByzXhju-ar_WzdsT7uK163j52VXs1A2ZirSqSQNbqeglyak m

10/18/2021

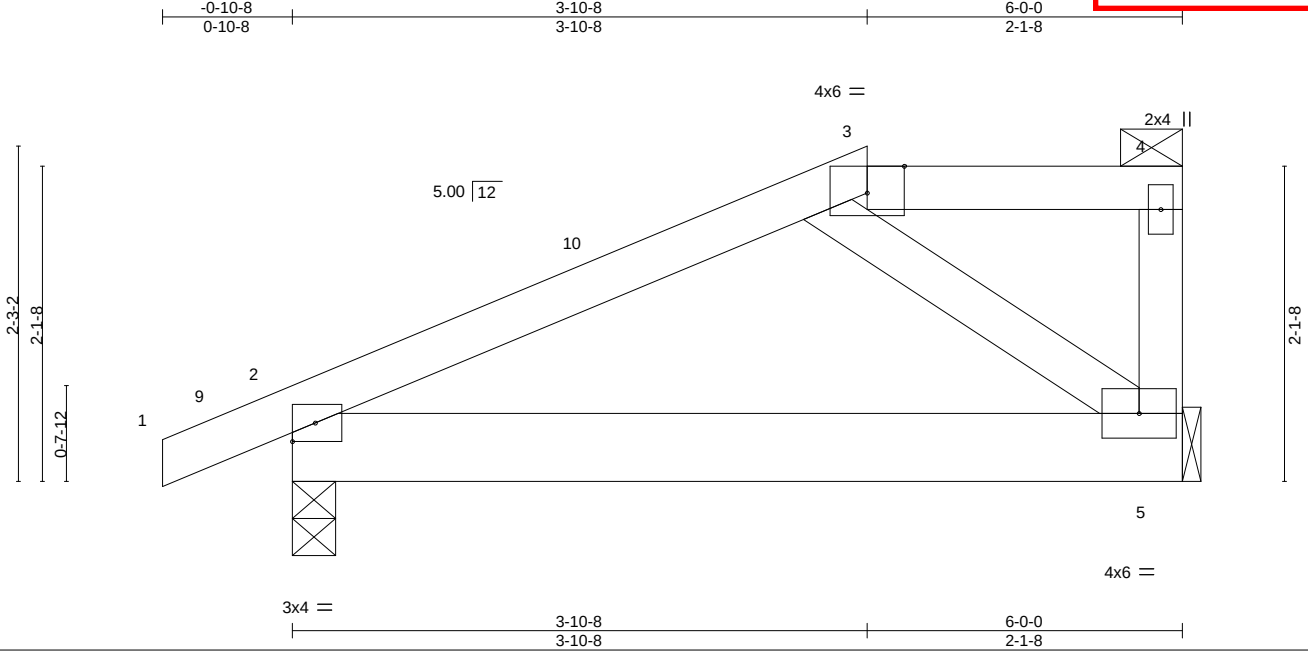


Plate Offsets (X,Y)-- [3:0-3:0,Edge]		SPACING-		CSI.		DEFL.		PLATES		GRIP	
LOADING (psf)		2-0-0		TC 0.21		in (loc)	l/defl	L/d			
TCLL 25.0		Plate Grip DOL 1.15		BC 0.16		Vert(LL) -0.01 5-8	>999	240	MT20	197/144	
TCDL 20.0		Lumber DOL 1.15		WB 0.04		Vert(CT) -0.03 5-8	>999	180			
BCLL 0.0		Rep Stress Incr YES		Matrix-AS		Horz(CT) 0.00 2	n/a	n/a			
BCDL 10.0		Code IRC2018/TPI2014							Weight: 24 lb	FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x6 SPF No.2		2-0-0 oc purlins: 3-4.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 5=Mechanical
 Max Horz 2=79(LC 11)
 Max Uplift 2=-70(LC 12), 5=-53(LC 9)
 Max Grav 2=407(LC 1), 5=316(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3--255/107

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-8, Exterior(2E) 3-10-8 to 5-10-8 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.
 - 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.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J4	Roof Special Girder	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:37 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-31XuAzt5tBSkD HbC2Zaym:0BAZWLXOFZLb9yakfg

10/18/2021



Plate Offsets (X,Y)-- [4:0-3-14,Edge]		SPACING-		CSI.		DEFL.		PLATES		GRIP	
LOADING (psf)											
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00 6-7 >999 240	MT20		197/144	
TCDL	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01 6-7 >999 180				
BCLL	0.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00 6 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							
								Weight: 26 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x6 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 10-0-0 oc bracing.

REACTIONS.

(size) 6=Mechanical, 2=0-3-8
 Max Horz 2=85(LC 7)
 Max Uplift 6=68(LC 8), 2=-85(LC 8)
 Max Grav 6=324(LC 1), 2=425(LC 1)

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

TOP CHORD 2-3=-458/70, 3-4=-397/77
 BOT CHORD 2-7=-77/399, 6-7=-88/380
 WEBS 4-6=-424/118

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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) 6, 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.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 59 lb down and 64 lb up at 1-10-8 on top chord, and 34 lb down and 16 lb up at 1-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-90, 3-4=-90, 4-5=-90, 6-8=-20
 Concentrated Loads (lb)
 Vert: 7=-25(F)



September 17, 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

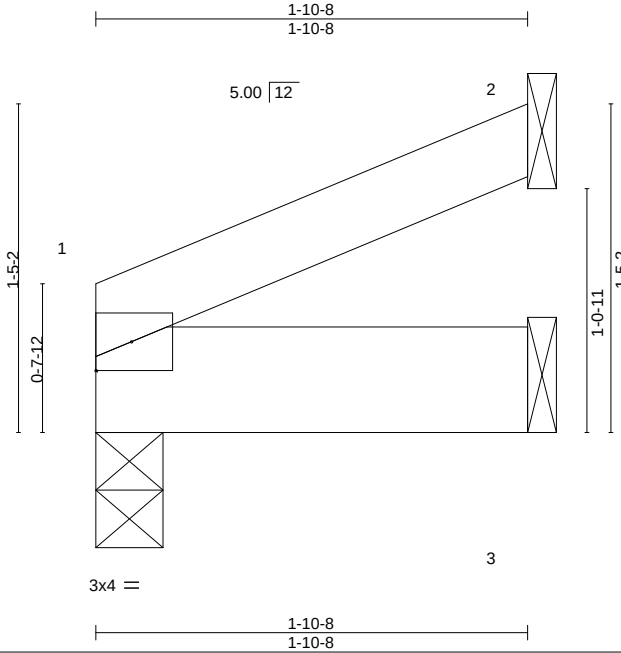
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J5	Jack-Open	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-XE5GOJuJeValNTU9wz077GykvZvlZzgcV5fIbydKf1

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/18/2021



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	-0.00	6	>999	240	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	6	>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: 6 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=32(LC 12)
Max Uplift 1=-8(LC 12), 2=-25(LC 12), 3=-5(LC 12)
Max Grav 1=102(LC 1), 2=62(LC 1), 3=45(LC 3)

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

NOTES-

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



September 17, 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

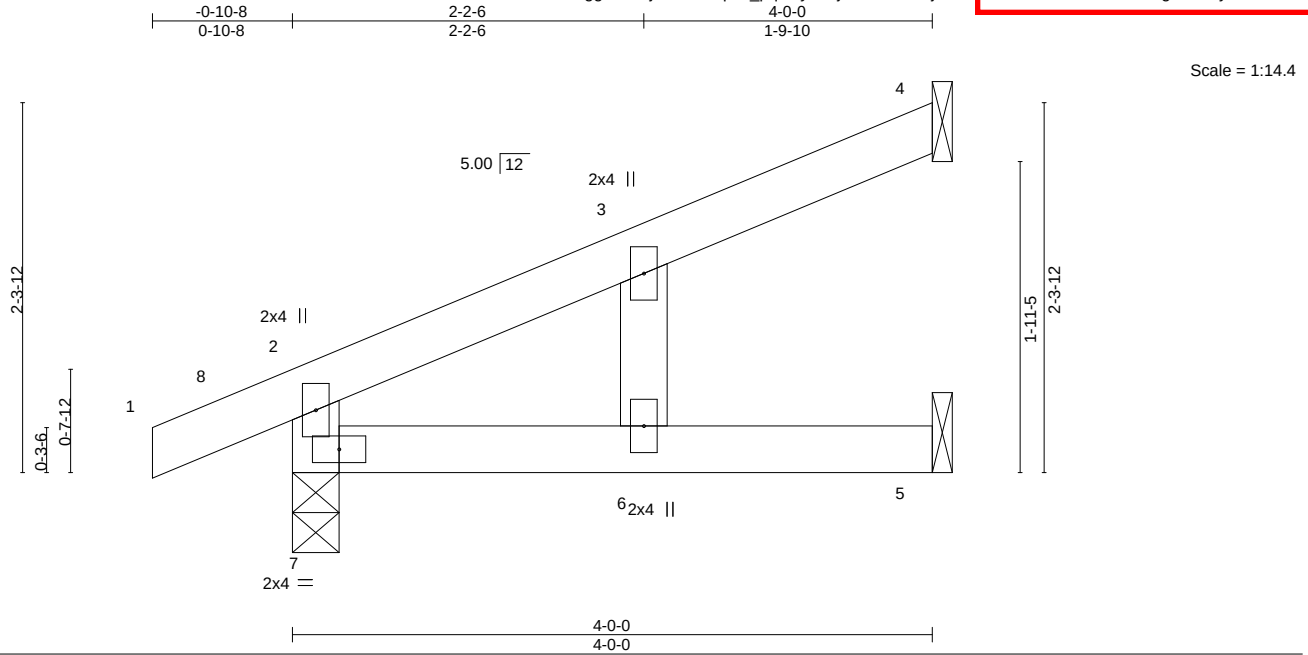


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J6	Jack-Open	9	1	Job Reference (optional)

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1
ID:ggMHuYjvKTSNSqRk_pqYByzXhju-XE5GOJuJeVacNtU9wZc77Gw?VwWlZKgcV5FibydKf1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.15	Vert(LL)	0.02	6	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.03	6	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 12 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) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=74(LC 12)
Max Uplift 4=42(LC 12), 5=-14(LC 12), 7=-45(LC 12)
Max Grav 4=120(LC 1), 5=76(LC 1), 7=313(LC 1)

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

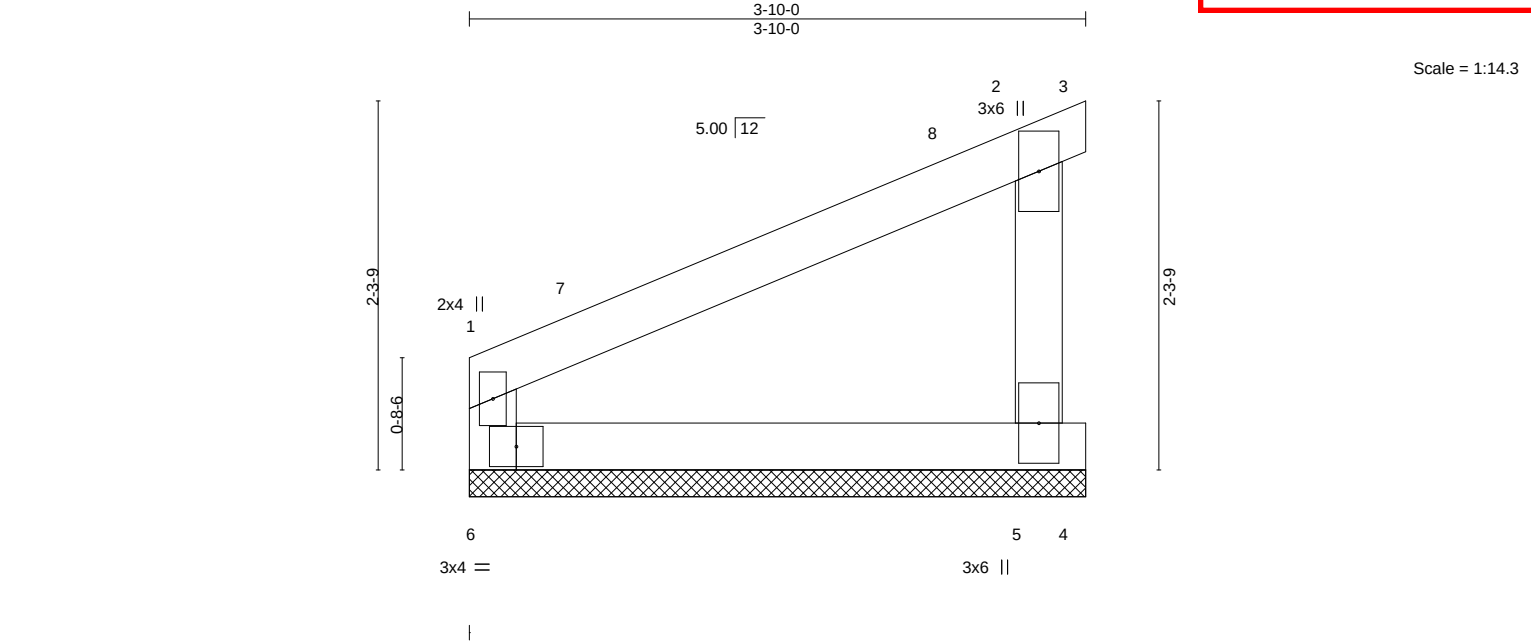
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-2-6, Interior(1) 2-2-6 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J7	Jack-Open	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-?QfebfvMPoiTzXSgjd4LfkoSRvnlPSqrZ26H2ydkTe



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.17	Vert(LL) n/a	-	n/a	999		MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.15	Vert(CT) n/a	-	n/a	999			
BCLL 0.0	Rep Stress Incr YES	WB 0.11	Horz(CT) -0.01	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 11 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. All bearings 3-10-0.
(lb) - Max Horz 6=56(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) except 3=-280(LC 1), 4=-183(LC 3), 5=-213(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 6, 3, 4 except 5=681(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-474/640

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 3-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) 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 from one face or securely braced against lateral movement (i.e. diagonal web).
 - 5) Gable studs spaced at 1-4-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 280 lb uplift at joint 3, 183 lb uplift at joint 4 and 213 lb uplift at joint 5.
 - 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.



September 17, 2021

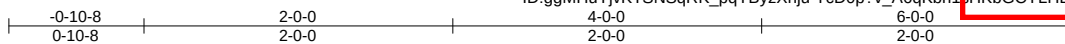
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J8	Roof Special Girder	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:58 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-TcD0p?v_A6qKbh1sHKbGCvLCH0Dlm624D0mPdyakYd

10/18/2021



Scale = 1:14.9

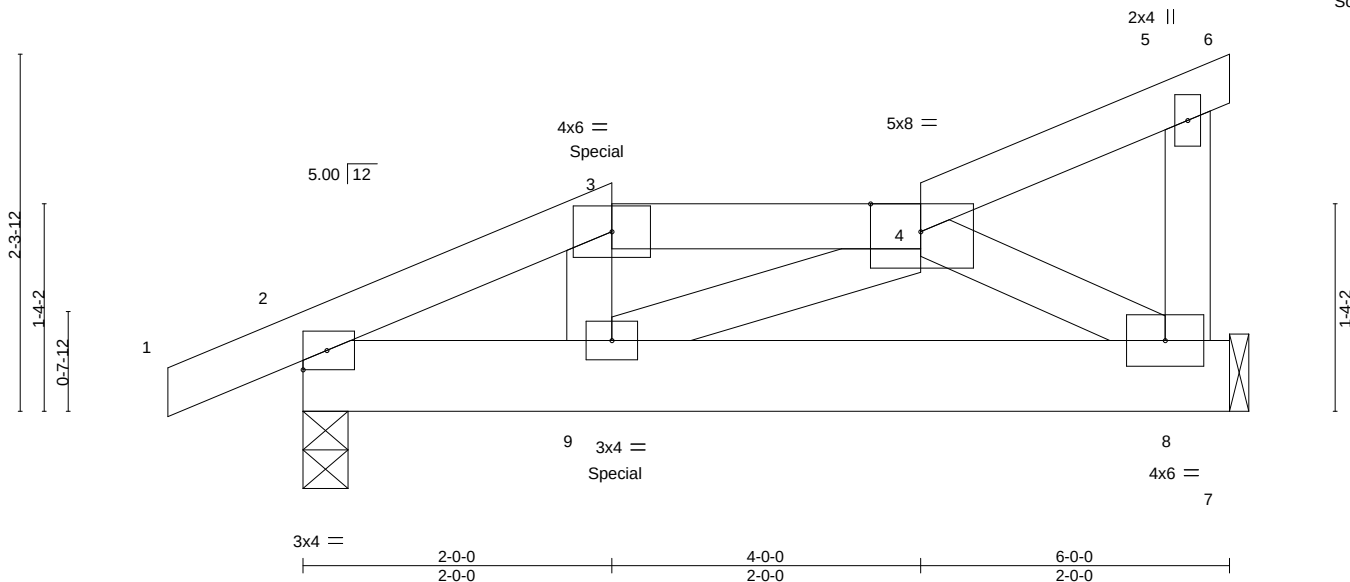


Plate Offsets (X,Y)-- [4:0-3-14,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	-0.00	9	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.01	8-9	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 26 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x6 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 10-0-0 oc bracing.

REACTIONS.

(size) 8=Mechanical, 2=0-3-8
 Max Horz 2=85(LC 24)
 Max Uplift 8=-83(LC 8), 2=-104(LC 8)
 Max Grav 8=354(LC 1), 2=458(LC 1)

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

TOP CHORD 2-3=-515/108, 3-4=-446/111
 BOT CHORD 2-9=-109/450, 8-9=-88/355
 WEBS 4-8=-413/123

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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 83 lb uplift at joint 8 and 104 lb uplift at joint 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.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 28 lb down and 31 lb up at 2-0-0 on top chord, and 86 lb down and 59 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-90, 3-4=-90, 4-5=-90, 5-6=-40, 7-10=-20
 Concentrated Loads (lb)
 Vert: 9=-86(B)



September 17, 2021

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

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

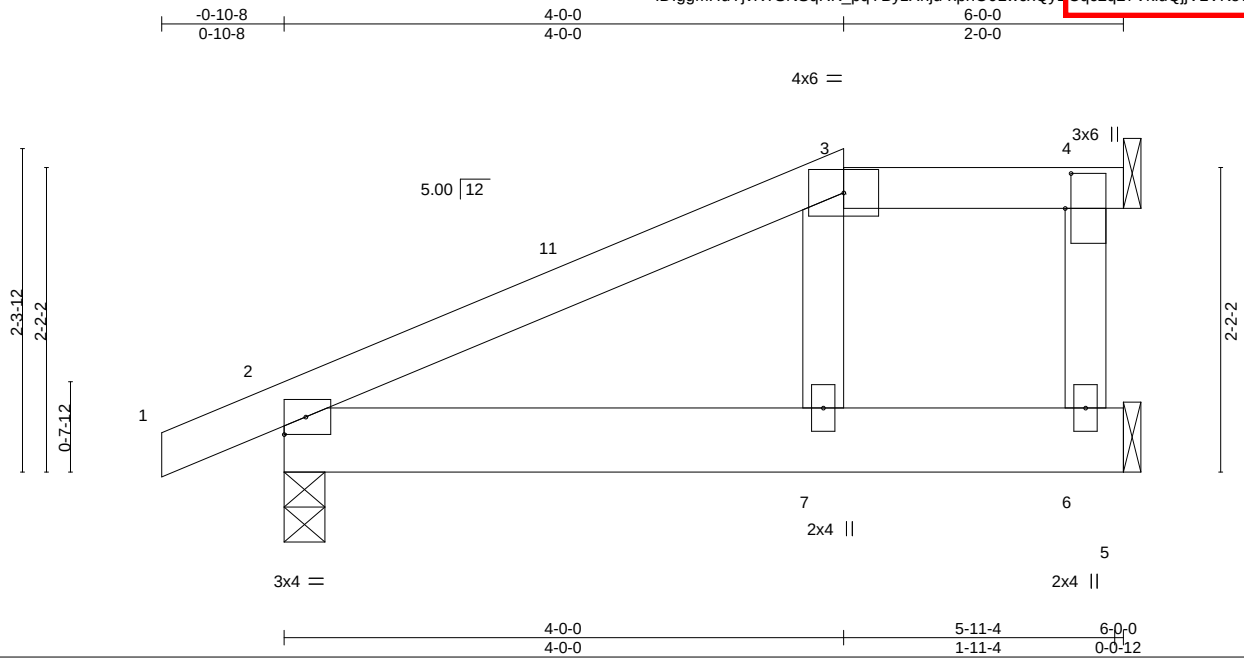
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:53 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYBzXhju-xpnOOLwxcQYbCqC2q27vklQjVLVK6r1xwmmwydK4C



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins: 3-4.
BOT CHORD	2x6 SPF No.2	BOT CHORD	
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.

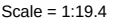
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=4.2psf; h=25ft; 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 4-0-0, Exterior(2E) 4-0-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 2, 31 lb uplift at joint 6 and 25 lb uplift at joint 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



September 17, 2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:27:34 2021 Page 1
ID:aaMHuYivKTSNSaRk paYBvzXhiu-xXFzSXixxCpbqJnLzJY AnTzsf3dmcOWwEPvKtY



Weight: 18 lb FT = 20%

September 17, 2021

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



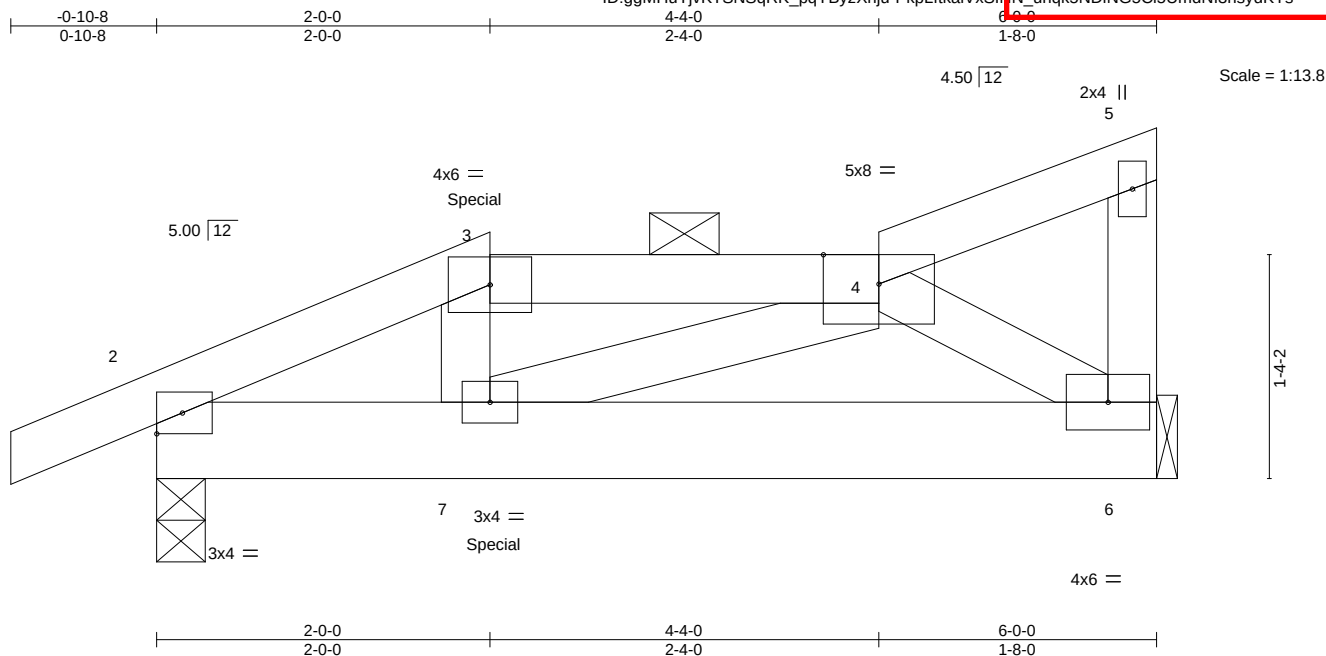
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J11	Roof Special Girder	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-PkpLftkaivxSIN_uhqkNDIN65CISUmNfnsydkrs

10/18/2021



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.14	Vert(LL)	-0.00	7	>999	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.14	Vert(CT)	-0.01	6-7	>999		
BCLL 0.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MP					Weight: 26 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 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) 6=Mechanical, 2=0-3-8
 Max Horz 2=77(LC 7)
 Max Uplift 6=-74(LC 8), 2=-101(LC 8)
 Max Grav 6=342(LC 1), 2=462(LC 1)

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

TOP CHORD 2-3=-525/102, 3-4=-457/106
 BOT CHORD 2-7=-100/459, 6-7=-80/333
 WEBS 4-6=-401/116

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 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) 6 except (jt=lb) 2=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.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 33 lb down and 36 lb up at 2-0-0 on top chord, and 81 lb down and 48 lb up at 2-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-90, 3-4=-90, 4-5=-90, 6-8=-20
 Concentrated Loads (lb)
 Vert: 7=-81(F)



September 17, 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

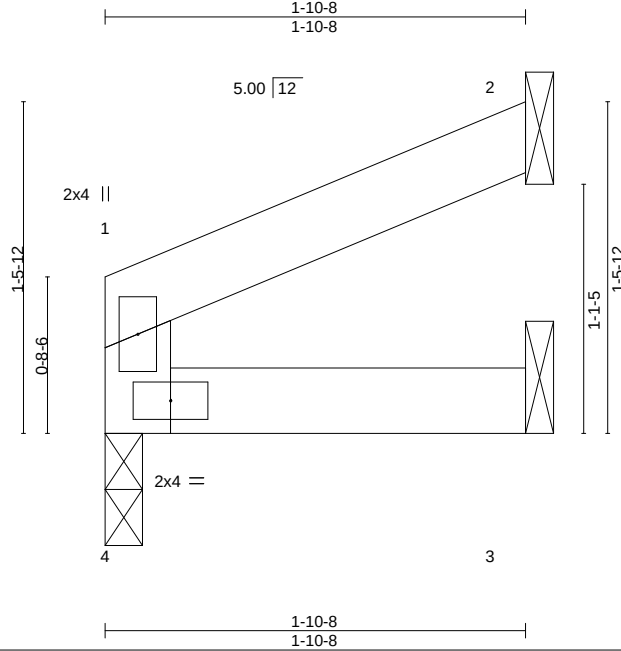
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J12	Jack-Open	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1

ID:ggMHuYjvKTSNSgRK_pqYByzXhju-PkpLftkaiVxSNN_uhqKSNBkdG7HSLmNfnsydkTs

10/18/2021



Scale = 1:10.3

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 0.05	Vert(LL)	-0.00	4	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	3-4	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR					Weight: 5 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=Mechanical, 3=Mechanical, 4=0-2-0
 Max Horz 4=29(LC 9)
 Max Uplift 2=-31(LC 12), 4=-5(LC 12)
 Max Grav 2=72(LC 1), 3=35(LC 3), 4=94(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

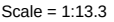
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:36 2021 Page 1
ID:aaMHuYivKTSNSqRK paYBvzXhiu-twNktCkCTp3JyivASOLzgnstRQ5Yvys1EjvVckT



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x6 SPF No.2	BOT CHORD	Rigid ceiling directly applied.

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

NOTES-

-

September 17, 2021



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 personnel injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Code**

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



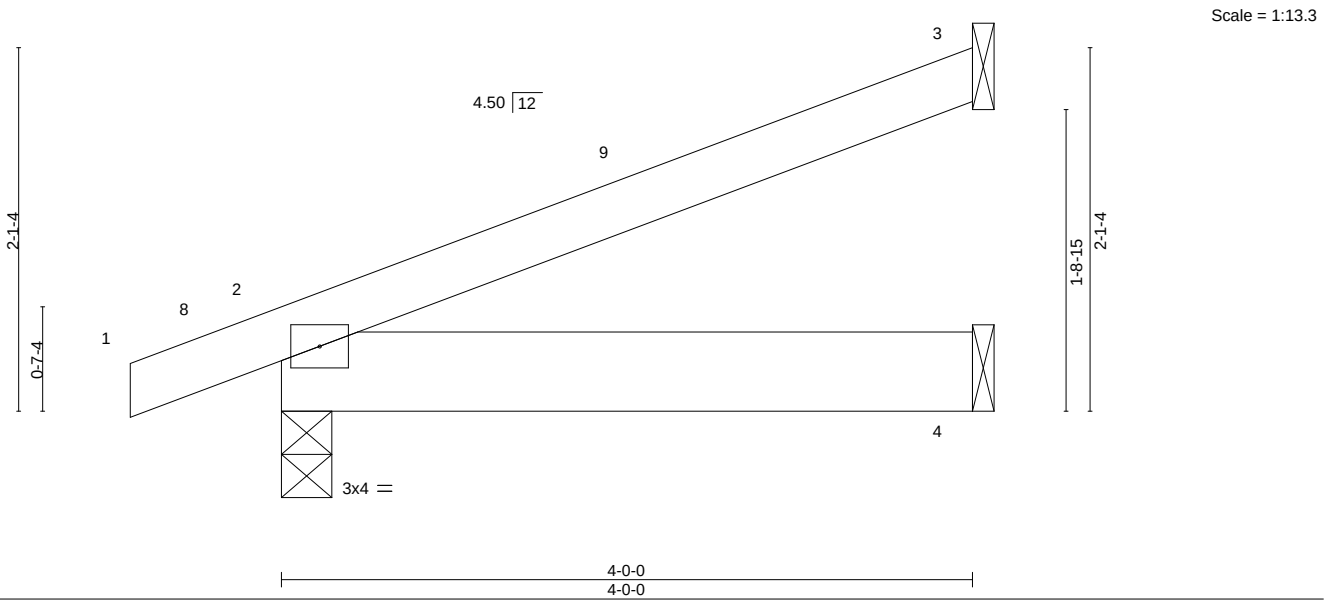
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J14	Jack-Open	3	1	Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
147923618

10/18/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 16 16:17:38 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-twNktCkCTp3JvXyASOLzomOgRcoYbV31FcklydKtH



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.19	Vert(LL) 0.01	4-7	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.13	Vert(CT) -0.01	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-AS					Weight: 13 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 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=74(LC 8)
Max Uplift 3=50(LC 12), 2=60(LC 8), 4=3(LC 12)
Max Grav 3=133(LC 1), 2=304(LC 1), 4=90(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -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, 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.



September 17, 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



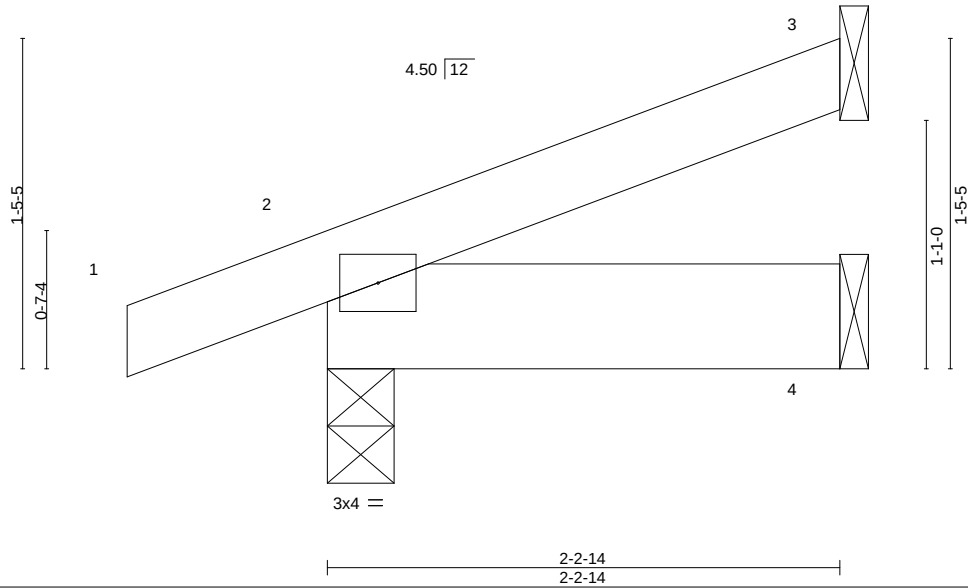
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J15	Jack-Open	2	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:37 2021 Page 1					
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-L6x64YlqE7CAXHXM06tCAuJ344pOC2q84n8AskydKrq					
Job Reference (optional)					

10/18/2021

-0-10-8
0-10-8
2-2-14
2-2-14

Scale = 1:10.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.07	Vert(LL)	-0.00	7	>999	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	-0.00	7	>999		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP					Weight: 8 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-14 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=48(LC 8)
 Max Uplift 3=-26(LC 12), 2=-52(LC 8), 4=-3(LC 12)
 Max Grav 3=67(LC 1), 2=214(LC 1), 4=48(LC 3)

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

NOTES-

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



September 17, 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

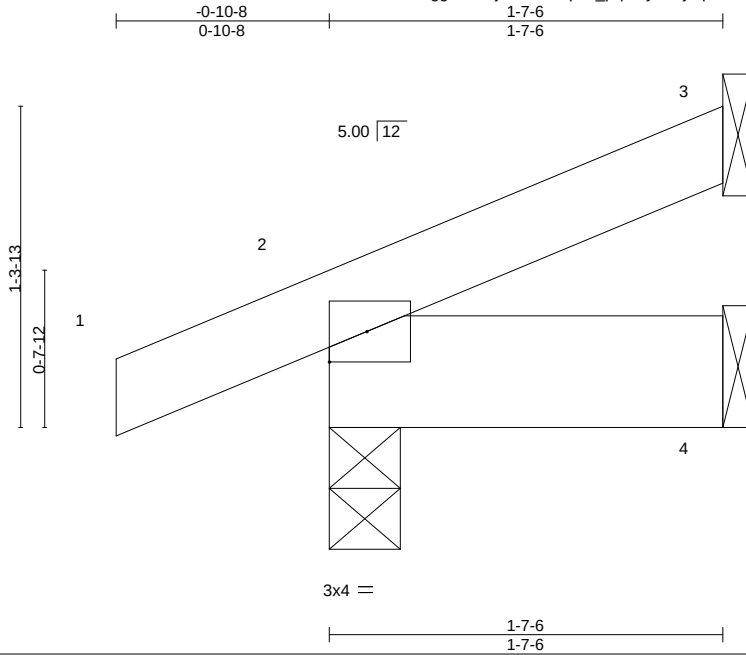
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J16	Jack-Open	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-pJVUHumS?QK19j6ZapOrjorEq78sy34GdLuj6AydkTp

10/18/2021



Scale = 1:9.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	7	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.01	Vert(CT)	-0.00	7	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-7-6 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=40(LC 12)
Max Uplift 3=-20(LC 12), 2=-34(LC 8), 4=-2(LC 12)
Max Grav 3=48(LC 1), 2=188(LC 1), 4=32(LC 3)

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

NOTES-

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



September 17,2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1
ID:ggMhuYjvKtSNSqRk_pqYByzXhju-pJVUHumS?QK1962apORj0rE15Ey34C3Lu0aydkTp
-0-10-8 4-5-8
0-10-8 4-5-8

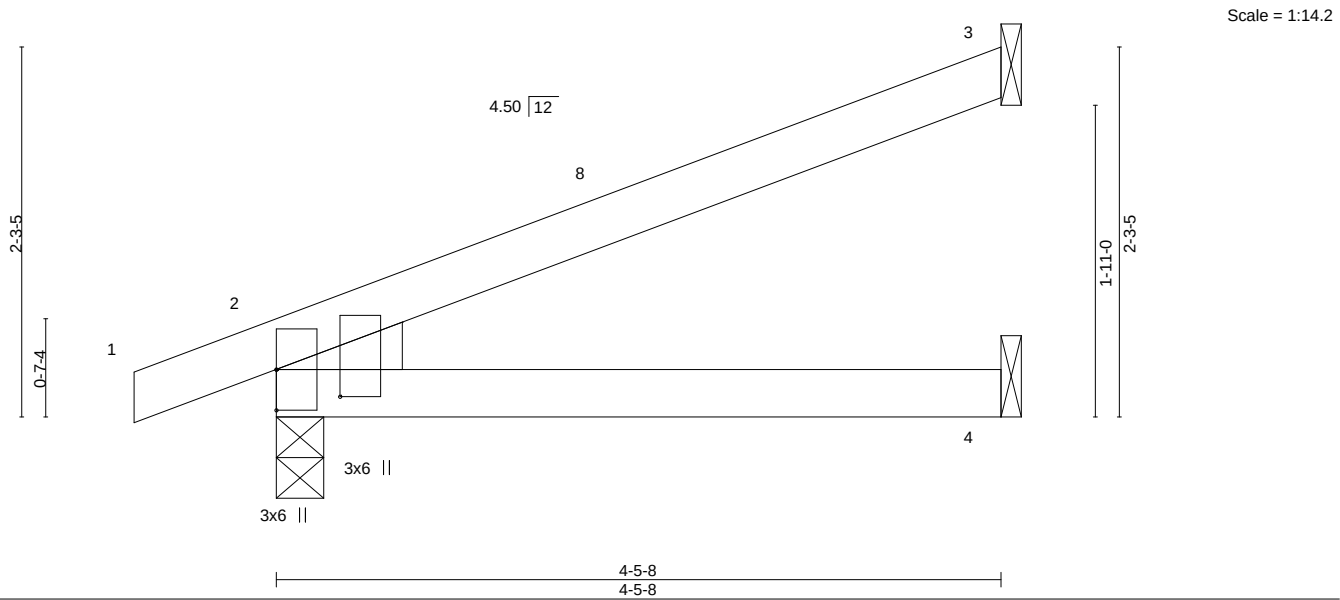


Plate Offsets (X,Y)-- [2:0-2:0,0-4-11]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	0.03	4-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TP12014		Matrix-AS							Weight: 13 lb	FT = 20%

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

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

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
 Max Horz 2=80(LC 8)
 Max Uplift 3=-60(LC 12), 2=-61(LC 8)
 Max Grav 3=166(LC 1), 2=328(LC 1), 4=86(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=4.2psf; h=25ft; 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 4-4-12 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) 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.



September 17, 2021



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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J18	Jack-Closed Girder	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-IV2sVEn4mkStm_017XvgFDOLvGKh_MN_rdhwdydk To

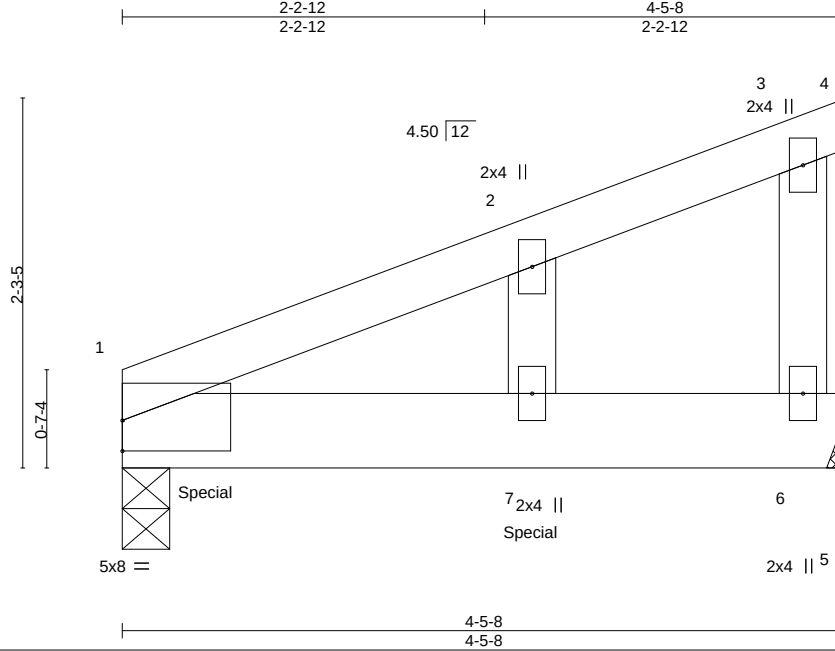


Plate Offsets (X,Y)-- [1:0-0-0,0-2-4]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.04 7-10 >999	240	MT20 197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.06 7-10 >785	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01 1 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP					Weight: 19 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x6 SP 2400F 2.0E
 WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-5-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 6=Mechanical
 Max Horz 1=79(LC 7)
 Max Uplift 1=-278(LC 8), 6=-206(LC 8)
 Max Grav 1=1231(LC 1), 6=743(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=278, 6=206.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 817 lb down and 185 lb up at 0-6-4, and 680 lb down and 230 lb up at 2-6-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-90, 3-4=-40, 5-8=-20
 Concentrated Loads (lb)
 Vert: 7=-680(F) 10=-817(F)



September 17, 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

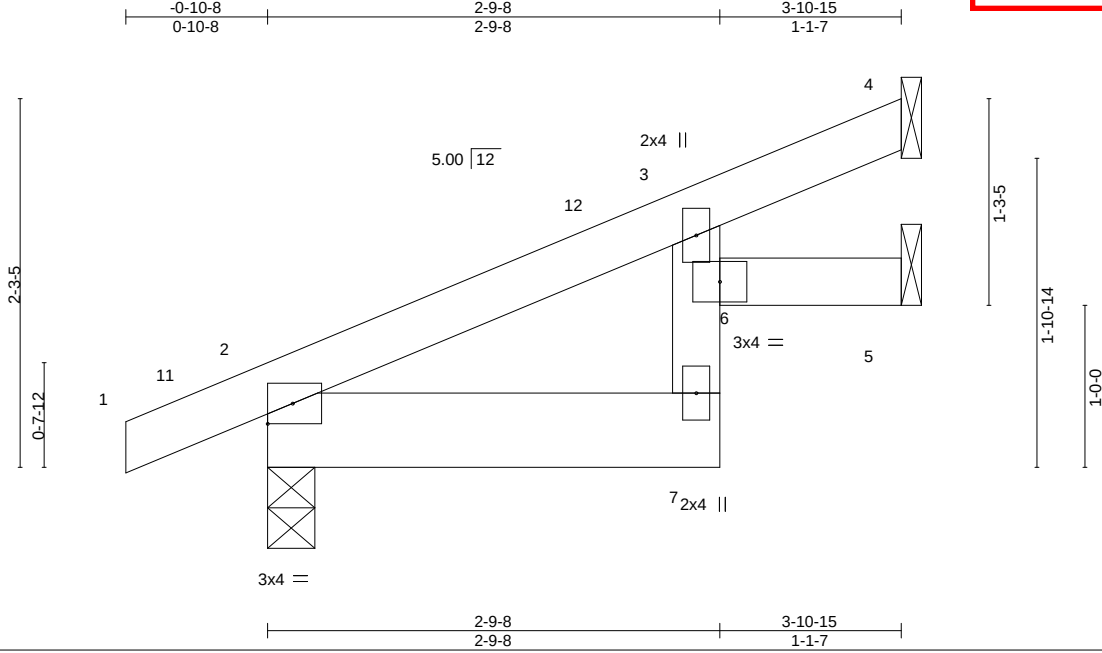
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J19	Jack-Open	2	1	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-mhcEiaoiX2akO8CzhEQvofxaqHnTQmavmNqT3yakm

10/18/2021



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.10	Vert(LL) -0.01	7	>999	240		MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.01	7	>999	180			
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01	5	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR							
								Weight: 14 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-7: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-15 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=78(LC 12)
 Max Uplift 4=-33(LC 12), 2=-43(LC 12), 5=-23(LC 12)
 Max Grav 4=101(LC 1), 2=299(LC 1), 5=102(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-3 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) 4, 2, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

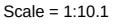
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:27:43 2021 Page 1
ID:aaMHuYivKTSNSaRK paYBvzXhju-i4k?7Gpz3fqSd3OKpfSNs0wS5WedG4pEzszXvdkKt



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		

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

NOTES-

-

September 17, 2021



WARNING – verify design parameters and NOTES ON THIS AND INCLUDED WITHIN REFERENCE T-PLATE MFG-1413 (REV. 3/25/2020) 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/WOODSIDE RIDGE #31/MO
2933941	J21	Jack-Open	3	1	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1
 ID:ggMHuYjvKTSNSqRK_pqYByzXhju-i4k77Gpz3fqSJSQKpfSmsonv5M+uG40EzsXxydKt

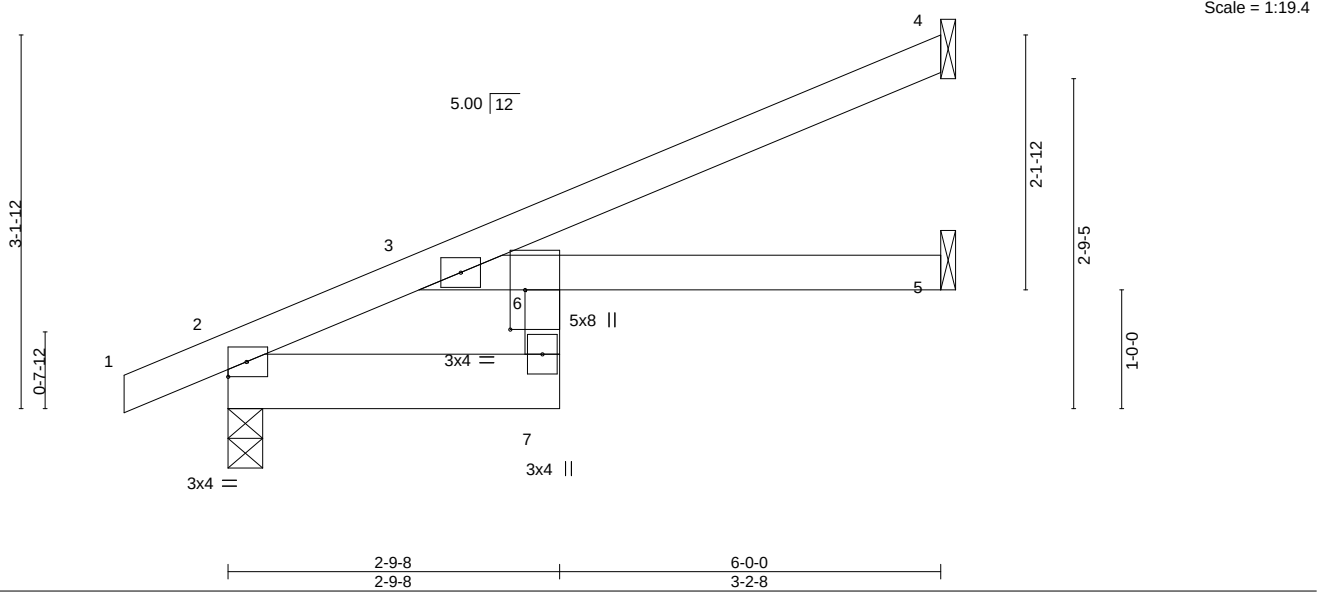


Plate Offsets (X,Y)-- [6:0-4-0,0-1-8]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	0.08 5-6	>942	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.15 5-6	>468	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.05 5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 19 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied.
2-7: 2x6 SPF No.2	

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
 Max Horz 2=114(LC 12)
 Max Uplift 4=-69(LC 12), 2=-51(LC 12), 5=-13(LC 12)
 Max Grav 4=203(LC 1), 2=424(LC 1), 5=132(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 3-9=-437/90
 BOT CHORD 2-7=-197/333, 3-6=-333/197

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-11, Interior(1) 2-3-11 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) 4, 2, 5.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J22	Jack-Open	11	1	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-AGINLcqbqzyJFc?VMMzcQsY_2UmCqj_XtobUsoYakrk

10/18/2021

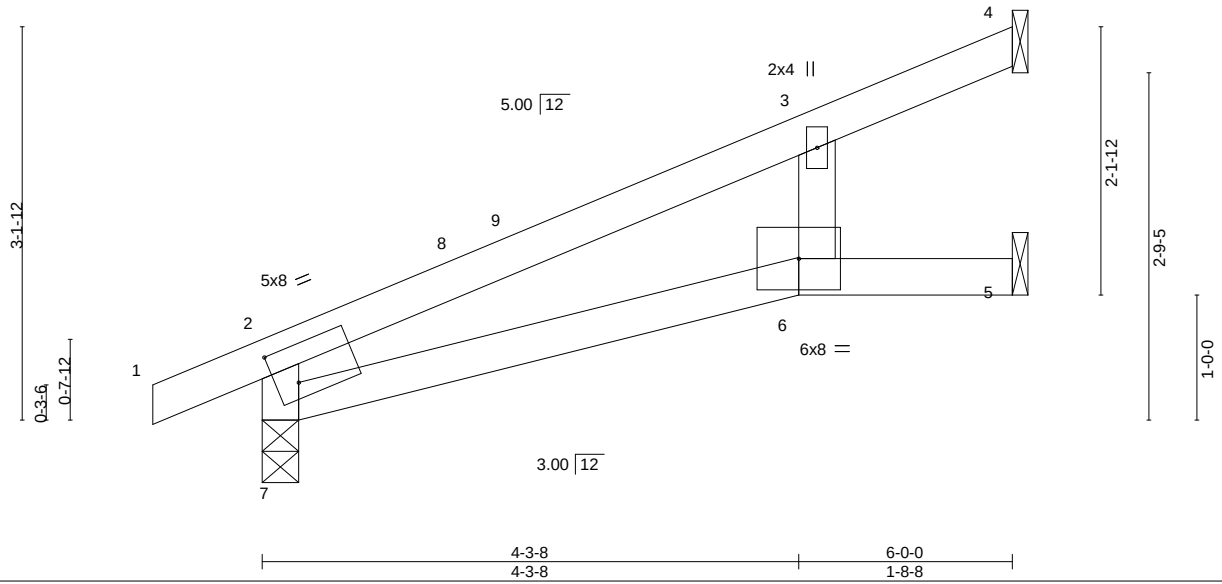


Plate Offsets (X,Y)-- [2:0-2-2,0-3-8]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.51	Vert(LL)	0.09	6-7	>747	240	MT20
TCDL 20.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.16	6-7	>427	180	GRIP
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.04	4	n/a	n/a	197/144
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS						Weight: 17 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) 4=Mechanical, 5=Mechanical, 7=0-3-8
 Max Horz 7=107(LC 12)
 Max Uplift 4=-49(LC 12), 5=-36(LC 12), 7=-56(LC 12)
 Max Grav 4=174(LC 1), 5=136(LC 1), 7=419(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-7=-337/164

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 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.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J23	Jack-Open	2	1	
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:34 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-eTsYyrDbG4AtZiw4VryH5EkdASm9Z3nHL2cqydlKvj
 3-10-15
 3-10-15

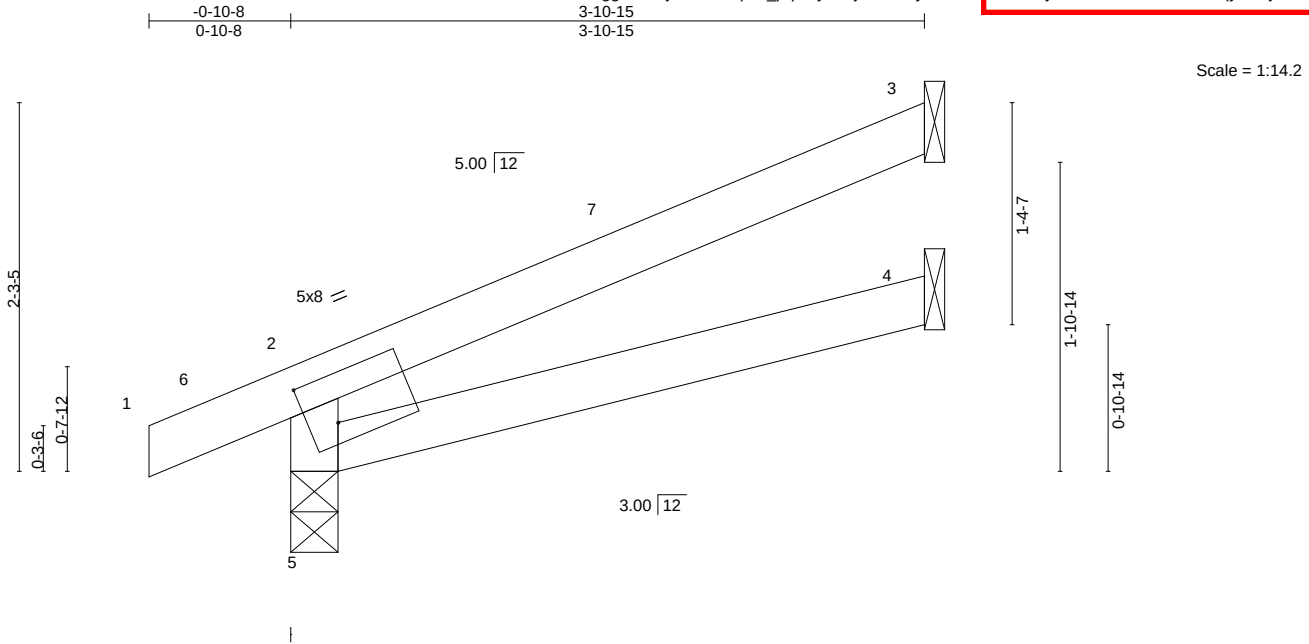


Plate Offsets (X,Y)-- [2:0-2-2,0-3-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.02	4-5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MR						Weight: 11 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
 Max Horz 5=72(LC 12)
 Max Uplift 3=-60(LC 12), 5=-43(LC 12)
 Max Grav 3=145(LC 1), 4=72(LC 3), 5=308(LC 1)

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

TOP CHORD 2-5=-280/168

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-3 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, 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.



September 17, 2021

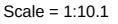
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:45 2021 Page 1
ID:ggMHuYjvKTSNSqRk_pgYByzXhju-6fQ7mHrrMaC1Uv8vUn04vUeRfIX55cpEwx468Gydkrf



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SPF No.2		

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

NOTES-

-

September 17, 2021



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, D5B-89 and BCSI Building C**

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

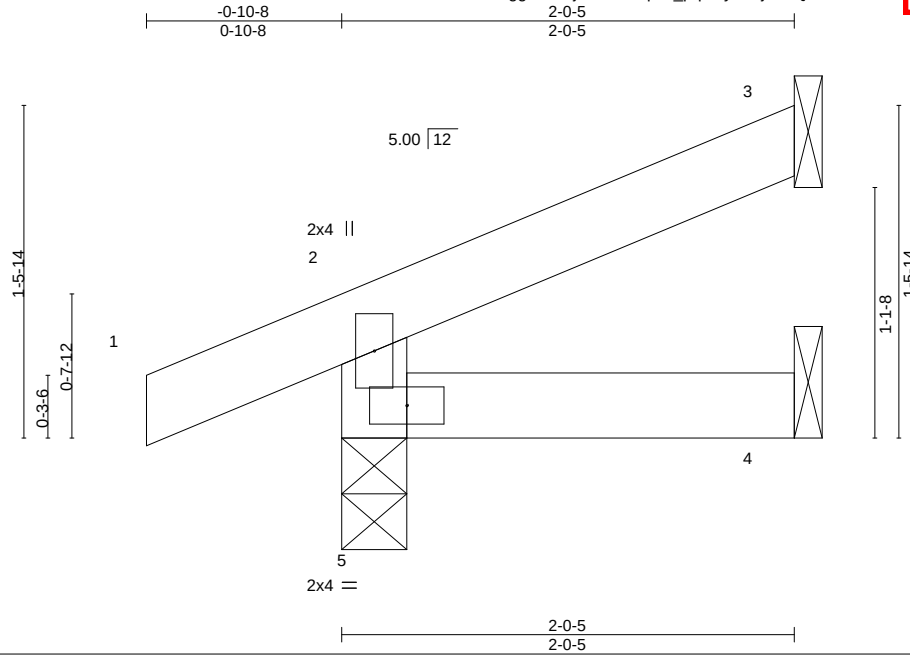
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	J25	Jack-Open	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-6fQ7mHrrMaC1Uv8vUn04vUcRfIX35cpEwx466GydkH

10/18/2021



Scale = 1:10.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	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: 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 2-0-5 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=40(LC 12)
 Max Uplift 3=-28(LC 12), 5=-38(LC 8)
 Max Grav 3=60(LC 1), 4=32(LC 3), 5=218(LC 1)

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

NOTES-

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



September 17, 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/WOODSIDE RIDGE #31/MO
2933941	LG1	GABLE	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:53 2021 Page 1					
Job Reference (optional) ID:ggMHuYjvKTSNSqRK_pqYByzXhju-P?LnEhxEij41q_BfOlekH2C017WmEKRGXXHfNnyakRb 147923630					

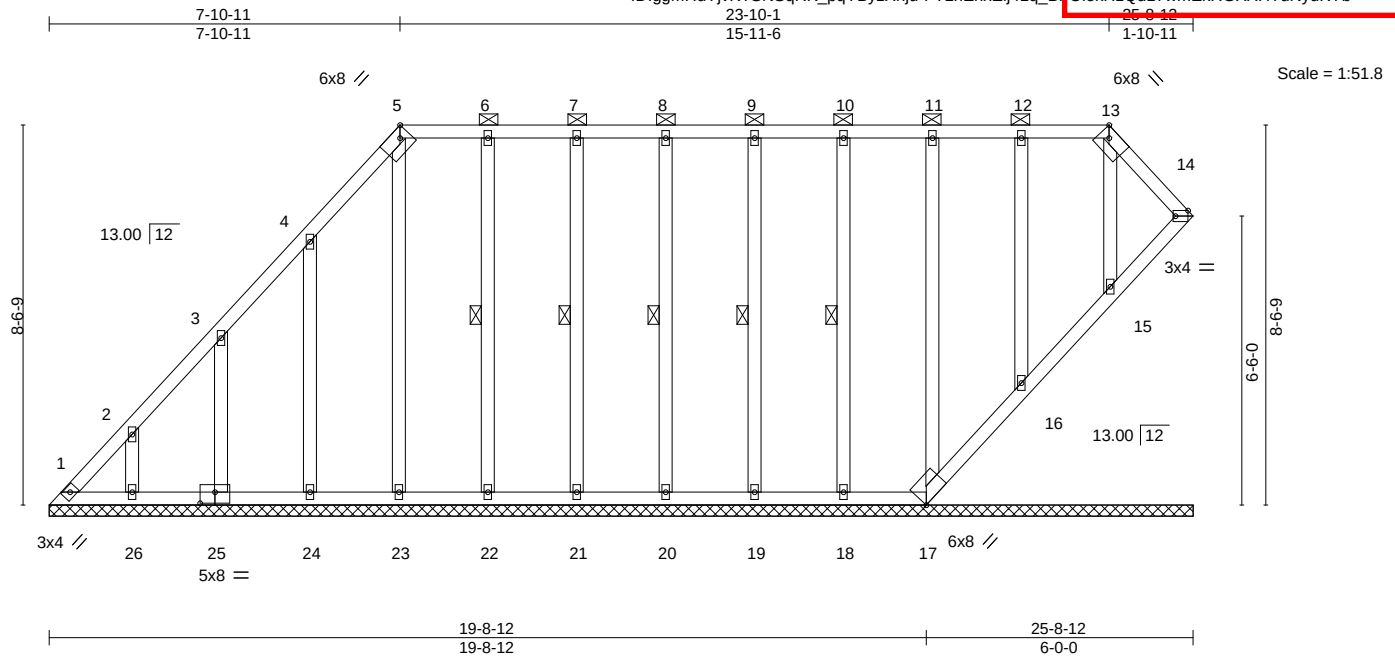


Plate Offsets (X,Y)--		[5:0-2-9,Edge], [13:0-2-9,Edge], [14:Edge,0-1-8], [25:0-4-0,0-3-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.08	in (loc) l/defl L/d
TCDL 20.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) n/a - n/a 999
BCLL 0.0	Lumber DOL 1.15	WB 0.20	Vert(CT) n/a - n/a 999
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) -0.00 14 n/a n/a
	Code IRC2018/TPI2014		
		PLATES	GRIP
		MT20	197/144
		Weight: 153 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-13.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SPF No.2	WEBS 1 Row at midpt 6-22, 7-21, 8-20, 9-19, 10-18

REACTIONS. All bearings 25-8-12.
 (lb) - Max Horz 1=293(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 17, 23, 22, 21, 20, 19, 18, 16, 15 except 26=136(LC 12), 25=141(LC 12), 24=147(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 14, 17, 26, 23, 22, 21, 20, 19, 18, 16, 15 except 1=255(LC 12), 25=252(LC 19), 24=262(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=363/267

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-11, Exterior(2R) 7-10-11 to 11-10-6, Interior(1) 11-10-6 to 23-10-1, Exterior(2E) 23-10-1 to 25-6-5 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, 14, 17, 23, 22, 21, 20, 19, 18, 16, 15 except (jt=lb) 26=136, 25=141, 24=147.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 14, 16, 15.
 - This truss 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.



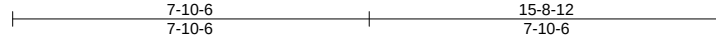
September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	LG2	GABLE	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:58 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-tBv9R0ysT1DuS8 RyT9zqAzowwVGxzBiPmMA06QpydK ra



4x6 =

Scale = 1:50.8

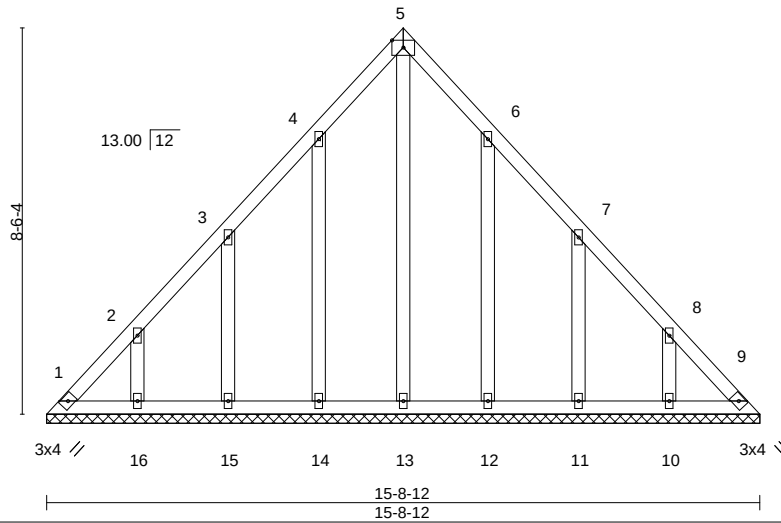


Plate Offsets (X,Y)-- [2:0-0-0,0-0-0], [3:0-0-0,0-0-0], [4:0-0-0,0-0-0], [5:Edge,0-1-15]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.00	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 78 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 15-8-12.
 (lb) - Max Horz 1=-218(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 10=-138(LC 13), 11=-140(LC 13), 12=-130(LC 13),
 16=-138(LC 12), 15=-140(LC 12), 14=-132(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 10, 11, 12, 15, 14 except 16=250(LC 19)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-290/193, 8-9=-258/185

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-6, Exterior(2R) 7-10-6 to 10-10-6, Interior(1) 10-10-6 to 15-4-12 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
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 10=138, 11=140, 12=130, 16=138, 15=140, 14=132.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 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/WOODSIDE RIDGE #31/MO
2933941	LG3	GABLE	1	1	Job Reference (optional)

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:34 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-LOSXeMyUELLi3IKJWAgCMOWzEwcyf_24qmZyFydkYz 147923632

10/18/2021

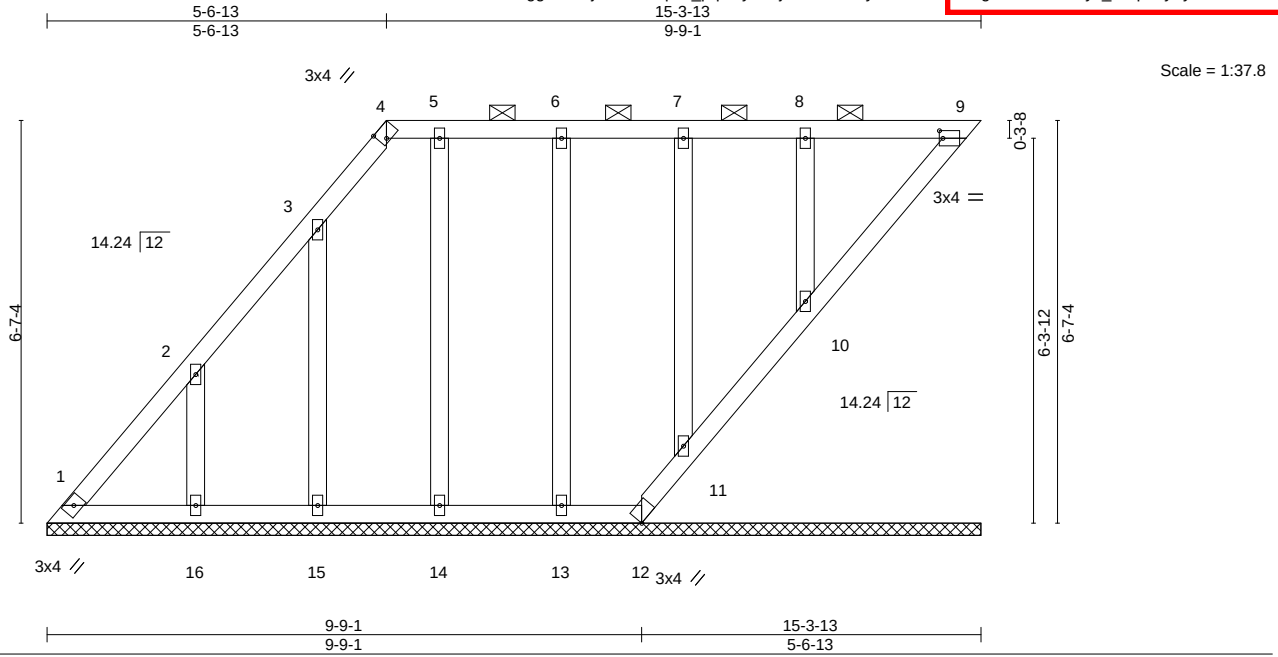


Plate Offsets (X,Y)-- [4:0-1-5,Edge], [9:0-0-11,0-1-8]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.13	Horz(CT)	-0.00	9	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S					Weight: 72 lb	FT = 20%

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

REACTIONS. All bearings 15-3-13.
(lb) - Max Horz 1=260(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 12, 14, 13, 11, 10 except 16=-190(LC 12), 15=-118(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 12, 15, 14, 13, 11 except 16=304(LC 19), 10=306(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-274/231
WEBS 2-16=-280/200

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-12 to 3-3-12, Interior(1) 3-3-12 to 5-6-13, Exterior(2R) 5-6-13 to 8-5-4, Interior(1) 8-5-4 to 15-0-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 12, 14, 13, 11, 10 except (jt=lb) 16=190, 15=118.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 10.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 17, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	LG4	GABLE	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:38 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-qa0vsiz7?eTchSrq3uBRvz8_KyBRFXIBUVrwhydkYr

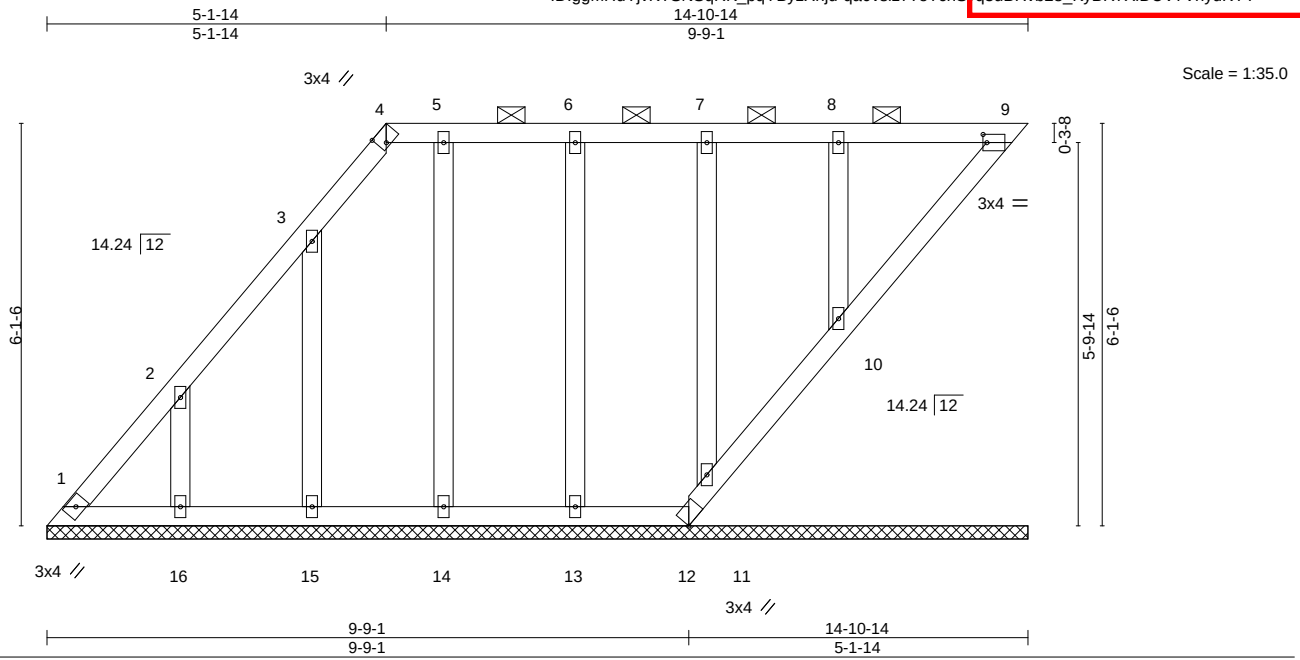


Plate Offsets (X,Y)-- [4:0-1-5,Edge], [9:0-0-11,0-1-8]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.11	Horz(CT)	-0.00	9	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S					Weight: 68 lb	FT = 20%

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

REACTIONS. All bearings 14-10-14.
(lb) - Max Horz 1=240(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 12, 14, 13, 11, 10 except 16=168(LC 12), 15=-126(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 12, 15, 14, 13, 11 except 16=268(LC 19), 10=306(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-263/219

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-12 to 3-3-12, Interior(1) 3-3-12 to 5-1-14, Exterior(2R) 5-1-14 to 8-0-5, Interior(1) 8-0-5 to 14-7-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 12, 14, 13, 11, 10 except (jt=lb) 16=168, 15=126.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 10.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 17, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

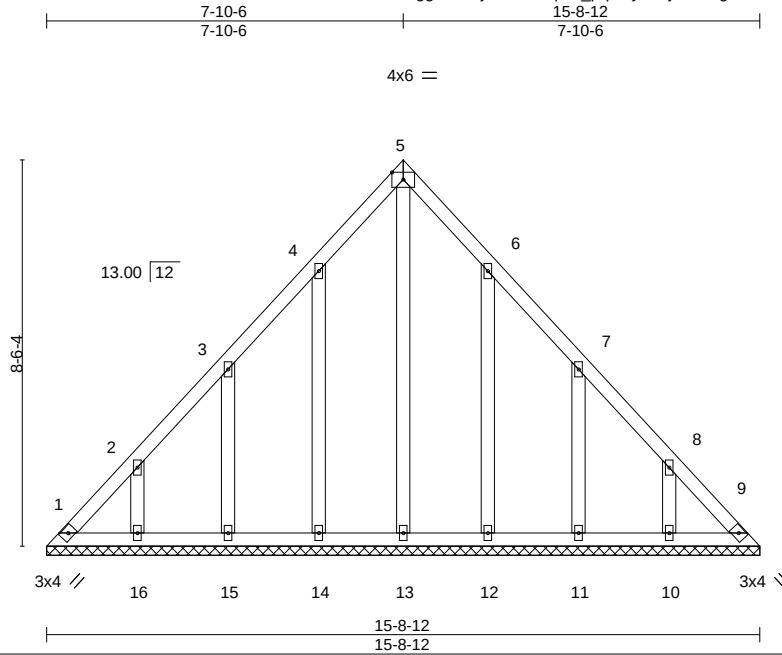
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	LG5	GABLE	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:17:37 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-mz8gHO?NXGjKx3CBJEV_08Uv6dtv4n?no_EZayukYW

10/18/2021



Scale = 1:50.8

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.00	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 78 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 15-8-12.
 (lb) - Max Horz 1=-218(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 10=-138(LC 13), 11=-140(LC 13), 12=-130(LC 13),
 16=-138(LC 12), 15=-140(LC 12), 14=-132(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 10, 11, 12, 15, 14 except 16=250(LC 19)

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

TOP CHORD 1-2=-290/193, 8-9=-258/185

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-6, Exterior(2R) 7-10-6 to 10-10-6, Interior(1) 10-10-6 to 15-4-12 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
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 10=138, 11=140, 12=130, 16=138, 15=140, 14=132.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 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/WOODSIDE RIDGE #31/MO
2933941	LG6	GABLE	1	1	

Builders FirstSource (Valley Center),	Valley Center, KS - 67147,	8.430 s Aug 16 2021 MiTek Industries, Inc.	Wed Sep 15 16:17:58 2021 Page 1
		ID:ggMHuYjvKTSNSqRK_pqYByzXhju-iLGQi4d3tz2A3DbljGN3RDQwXJZNXLI88TKetYdK YG	147923635

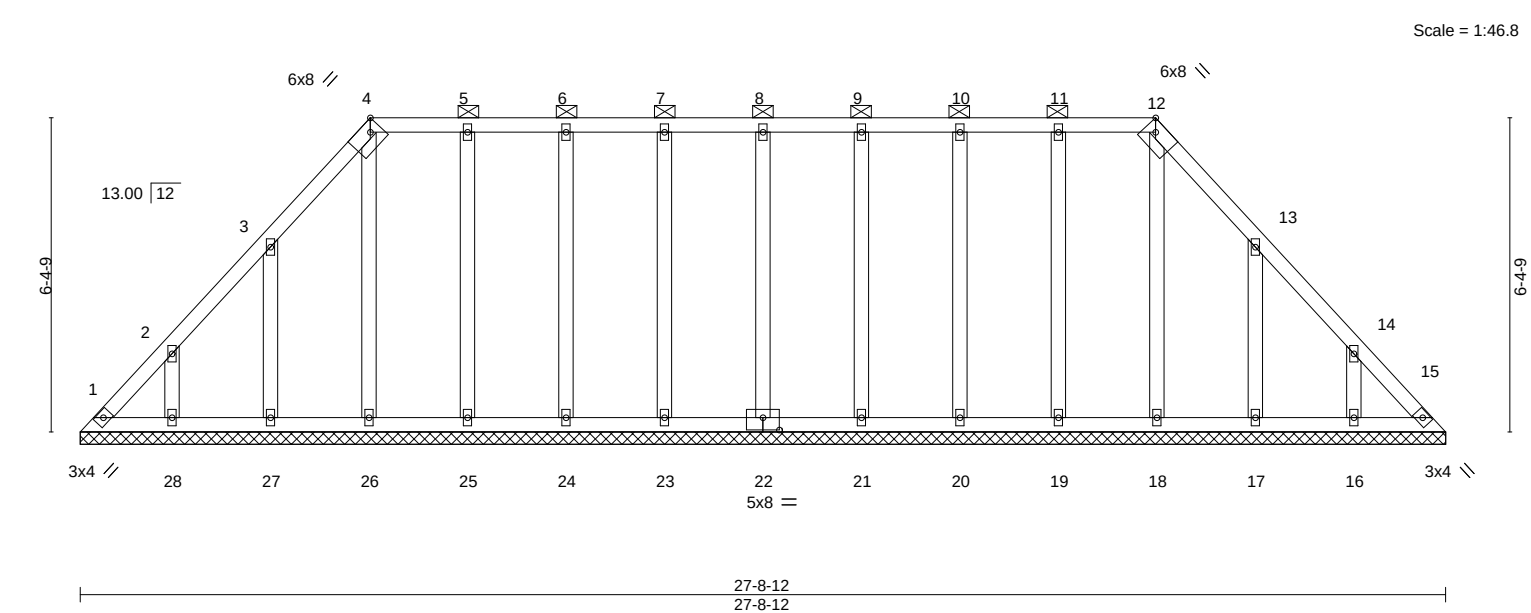


Plate Offsets (X,Y)--		[4:0-2-9,Edge], [12:0-2-9,Edge], [22:0-4-0,0-3-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07
TCDL 20.0	Lumber DOL	1.15	BC 0.03
BCLL 0.0	Rep Stress Incr	YES	WB 0.12
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			DEFL.
			in (loc)
			l/defl
			L/d
			Plates
			GRIP
			MT20
			197/144
			Weight: 140 lb
			FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 4-12.
OTHERS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.	All bearings 27-8-12.
(lb) - Max Horz	1=-162(LC 8)
Max Uplift	All uplift 100 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 21, 20, 19 except 27=-149(LC 12),
	28=-132(LC 12), 17=-149(LC 13), 16=-132(LC 13)
Max Grav	All reactions 250 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 28, 21, 20, 19, 18, 16 except
	27=263(LC 19), 17=262(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 5-10-11, Exterior(2R) 5-10-11 to 9-10-6, Interior(1) 9-10-6 to 21-10-1, Exterior(2R) 21-10-1 to 25-10-6, Interior(1) 25-10-6 to 27-4-12 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.
 - 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, 15, 22, 23, 24, 25, 26, 21, 20, 19 except (jt=lb) 27=149, 28=132, 17=149, 16=132.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



September 17,2021

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

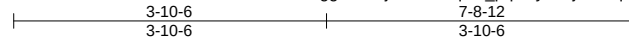
Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	LG7	GABLE	1	1	Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:18:08 2021 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-AYqovQ1FqB5voDonsRnccm?DLtq6P4RnmDuAwYdK147923636

10/18/2021



Scale = 1:28.5

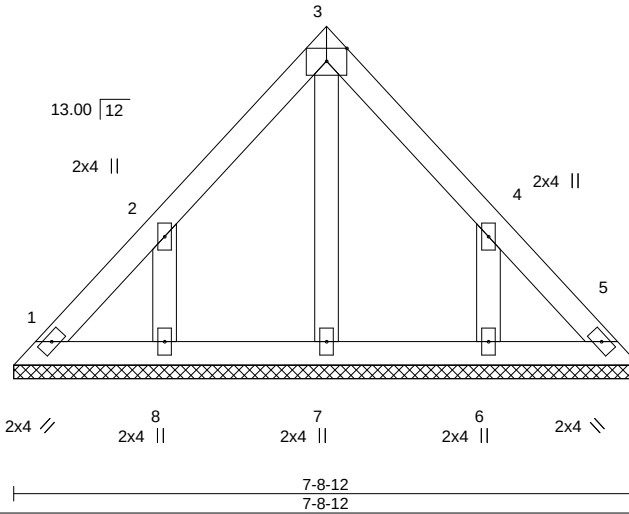


Plate Offsets (X,Y)-- [3:Edge,0-1-15]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 28 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 7-8-12.
 (lb) - Max Horz 1=-102(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-153(LC 12), 6=-153(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=267(LC 19), 6=267(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-265/169, 4-6=-265/169

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 3-10-6, Exterior(2R) 3-10-6 to 6-10-6, Interior(1) 6-10-6 to 7-4-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=153, 6=153.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 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



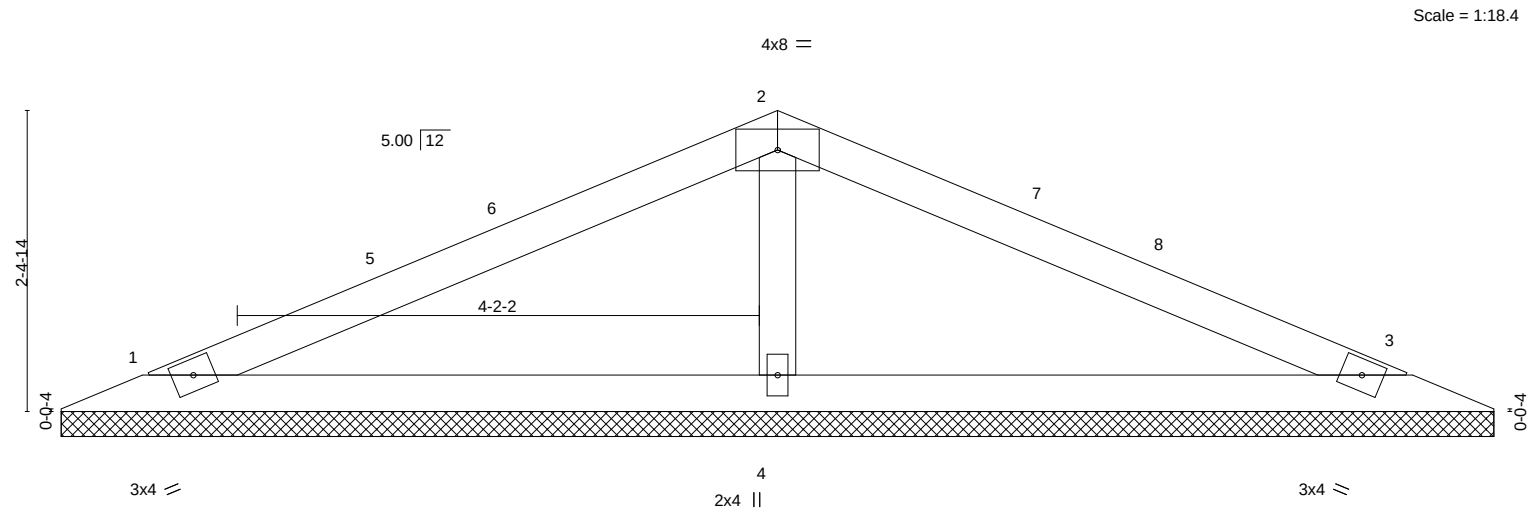
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	V1	Valley	1	1	

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

10/18/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:18:38 2021 Page 1
ID:ggMHuYjvKTSnSqRK_pqYByzXhju-AYqovQ1FqB5voDonsRnccfmwQLck6OWRnmDuAvydkYF 147923637



0-0-10		11-6-12								
0-0-10		11-6-2								
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 0.44	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL 1.15	BC 0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr YES	WB 0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 28 lb	FT = 20%

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

REACTIONS. (size) 1=11-5-8, 3=11-5-8, 4=11-5-8
Max Horz 1=37(LC 16)
Max Uplift 1=-49(LC 12), 3=-55(LC 13), 4=-56(LC 12)
Max Grav 1=251(LC 25), 3=251(LC 26), 4=615(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-455/205

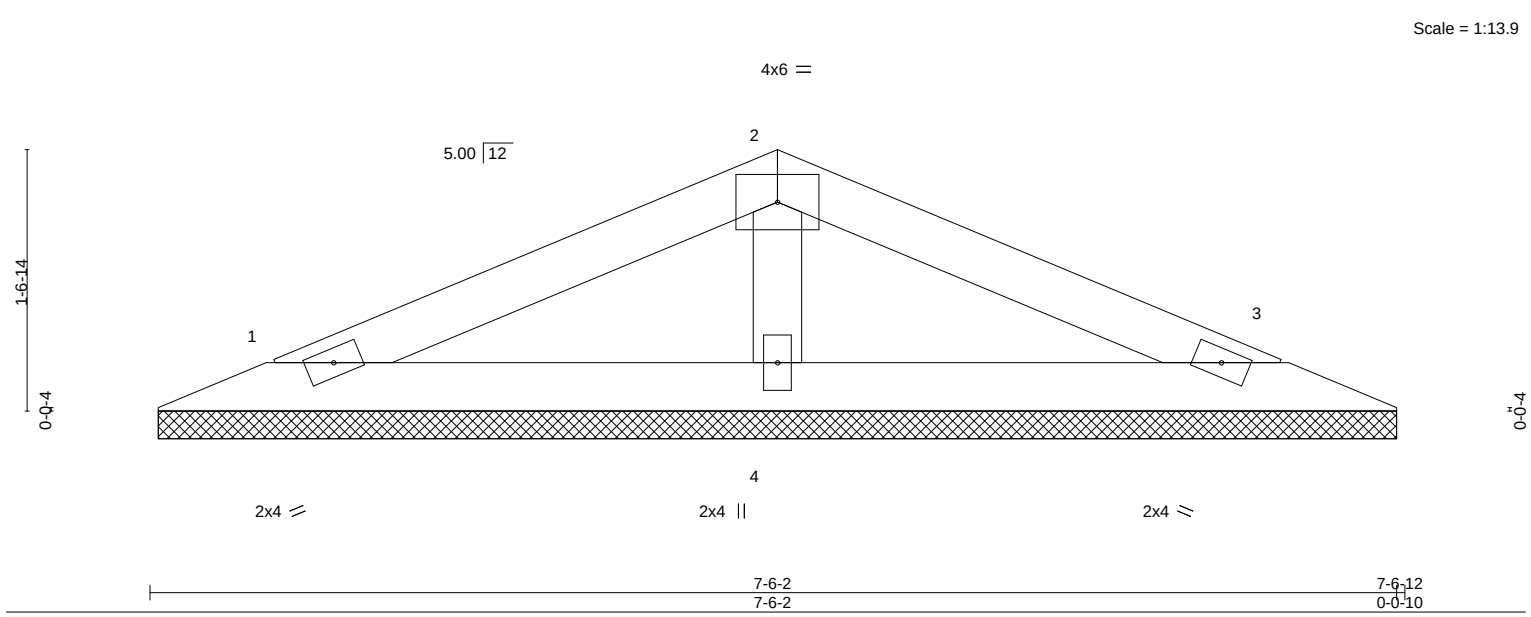
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 5-9-6, Exterior(2R) 5-9-6 to 8-9-6, Interior(1) 8-9-6 to 10-9-11 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
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/WOODSIDE RIDGE #31/MO
2933941	V2	Valley	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:18:33 2021 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-ekOA6m2taUDmPNNzQ6m8slp1_ErSG6cQYRtLydkYs 147923638



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.08	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2018/TPI2014			Weight: 17 lb	FT = 20%

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

REACTIONS. (size) 1=7-5-8, 3=7-5-8, 4=7-5-8
Max Horz 1=-22(LC 17)
Max Uplift 1=-35(LC 12), 3=-39(LC 13), 4=-22(LC 12)
Max Grav 1=167(LC 1), 3=167(LC 1), 4=331(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-256/155

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



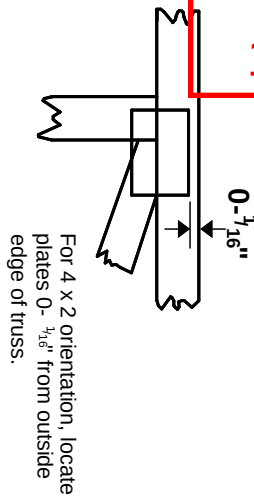
September 17, 2021

10/18/2021

Symbols

PLATE LOCATION AND ORIENTATION

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



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

* Plate location details available in **MiTek 20120** software or upon request.

PLATE SIZE

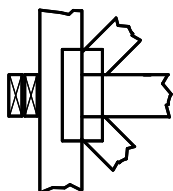
4 X 4
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

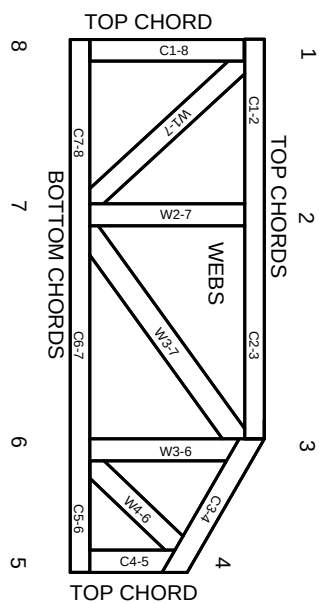


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

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

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

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

© 2012 MiTek® All Rights Reserved



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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/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.