



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

11/24/2020

RE: 2532764
Summit/5 Woodside

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

Site Information:

Customer: Project Name: 2532764
Lot/Block:
Address:
City:

Model:
Subdivision:
State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014
Wind Code: N/A
Roof Load: 45.0 psf

Design Program: MiTek 20/20 8.2
Wind Speed: 115 mph
Floor Load: N/A psf

This package includes 99 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43574781	A1	11/14/2020	21	I43574801	D2	11/14/2020
2	I43574782	A2	11/14/2020	22	I43574802	D3	11/14/2020
3	I43574783	A3	11/14/2020	23	I43574803	JA1	11/14/2020
4	I43574784	A4	11/14/2020	24	I43574804	JA2	11/14/2020
5	I43574785	A5	11/14/2020	25	I43574805	JA3	11/14/2020
6	I43574786	A6	11/14/2020	26	I43574806	JA4	11/14/2020
7	I43574787	A7	11/14/2020	27	I43574807	JA5	11/14/2020
8	I43574788	A8	11/14/2020	28	I43574808	JA6	11/14/2020
9	I43574789	A9	11/14/2020	29	I43574809	JA7	11/14/2020
10	I43574790	A10	11/14/2020	30	I43574810	JA8	11/14/2020
11	I43574791	A11	11/14/2020	31	I43574811	JA9	11/14/2020
12	I43574792	A12	11/14/2020	32	I43574812	JA10	11/14/2020
13	I43574793	B1	11/14/2020	33	I43574813	JA11	11/14/2020
14	I43574794	B2	11/14/2020	34	I43574814	JA12	11/14/2020
15	I43574795	B3	11/14/2020	35	I43574815	JA13	11/14/2020
16	I43574796	B4	11/14/2020	36	I43574816	JA14	11/14/2020
17	I43574797	B5	11/14/2020	37	I43574817	JA15	11/14/2020
18	I43574798	C1	11/14/2020	38	I43574818	JA16	11/14/2020
19	I43574799	C2	11/14/2020	39	I43574819	JA17	11/14/2020
20	I43574800	D1	11/14/2020	40	I43574820	JC1	11/14/2020

The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision
based on the parameters provided by Builders FirstSource (Valley Center).
Truss Design Engineer's Name: Sevier, Scott
My license renewal date for the state of Missouri is December 31, 2021.
Missouri COA: 001193

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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek 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.



November 14, 2020



RE: 2532764 - Summit/5 Woodside

MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Project Customer: Project Name: 2532764

Lot/Block:

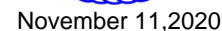
Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
41	I43574821	JC2	11/14/2020	85	I43574865	M7	11/14/2020
42	I43574822	JC3	11/14/2020	86	I43574866	M8	11/14/2020
43	I43574823	JC4	11/14/2020	87	I43574867	M9	11/14/2020
44	I43574824	JC5	11/14/2020	88	I43574868	P1	11/14/2020
45	I43574825	JD1	11/14/2020	89	I43574869	P2	11/14/2020
46	I43574826	JD2	11/14/2020	90	I43574870	P3	11/14/2020
47	I43574827	JD3	11/14/2020	91	I43574871	V1	11/14/2020
48	I43574828	JM1	11/14/2020	92	I43574872	V2	11/14/2020
49	I43574829	JM2	11/14/2020	93	I43574873	V3	11/14/2020
50	I43574830	JM3	11/14/2020	94	I43574874	V4	11/14/2020
51	I43574831	JM4	11/14/2020	95	I43574875	V5	11/14/2020
52	I43574832	JM5	11/14/2020	96	I43574876	V6	11/14/2020
53	I43574833	JM6	11/14/2020	97	I43574877	V7	11/14/2020
54	I43574834	JM7	11/14/2020	98	I43574878	V8	11/14/2020
55	I43574835	JM8	11/14/2020	99	I43574879	V9	11/14/2020
56	I43574836	JM9	11/14/2020				
57	I43574837	JM10	11/14/2020				
58	I43574838	JM11	11/14/2020				
59	I43574839	JM12	11/14/2020				
60	I43574840	JM13	11/14/2020				
61	I43574841	JM14	11/14/2020				
62	I43574842	JM15	11/14/2020				
63	I43574843	JM16	11/14/2020				
64	I43574844	JM17	11/14/2020				
65	I43574845	JP1	11/14/2020				
66	I43574846	JP2	11/14/2020				
67	I43574847	LG1	11/14/2020				
68	I43574848	LG2	11/14/2020				
69	I43574849	LG3	11/14/2020				
70	I43574850	LG4	11/14/2020				
71	I43574851	LG5	11/14/2020				
72	I43574852	LG6	11/14/2020				
73	I43574853	LG7	11/14/2020				
74	I43574854	LG8	11/14/2020				
75	I43574855	LG9	11/14/2020				
76	I43574856	LG10	11/14/2020				
77	I43574857	LG12	11/14/2020				
78	I43574858	LG14	11/14/2020				
79	I43574859	M1	11/14/2020				
80	I43574860	M2	11/14/2020				
81	I43574861	M3	11/14/2020				
82	I43574862	M4	11/14/2020				
83	I43574863	M5	11/14/2020				
84	I43574864	M6	11/14/2020				

Scale = 1:73.1

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574781
2532764	A1	HIP GIRDER	1	3	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:01 2020 Page 2
ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-gAjqcDOgQ?iJmB0BN71lhXZgjRd_xgWq6Y9KuoyKXfm

- NOTES-**
- 10) All plates are 2x4 MT20 unless otherwise indicated.
 - 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 12) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 626 lb uplift at joint 1 and 623 lb uplift at joint 12.
 - 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 15) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 16) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 4-0-0 oc max. starting at 3-8-8 from the left end to 35-8-8 to connect truss(es) to front face of bottom chord.
 - 17) Fill all nail holes where hanger is in contact with lumber.
 - 18) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 594 lb down and 136 lb up at 1-8-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-29=-73, 3-29=-51, 3-10=-61, 10-11=-51, 11-13=-51, 11-28=-20, 14-31=-20

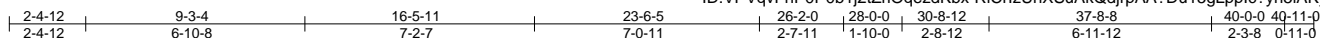
Concentrated Loads (lb)

Vert: 18=-334(F) 23=-338(F) 22=-334(F) 20=-334(F) 19=-334(F) 28=-594(F) 41=-292(F) 42=-338(F) 43=-334(F) 44=-334(F) 45=-334(F) 46=-339(F) 47=-339(F) 48=-339(F) 49=-300(F) 50=-298(F) 51=-404(F)

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574782
2532764	A2	Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:09 2020 Page 1
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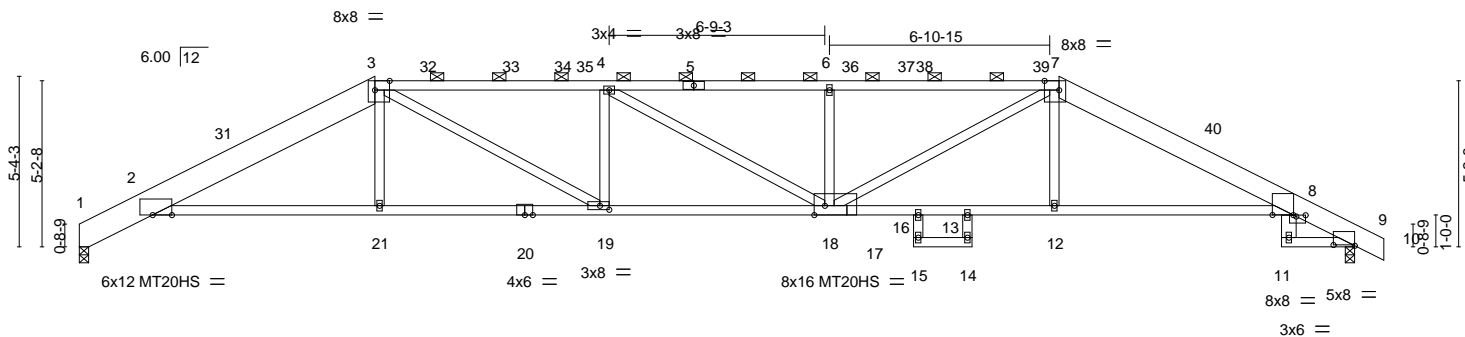


Plate Offsets (X,Y)--	[2:0-7-4,Edge], [3:0-5-8,Edge], [7:0-5-8,Edge], [8:0-7-14,0-0-1], [8:0-3-8,0-0-8], [9:0-8-0,0-0-5], [17:0-0-0,0-1-12], [17:0-4-0,Edge], [18:0-1-12,0-0-0], [19:0-3-8,0-0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.87	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 1.00	Vert(LL) -0.51 18-19 >938 240	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.40	Vert(CT) -0.95 18-19 >504 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.48 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 194 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
1-3: 2x10 SP 2400F 2.0E, 7-10: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
8-11: 2x6 SPF No.2, 8-17,17-20: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (2-2-0 max.): 3-7.
BOT CHORD Rigid ceiling directly applied. Except:
2-2-0 oc bracing: 2-21

REACTIONS.

(size) 1=0-3-8, 9=0-3-8
Max Horz 1=96(LC 14)
Max Uplift 1=138(LC 16), 9=170(LC 16)
Max Grav 1=1810(LC 2), 9=1866(LC 2)

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

TOP CHORD 1-2=-801/122, 2-3=-3639/410, 3-4=-4754/534, 4-6=-4754/528, 6-7=-4754/528,
7-8=-3706/411, 8-9=-765/131
BOT CHORD 2-21=-259/3330, 19-21=-257/3336, 18-19=-376/4754, 16-18=-262/3381, 13-16=-274/3326,
12-13=-262/3381, 8-12=-264/3373
WEBS 3-21=0/294, 7-12=0/323, 3-19=-136/1613, 4-19=-633/126, 6-18=-623/127,
7-18=-131/1564

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-10-9, Interior(1) 2-10-9 to 9-3-4, Exterior(2R) 9-3-4 to 13-6-3, Interior(1) 13-6-3 to 30-8-12, Exterior(2R) 30-8-12 to 34-11-11, Interior(1) 34-11-11 to 40-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 1 and 170 lb uplift at joint 9.



November 11, 2020

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/5 Woodside	I43574782
2532764	A2	Hip	1	1	Job Reference (optional)	

- NOTES-**
- 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.
 - 13) 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.
 - 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



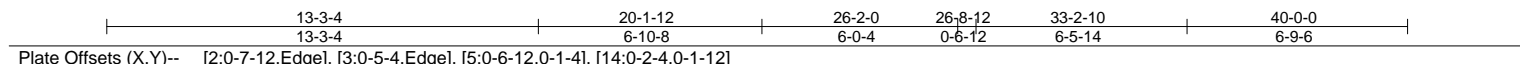
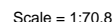
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574783
2532764	A3	Hip	1	1	Job Reference (optional)	

- NOTES-**
- 12) 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:13 2020 Page 1

ID:VPVqyEnP0P0b1j2tZrIQgezdkhX-KTBM7KXCbhQcC1xI4eE6A32ijHi6l2ebtP3z.I5vKXfa



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

TOP CHORD 1-2=-802/117, 2-3=-3102/362, 3-4=-3085/422, 4-5=-3087/423, 5-7=-3097/393,
7-9=-3102/362

BOT CHORD 2-17=-176/2759, 15-17=-174/2764, 14-15=-179/2708, 9-11=-246/2692

WEBS 3-17=0/372, 3-15=-51/611, 4-15=-650/127, 5-15=-54/686, 7-11=-315/100, 5-14=-18/599,
11-14=-246/2646, 7-14=-227/253



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/5 Woodside	I43574784
2532764	A4	Hip	1	1	Job Reference (optional)	

- NOTES-**
- 12) 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.
- 13) 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/5 Woodside	143574785
2532764	A5	Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:16 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrOgezdKbx-k27VmMZ4tcmA3Vf3InppnhgGIUmlyPG1ZNHdwQyKXfX

2-4-12	8-9-10	15-3-4	20-0-0	24-8-12	25-8-8	29-7-8	31-2-6	36-4-0	40-0-0	40-11-0
2-4-12	6-4-14	6-5-10	4-8-12	4-8-12	0-11-12	3-11-0	1-6-14	5-1-10	3-8-0	0-11-0

Scale = 1:73.0

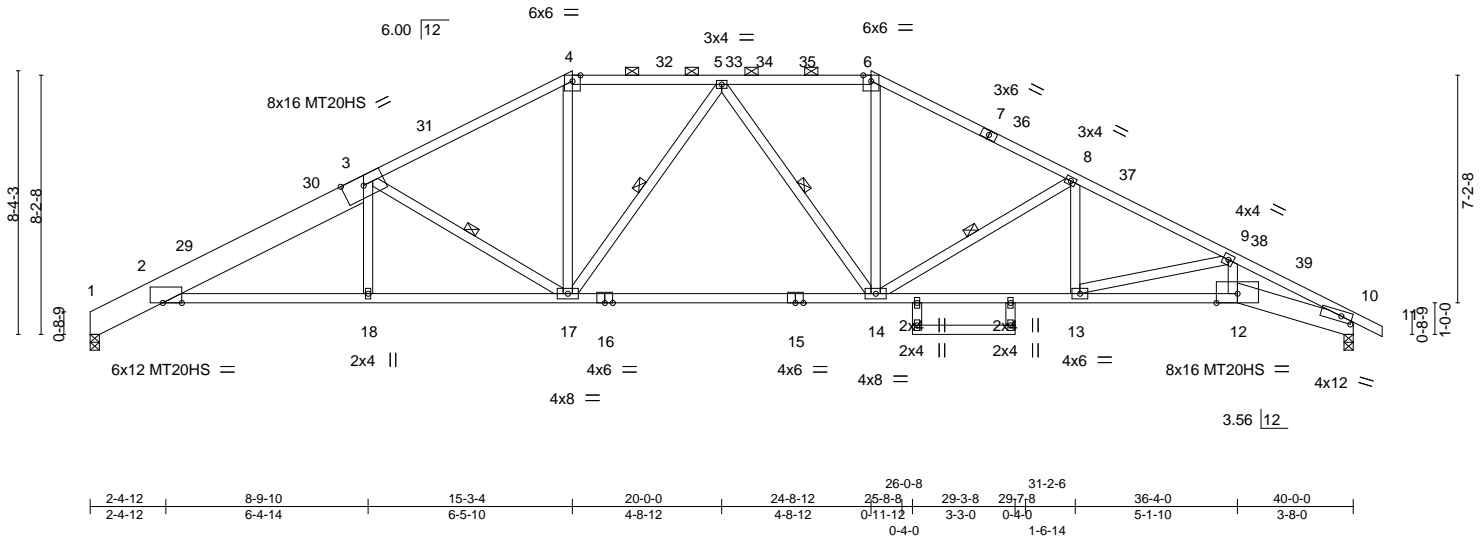


Plate Offsets (X,Y)-- [2:0-7-4,Edge], [10:0-4-3,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL 1.15		TC 0.68	Vert(LL) -0.31	14-17	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL 1.15		BC 0.88	Vert(CT) -0.74	14-17	>650	180	MT20HS	148/108
TCDL 10.0	Rep Stress Incr YES		WB 0.59	Horz(CT) 0.35	10	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL 10.0								Weight: 201 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-3: 2x10 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-6-10 max.): 4-6.
BOT CHORD 2x4 SPF 1650F 1.5E *Except* 10-12: 2x8 SP 2400F 2.0E, 15-16: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-17, 5-17, 5-14, 8-14
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 1=0-3-8, 10=0-3-8
Max Horz 1=-153(LC 14)
Max Uplift 1=-138(LC 16), 10=-173(LC 16)
Max Grav 1=1810(LC 2), 10=1859(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-801/118, 2-3=-3637/427, 3-4=-2860/385, 4-5=-2450/375, 5-6=-2456/379,
6-8=-2860/385, 8-9=-3727/445, 9-10=-5269/553
BOT CHORD 2-18=-286/3322, 17-18=-285/3327, 14-17=-167/2584, 13-14=-291/3301, 12-13=-438/4547,
10-12=-450/4707
WEBS 3-17=-1134/182, 4-17=-61/862, 5-17=-426/62, 5-14=-420/61, 6-14=-57/856,
9-13=-1291/151, 9-12=-39/851, 8-13=-0/468, 8-14=-1101/176

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-10-9, Interior(1) 2-10-9 to 15-3-4, Exterior(2R) 15-3-4 to 19-6-3, Interior(1) 19-6-3 to 24-8-12, Exterior(2R) 24-8-12 to 28-11-11, Interior(1) 28-11-11 to 40-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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) 1, 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 138 lb uplift at joint 1 and 173 lb uplift at joint 10.

Continued on page 2



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574785
2532764	A5	Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:16 2020 Page 2
ID:VPVqvFnP0P0b1j2tZrOqezdKbx-k27VmMZ4tcmA3Vf3InppnhgGIUmlyPG1ZNHdwQyKXfX

- NOTES-**
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 12) 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.
 - 13) 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/5 Woodside	143574786
2532764	A6	Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:18 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-hREFB2bLPD1uJopStCrHt6mZTIR9QM8K0hmj_JyKXfV

2-4-12	9-8-6	17-3-4	22-8-12	25-8-8	29-6-6	29-7-8	36-4-0	40-0-0	40-11-0
2-4-12	7-3-10	7-6-14	5-5-8	2-11-12	3-9-14	0-1-2	6-8-8	3-8-0	0-11-0

Scale = 1:73.0

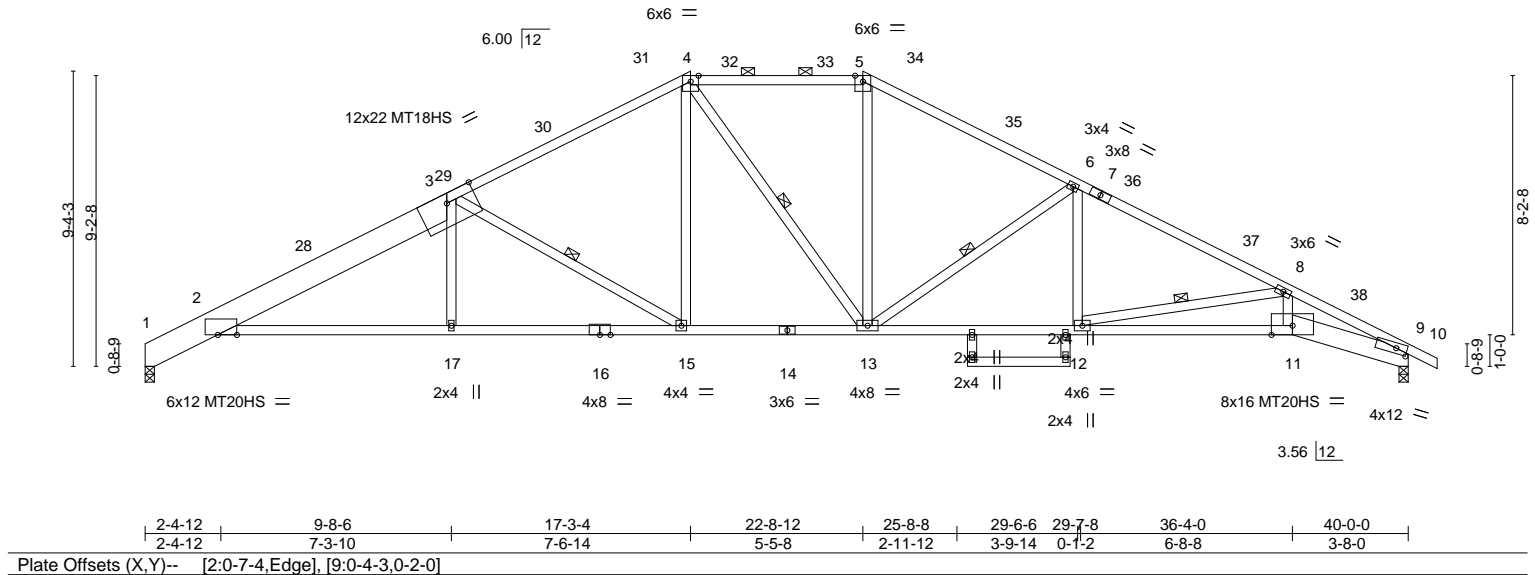


Plate Offsets (X,Y)-- [2:0-7-4,Edge], [9:0-4-3,0-2-0]									
LOADING (psf)		SPACING		CSI		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.89	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.92	Vert(LL)	-0.32 11-12	MT20HS	197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.44	Vert(CT)	-0.61 11-12	MT18HS	148/108
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.37 9		197/144
BCDL	10.0	Code IRC2018/TPI2014						Weight: 204 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-3: 2x10 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-7-1 max.): 4-5.
BOT CHORD	2x4 SPF No.2 *Except* 9-11: 2x8 SP 2400F 2.0E, 11-14: 2x4 SPF 1650F 1.5E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 3-15, 4-13, 6-13, 8-12
OTHERS	2x4 SPF No.2		

REACTIONS.		FORCES.	
(size)	9=0-3-8, 1=0-3-8	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
Max Horz	1=-172(LC 14)	TOP CHORD	1-2=-801/118, 2-3=-3691/417, 3-4=-2685/380, 4-5=-2239/380, 5-6=-2660/383, 6-8=-3643/423, 8-9=-5416/564
Max Uplift	9=-173(LC 16), 1=-138(LC 16)	BOT CHORD	2-17=-269/3361, 15-17=-267/3367, 13-15=-103/2241, 12-13=-254/3202, 11-12=-454/4702, 9-11=-463/4864
Max Grav	9=1859(LC 2), 1=1810(LC 2)	WEBS	3-17=0/312, 3-15=-1270/192, 4-15=-37/744, 5-13=-53/777, 6-13=-1156/174, 8-12=-1577/203, 8-11=-28/883, 6-12=0/511

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-10-9, Interior(1) 2-10-9 to 17-3-4, Exterior(2R) 17-3-4 to 21-6-3, Interior(1) 21-6-3 to 22-8-12, Exterior(2R) 22-8-12 to 26-11-11, Interior(1) 26-11-11 to 40-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 9, 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 173 lb uplift at joint 9 and 138 lb uplift at joint 1.



November 11, 2020

Continued on page 2

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MiTek
 16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574786
2532764	A6	Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:18 2020 Page 2
ID:VPVqvFnP0P0b1j2tZrOqezdKbx-hREFB2bLPD1uJopStCrHt6mZTIR9QM8K0hmj_JyKXfV

NOTES-

- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574787
2532764	A7	HIP	1	1		

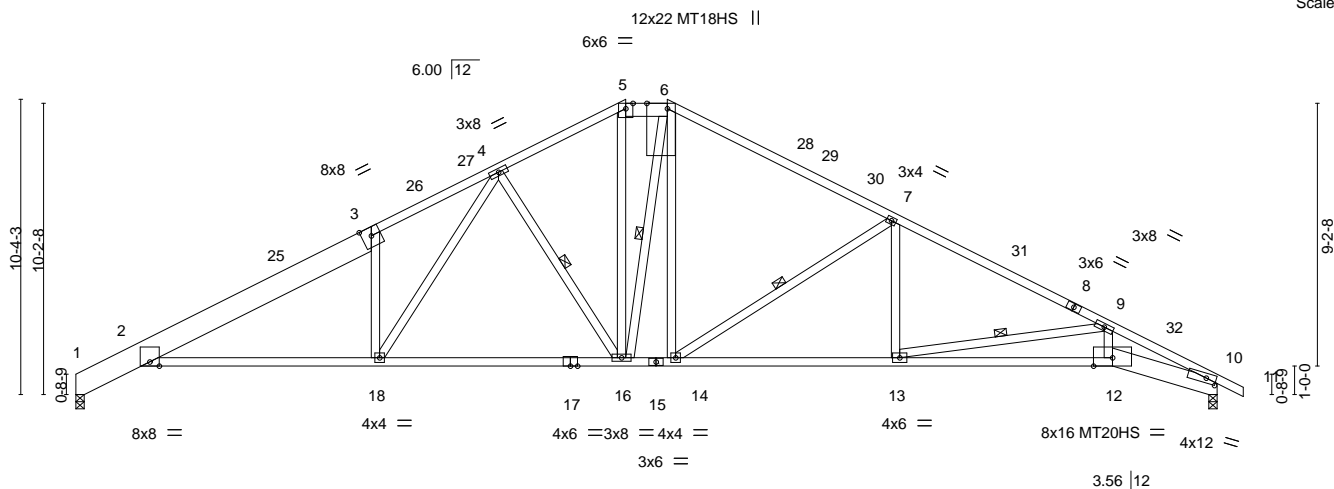
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:21 2020 Page 1

ID:VPVqVFnP0P0b1j2tZrOqezdKbx-50wOp3dDi8PTAGY1YKO_UIO4KVRGditmif?ObdyKXfS

2-4-12	10-6-0	14-9-12	19-3-4	20-8-12	28-8-12	36-4-0	40-0-0	40-11-0
2-4-12	8-1-4	4-3-12	4-5-8	1-5-8	8-0-0	7-7-4	3-8-0	0-11-0

Scale = 1:80.8



2-4-12	10-6-0	19-3-4	20-8-12	28-8-12	29-2-0	36-4-0	40-0-0
2-4-12	8-1-4	8-9-4	1-5-8	8-0-0	0-5-4	7-2-0	3-8-0

Plate Offsets (X,Y)-- [6:0-2-4,Edge], [10:0-4-3,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL 1.15		TC 0.85	Vert(LL) -0.36	12-13	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL 1.15		BC 0.96	Vert(CT) -0.67	12-13	>709	180	MT20HS	148/108
TCDL 10.0	Rep Stress Incr YES		WB 0.50	Horz(CT) 0.39	10	n/a	n/a	MT18HS	197/144
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL 10.0								Weight: 215 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 5-6: 2x6 SPF No.2, 1-3: 2x10 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-7-14 max.): 5-6.
BOT CHORD 2x4 SPF No.2 *Except* 10-12: 2x8 SP 2400F 2.0E, 12-15: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 4-16, 7-14, 9-13, 6-16

REACTIONS. (size) 10=0-3-8, 1=0-3-8
Max Horz 1=191(LC 14)
Max Uplift 10=173(LC 16), 1=138(LC 16)
Max Grav 10=1873(LC 39), 1=1845(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-818/115, 2-3=-3666/366, 3-4=-3771/466, 4-5=-2541/365, 5-6=-2195/349,
6-7=-2642/356, 7-9=-3704/393, 9-10=-5560/538
BOT CHORD 2-18=-207/3312, 16-18=-134/2685, 14-16=-60/2209, 13-14=-220/3266, 12-13=-435/4823,
10-12=-442/4992
WEBS 3-18=-761/175, 4-18=-126/1127, 4-16=-886/168, 5-16=-146/957, 6-14=-68/724,
7-14=-1241/189, 7-13=0/550, 9-13=-1692/218, 9-12=-19/919, 6-16=-317/275

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-10-9, Interior(1) 2-10-9 to 19-3-4, Exterior(2E) 19-3-4 to 20-8-12, Exterior(2R) 20-8-12 to 24-11-11, Interior(1) 24-11-11 to 40-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 10, 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 173 lb uplift at joint 10 and 138 lb uplift at joint 1.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574787
2532764	A7	HIP	1	1	Job Reference (optional)	

- NOTES-**
- 12) 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.
 - 13) 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/5 Woodside	I43574788
2532764	A8	ROOF SPECIAL	1	1		

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

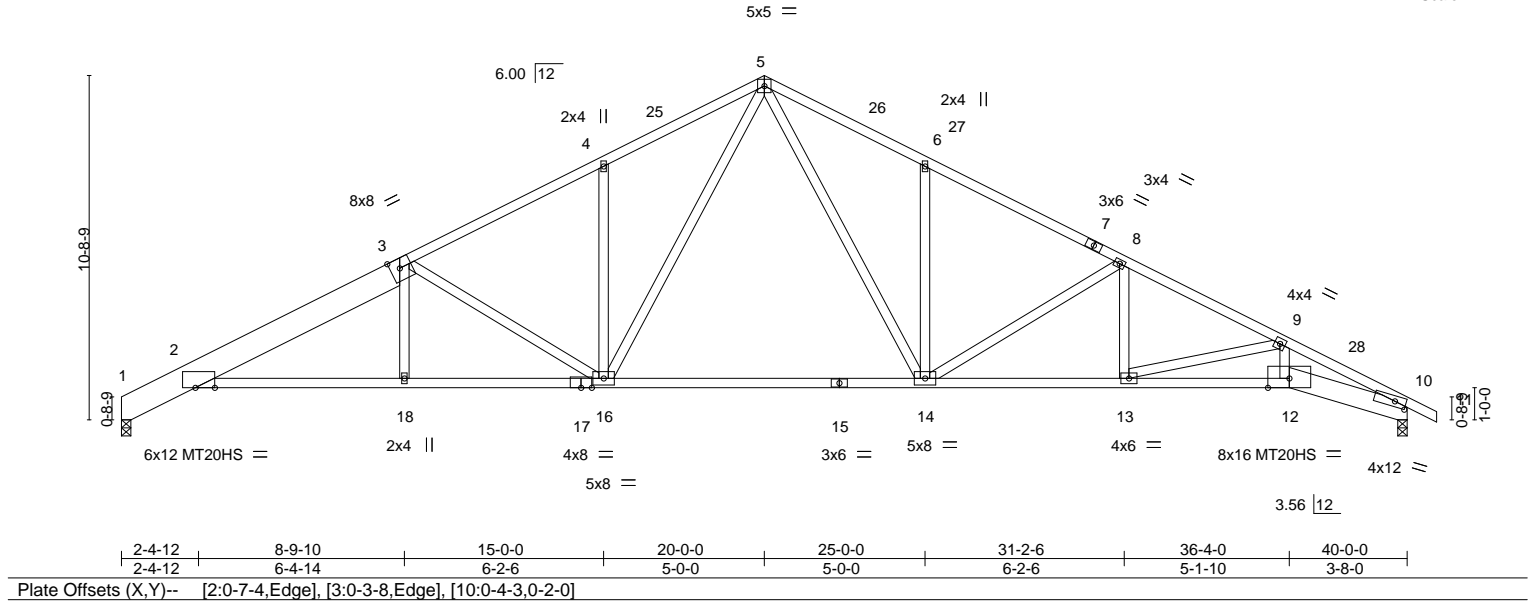
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:22 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-ZCUM0PerTSXKnQ7D61vD1ywKNvoHM2xwxJkx74yKXfR

Job Reference (optional)

2-4-12 8-9-10 15-0-0 20-0-0 25-0-0 31-2-6 36-4-0 40-0-0 40-11-0
2-4-12 6-4-14 6-2-6 5-0-0 5-0-0 6-2-6 5-1-10 3-8-0 0-11-0

Scale = 1:71.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.58	Vert(LL)	-0.33 14-16	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.78 14-16	>613	180	MT20HS	148/108
TCDL 10.0	Rep Stress Incr	YES	WB 0.90	Horz(CT)	0.34 10	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL 10.0								Weight: 201 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-3: 2x10 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except* 10-12: 2x8 SP 2400F 2.0E, 12-15: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	

REACTIONS.	(size) 10=0-3-8, 1=0-3-8
	Max Horz 1=-199(LC 14)
	Max Uplift 10=-173(LC 16), 1=-138(LC 16)
	Max Grav 10=1859(LC 2), 1=1810(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-801/121, 2-3=-3626/409, 3-4=-2864/376, 4-5=-2840/462, 5-6=-2850/461, 6-8=-2867/373, 8-9=-3727/423, 9-10=-5269/525
BOT CHORD	2-18=-262/3309, 16-18=-260/3314, 14-16=-45/1900, 13-14=-261/3301, 12-13=-413/4546, 10-12=-424/4707
WEBS	3-16=-985/162, 4-16=-404/154, 5-16=-178/1205, 5-14=-180/1224, 6-14=-410/155, 8-14=-970/156, 8-13=-4/464, 9-13=-1287/157, 9-12=-33/853

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-10-9, Interior(1) 2-10-9 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 10, 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 173 lb uplift at joint 10 and 138 lb uplift at joint 1.
 - This truss 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574789
2532764	A9	Roof Special	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:24 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-VbcWR5f6?3n21jHcDSyh6N0dWjUkq3eCPdD2CyyKXfP

3-9-12 9-8-0 17-8-0 20-0-0 24-9-12 29-7-8 36-4-0 40-0-0 40-11-0
3-9-12 5-10-4 8-0-0 2-4-0 4-9-12 4-9-12 6-8-8 3-8-0 0-11-0

5x5 ||

Scale = 1:75.4

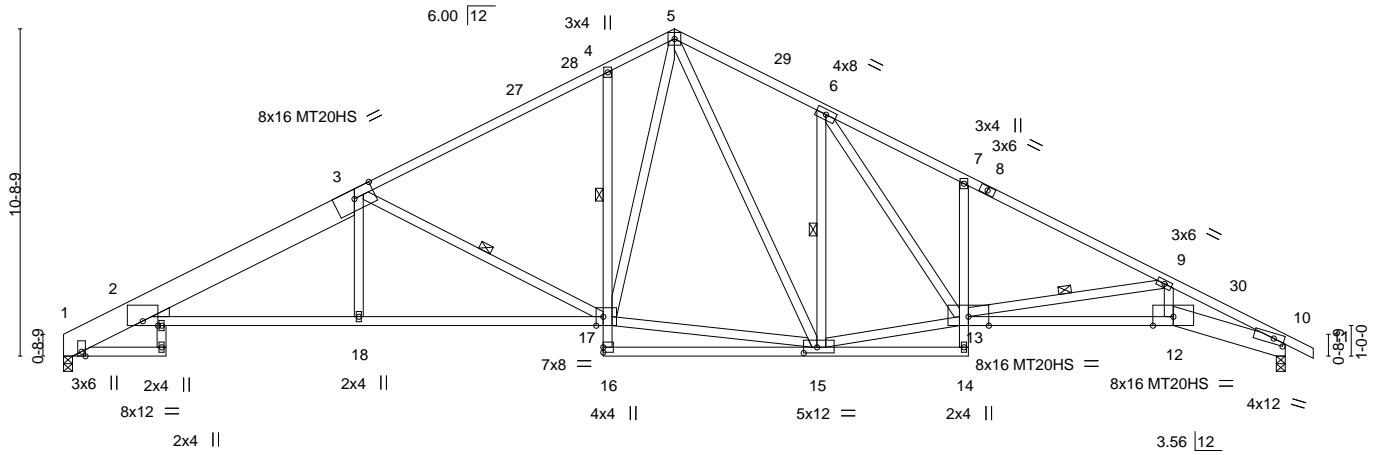


Plate Offsets (X,Y)--	10:0-4-3,0-2-0,	15:0-5-4,0-2-4,	17:0-2-12,Edge
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.73	Vert(LL)	-0.33 12-13	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.64 12-13	>746	180	MT20HS	148/108
TCDL 10.0	Rep Stress Incr	YES	WB 0.50	Horz(CT)	0.36 10	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL 10.0								Weight: 233 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x10 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
12-13: 2x4 SPF 1650F 1.5E, 10-12: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 4-17
WEBS 1 Row at midpt 3-17, 6-15, 9-13

REACTIONS.

(size) 1=0-3-8, 10=0-3-8
Max Horz 1=-199(LC 14)
Max Uplift 1=-138(LC 16), 10=-173(LC 16)
Max Grav 1=1810(LC 2), 10=1859(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-801/121, 2-3=-3561/403, 3-4=-2558/366, 4-5=-2443/434, 5-6=-2444/441,
6-7=-3423/482, 7-9=-3481/403, 9-10=-5368/536
BOT CHORD 2-18=-250/3234, 17-18=-248/3241, 4-17=-401/165, 7-13=-417/140, 12-13=-431/4645,
10-12=-438/4811
WEBS 3-18=0/340, 3-17=-1207/188, 15-17=-21/1735, 5-17=-196/1336, 5-15=-169/771,
6-15=-1176/231, 13-15=-81/2051, 6-13=-184/1540, 9-13=-1620/210, 9-12=-18/897

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-10-9, Interior(1) 2-10-9 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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) 1, 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 138 lb uplift at joint 1 and 173 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.

Continued on page 2



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574789
2532764	A9	Roof Special	1	1	Job Reference (optional)	

NOTES-

11) 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.

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574790
2532764	A10	ROOF SPECIAL	1	1		

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

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ID:VPVqvFnP0P0b1j2tZrI0qezdKbx-dYqa1vPwxc807VAZVY4mmye1FFJbPZS7aseRygyKXfk

Job Reference (optional)

4-6-4	9-8-0	17-8-0	20-0-0	24-7-0	29-2-0	33-5-14	36-4-0	40-0-0	40-11-0
4-6-4	5-1-12	8-0-0	2-4-0	4-7-0	4-7-0	4-3-14	2-10-1	3-8-0	0-11-0

5x5 ||

Scale = 1:75.4

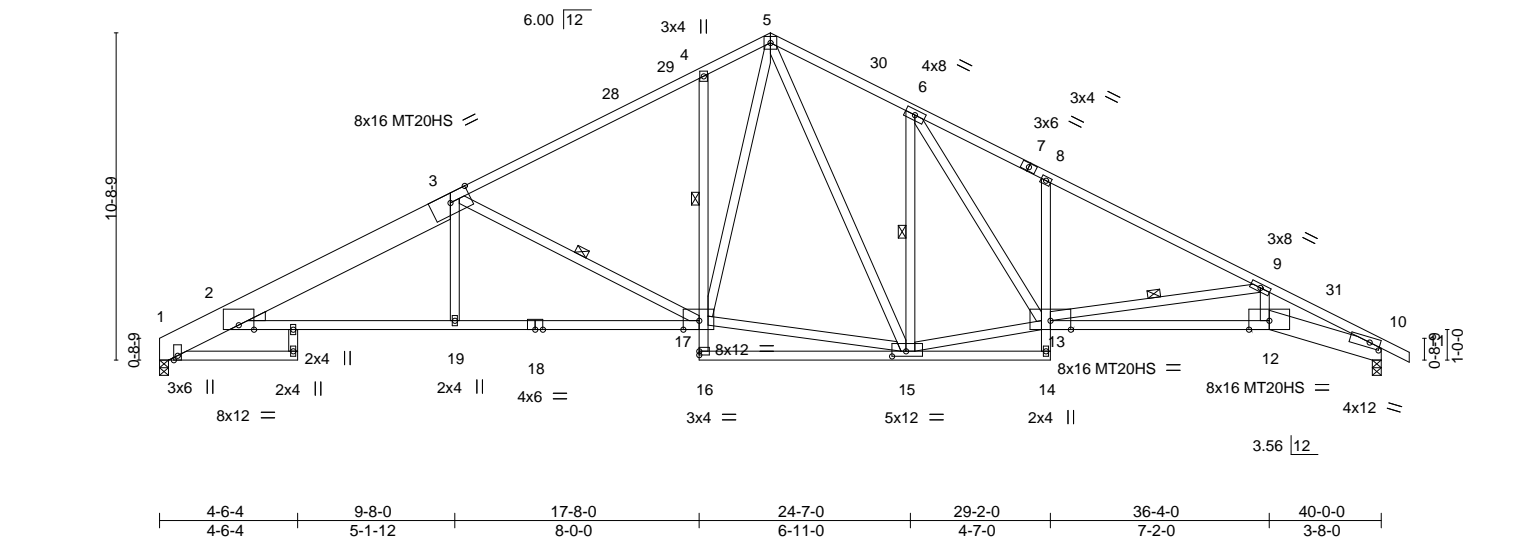


Plate Offsets (X,Y)-- [10:0-4-3,0-2-0], [15:0-5-8,0-2-0], [17:0-6-4,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.34 12-13 >999 240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-0.67 12-13 >712 180	MT20HS	148/108
TCDL	10.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.36 10 n/a n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 235 lb	FT = 20%
BCDL	10.0								

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x10 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
12-13: 2x4 SPF 1650F 1.5E, 10-12: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 4-17
WEBS 1 Row at midpt 3-17, 6-15, 9-13

REACTIONS.

(size) 1=0-3-8, 10=0-3-8
Max Horz 1=199(LC 14)
Max Uplift 1=138(LC 16), 10=173(LC 16)
Max Grav 1=1810(LC 2), 10=1859(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-801/121, 2-3=-3561/403, 3-4=-2558/366, 4-5=-2444/434, 5-6=-2415/437,
6-8=-3360/479, 8-9=-3424/399, 9-10=-5394/539
BOT CHORD 2-19=-250/3234, 17-19=-248/3241, 4-17=-402/166, 8-13=-432/145, 12-13=-436/4672,
10-12=-442/4839
WEBS 3-19=0/339, 3-17=-1207/188, 15-17=-19/1739, 5-17=-197/1346, 5-15=-168/753,
6-15=-1197/228, 13-15=-72/2049, 6-13=-184/1547, 9-13=-1702/223, 9-12=-13/904

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-10-9, Interior(1) 2-10-9 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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) 1, 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 138 lb uplift at joint 1 and 173 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.

Continued on page 2



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574790
2532764	A10	ROOF SPECIAL	1	1	Job Reference (optional)	

NOTES-
11) 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.

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574792
2532764	A12	Roof Special	2	1		

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

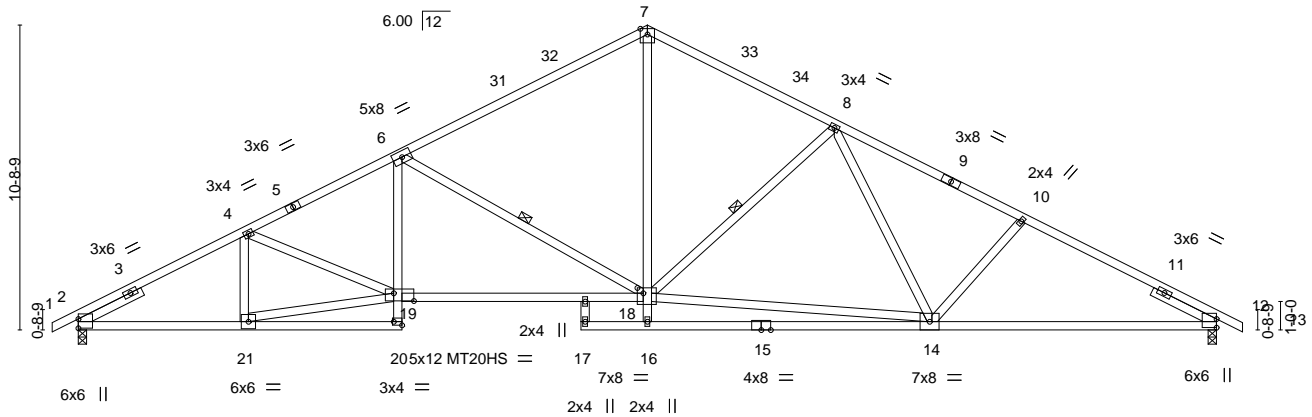
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:07 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-VK45tHSR?reSU6TKkO8iwophlsgOLLKiUTce5RyKXfg

-0-11-0 5-10-0 11-4-8 17-8-0 20-0-0 26-6-13 33-1-11 40-0-0 40-11-0
0-11-0 5-10-0 5-6-8 6-3-8 2-4-0 6-6-13 6-6-13 6-10-5 0-11-0

6x6 =

Scale = 1:81.0



5-10-0 11-4-8 17-8-0 20-0-0 26-6-13 30-0-0 33-1-11 40-0-0
5-10-0 5-6-8 6-3-8 2-4-0 6-6-13 3-5-3 3-1-11 6-10-5

Plate Offsets (X,Y)-- [18:0-2-8,0-2-4], [19:0-8-8,0-3-4], [20:Edge,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.86	Vert(LL)	-0.34 14-16	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 1.00	Vert(CT)	-0.79 14-16	>608	180	MT20HS	148/108
TCDL 10.0	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.21 12	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL 10.0								Weight: 188 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
5-7: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
2-20: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-18, 8-18

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=200(LC 14)
Max Uplift 2=164(LC 16), 12=165(LC 16)
Max Grav 2=1887(LC 2), 12=1885(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3118/332, 4-6=-3405/376, 6-7=-2381/339, 7-8=-2306/344, 8-10=-2904/358,
10-12=-3130/356
BOT CHORD 2-21=-208/2705, 6-19=0/587, 18-19=-193/3062, 12-14=-225/2717
WEBS 4-21=-463/79, 19-21=-152/2603, 4-19=0/334, 6-18=-1232/197, 16-18=0/275,
7-18=-131/1475, 10-14=-330/134, 14-18=-149/2362, 8-18=-690/161, 8-14=0/345

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 164 lb uplift at joint 2 and 165 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss B1	Truss Type Monopitch	Qty 2	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574793
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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0-11-0 5-10-0 5-6-8 6-7-0

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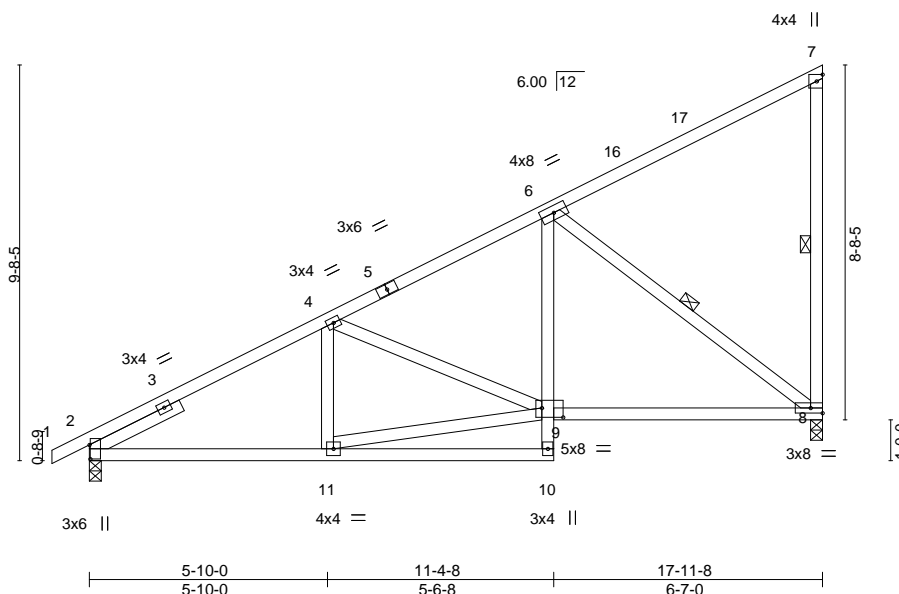


Plate Offsets (X,Y)-- [2:0-4-2,0-0-4], [9:0-6-4,0-2-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	-0.06	8-9	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.13	8-9	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.29	Horz(CT)	0.03	8	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 88 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-8, 6-8

REACTIONS.

(size) 8=0-3-8, 2=0-3-8
Max Horz 2=309(LC 13)
Max Uplift 8=-83(LC 13), 2=-81(LC 16)
Max Grav 8=800(LC 2), 2=867(LC 2)

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

TOP CHORD 2-4=-1107/214, 4-6=-866/196
BOT CHORD 2-11=-394/990, 6-9=-51/453, 8-9=-307/729
WEBS 9-11=-345/948, 4-9=-307/125, 6-8=-897/282

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 17-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 83 lb uplift at joint 8 and 81 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574794
2532764	B2	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:27 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrOqezdKbx-wAHf46i_I_9cuB?AvbVOk0eDTweg1LFf5bSioHyKXfM

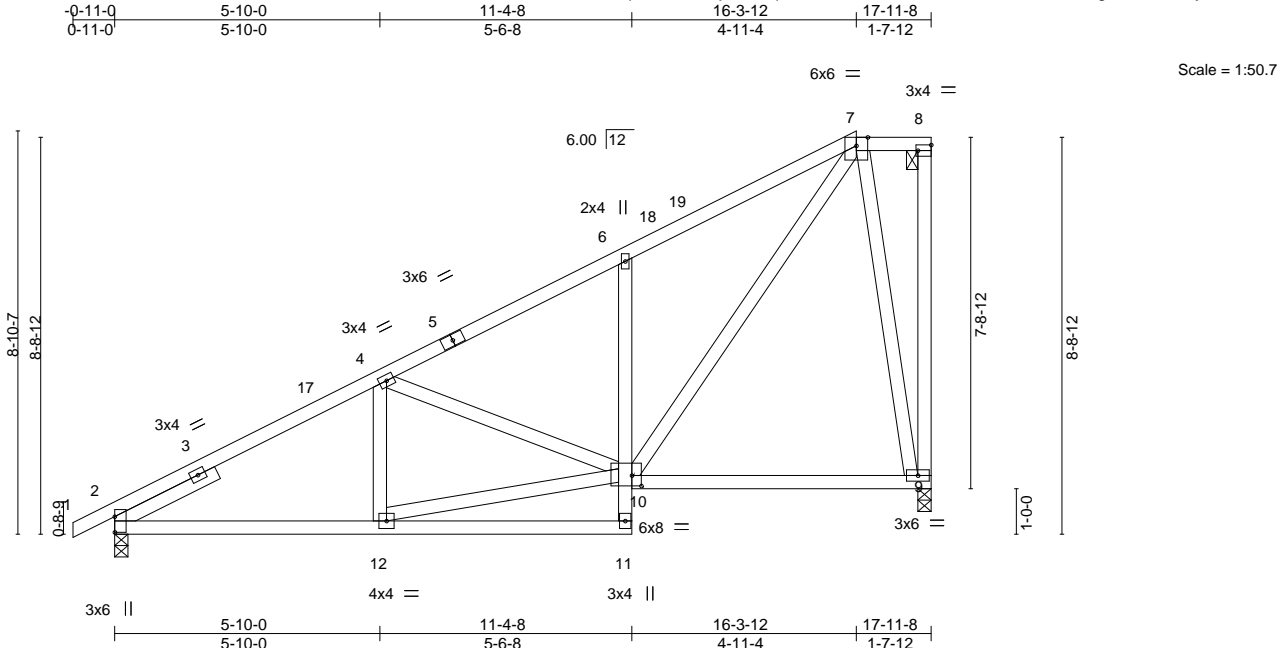


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [8:Edge,0-1-8], [10:0-2-8,0-2-12]									
LOADING (psf)		SPACING		CSI		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.36	in (loc)	l/defl	MT20	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.38	Vert(LL)	-0.06 9-10 >999		197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.83	Vert(CT)	-0.14 9-10 >999		
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.02 9 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 96 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (6-0-0 max.): 7-8.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 2-6-0		

REACTIONS. (size) 9=0-3-8, 2=0-3-8
Max Horz 2=278(LC 13)
Max Uplift 9=82(LC 13), 2=83(LC 16)
Max Grav 9=851(LC 36), 2=867(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1255/154, 4-6=-994/149, 6-7=-1004/231
BOT CHORD 2-12=-297/1087, 6-10=-493/154
WEBS 10-12=-266/1054, 4-10=-322/91, 7-10=-201/1128, 7-9=-832/321

- 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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 16-3-12, Exterior(2E) 16-3-12 to 17-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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 82 lb uplift at joint 9 and 83 lb uplift at joint 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum 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.



November 11,2020

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574795
2532764	B3	Half Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:28 2020 Page 1

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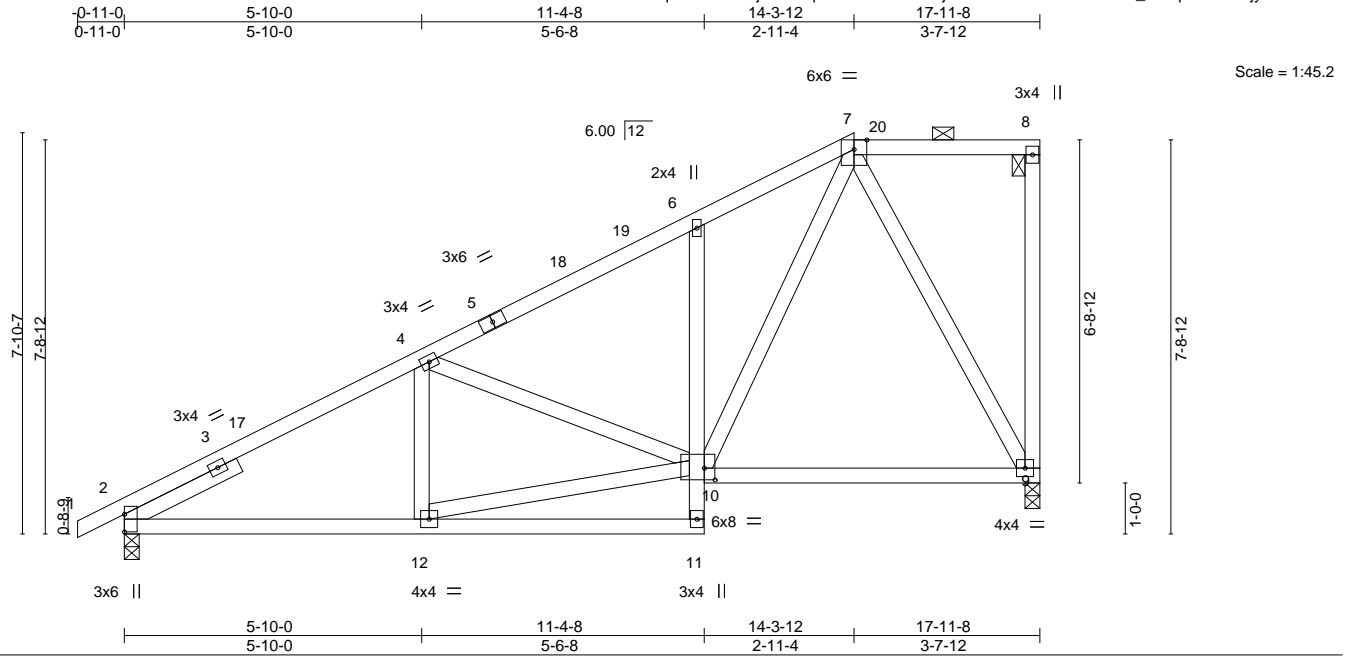


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [10:0-2-8,0-2-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	-0.06	9-10	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.35	Vert(CT)	-0.13	9-10	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.70	Horz(CT)	0.02	9	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 92 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 9=0-3-8, 2=0-3-8
Max Horz 2=243(LC 13)
Max Uplift 9=83(LC 13), 2=85(LC 16)
Max Grav 9=800(LC 2), 2=898(LC 36)

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

TOP CHORD 2-4=-1312/158, 4-6=-972/152, 6-7=-927/208
BOT CHORD 2-12=-303/1127, 6-10=-384/131, 9-10=-172/360
WEBS 10-12=-280/1110, 4-10=-382/94, 7-10=-163/953, 7-9=-739/240

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 14-3-12, Exterior(2E) 14-3-12 to 17-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 83 lb uplift at joint 9 and 85 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum 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.



November 11, 2020

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss B4	Truss Type Half Hip	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574796
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:30 2020 Page 1
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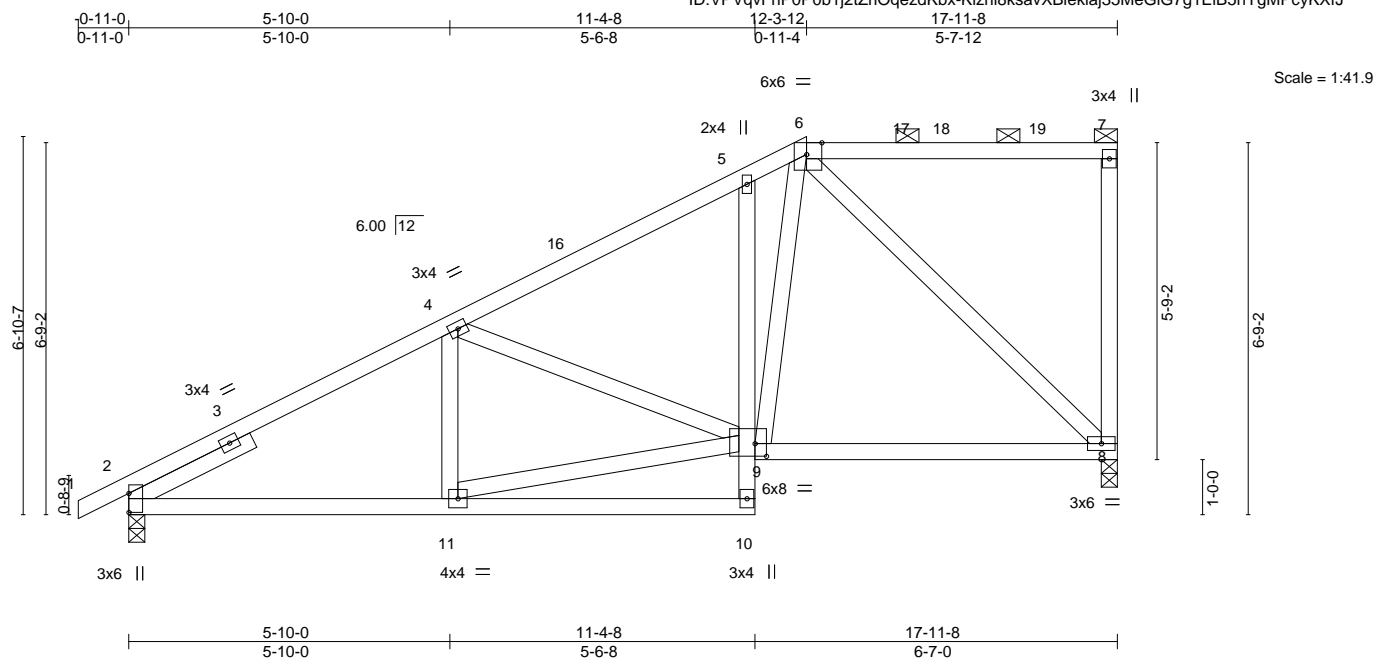


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [6:0-3-5,Edge], [9:0-2-8,0-2-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.45	Vert(LL)	-0.06	8-9	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.13	8-9	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.82	Horz(CT)	0.03	8	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 90 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=209(LC 13)
Max Uplift 8=85(LC 13), 2=87(LC 16)
Max Grav 8=800(LC 2), 2=939(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1164/166, 4-5=-908/161, 5-6=-817/183
BOT CHORD 2-11=-302/1110, 5-9=-285/97, 8-9=-209/573
WEBS 9-11=-284/1099, 4-9=-429/93, 6-9=-121/789, 6-8=-774/219

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 12-3-12, Exterior(2R) 12-3-12 to 16-6-11, Interior(1) 16-6-11 to 17-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 85 lb uplift at joint 8 and 87 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574797
2532764	B5	Half Hip	1	1		
Job Reference (optional)						

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:31 2020 Page 1
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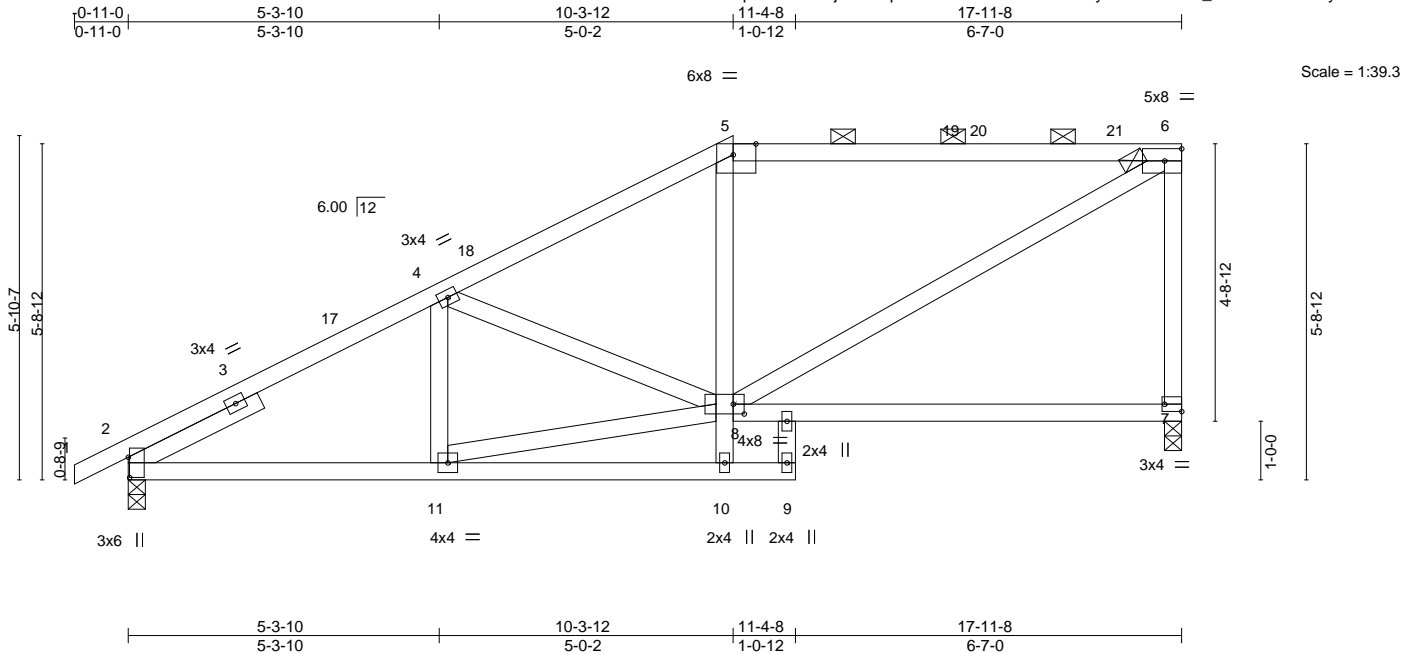


Plate Offsets (X,Y)-- [2:0-4-2,0-0-4], [5:0-4-10,Edge], [7:Edge,0-1-8], [8:0-2-4,0-2-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.14 7-8 >999	240	MT20 197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.28 7-8 >755	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.02 7 n/a	n/a	
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS					
BCDL	10.0								Weight: 83 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 5-6: 2x4 SPF 1650F 1.5E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-0-8 max.): 5-6.
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	

REACTIONS. (size) 7=0-3-8, 2=0-3-8
Max Horz 2=173(LC 13)
Max Uplift 7=64(LC 16), 2=85(LC 16)
Max Grav 7=813(LC 2), 2=956(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1200/165, 4-5=-997/177, 5-6=-846/184, 6-7=-725/205
BOT CHORD 2-11=-294/1073
WEBS 6-8=-228/905, 8-11=-297/1059, 4-8=-343/64

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 10-3-12, Exterior(2R) 10-3-12 to 14-6-11, Interior(1) 14-6-11 to 17-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 64 lb uplift at joint 7 and 85 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss C1	Truss Type Common	Qty 3	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574798
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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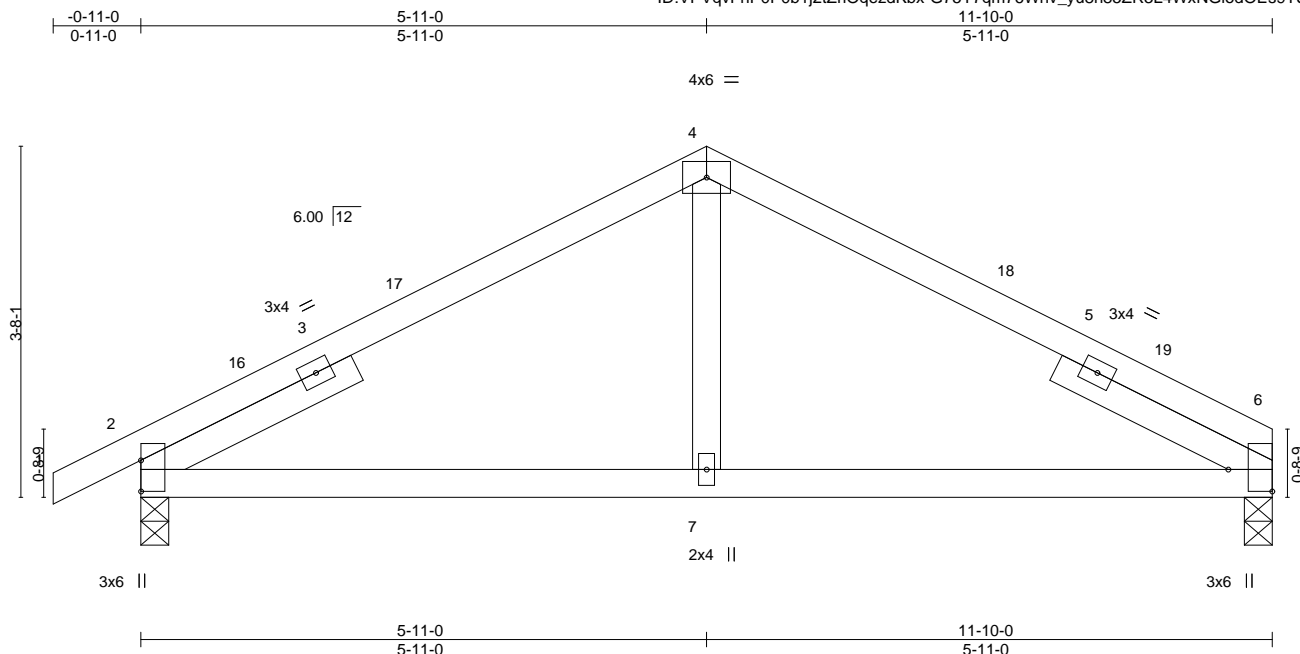


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [6:Edge,0-5-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.04	7-10	>999	240	MT20
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.06	7-10	>999	180	197/144
TCDL 10.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.02	2	n/a	n/a	
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						
BCDL 10.0									
								Weight: 39 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, Right 2x4 SPF No.2 2-6-0

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

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=63(LC 15)
Max Uplift 6=42(LC 16), 2=72(LC 16)
Max Grav 6=530(LC 2), 2=599(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-608/236, 4-6=-607/240
BOT CHORD 2-7=-128/535, 6-7=-128/535

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 5-11-0, Exterior(2R) 5-11-0 to 8-11-0, Interior(1) 8-11-0 to 11-10-0 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
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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 42 lb uplift at joint 6 and 72 lb uplift at joint 2.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574799
2532764	C2	Hip Girder	1	1		

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

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ID:VPVqvFnP0P0b1j2tZrOqezdKbx-himglso?PRAUrpCjNGeG3izYp8Gtv60qwQO74qyKXfE

Job Reference (optional)

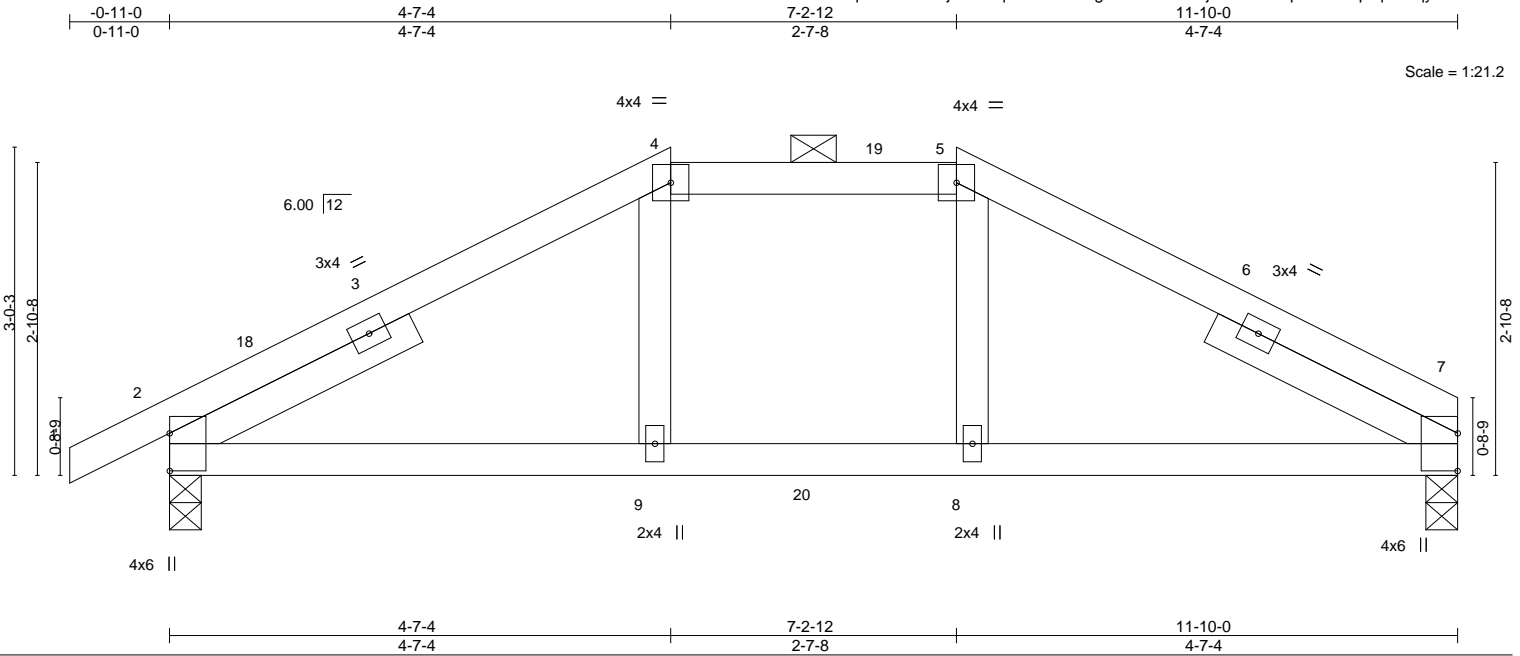


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [7:Edge,0-0-0]		2-0-0		2-7-8		4-7-4	
LOADING (psf)		SPACING-		CSI.		DEFL.	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.07
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.81	Vert(CT)	-0.10
TCDL	10.0	Rep Stress Incr	NO	WB	0.14	Horz(CT)	0.04
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS			
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						Weight: 41 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, Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-1 oc purlins, except 2-0-0 oc purlins (4-10-11 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 2=0-3-8
Max Horz 2=49(LC 57)
Max Uplift 7=139(LC 12), 2=168(LC 12)
Max Grav 7=1048(LC 35), 2=1135(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1627/263, 4-5=-1381/245, 5-7=-1625/261
BOT CHORD 2-9=-187/1412, 8-9=-183/1381, 7-8=-187/1412
WEBS 4-9=-72/578, 5-8=-72/575

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 139 lb uplift at joint 7 and 168 lb uplift at joint 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) 344 lb down and 84 lb up at 4-7-4, and 297 lb down and 68 lb up at 5-11-0, and 344 lb down and 84 lb up at 7-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



November 11, 2020

Continued on page 2

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574799
2532764	C2	Hip Girder	1	1	Job Reference (optional)	

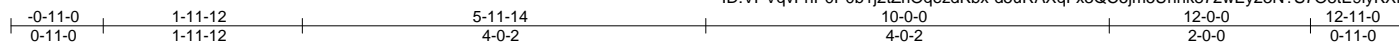
LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 4-5=-61, 5-7=-51, 10-14=-20
Concentrated Loads (lb)
Vert: 9=-344 8=-344 20=-297

Job 2532764	Truss D1	Truss Type Hip Girder	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	143574800
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:VPVqvFnP0P0b1j2tZrLOqezdKbx-d5uRAXqFx3QC5jm5Uhhk872wEy23N?S7O8tE9iyKXfC



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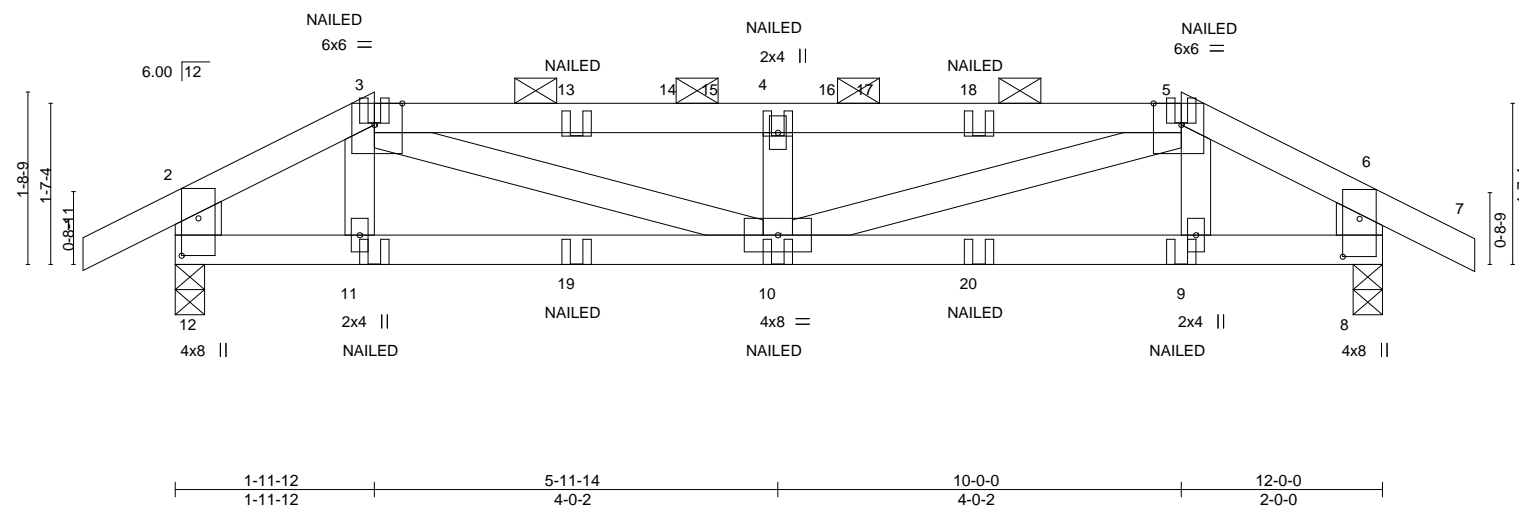


Plate Offsets (X,Y)-- [3:0-3-5,Edge], [5:0-3-5,Edge], [8:0-4-8,0-2-0], [12:0-4-7,0-2-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.06	10	>999
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.09	10	>999
TCDL	10.0	Rep Stress Incr	NO	WB	0.21	Horz(CT)	0.01	8	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS					
BCDL	10.0								
								PLATES	GRIP
								MT20	197/144
								Weight: 45 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-12,6-8: 2x6 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 (4-7-15 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=-44(LC 10)
Max Uplift 12=-80(LC 12), 8=-80(LC 12)
Max Grav 12=601(LC 2), 8=601(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-701/54, 3-4=-1404/116, 4-5=-1404/116, 5-6=-708/54, 2-12=-487/75, 6-8=-489/75
BOT CHORD 11-12=-30/588, 10-11=-34/594, 9-10=-27/600, 8-9=-23/594
WEBS 3-10=-73/853, 4-10=-437/82, 5-10=-73/846

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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 80 lb uplift at joint 12 and 80 lb uplift at joint 8.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15



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Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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/5 Woodside	I43574800
2532764	D1	Hip Girder	1	1	Job Reference (optional)	

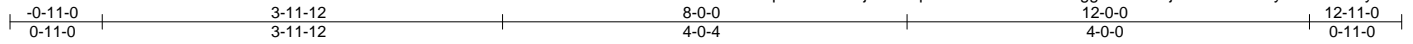
LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-2=-51, 2-3=-51, 3-5=-61, 5-6=-51, 6-7=-51, 8-12=-20
Concentrated Loads (lb)
Vert: 11=-5(F) 10=0(F) 9=-5(F) 19=0(F) 20=0(F)

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574801
2532764	D2	Hip	1	1		

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

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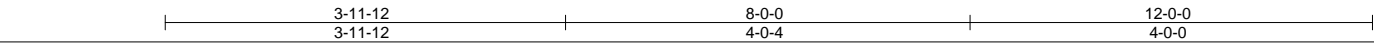
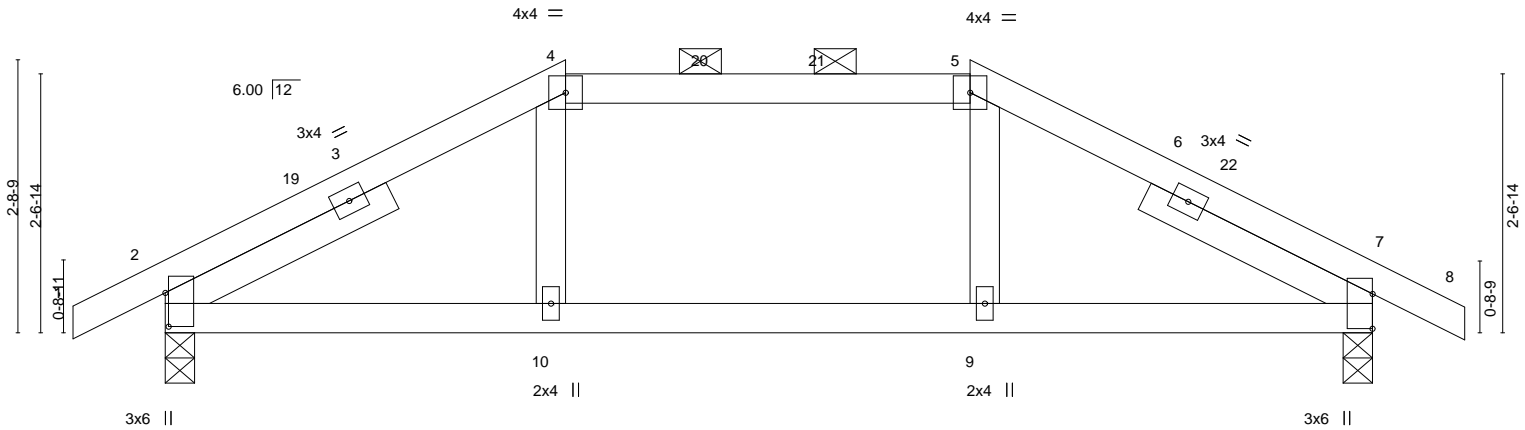


Plate Offsets (X,Y)-- [2:0-4-0,0-0-6], [7:Edge,0-0-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.04	9	>999
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.06	9	>999
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.02	7	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS					
BCDL	10.0								
								PLATES	GRIP
								MT20	197/144
								Weight: 42 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, Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-45(LC 14)
Max Uplift 2=-72(LC 16), 7=-72(LC 16)
Max Grav 2=608(LC 39), 7=608(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-673/232, 4-5=-628/231, 5-7=-672/231
BOT CHORD 2-10=-123/633, 9-10=-124/628, 7-9=-122/632

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-11-12, Exterior(2E) 3-11-12 to 8-0-0, Exterior(2R) 8-0-0 to 12-0-0, Interior(1) 12-0-0 to 12-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 72 lb uplift at joint 2 and 72 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss D3	Truss Type Common	Qty 3	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574802
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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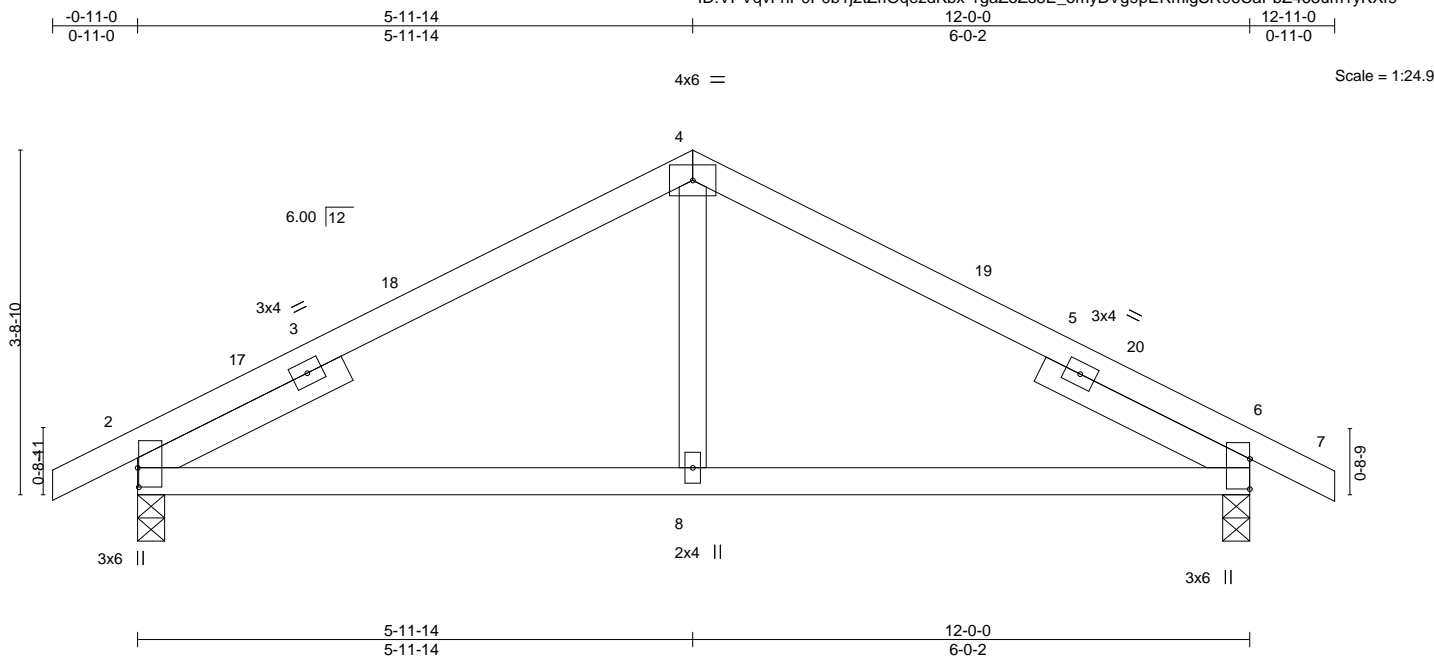


Plate Offsets (X,Y)-- [2:0-2-8,0-0-2], [6:Edge,0-0-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	-0.04	8-15	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.06	8-15	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.02	2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 41 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, Right 2x4 SPF No.2 2-6-0

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-66(LC 14)
Max Uplift 2=-72(LC 16), 6=-72(LC 16)
Max Grav 2=604(LC 2), 6=604(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-609/235, 4-6=-608/235
BOT CHORD 2-8=-93/536, 6-8=-93/536

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 5-11-14, Exterior(2R) 5-11-14 to 8-11-14, Interior(1) 8-11-14 to 12-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 72 lb uplift at joint 2 and 72 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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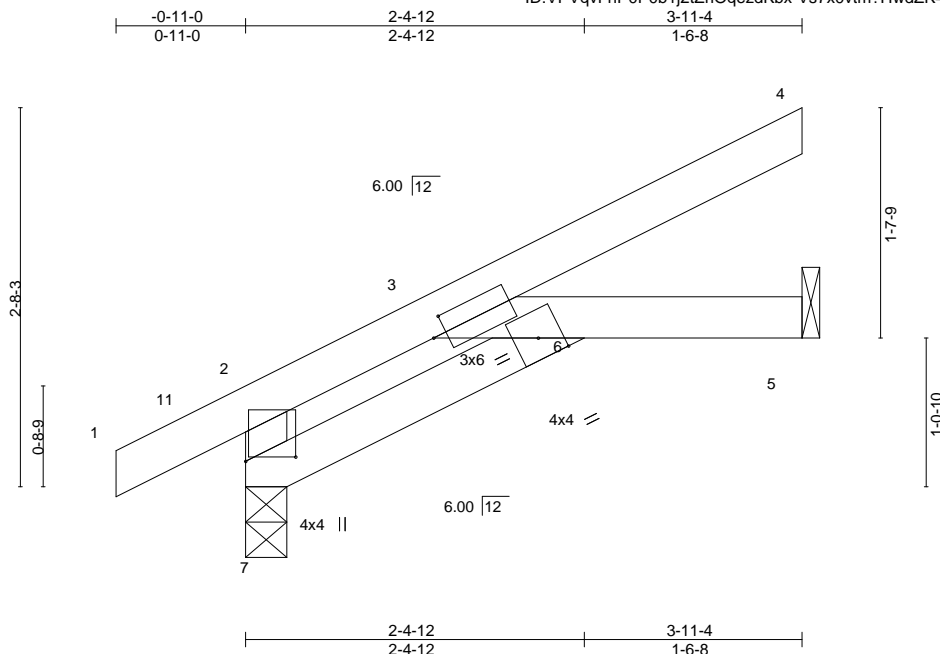
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA1	Truss Type Jack-Closed	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574803
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:41 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-Vs7x0vtm?HwdZK4tjXlgizDemZNoJsCjJmrRITYkXf8



Scale = 1:16.3

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.31	Vert(LL)	0.04	6	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.06	6	>794	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.03	5	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 13 lb	FT = 20%
BCDL 10.0										

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

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=90(LC 16)
Max Uplift 7=23(LC 16), 5=58(LC 16)
Max Grav 7=264(LC 2), 5=171(LC 2)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 1-10-15, Interior(1) 1-10-15 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 7 and 58 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.



November 11, 2020

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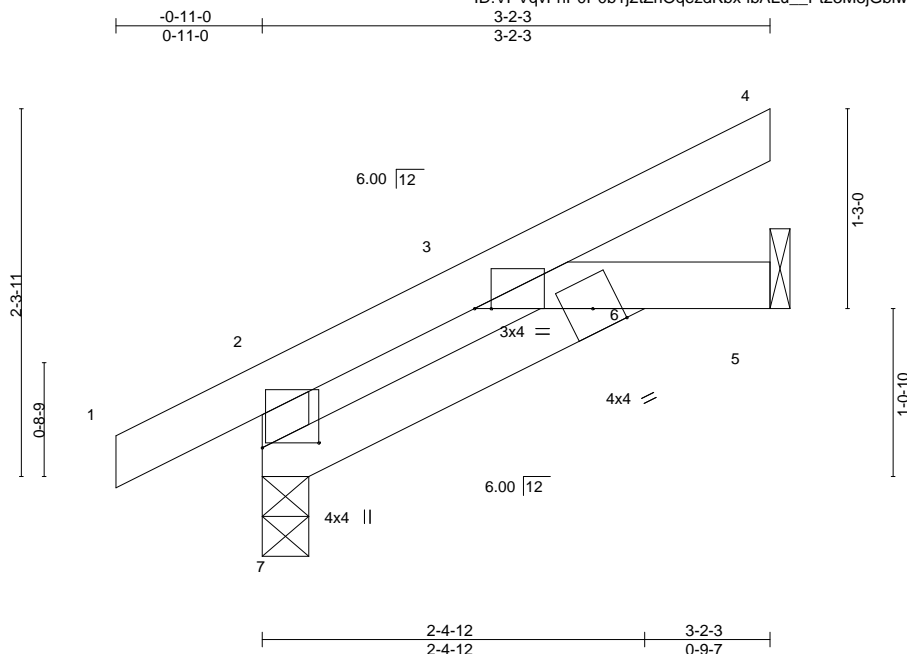
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA2	Truss Type Jack-Closed	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574804
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:VPVqvFnP0P0b1j2tZrOqezdKbx-lbAlu_Pt23M8jGblwQnAs5CGBWlwxU1NgWQ6SyKXf?



Scale = 1:14.4

Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [3:0-1-4,Edge], [7:0-0-14,0-1-12], [7:0-0-6,0-4-4]

LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.13	Vert(LL)	-0.01	10	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.28	Vert(CT)	-0.02	10	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.01	5	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MP							
BCDL 10.0	Code IRC2018/TPI2014							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 3-2-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=Mechanical
Max Horz 7=74(LC 16)
Max Uplift 7=23(LC 16), 5=42(LC 16)
Max Grav 7=249(LC 21), 5=146(LC 21)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 1-10-15, Interior(1) 1-10-15 to 3-2-3 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 7 and 42 lb uplift at joint 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.



November 11, 2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA3	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574805
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:51 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrOqezdKbx-Dnkj6K_1eMBCmtroJdx0i4dJfbp0fOBBCJGzfuykXf_

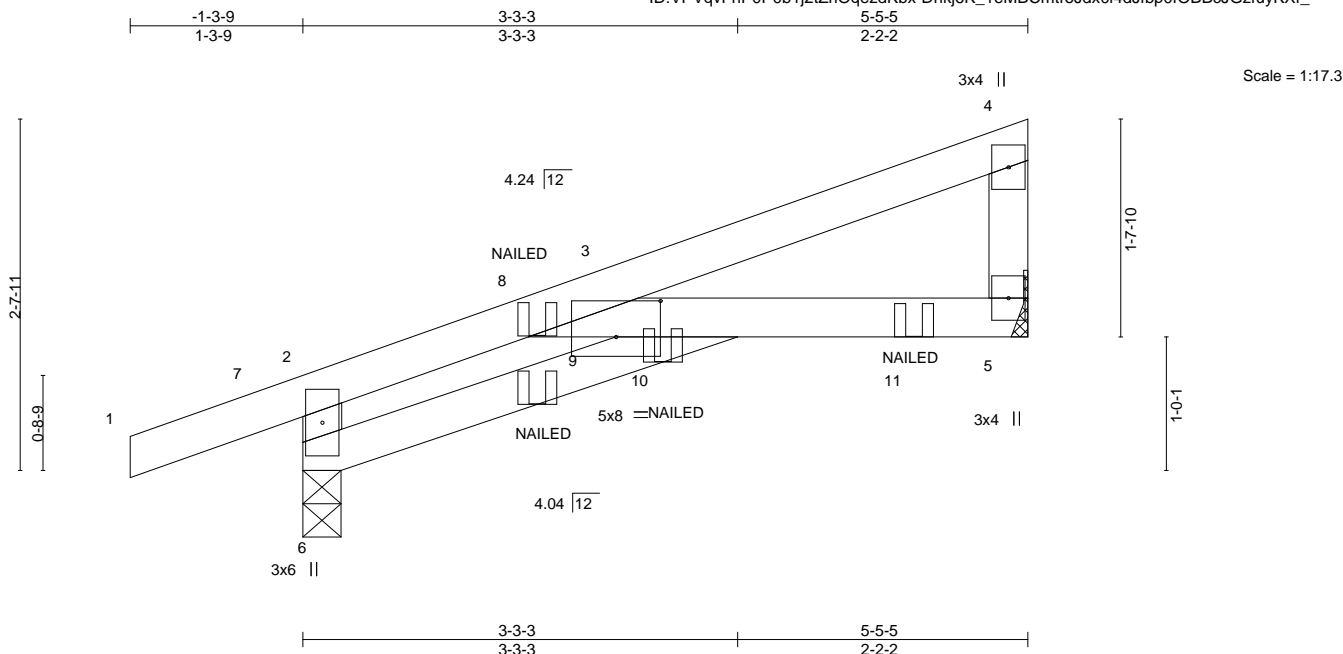


Plate Offsets (X,Y)-- [3:0-4-0,0-3-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.41	Vert(LL)	-0.07	3-5	>922	240	MT20
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.47	Vert(CT)	-0.11	3-5	>570	180	197/144
TCDL 10.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.07	5	n/a	n/a	
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MR						
BCDL 10.0									
								Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 6=0-3-7, 5=Mechanical
Max Horz 6=72(LC 9)
Max Uplift 6=87(LC 12), 5=78(LC 12)
Max Grav 6=381(LC 2), 5=361(LC 17)

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

TOP CHORD 2-6=-360/100, 2-3=-264/64

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 6 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 87 lb uplift at joint 6 and 78 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-51, 2-3=-51, 3-4=-51, 3-6=-20, 3-5=-20
Concentrated Loads (lb)
Vert: 9=1(B) 10=-39(F) 11=-125(B)



November 11, 2020

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

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



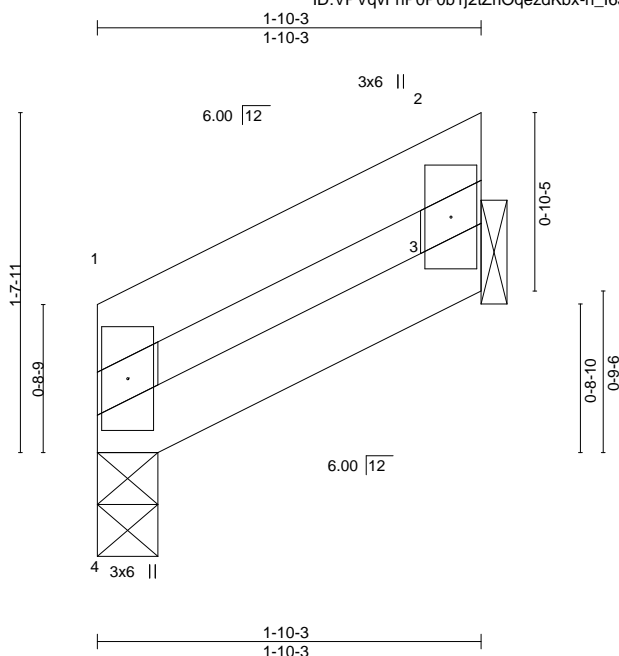
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574806
2532764	JA4	Monopitch	1	1	Job Reference (optional)	

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

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Scale = 1:11.1

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.03	in (loc)	l/defl	L/d			
Snow (Pt/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.02	Vert(LL)	-0.00 4 >999	240	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	WB	0.00	Vert(CT)	-0.00 4 >999	180			
BCLL	0.0	Rep Stress Incr	YES	Matrix-MR		Horz(CT)	-0.00 3 n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 6 lb	FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=0-3-8, 3=Mechanical
Max Horz 4=33(LC 13)
Max Uplift 3=16(LC 13)
Max Grav 4=70(LC 2), 3=73(LC 27)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 16 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11,2020

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA5	Truss Type Half Hip Girder	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574807
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:53 2020 Page 1
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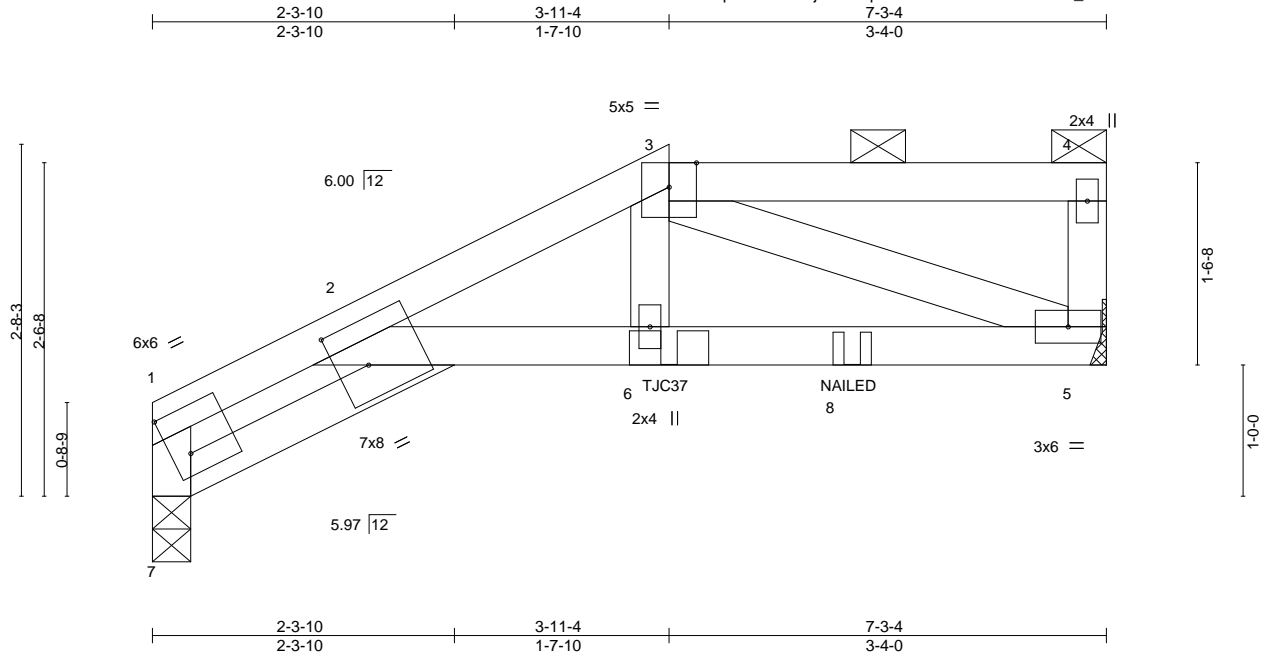


Plate Offsets (X, Y)-- [1:0-1-15,0-0-0], [1:0-1-11,0-4-1], [2:0-2-14,0-4-0], [7:0-0-14,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.74	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.88	Vert(LL) -0.09 2-6 >971 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.24	Vert(CT) -0.14 2-6 >588 180		
BCLL 0.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.12 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 25 lb	FT = 20%

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

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

REACTIONS. (size) 5=Mechanical, 7=0-3-8
Max Horz 7=63(LC 9)
Max Uplift 5=132(LC 9), 7=82(LC 12)
Max Grav 5=598(LC 30), 7=529(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-7=-484/100, 1-2=-456/102, 2-3=-1180/264
BOT CHORD 2-6=-257/1074, 5-6=-245/1025
WEBS 3-6=-134/618, 3-5=-1041/238

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 132 lb uplift at joint 5 and 82 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie TJC37 (6 nail 90-150) or equivalent at 3-11-4 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
- Fill all nail holes where hanger is in contact with lumber.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



November 11, 2020

LOAD CASE(S)

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574807
2532764	JA5	Half Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-51, 2-3=-51, 3-4=-61, 2-7=-20, 2-5=-20

Concentrated Loads (lb)

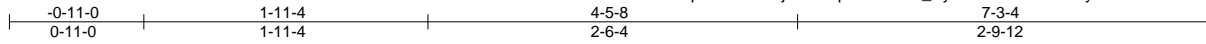
Vert: 6=-333(B) 8=-146(B)

Job 2532764	Truss JA6	Truss Type Half Hip Girder	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574808
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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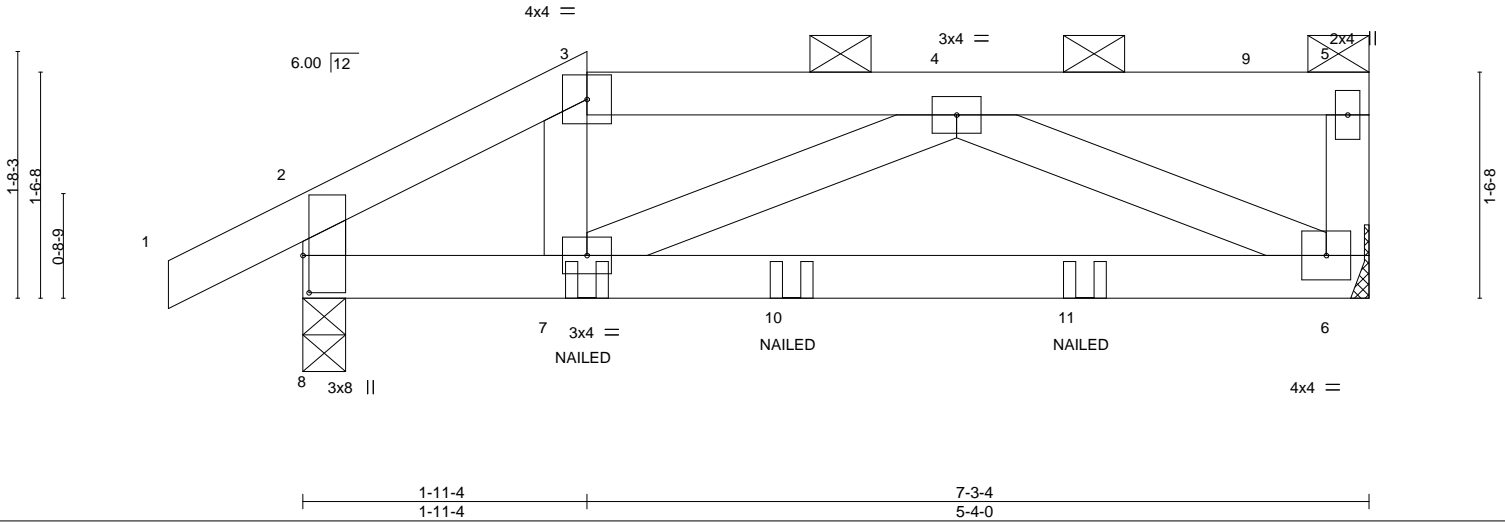


Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [8:0-3-1,0-0-8], [8:0-0-0,0-1-12]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	0.05	6-7	>999
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.07	6-7	>999
TCDL	10.0	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.01	6	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS					
BCDL	10.0								
								PLATES	GRIP
								MT20	197/144
								Weight: 27 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 8=0-3-8
Max Horz 8=51(LC 11)
Max Uplift 6=122(LC 9), 8=146(LC 12)
Max Grav 6=424(LC 31), 8=474(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-551/200, 3-4=-436/165, 2-8=-432/159
BOT CHORD 7-8=-190/456, 6-7=-172/544
WEBS 4-6=-528/150

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 122 lb uplift at joint 6 and 146 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



November 11, 2020

Continued on page 2

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574808
2532764	JA6	Half Hip Girder	1	1	Job Reference (optional)	

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

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LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-2=-51, 2-3=-51, 3-5=-61, 6-8=-20
Concentrated Loads (lb)
Vert: 7=-70(F) 10=-40(F) 11=-40(F)

Job 2532764	Truss JA7	Truss Type Jack-Closed	Qty 7	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574809
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:56 2020 Page 1
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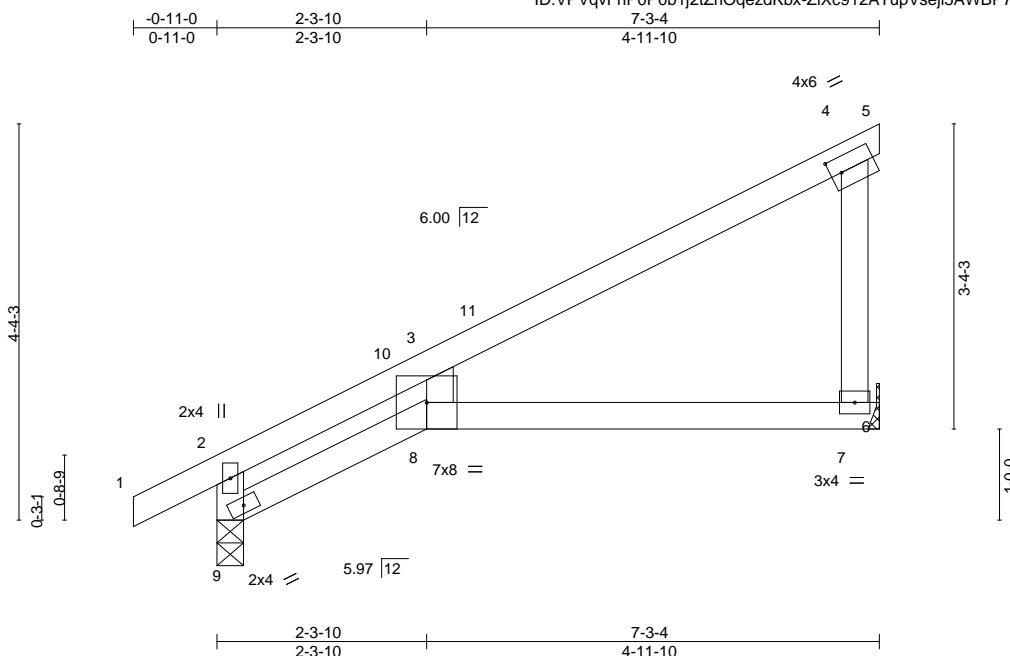


Plate Offsets (X,Y)-- [3:0-1-12,0-0-14], [4:0-1-7,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	0.12	8	>684	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.44	Vert(CT)	-0.19	7-8	>440	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.09	7	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 23 lb	FT = 20%

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

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

REACTIONS. (size) 7=Mechanical, 9=0-3-8
Max Horz 9=131(LC 13)
Max Uplift 7=-38(LC 13), 9=-50(LC 16)
Max Grav 7=354(LC 21), 9=388(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-329/123

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 7-3-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 7 and 50 lb uplift at joint 9.
- 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.
- 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.



November 11, 2020

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



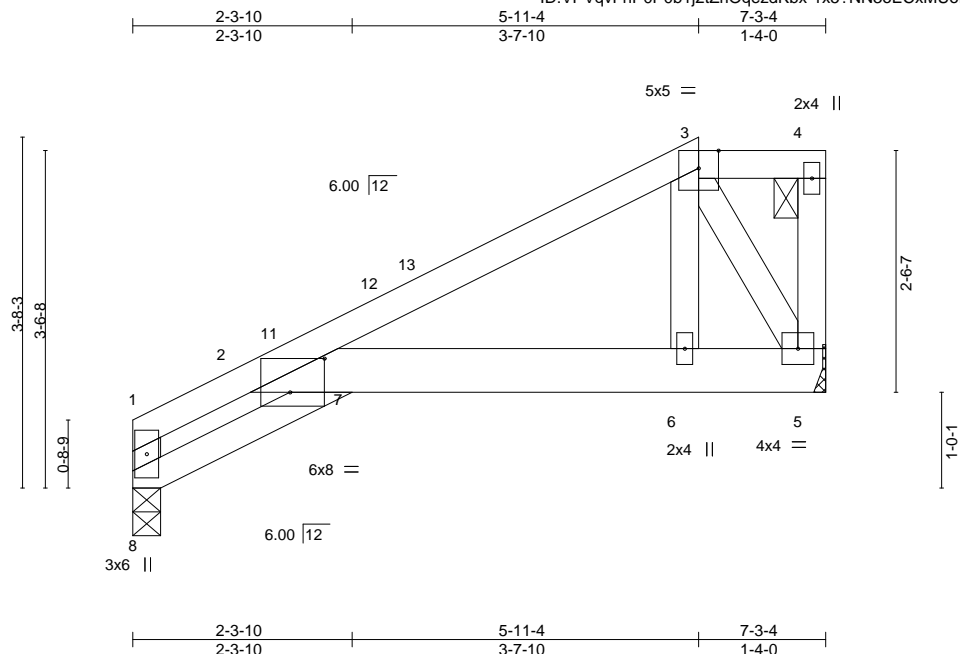
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574810
2532764	JA8	Half Hip	1	1	Job Reference (optional)	

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

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ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-1x5?NN3oECxMUolxfu2QyLJc0sD34A3_FjlrYyKXeu



Scale: 1/2"=1'

Plate Offsets (X,Y)-- [2:0-5-8,0-2-12], [7:0-4-5,0-4-4], [7:0-3-15,0-0-0]															
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES		GRIP	
TCLL (roof) 25.0		Plate Grip DOL		1.15		TC 0.57		Vert(LL)		-0.06 7 >999		240		MT20 197/144	
Snow (Pf/Pg) 20.4/20.0		Lumber DOL		1.15		BC 0.48		Vert(CT)		-0.09 7 >899		180			
TCDL 10.0		Rep Stress Incr		YES		WB 0.10		Horz(CT)		0.05 5 n/a		n/a			
BCLL 0.0		Code IRC2018/TPI2014				Matrix-AS									
BCDL 10.0															
												Weight: 30 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-5: 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 5=Mechanical
Max Horz 8=97(LC 13)
Max Uplift 8=-20(LC 16), 5=-36(LC 13)
Max Grav 8=369(LC 35), 5=314(LC 2)

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

TOP CHORD 1-8=-347/170, 2-3=-365/111
BOT CHORD 2-7=0/259, 6-7=-174/259
WEBS 3-5=-495/290, 3-6=-185/392

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 5-11-4, Exterior(2E) 5-11-4 to 7-1-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 8 and 36 lb uplift at joint 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA9	Truss Type Jack-Closed	Qty 3	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574811
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:VPVqvFnP0P0b1j2tZrIQezdKbx-W8fNaj4Q_W3D6yt8DbZfUYQOvQFeoXhDDvSrO_ykXet



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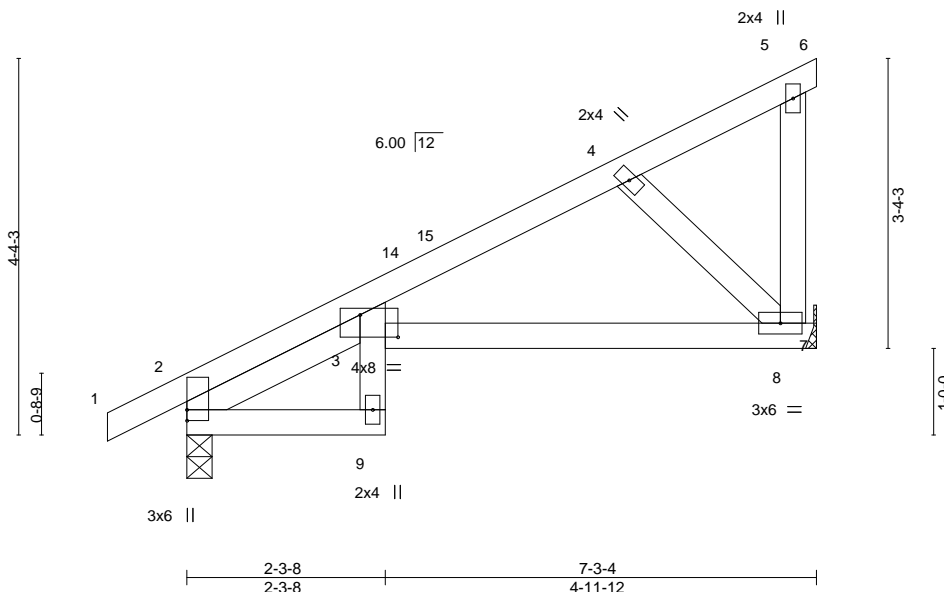


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [3:0-5-4,0-3-1]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.86	Vert(LL)	0.16	9	>536	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.27	Vert(CT)	-0.24	9	>348	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.19	8	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 29 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 2-3-6

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

REACTIONS. (size) 8=Mechanical, 2=0-3-8
Max Horz 2=122(LC 13)
Max Uplift 8=36(LC 13), 2=46(LC 16)
Max Grav 8=359(LC 21), 2=383(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-11=617/342, 3-4=331/117
BOT CHORD 3-8=287/348
WEBS 4-8=472/346

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-12, Interior(1) 2-1-12 to 7-3-4 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 8 and 46 lb uplift at joint 2.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA10	Truss Type Half Hip Girder	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574812
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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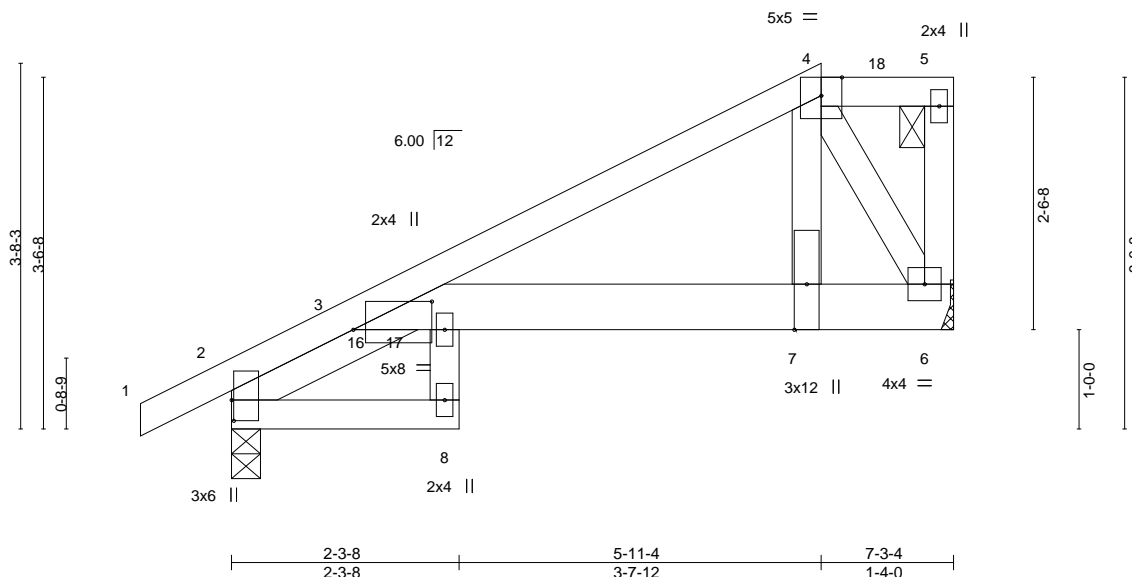


Plate Offsets (X,Y)-- [2:0-2-8,0-0-4], [3:0-9-8,0-3-7]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.05	8	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.48	Vert(CT)	-0.10	8	>856	180		
TCDL 10.0	Rep Stress Incr	NO	WB 0.11	Horz(CT)	0.04	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 34 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-6: 2x6 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-11-15

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and
2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=96(LC 13)
Max Uplift 6=32(LC 13), 2=43(LC 16)
Max Grav 6=322(LC 2), 2=478(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-10=-866/335, 3-4=-356/105
BOT CHORD 3-7=-174/278
WEBS 4-7=-198/445, 4-6=-528/290

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 5-11-4, Exterior(2E) 5-11-4 to 7-1-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 32 lb uplift at joint 6 and 43 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum 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.



November 11, 2020

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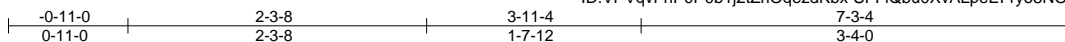


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA11	Truss Type Half Hip Girder	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574813
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:43 2020 Page 1
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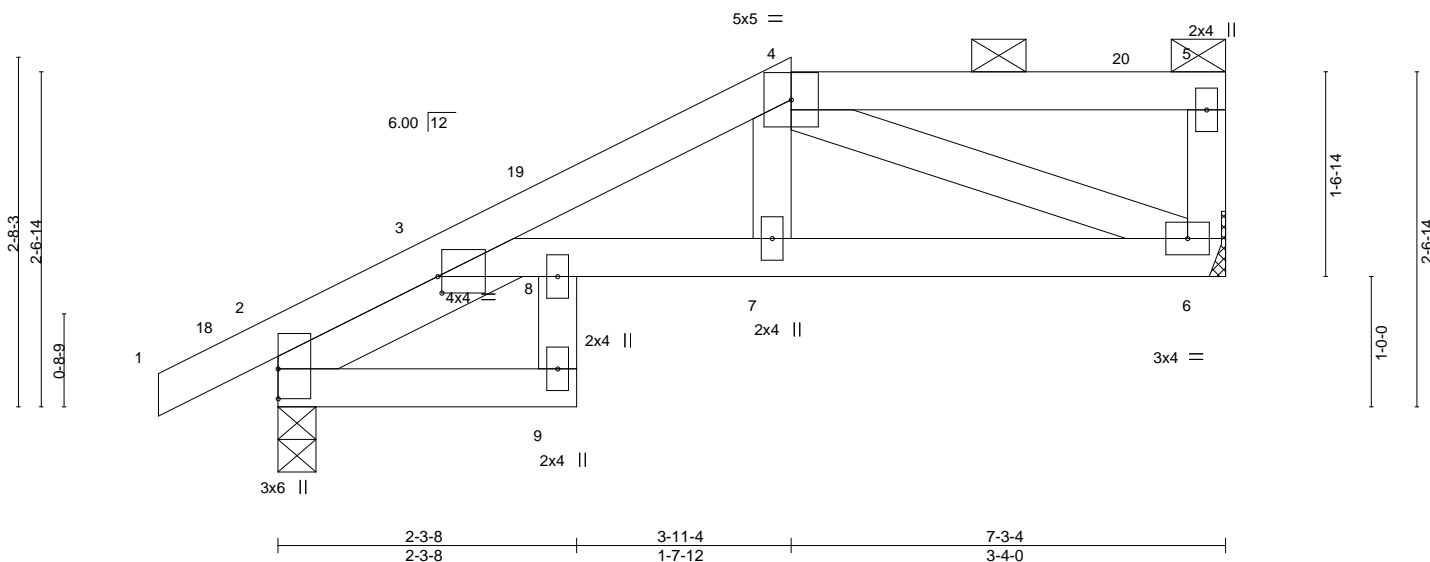


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [3:0-0-6,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	-0.03	16	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.06	16	>999	180		
TCDL 10.0	Rep Stress Incr	NO	WB 0.11	Horz(CT)	0.03	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 29 lb	FT = 20%
BCDL 10.0										

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-11-15

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=63(LC 13)
Max Uplift 6=-35(LC 13), 2=-52(LC 16)
Max Grav 6=318(LC 35), 2=427(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-11=-638/375, 3-4=-504/233
BOT CHORD 3-8=-468/278, 7-8=-278/468, 6-7=-273/451
WEBS 4-6=-488/280

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-11-4, Exterior(2E) 3-11-4 to 7-1-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 35 lb uplift at joint 6 and 52 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum 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.



November 11, 2020

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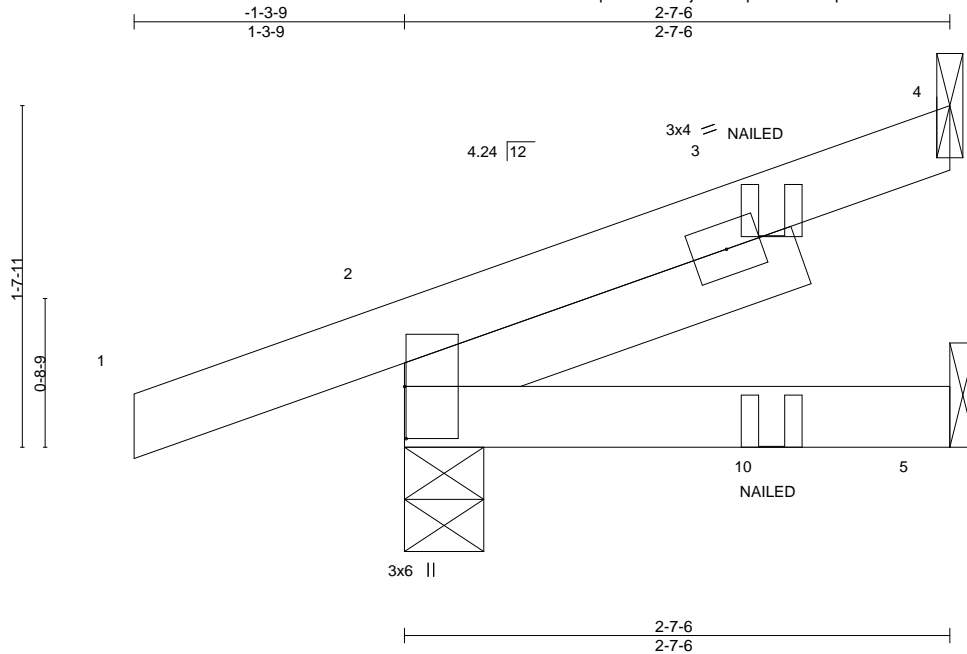
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA12	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574814
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:44 2020 Page 1

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Scale = 1:11.0

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.01	5-8	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.02	5-8	>999	180		
TCDL 10.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MP							
BCDL 10.0									Weight: 10 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-4-9, 5=Mechanical
Max Horz 2=56(LC 12)
Max Uplift 2=58(LC 12), 5=38(LC 12)
Max Grav 2=235(LC 17), 5=98(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-198/338

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 58 lb uplift at joint 2 and 38 lb uplift at joint 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
Vert: 1-4=-51, 5-6=-20
- Concentrated Loads (lb)
Vert: 10=1(F)



November 11, 2020

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

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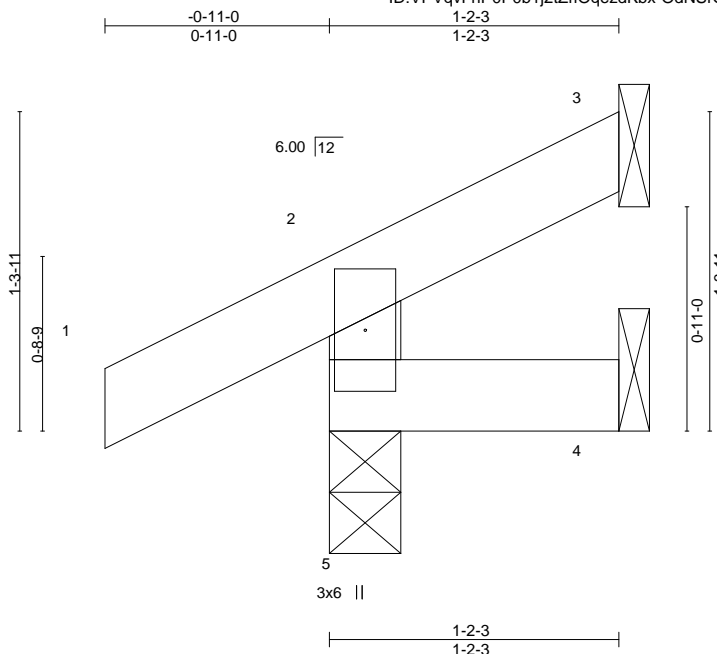
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA13	Truss Type Jack-Open	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574815
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:45 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrI0qezdKbx-OdNSrGwH2WQ32yNeyNqcTpNMNAtbFgilEOpfREyKXf4



Scale = 1:9.4

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00 5 >999 240	MT20		197/144	
Snow (Pt/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00 5 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00 3 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MR							
BCDL	10.0										

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 1-2-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=48(LC 16)
Max Uplift 5=35(LC 16), 3=9(LC 20), 4=1(LC 13)
Max Grav 5=159(LC 2), 3=11(LC 28), 4=16(LC 7)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 35 lb uplift at joint 5, 9 lb uplift at joint 3 and 1 lb uplift at joint 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.



November 11, 2020

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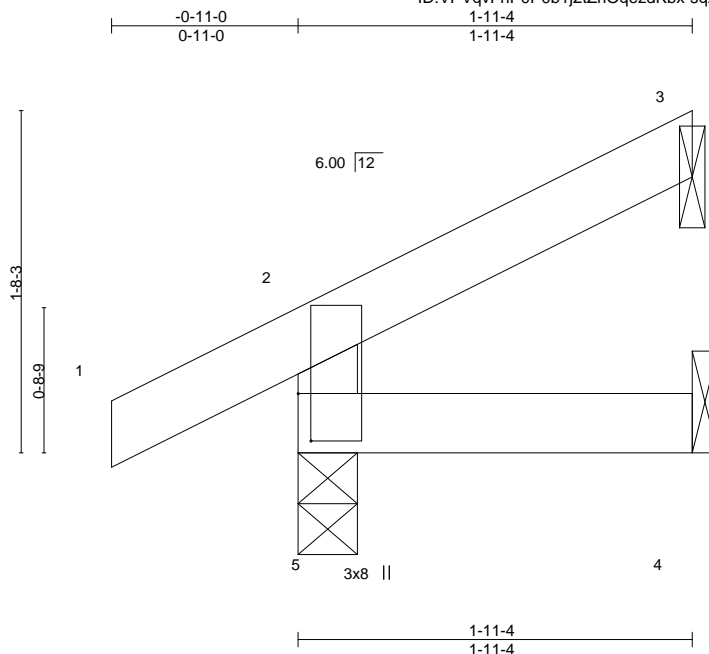


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA14	Truss Type Jack-Closed	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574816
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:46 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-sqxq3cxvpqYwg6yqW4Lr?0wVwaBN_7xSS2YCzhyKXf3



Scale = 1:11.3

Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [5:0-2-13,0-0-12], [5:0-0-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 0.0/20.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) 0.01 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 4-5 >999 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.00 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 4=Mechanical
Max Horz 5=78(LC 16)
Max Uplift 5=-75(LC 16), 4=-53(LC 16)
Max Grav 5=182(LC 21), 4=60(LC 21)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=0.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 75 lb uplift at joint 5 and 53 lb uplift at joint 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.



November 11, 2020

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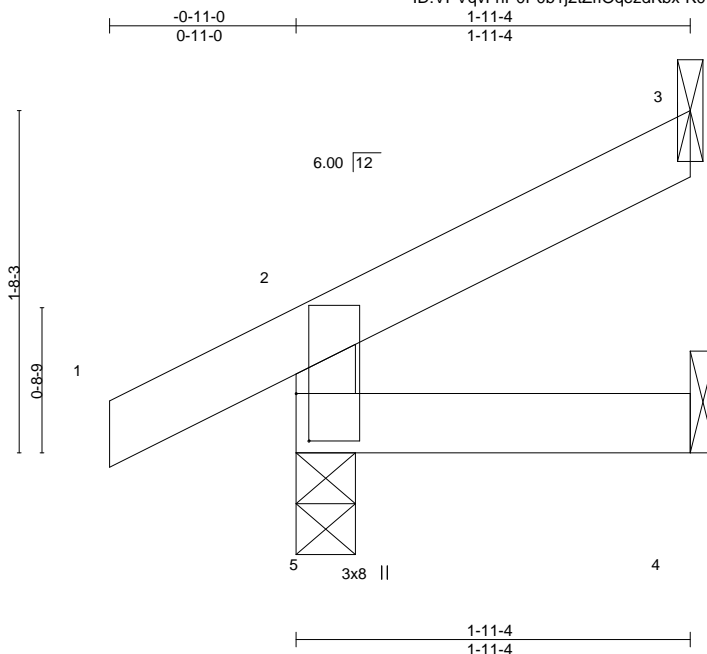


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA15	Truss Type Jack-Closed	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574817
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:47 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrOqezdKbx-K0VDGyxXa7gnHFX04ns4YETgg_WcjaBbhilmW7yKXf2



Scale = 1:11.3

Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [5:0-2-13,0-0-12], [5:0-0-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.22	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 0.0/20.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) 0.01 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 4-5 >999 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.00 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 5=0-3-8, 4=Mechanical
Max Horz 5=78(LC 16)
Max Uplift 5=-75(LC 16), 4=-53(LC 16)
Max Grav 5=182(LC 21), 4=60(LC 21)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=0.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 75 lb uplift at joint 5 and 53 lb uplift at joint 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

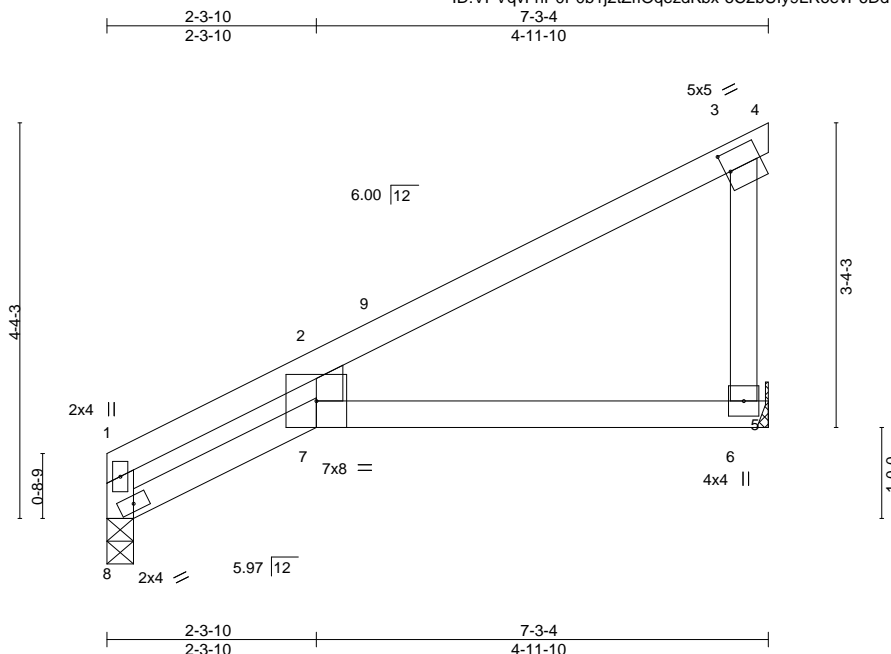
Job 2532764	Truss JA16	Truss Type Jack-Closed	Qty 3	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574818
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:48 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-oC2bUly9LRoevP6DdVNJ4R?mDOnPS15lwM1J2ZyKXf1



Scale = 1:25.3

Plate Offsets (X,Y)-- [2:0-1-12,0-0-14], [3:0-0-11,0-2-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.55	Vert(LL)	0.12	7	>675	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.19	6-7	>423	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.09	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 22 lb	FT = 20%

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

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

REACTIONS. (size) 6=Mechanical, 8=0-3-8
Max Horz 8=123(LC 13)
Max Uplift 6=-38(LC 13), 8=-16(LC 16)
Max Grav 6=358(LC 20), 8=308(LC 2)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-3-4 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 6 and 16 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



November 11, 2020

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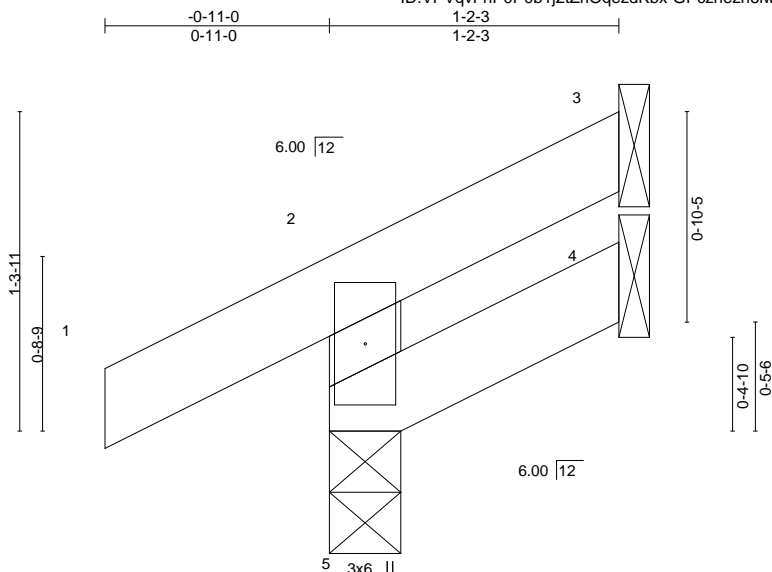
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JA17	Truss Type Jack-Open	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574819
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:49 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrOqezdKbx-GPczhezn6lwVXZhPBCuYdfY2MoEYBUhu90nsa0yKXf0



Scale = 1:9.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.08	Vert(LL)	0.00	5	>999	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	0.00	5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR						
BCDL 10.0	Code IRC2018/TPI2014						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 1-2-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=49(LC 16)
Max Uplift 5=33(LC 16), 3=-9(LC 20), 4=-2(LC 13)
Max Grav 5=159(LC 2), 3=11(LC 28), 4=16(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 33 lb uplift at joint 5, 9 lb uplift at joint 3 and 2 lb uplift at joint 4.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574820
2532764	JC1	Jack-Open	2	1		
Job Reference (optional)						

Builders FirstSource (Valley Center),

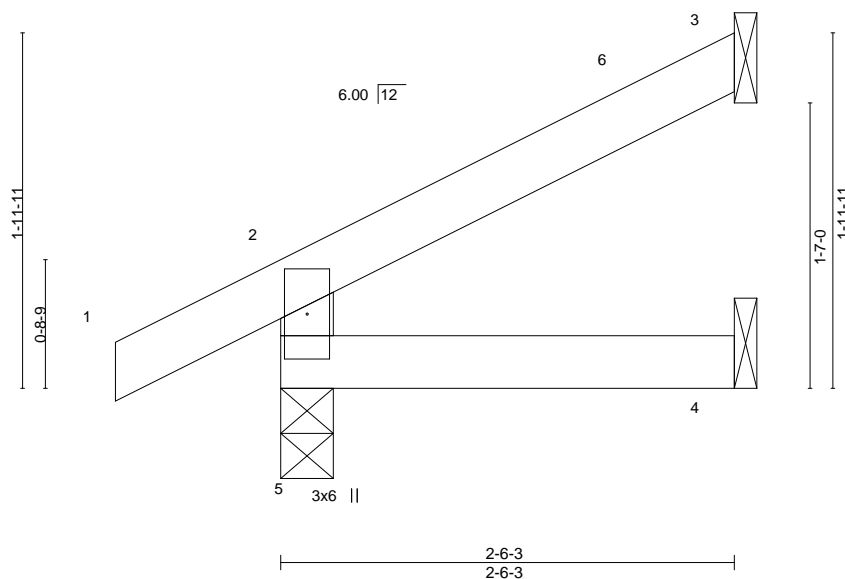
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:05:59 2020 Page 1

ID:VPVqvFnP0P0b1j2tZr1OqezdKbx-_KDln353lpB4j6SKnJ4u1mylnqfNX?9MSZCOWQyKXes

0-11-0
0-11-0
2-6-3
2-6-3

Scale = 1:12.8



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.08	Vert(LL)	-0.00	4-5	>999	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-6-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=65(LC 16)
Max Uplift 5=30(LC 16), 3=-23(LC 16)
Max Grav 5=206(LC 21), 3=69(LC 21), 4=42(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 2-5-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 5 and 23 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

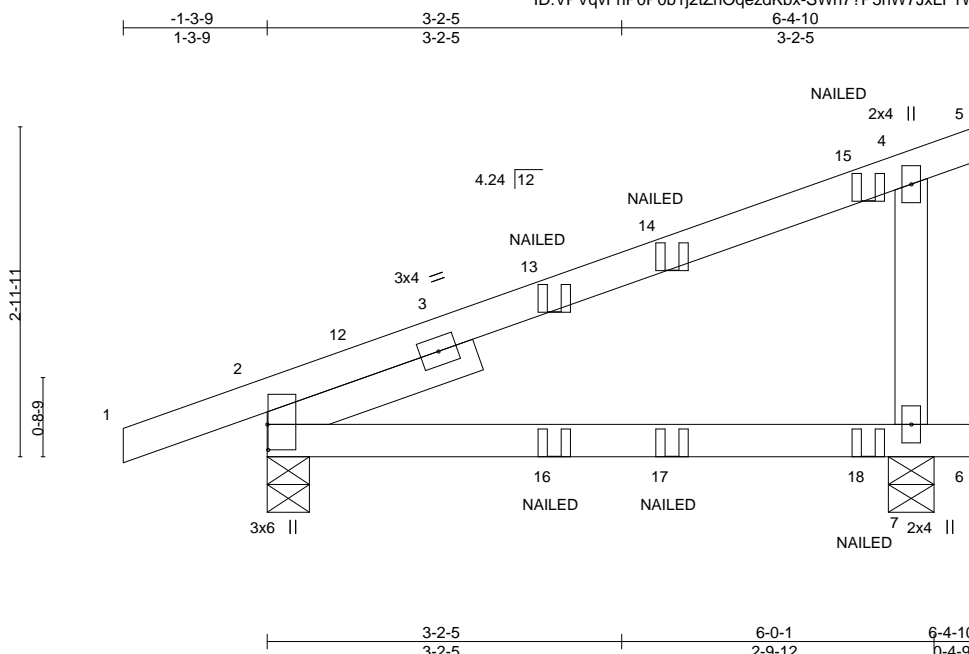
Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside
2532764	JC2	Diagonal Hip Girder	2	1	143574821
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:00 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-SWn7?P5hW7JxLF1WK0b7azVoTDuDGSmWgDxyStyKXer



Scale = 1:20.8

Plate Offsets (X,Y)-- [2:0-2-12,0-0-1]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.60	Vert(LL)	-0.07	7-10	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.13	7-10	>544	180		
TCDL 10.0	Rep Stress Incr	NO	WB 0.04	Horz(CT)	0.03	2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MP							
BCDL 10.0									Weight: 21 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 2-0-0

BRACING-

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

REACTIONS.

(size) 2=0-4-9, 7=0-4-15
Max Horz 2=85(LC 12)
Max Uplift 2=-46(LC 12), 7=-56(LC 12)
Max Grav 2=361(LC 2), 7=372(LC 17)

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

TOP CHORD 2-4=-273/63
WEBS 4-7=-263/77

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 46 lb uplift at joint 2 and 56 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-51, 6-8=-20
Concentrated Loads (lb)
Vert: 14=-5(B) 15=-60(F) 16=0(F) 17=-1(B) 18=-18(F)



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JC3	Truss Type Jack-Open	Qty 2	Ply 1	Summit/5 Woodside Job Reference (optional)	143574822
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Builders FirstSource (Valley Center),

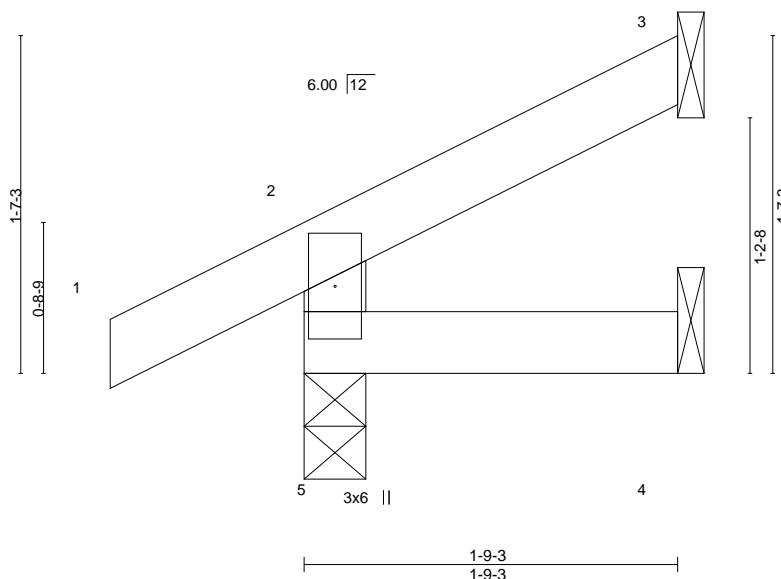
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:01 2020 Page 1

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Scale = 1:10.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.08	Vert(LL)	-0.00	5	>999	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	-0.00	5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-9-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=56(LC 16)
Max Uplift 5=32(LC 16), 3=-14(LC 16)
Max Grav 5=175(LC 21), 3=38(LC 21), 4=28(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 5 and 14 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574823
2532764	JC4	Jack-Open	2	1		
Job Reference (optional)						

Builders FirstSource (Valley Center),

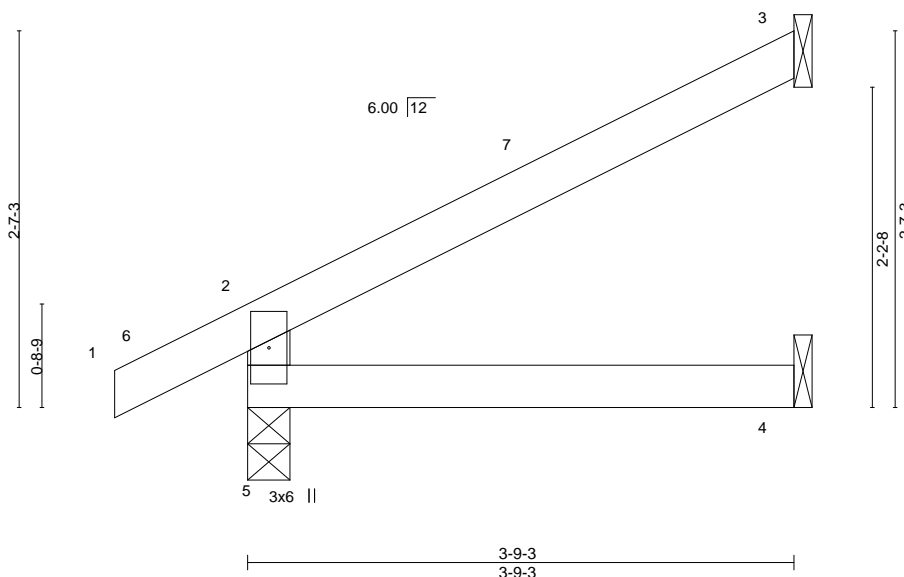
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:02 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrI0qezdKbx-OvvuQ47x2kZfaZBvSRdbfOaEE1fzkMvo8XQ3XlyKXep

-0-11-0
0-11-0
3-9-3
3-9-3

Scale: 3/4"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.19	Vert(LL)	-0.01	4-5	>999	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.12	Vert(CT)	-0.02	4-5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 11 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=83(LC 16)
Max Uplift 5=29(LC 16), 3=-36(LC 16)
Max Grav 5=271(LC 21), 3=121(LC 21), 4=67(LC 7)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-8-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 29 lb uplift at joint 5 and 36 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JC5	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	Summit/5 Woodside	I43574824
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Builders First Source, Valley Center, KS 67147

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8.240 s Apr 4 2020 MiTek Industries, Inc. Tue Nov 10 16:29:10 2020 Page 1

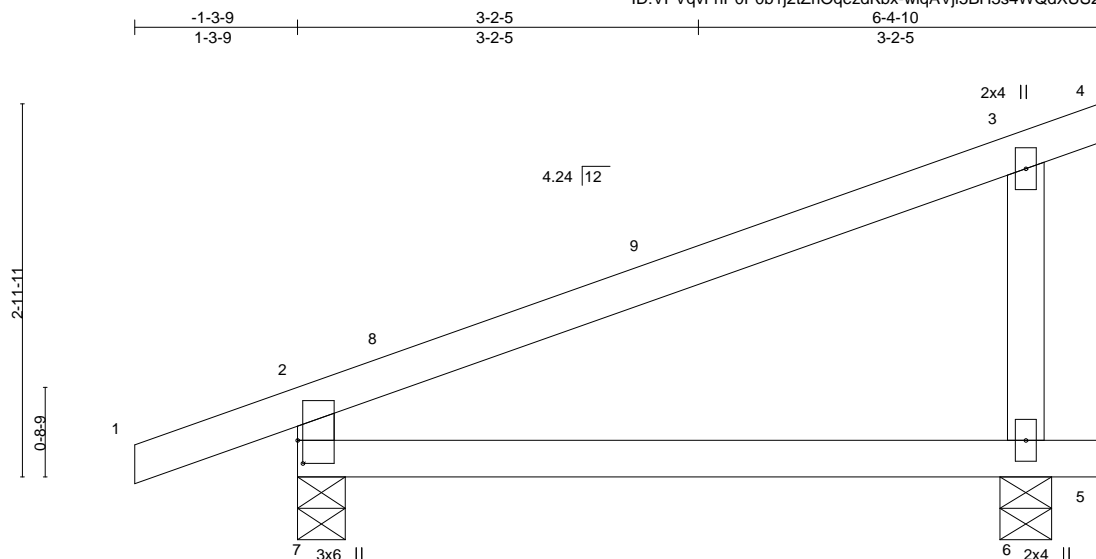


Plate Offsets (X,Y)--	[2:0-0-10,0-1-12], [7:0-2-3,0-0-8], [7:0-0-0,0-1-12]
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LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.54	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.32	Vert(CT)	-0.10	6-7	>679	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00		n/a	n/a		
BCLL 0.0	Rep Stress Incr NO	Matrix-AS							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 19 lb	FT = 20%

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

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

REACTIONS. (lb/size) 7=281/0-4-9, 6=234/0-4-15
Max Horz 7=96(LC 16)
Max Uplift 7=-50(LC 16), 6=-48(LC 16)
Max Grav 7=366(LC 2), 6=317(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-316/235

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) -1-3-9 to 2-11-6, Exterior(2R) 2-11-6 to 6-4-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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 50 lb uplift at joint 7 and 48 lb uplift at joint 6.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) 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.



November 11, 2020

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Chesterfield, MO 63017

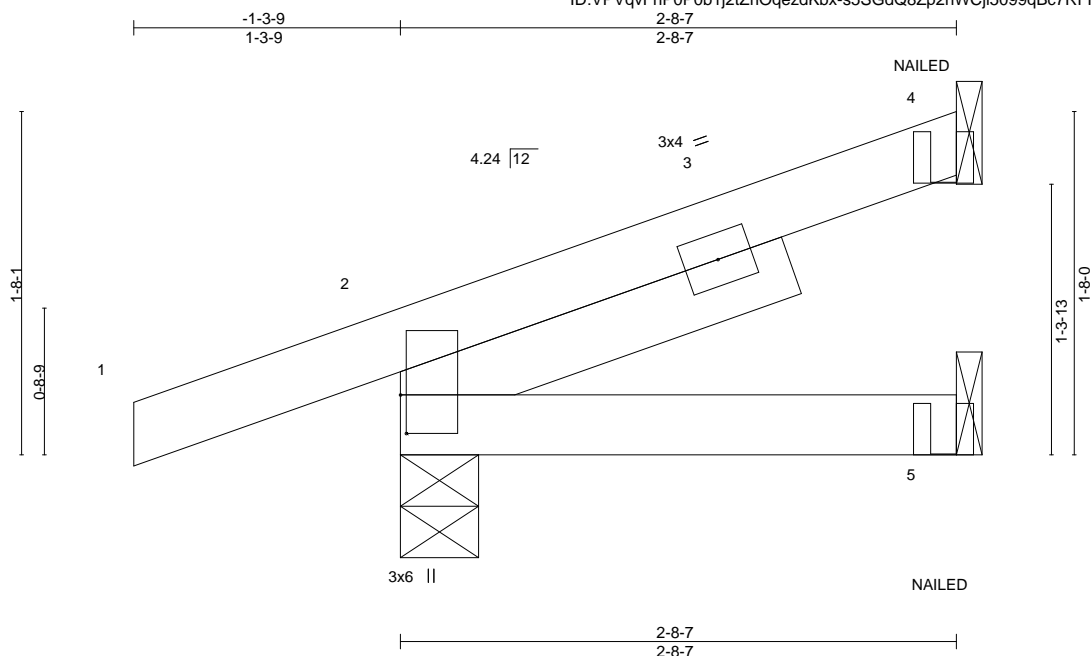
Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574825
2532764	JD1	Jack-Open	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:03 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-s5SGdQ8Zp2hWCjl5099qBc7RFR0UTp9yNBAC3CyKXeo



Scale = 1:11.2

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	8	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	5-8	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MP							
BCDL 10.0									Weight: 10 lb	FT = 20%

LUMBER-

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

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) 4=Mechanical, 2=0-4-9, 5=Mechanical
Max Horz 2=45(LC 16)
Max Uplift 4=-20(LC 16), 2=-49(LC 16)
Max Grav 4=72(LC 21), 2=239(LC 21), 5=45(LC 7)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 20 lb uplift at joint 4 and 49 lb uplift at joint 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.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 5-6=-20
Concentrated Loads (lb)
Vert: 4=-9(B) 5=-1(B)



November 11, 2020

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JD2	Truss Type Jack-Open	Qty 2	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574826
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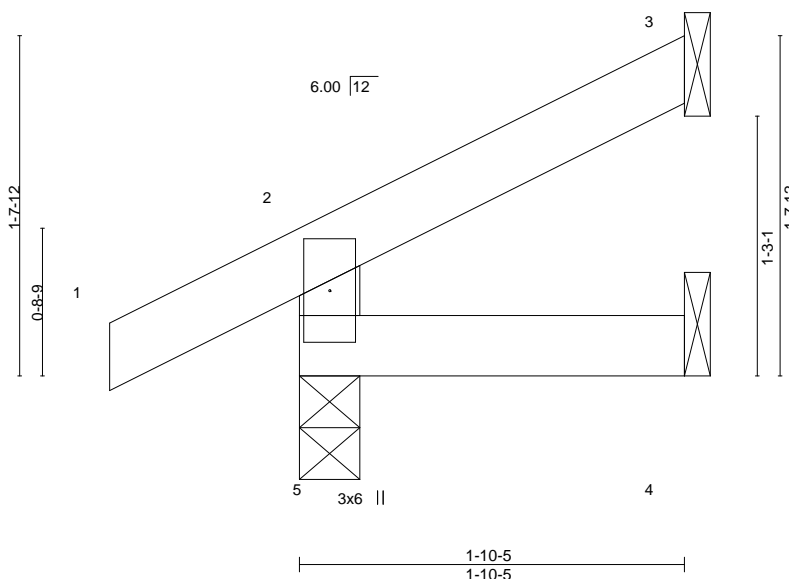
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:05 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-oUa0269pLfYDS1vU7ZBIH1CnIEi7xjfFqVfj74yKXem

-0-11-0
0-11-0
1-10-5
1-10-5

Scale = 1:11.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	-0.00	5	>999	240	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	5	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 6 lb	FT = 20%
BCDL 10.0										

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=57(LC 16)
Max Uplift 5=32(LC 16), 3=-15(LC 16)
Max Grav 5=179(LC 21), 3=42(LC 21), 4=30(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 5 and 15 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JD3	Truss Type Jack-Open	Qty 3	Ply 1	Summit/5 Woodside Job Reference (optional)	143574827
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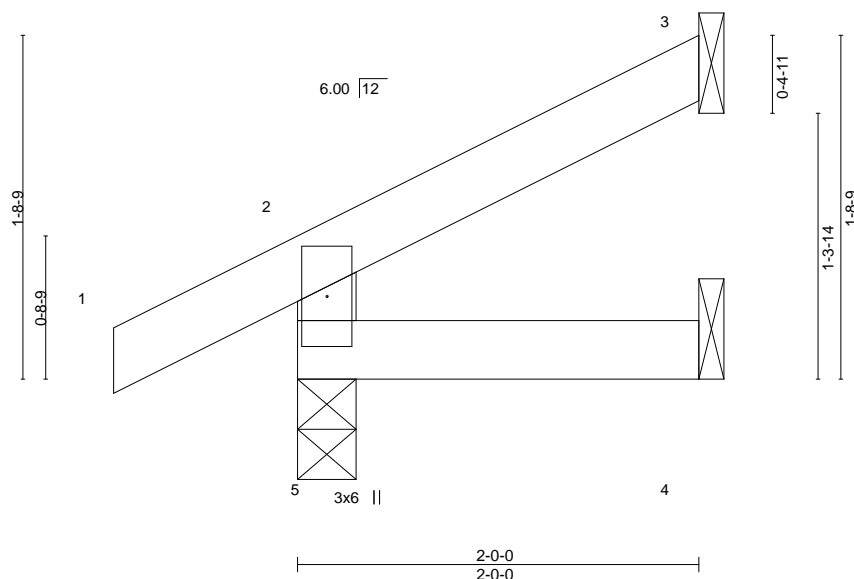
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:05 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-oUa0269pLfYDS1vU7ZBIH1CnHEi3xfFqVfj74yKXem

-0-11-0
0-11-0
2-0-0
2-0-0

Scale = 1:11.5



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.08	Vert(LL)	-0.00	5	>999	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	-0.00	4-5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR						
BCDL 10.0	Code IRC2018/TPI2014						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 2-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=59(LC 16)
Max Uplift 5=31(LC 16), 3=-17(LC 16)
Max Grav 5=185(LC 21), 3=49(LC 21), 4=33(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 5 and 17 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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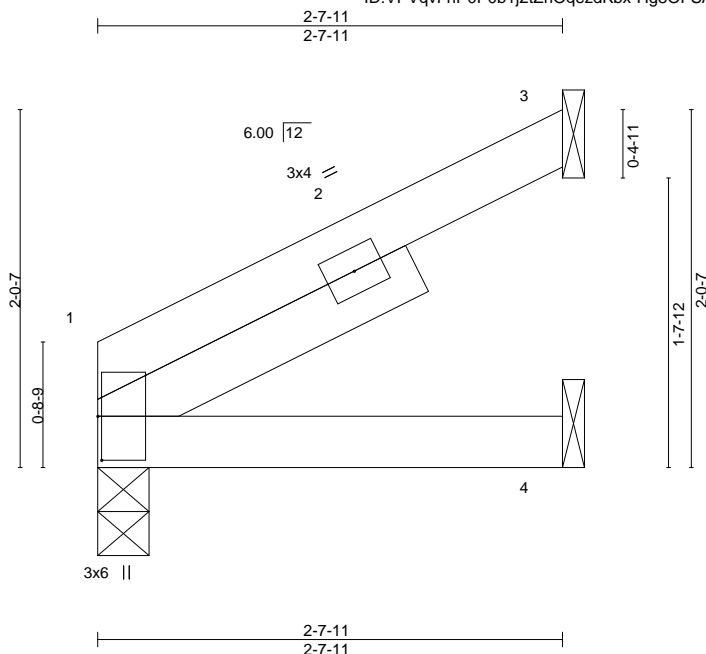
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside
2532764	JM1	Jack-Open	2	1	143574828
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:06 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrI0qezdKbx-Hg8OFSAS6z443AUghHiXpElyqe1ugAuO39OGgXyKXel



Scale = 1:13.1

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	7	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	4-7	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	1	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MP							
BCDL 10.0									Weight: 9 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 1=36(LC 16)
Max Uplift 3=26(LC 16)
Max Grav 1=118(LC 20), 3=83(LC 20), 4=44(LC 7)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 26 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

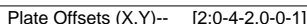
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:16 2020 Page 1
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LUMBER-

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

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

REACTIONS. (size) 2=0-4-9, 5=Mechanical
Max Horz 2=82(LC 12)
Max Uplift 2=-54(LC 12), 5=-37(LC 12)
Max Grav 2=396(LC 2), 5=302(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-319/55

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 2 and 37 lb uplift at joint 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 5-6=-20
Concentrated Loads (lb)
Vert: 11=-12(B) 12=-20(F) 13=-11(B) 14=-4(F)



November 11, 2020



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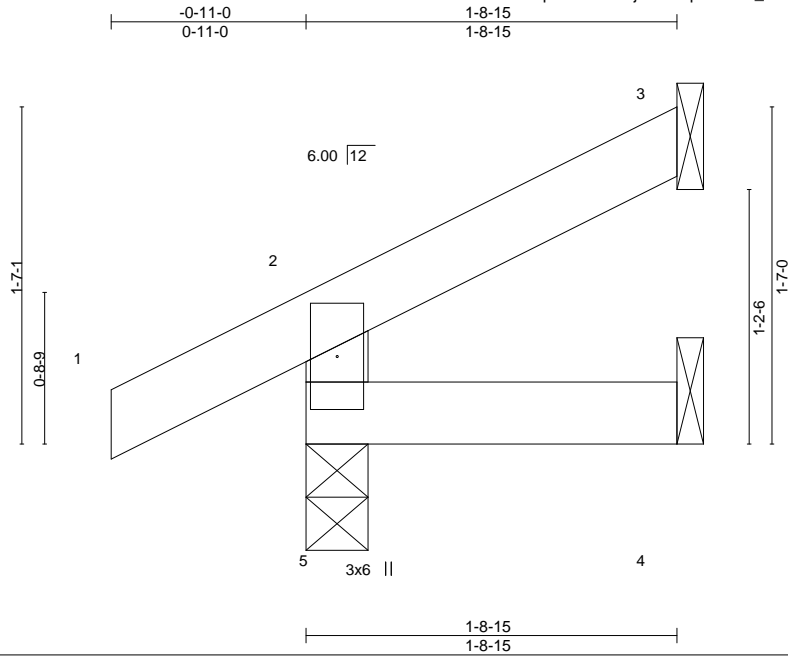
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574830
2532764	JM3	Jack-Open	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:16 2020 Page 1

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Scale = 1:10.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.08	Vert(LL)	-0.00	5	>999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	-0.00	5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-8-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=55(LC 16)
Max Uplift 5=32(LC 16), 3=-14(LC 16)
Max Grav 5=175(LC 21), 3=37(LC 28), 4=28(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 5 and 14 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

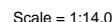
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16023 Swingley Ridge Rd
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:17 2020 Page 1
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LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-0-3 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2		
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horiz 5=72(LC 16)
Max Uplift 5=-30(LC 16), 3=-28(LC 16)
Max Grav 5=231(LC 21), 3=89(LC 21), 4=52(LC 7)

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; TC DL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 2-11-7 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 30 lb uplift at joint 5 and 28 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574832
2532764	JM5	Jack-Open	3	1		
Job Reference (optional)						

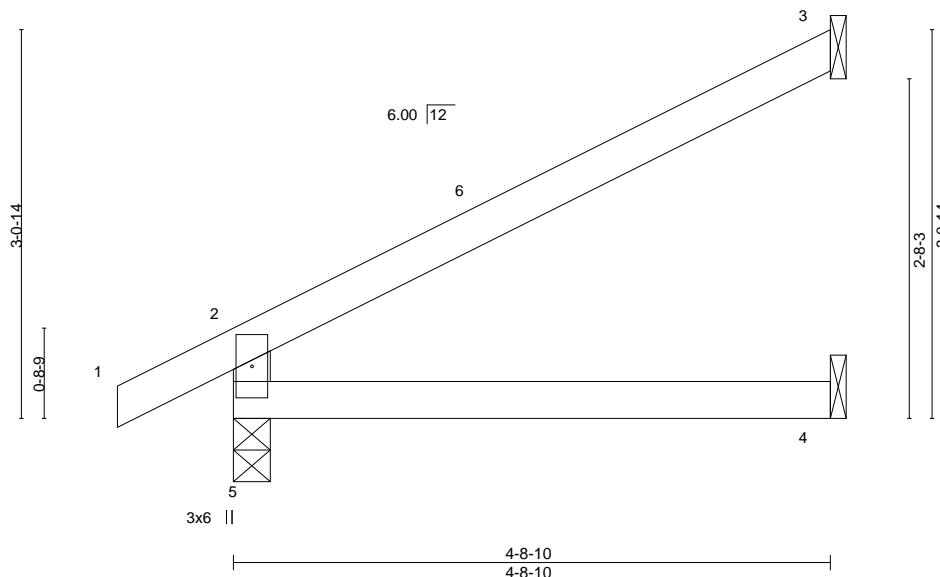
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:18 2020 Page 1

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Scale = 1:18.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.18	Vert(LL) -0.02 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.04 4-5 >999 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.02 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 13 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=96(LC 16)
Max Uplift 5=29(LC 16), 3=45(LC 16)
Max Grav 5=286(LC 2), 3=162(LC 21), 4=84(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-251/154

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 4-7-14 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 29 lb uplift at joint 5 and 45 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574834
2532764	JM7	Half Hip	1	1		

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

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ID:VPVqvFnP0P0b1j2tZrOqezdKbx-KZY3PaMsaazyMU7Z3wT2wPtT2h8NhxbV_XZi9yKXeW



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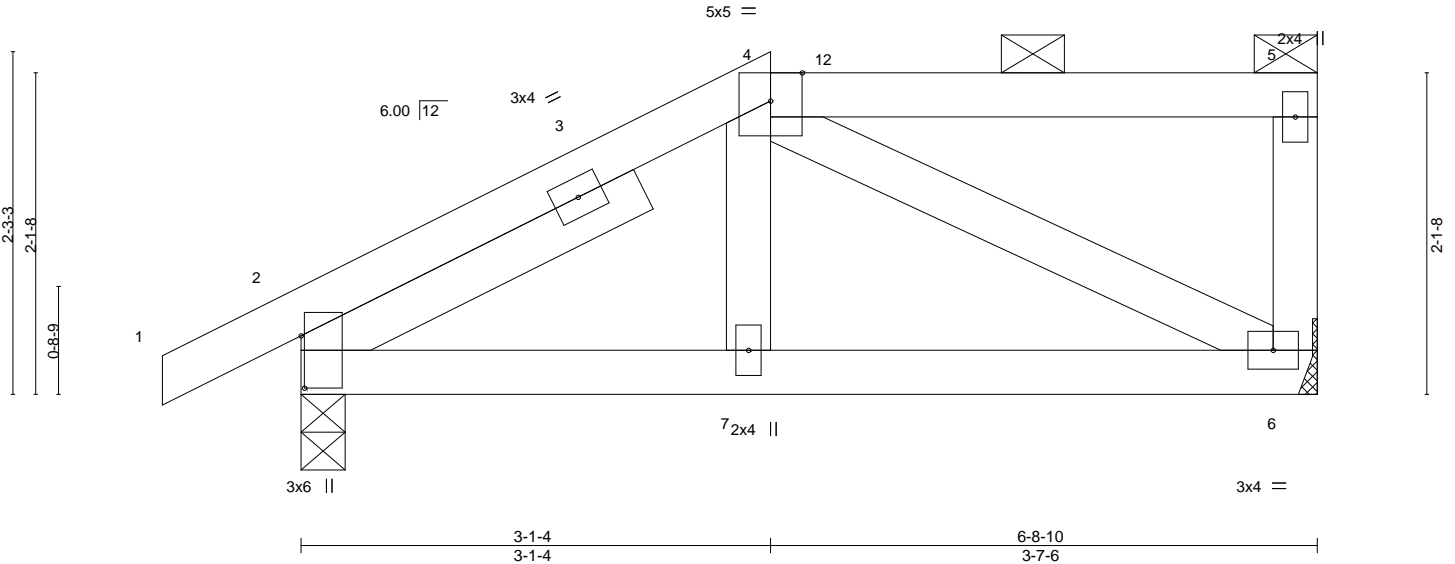


Plate Offsets (X,Y)-- [2:0-4-2,0-0-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	-0.01	6-7	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.01	6-7	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 28 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=67(LC 15)
Max Uplift 2=-52(LC 16), 6=-33(LC 13)
Max Grav 2=386(LC 36), 6=309(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-287/124
BOT CHORD 2-7=-160/263, 6-7=-161/257
WEBS 4-6=-292/159

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 3-1-4, Exterior(2E) 3-1-4 to 6-6-14 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 52 lb uplift at joint 2 and 33 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574835
2532764	JM8	Roof Special Girder	1	1		
Job Reference (optional)						

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:23 2020 Page 1
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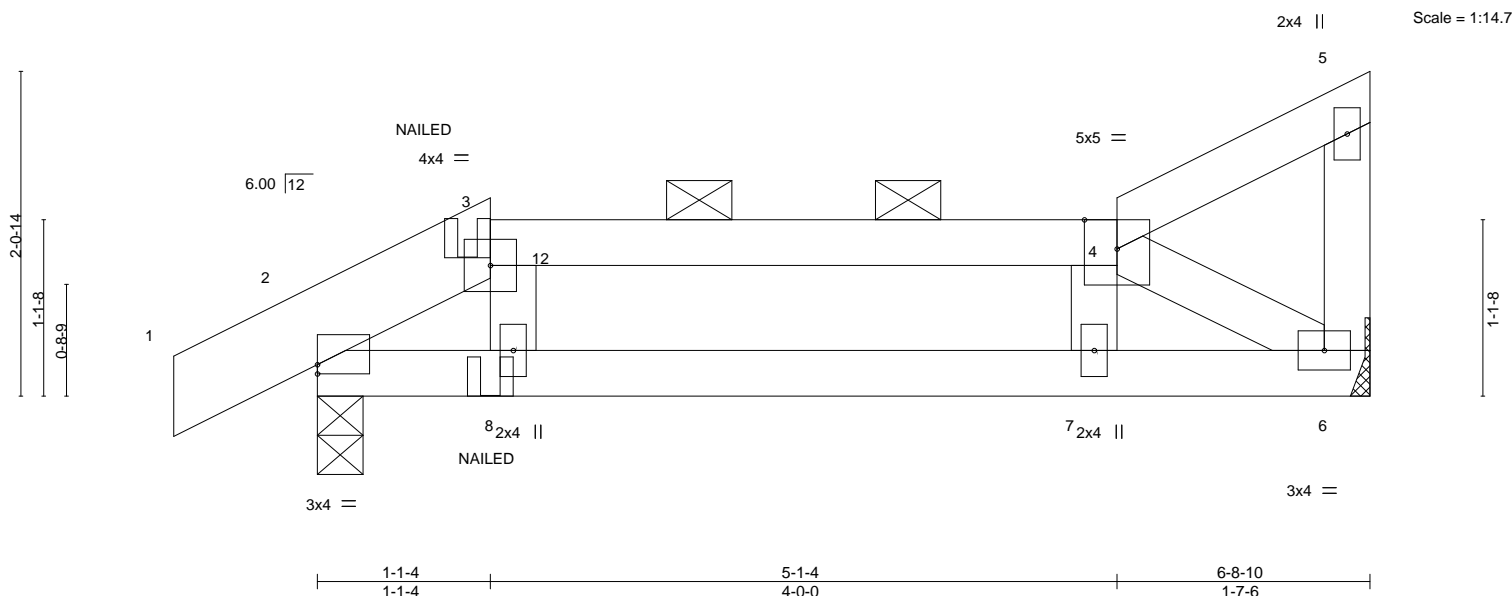
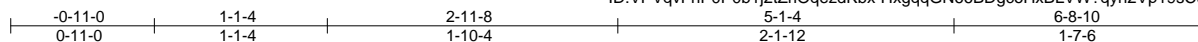


Plate Offsets (X,Y)-- [2:0-0-0,0-0-11]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.01	7	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.02	7-8	>999	180		
TCDL 10.0	Rep Stress Incr	NO	WB 0.06	Horz(CT)	0.00	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MP							
BCDL 10.0									Weight: 23 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 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=62(LC 80)
Max Uplift 6=-26(LC 9), 2=-52(LC 12)
Max Grav 6=291(LC 2), 2=364(LC 2)

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

TOP CHORD 2-3=-448/22, 3-4=-378/17
BOT CHORD 2-8=-46/363, 7-8=-37/376, 6-7=-40/371
WEBS 4-6=-433/32

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 26 lb uplift at joint 6 and 52 lb uplift at joint 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.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



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Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574835
2532764	JM8	Roof Special Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-3=-51, 3-4=-61, 4-5=-51, 6-9=-20
Concentrated Loads (lb)
Vert: 8=2(B)

Job 2532764	Truss JM9	Truss Type Jack-Open	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574836
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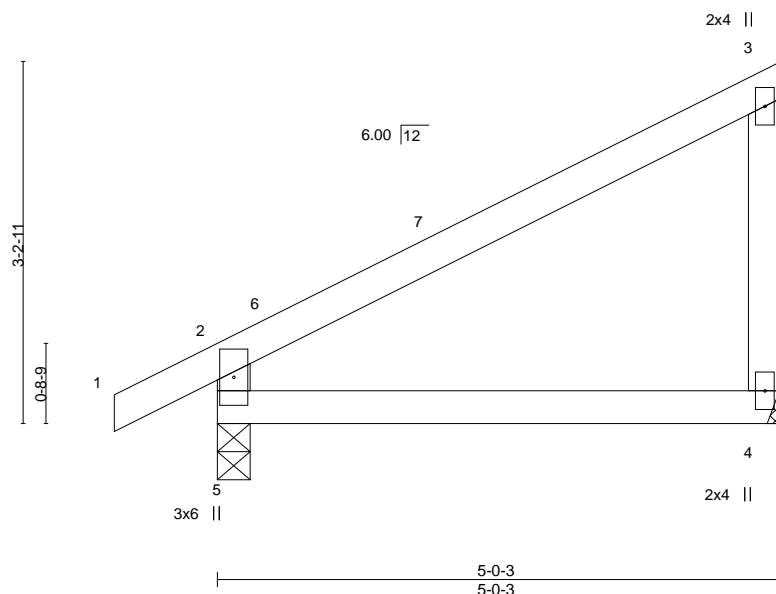
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

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ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-l8EC1cOktVLXDxs8k31Y1Vz5v8quJu2CylDIUyKXeT

-0-11-0 5-0-3
0-11-0 5-0-3



Scale = 1:20.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.36	Vert(LL)	-0.02	4-5	>999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	-0.05	4-5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00		n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 17 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 4=Mechanical
Max Horz 5=99(LC 16)
Max Uplift 5=29(LC 16), 4=38(LC 16)
Max Grav 5=296(LC 21), 4=229(LC 21)

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

TOP CHORD 2-5=-259/155

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 4-10-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 29 lb uplift at joint 5 and 38 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JM10	Truss Type Jack-Open	Qty 5	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574837
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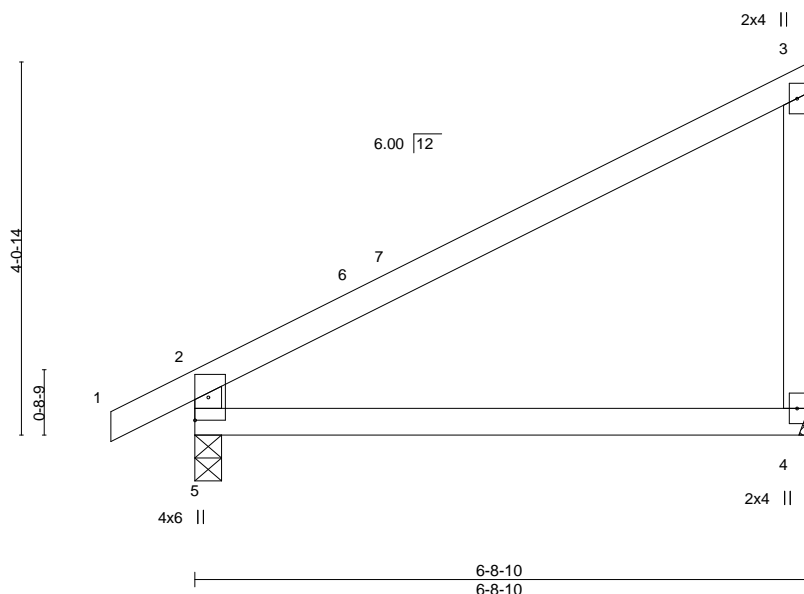
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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ID:VPVqvFnP0P0b1j2tZrOqezdKbx-lsimToB4tHCxhK3sF_DmMSI_v2HsPdEXHp8pCzyKXek

-0-11-0
0-11-0

6-8-10
6-8-10



Scale = 1:25.2

Plate Offsets (X,Y)-- [2:0-0-14,0-1-12], [5:0-0-0,0-1-12]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.08	4-5	>995	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.40	Vert(CT)	-0.17	4-5	>443	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00		n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 22 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 4=Mechanical
Max Horz 5=122(LC 16)
Max Uplift 5=28(LC 16), 4=51(LC 16)
Max Grav 5=370(LC 2), 4=309(LC 21)

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

TOP CHORD 2-5=-317/165

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-6-14 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 28 lb uplift at joint 5 and 51 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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

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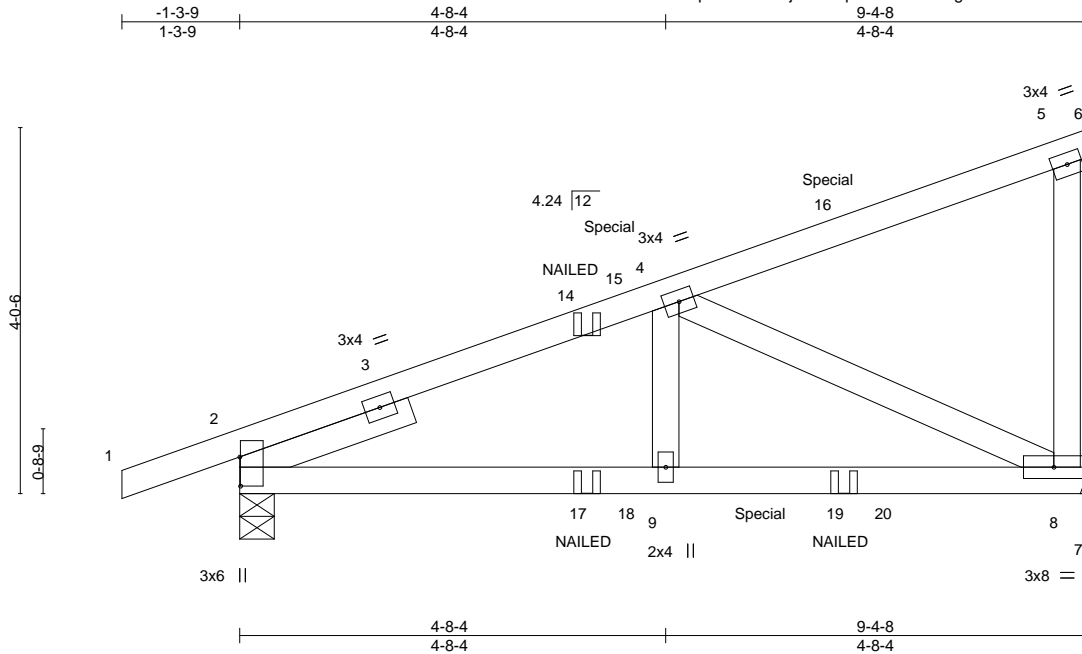


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574838
2532764	JM11	Diagonal Hip Girder	1	1		
Job Reference (optional)						

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:08 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrOqezdKbx-D3G9g8CieaKoJue3oik?ufqE6SZy80zhWTtNkPyKXej



Scale = 1:25.4

Plate Offsets (X,Y)-- [2:0-3-14,0-0-1]

LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.36	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.66	Vert(LL) -0.05 8-9 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.28	Vert(CT) -0.08 8-9 >999 180		
BCLL 0.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.01 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 37 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 2-0-0

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

REACTIONS. (size) 2=0-4-9, 8=Mechanical
Max Horz 2=130(LC 11)
Max Uplift 2=88(LC 12), 8=92(LC 9)
Max Grav 2=573(LC 2), 8=666(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-739/94
BOT CHORD 2-9=-126/673, 8-9=-126/673
WEBS 4-8=-688/108

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 88 lb uplift at joint 2 and 92 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 48 lb up at 4-4-4, and 119 lb down and 76 lb up at 6-7-13 on top chord, and 18 lb down and 3 lb up at 4-4-4, and 201 lb down and 66 lb up at 7-2-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- Special hanger(s) or other connection device(s) shall be provided at 5-9-3 from the left end sufficient to connect trusses to back face of bottom chord, skewed 45.0 deg. to the right, sloping 0.0 deg down.. The design/selection of such special 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

Continued on page 2



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574838
2532764	JM11	Diagonal Hip Girder	1	1	Job Reference (optional)	

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-51, 5-6=-51, 7-10=-20

Concentrated Loads (lb)

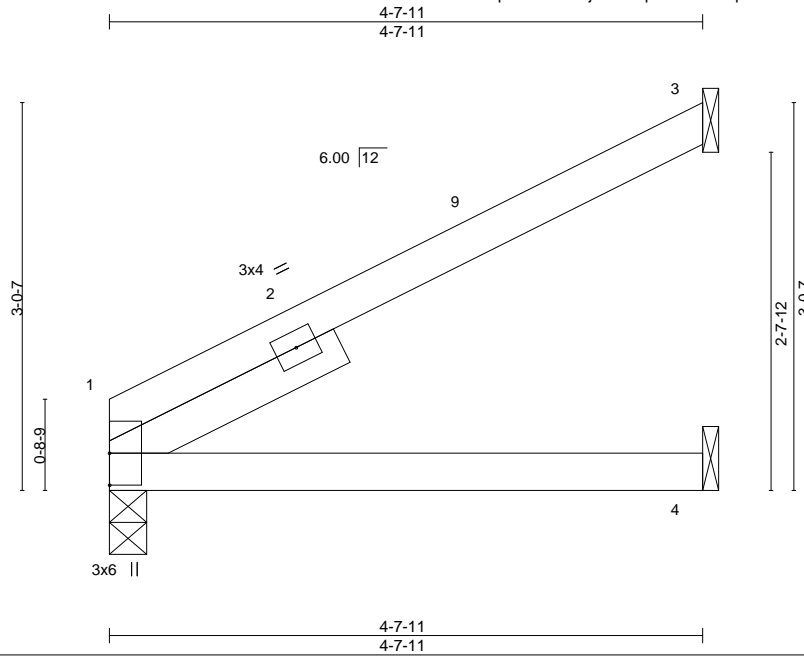
Vert: 14=-12(F) 15=-20(B) 16=-89(F) 17=-11(F) 18=-4(B) 19=-37(F) 20=-201(B)

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574839
2532764	JM12	Jack-Open	1	1	Job Reference (optional)	

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

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Scale = 1:18.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.32	Vert(LL)	-0.03	4-7	>999	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.23	Vert(CT)	-0.05	4-7	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.02	1	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 1=63(LC 16)
Max Uplift 3=44(LC 16)
Max Grav 1=225(LC 20), 3=160(LC 20), 4=82(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-6-15 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
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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 44 lb uplift at joint 3.
- 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

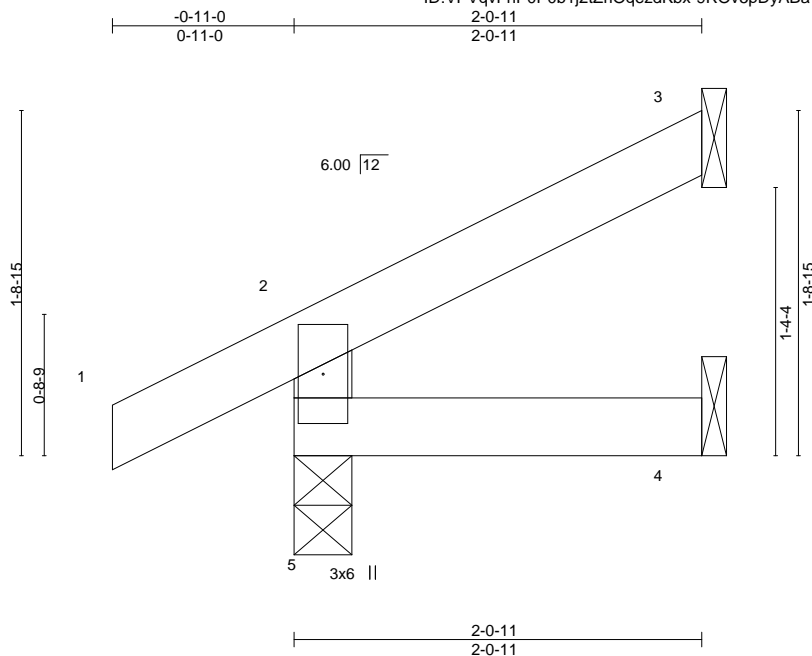
Job 2532764	Truss JM13	Truss Type Jack-Open	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	143574840
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:10 2020 Page 1

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Scale = 1:11.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.08	Vert(LL)	-0.00	5	>999	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	-0.00	4-5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 7 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=59(LC 16)
Max Uplift 5=31(LC 16), 3=-17(LC 16)
Max Grav 5=185(LC 21), 3=49(LC 21), 4=33(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 5 and 17 lb uplift at joint 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JM15	Truss Type Jack-Open	Qty 2	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574842
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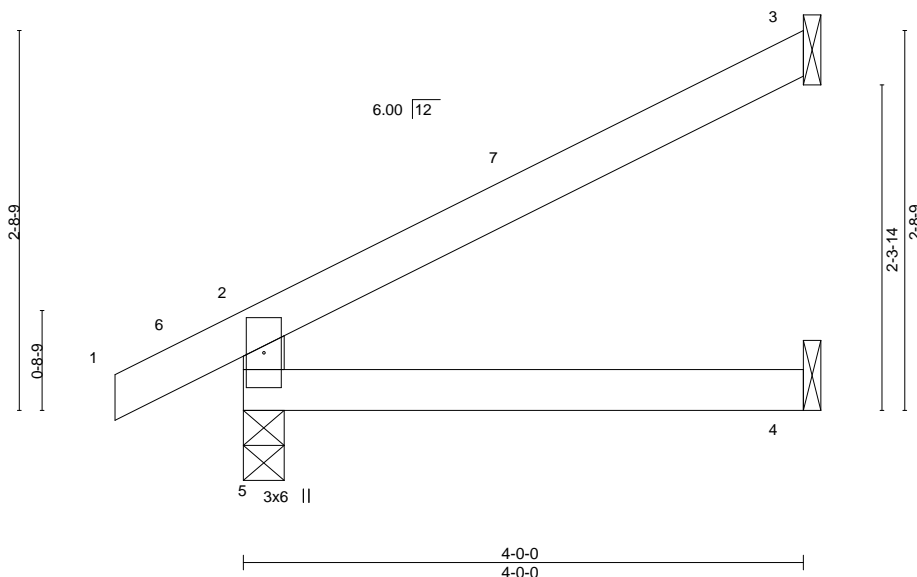
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:12 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-5qVfWVfChpqEn5xq1Ypx3V?yR3294tNHR5ratAyKXef



Scale = 1:16.5



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.21	Vert(LL)	-0.01	4-5	>999	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.13	Vert(CT)	-0.02	4-5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.01	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=86(LC 16)
Max Uplift 5=29(LC 16), 3=38(LC 16)
Max Grav 5=284(LC 21), 3=132(LC 21), 4=71(LC 7)

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

TOP CHORD 2-5=-253/143

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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 29 lb uplift at joint 5 and 38 lb uplift at joint 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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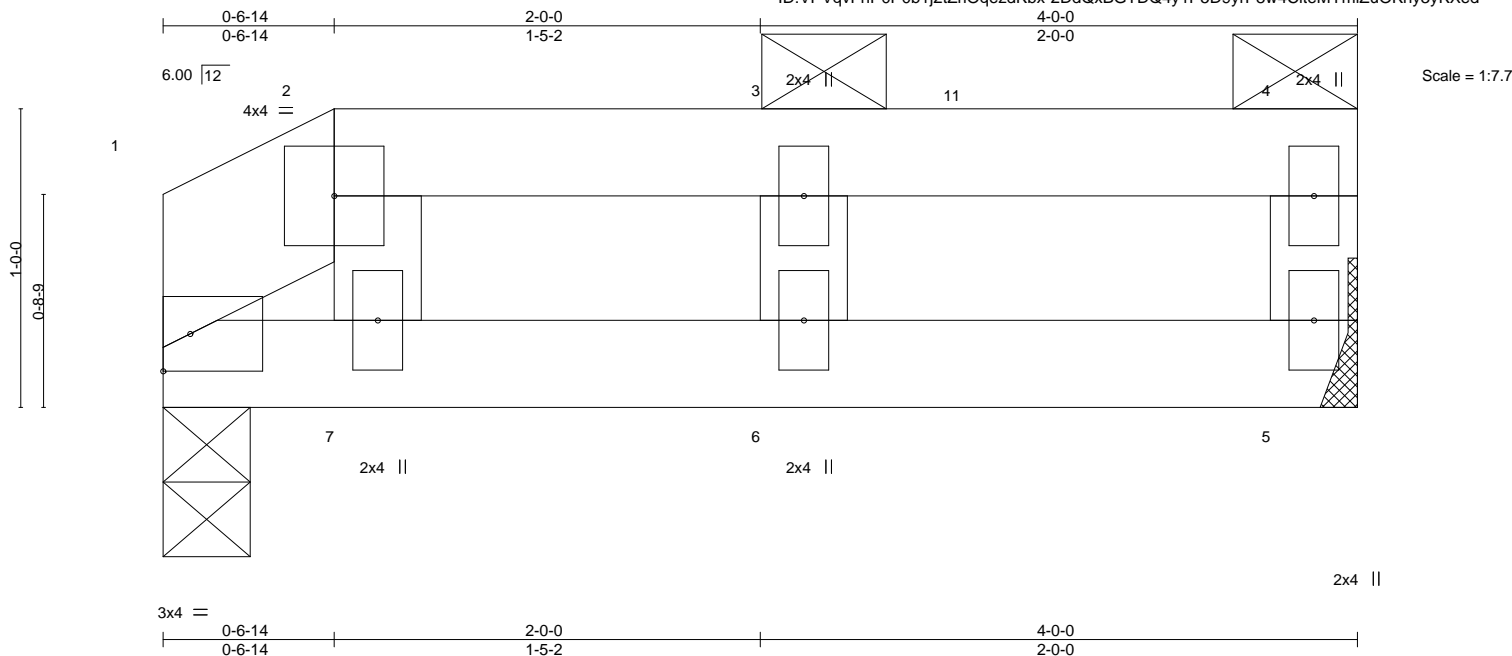
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JM16	Truss Type Half Hip	Qty 1	Ply 2	Summit/5 Woodside	I43574843
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:14 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-2DdQxBGTDQ4y1P5D9yrP8w4CiteMYmlZuOKhy3yKXed



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.55	Vert(LL) -0.05	6	>980	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.53	Vert(CT) -0.08	6-7	>553	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT) 0.02	1	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 23 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
2-4: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 1=0-3-8, 5=Mechanical
Max Horz 1=22(LC 15)
Max Uplift 1=49(LC 16), 5=64(LC 13)
Max Grav 1=605(LC 2), 5=727(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-408/92
WEBS 3-6=-55/594, 2-7=-553/149

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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 49 lb uplift at joint 1 and 64 lb uplift at joint 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 973 lb down and 90 lb up at 2-2-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2

LOAD CASE(S) Standard

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

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November 11, 2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574843
2532764	JM16	Half Hip	1	2	Job Reference (optional)	

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:14 2020 Page 2
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-2DdQxBGTDQ4y1P5D9yrP8w4CiteMYmlZuOKhy3yKXed

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-51, 2-4=-61, 5-8=-20

Concentrated Loads (lb)

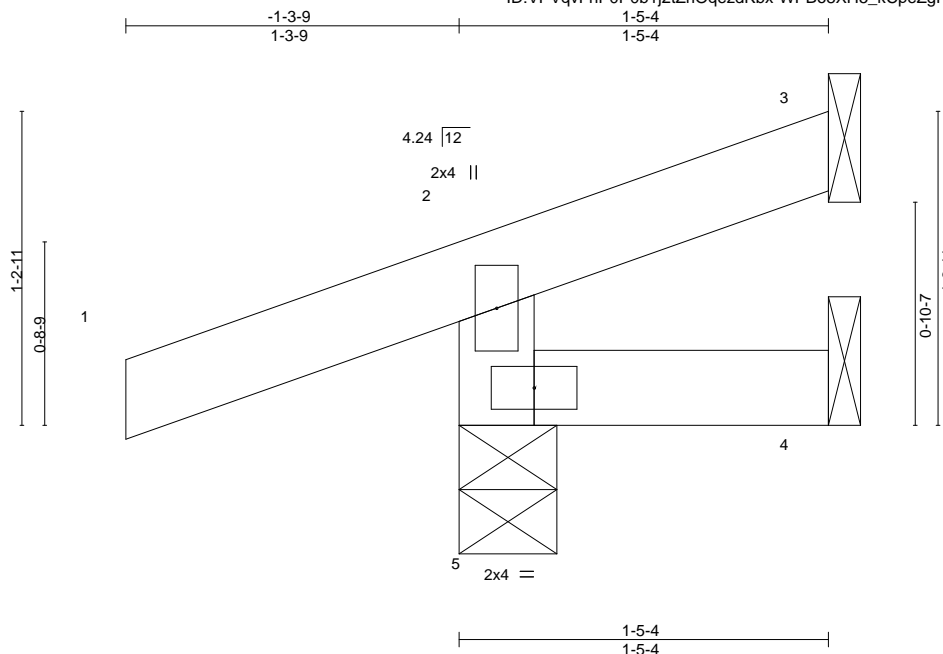
Vert: 6=-938

Job 2532764	Truss JM17	Truss Type Jack-Open	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574844
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:15 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrI0qezdKbx-WPBo8XH5_kCpeZgPjgMeg8dTrG6JHE7j724FUVyKXec



Scale = 1:9.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.14	Vert(LL) 0.00	5	>999	240	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT) 0.00	5	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT) -0.00	3	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 5 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=45(LC 16)
Max Uplift 5=61(LC 16), 3=-15(LC 20), 4=-4(LC 2)
Max Grav 5=215(LC 2), 3=7(LC 28), 4=19(LC 7)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 5 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 61 lb uplift at joint 5, 15 lb uplift at joint 3 and 4 lb uplift at joint 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

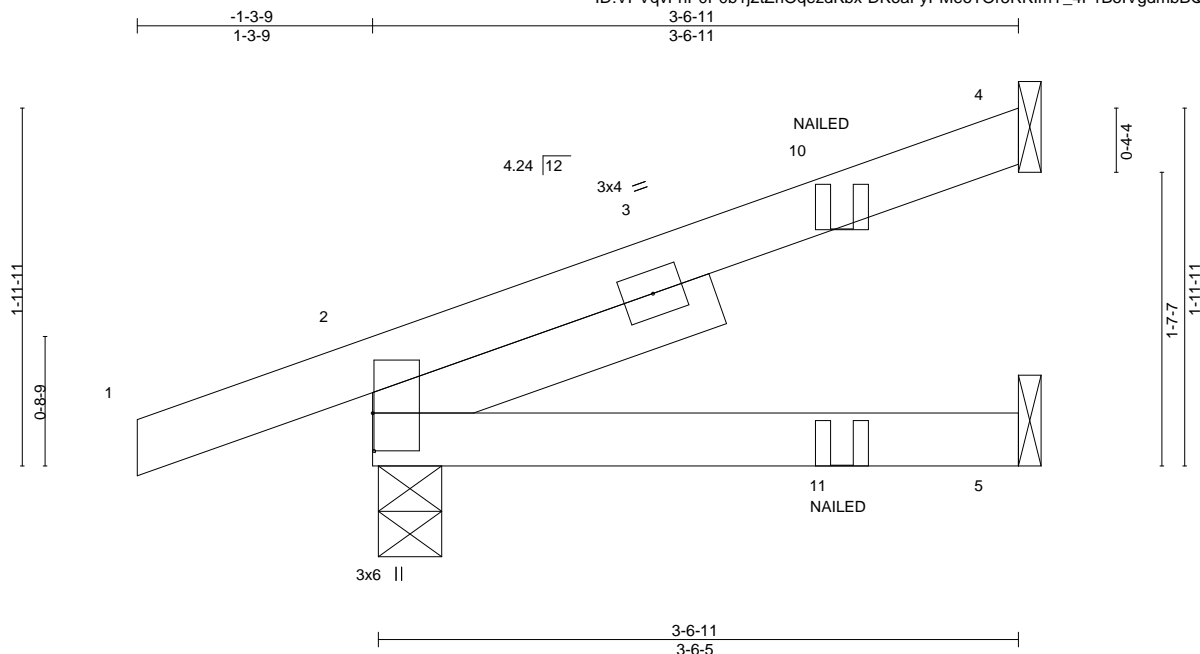


Plate Offsets (X,Y)-- [2:0-2-8,0-0-1]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01 5-8 >999 240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01 5-8 >999 180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00 2 n/a n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MP				Weight: 12 lb	FT = 20%
BCDL	10.0								

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-6-11 oc purlins.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
SLIDER	Left 2x4 SPF No.2 2-0-0		

REACTIONS. (size) 4=Mechanical, 2=0-4-3, 5=Mechanical
Max Horz 2=54(LC 12)
Max Uplift 4=-24(LC 12), 2=-48(LC 12)
Max Grav 4=105(LC 17), 2=280(LC 17), 5=59(LC 7)

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; TC DL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 24 lb uplift at joint 4 and 48 lb uplift at joint 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 5-6=-20
Concentrated Loads (lb)
Vert: 11=0(B)



November 11, 2020



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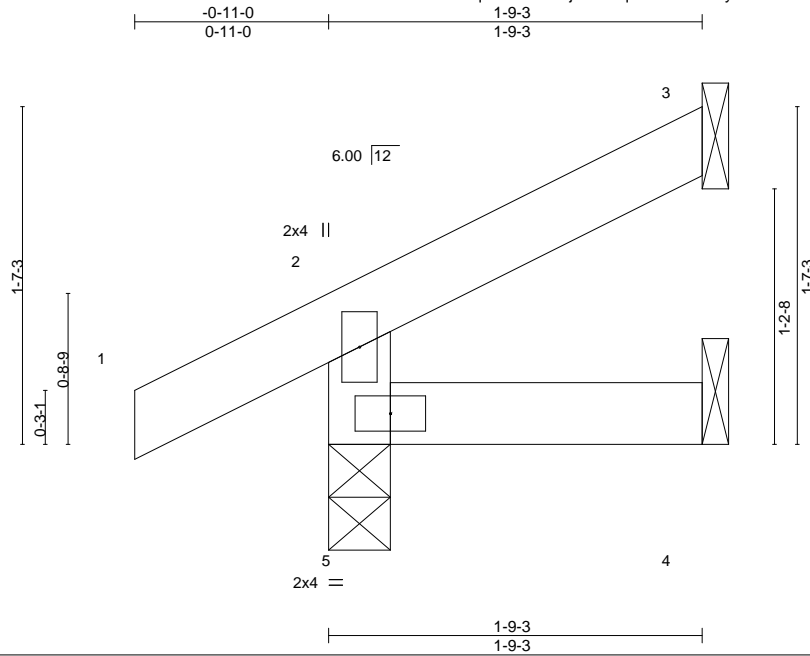
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss JP2	Truss Type Jack-Open	Qty 2	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574846
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:26 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-hWLySIQ?O6bFTF0WsU3DdSaN?is5MDrKfGEKNMyKXeR



Scale = 1:10.9

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 5 >999 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) -0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-9-3 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=56(LC 16)
Max Uplift 3=14(LC 16), 5=32(LC 16)
Max Grav 3=38(LC 21), 4=28(LC 7), 5=175(LC 21)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 3 and 32 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.



November 11, 2020

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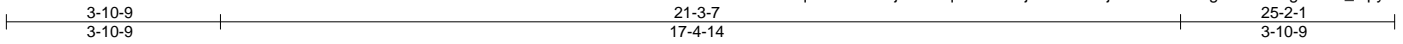
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574847
2532764	LG1	GABLE	1	1	Job Reference (optional)	

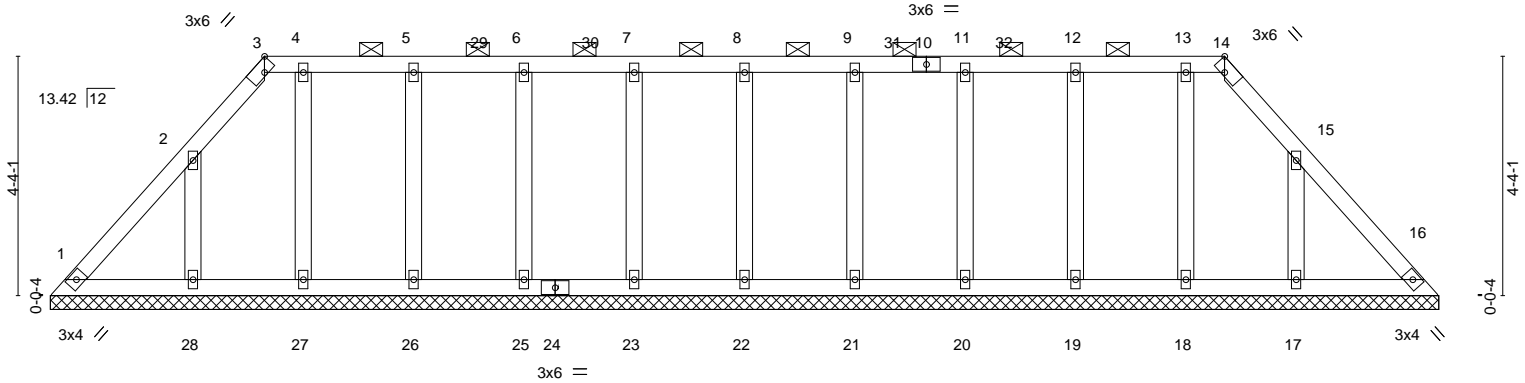
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:27 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-9jvKfdQd9Qj64PbiQBASAg7Z06CB5gQUuw_tpyKXeQ



Scale = 1:41.8



25-2-1
25-2-1

Plate Offsets (X,Y)-- [3:0-2-10,Edge], [14:0-2-10,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL 1.15		TC 0.06	Vert(LL) n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL 1.15		BC 0.03	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr YES		WB 0.04	Horz(CT) 0.00	16	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-S						
BCDL 10.0								Weight: 105 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-14.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 25-2-1.
(lb) - Max Horz 1=104(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 22, 23, 25, 26, 28, 21, 20, 19, 17
Max Grav All reactions 250 lb or less at joint(s) 1, 16, 22, 23, 25, 26, 27, 21, 20, 19, 18, 17 except 28=252(LC 23)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=25ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-10-9, Exterior(2R) 3-10-9 to 8-1-8, Interior(1) 8-1-8 to 21-3-7, Exterior(2E) 21-3-7 to 24-10-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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, 22, 23, 25, 26, 28, 21, 20, 19, 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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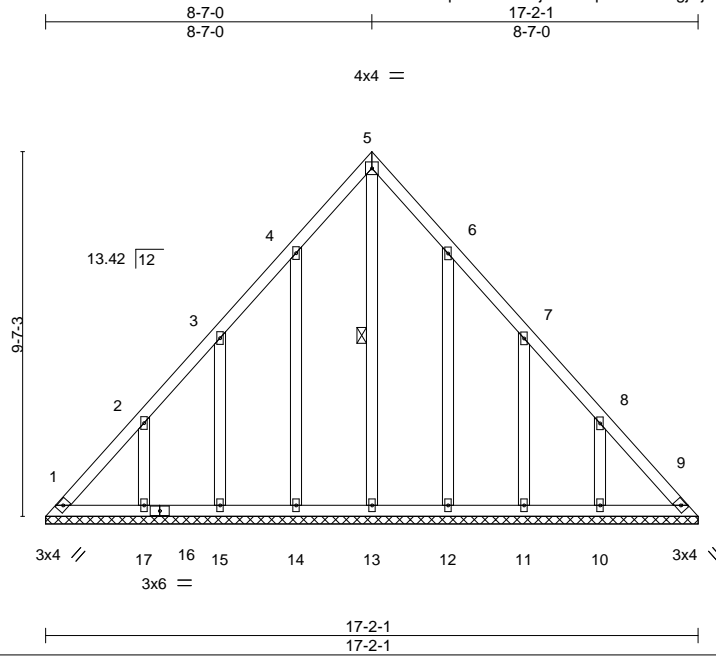


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574848
2532764	LG2	GABLE	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:32 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-WgjDLULyLOBATgCkAdtjqOU7vFmuzD1Chea0yKXeL



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.15	Horz(CT)	0.00	9	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 89 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.
WEBS 1 Row at midpt 5-13

REACTIONS.

All bearings 17-2-1.
(lb) - Max Horz 1=235(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 15, 14, 12, 11 except 17=102(LC 14), 10=102(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 15, 14, 13, 12, 11 except 17=256(LC 23), 10=256(LC 24)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 8-7-0, Exterior(2R) 8-7-0 to 11-7-0, Interior(1) 11-7-0 to 16-10-2 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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, 15, 14, 12, 11 except (jt=lb) 17=102, 10=102.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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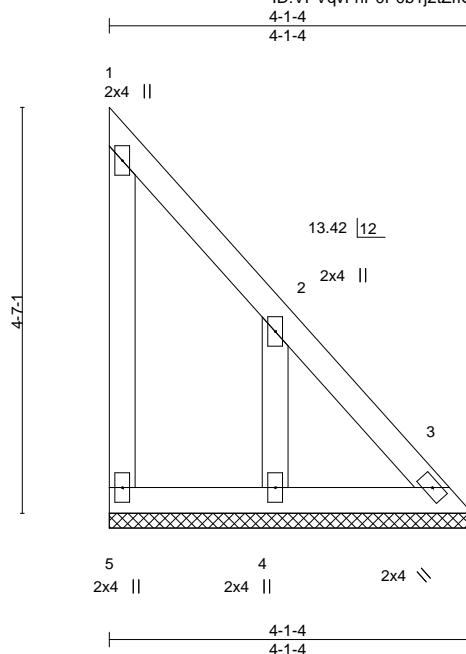
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss LG3	Truss Type GABLE	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574849
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:33 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-sGcwhVOIGTFpK2smShsPxNYKXFYVn8MGsRB7SyKXeK



Scale = 1:26.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 5=4-1-4, 3=4-1-4, 4=4-1-4

Max Horz 5=-142(LC 10)
Max Uplift 5=-49(LC 10), 3=-32(LC 13), 4=-94(LC 14)
Max Grav 5=78(LC 24), 3=121(LC 23), 4=235(LC 24)

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

TOP CHORD 2-3=-260/267

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

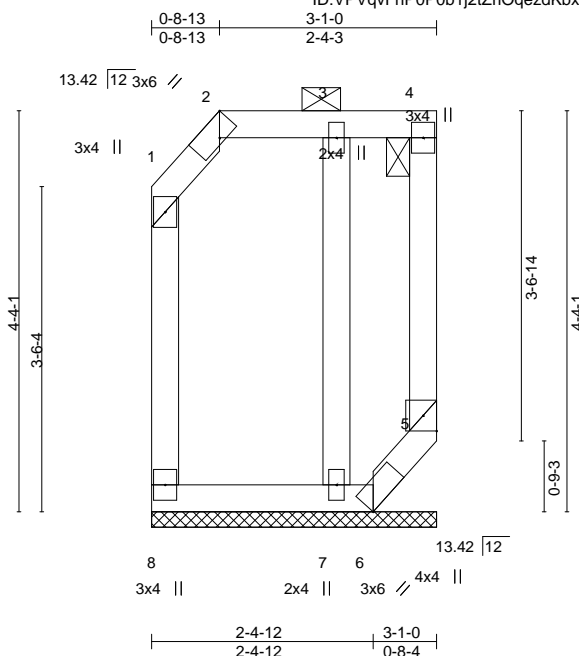
Job 2532764	Truss LG4	Truss Type GABLE	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)
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I43574850

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:34 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-S3q_71W0WZb6QUd3K9C5y8viLxYSEqHWVWAlfvyKXeJ



Scale = 1:24.9

Plate Offsets (X,Y)-- [2:0-2-10,Edge]

LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-R							
BCDL	10.0										

Weight: 20 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 2-4.
 BOT CHORD Rigid ceiling directly applied or 8-8-3 oc bracing.

REACTIONS.

All bearings 3-1-0.
 (lb) - Max Horz 8=123(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 8 except 5=291(LC 11), 6=316(LC 12), 7=137(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 8, 7 except 5=271(LC 12), 6=338(LC 11)

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

BOT CHORD 5-6=-418/432

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 5=291, 6=316, 7=137.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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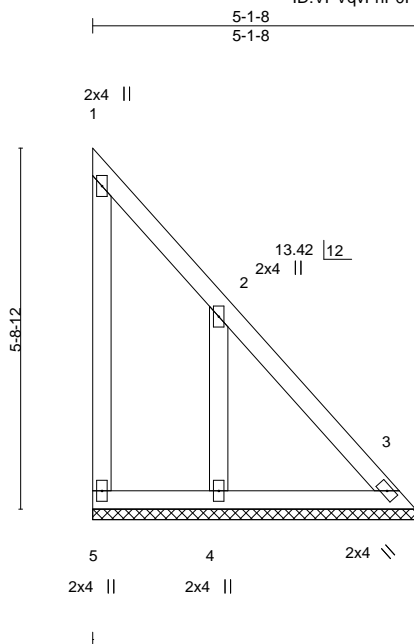


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside
2532764	LG5	GABLE	1	1	I43574851
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:35 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-wFOMLNWeHtj2eCFutjKUMStEKxozHljAwIBLyKXel



Scale = 1:36.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.24	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	3	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=5-1-8, 3=5-1-8, 4=5-1-8
Max Horz 5=-182(LC 10)
Max Uplift 5=-64(LC 12), 3=-27(LC 13), 4=-124(LC 14)
Max Grav 5=71(LC 24), 3=167(LC 23), 4=312(LC 24)

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

TOP CHORD 2-3=-322/334
BOT CHORD 4-5=-250/257, 3-4=-250/257
WEBS 2-4=-292/216

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 4-9-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3 except (jt=lb) 4=124.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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

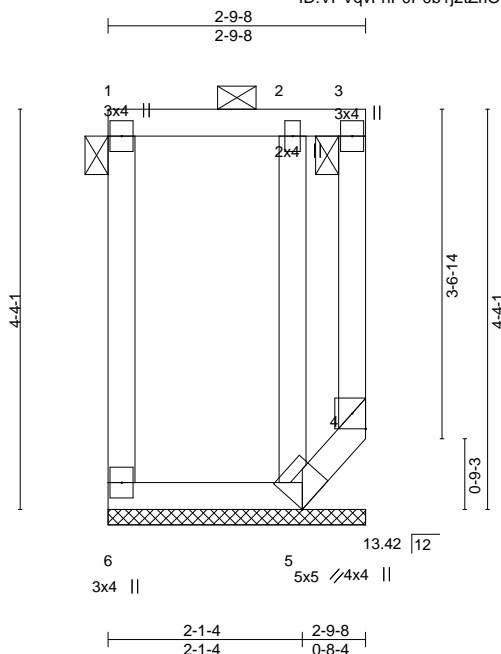
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 2532764	Truss LG6	Truss Type GABLE	Qty 1	Ply 1	Summit/5 Woodside I43574852
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:36 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrI0qezdKbx-ORykYiXG2BrqgnRRaEZ1Z_2ikDnikppyqfsjnyKXeH



Scale = 1:25.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.26	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pt/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.26	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	4	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-R					Weight: 19 lb	FT = 20%
BCDL 10.0	Code IRC2018/TPI2014							

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD 2-0-0 oc purlins: 1-3, 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	
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 6=2-9-8, 4=2-9-8, 5=2-9-8
Max Horz 6=-126(LC 12)
Max Uplift 6=-76(LC 10), 4=-248(LC 13), 5=-190(LC 10)
Max Grav 6=118(LC 24), 4=241(LC 10), 5=265(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 4-5=-405/408

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Provide adequate drainage to prevent water ponding.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 4=248, 5=190.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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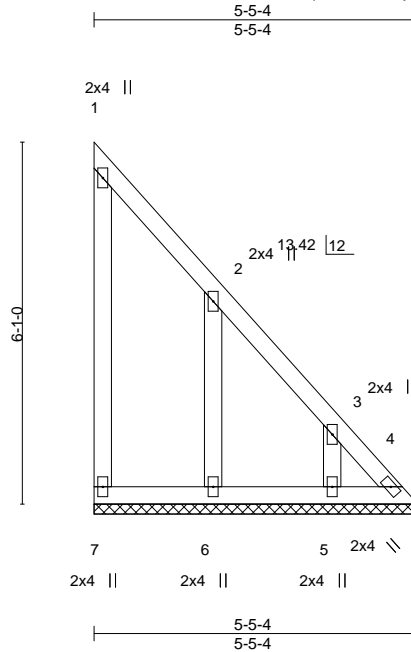
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside
2532764	LG7	GABLE	1	1	143574853
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:37 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-teW6m2YupU_hHxMd?lmoanXC98dlRBuyBUPPGEyKXeG



Scale = 1:38.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.27	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	4	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 26 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 5-5-4.
(lb) - Max Horz 7=-194(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 7, 4, 6, 5
Max Grav All reactions 250 lb or less at joint(s) 7, 4, 6, 5

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-291/296, 3-4=-391/391
BOT CHORD 6-7=-265/274, 5-6=-265/274, 4-5=-265/274

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 5-1-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 4, 6, 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.



November 11, 2020

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Chesterfield, MO 63017

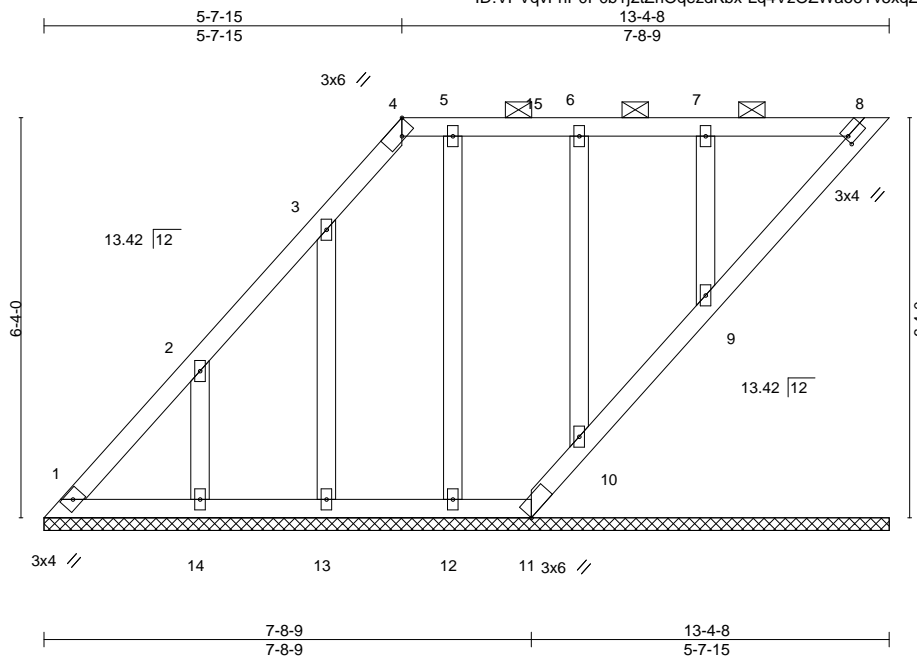
Job 2532764	Truss LG8	Truss Type GABLE	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574854
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:38 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-Lq4VzOZWao6Yv5xqZ7H16_4QzYyVAdX6Q78yogyKXeF



Scale = 1:36.5

Plate Offsets (X,Y)-- [4:0-2-10,Edge], [8:0-0-10,0-1-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	999
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	999
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	-0.00	8	n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
								PLATES	GRIP
								MT20	197/144
								Weight: 59 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-4-8.
(lb) - Max Horz 1=167(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 11, 13, 12, 10, 9 except 14=103(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 1, 8, 11, 13, 12, 10, 9 except 14=250(LC 23)

FORCES.

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 5-7-15, Exterior(2R) 5-7-15 to 8-5-10, Interior(1) 8-5-10 to 13-0-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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, 8, 11, 13, 12, 10, 9 except (jt=lb) 14=103.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 10, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

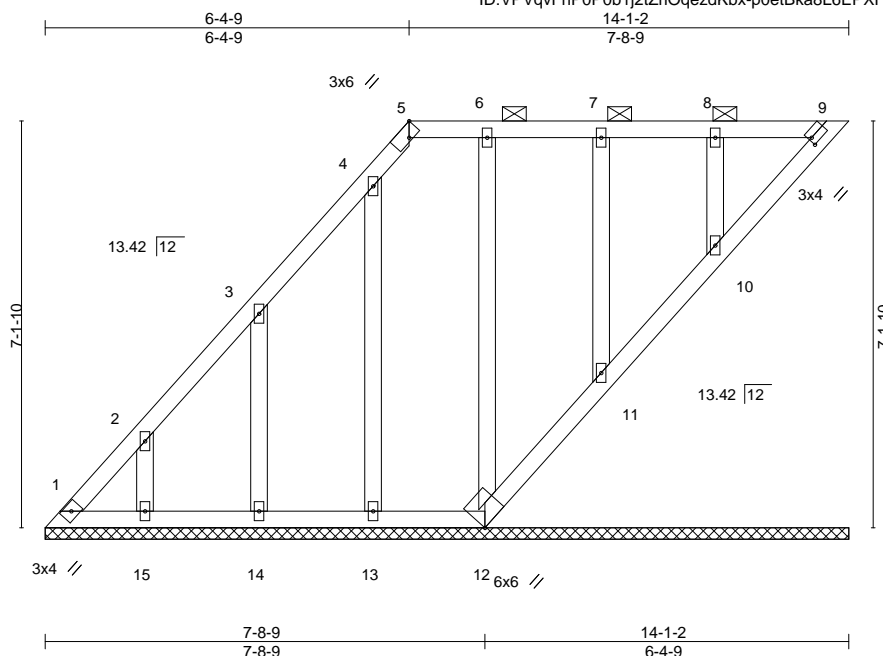
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 2532764	Truss LG9	Truss Type GABLE	Qty 1	Ply 1	Summit/5 Woodside	I43574855
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:39 2020 Page 1
Job Reference (optional)						ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-p0etBka8L6EPXFW07ioGfCcbtyl_v4SFenuWK6yKXeE



Scale = 1:40.4

Plate Offsets (X,Y)-- [5:0-2-10,Edge], [9:0-0-10,0-1-8]													
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999		MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999			
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	-0.00	9	n/a	n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-S								Weight: 66 lb	FT = 20%
BCDL	10.0												

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 14-1-2.
(lb) - Max Horz 1=190(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 12, 15, 14, 13, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 12, 15, 14, 13, 11, 10

FORCES.

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

TOP CHORD 1-2=-262/235

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 6-4-9, Exterior(2R) 6-4-9 to 9-4-9, Interior(1) 9-4-9 to 13-9-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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, 15, 14, 13, 11, 10.
- 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside
2532764	LG10	GABLE	1	1	I43574856
Job Reference (optional)					

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

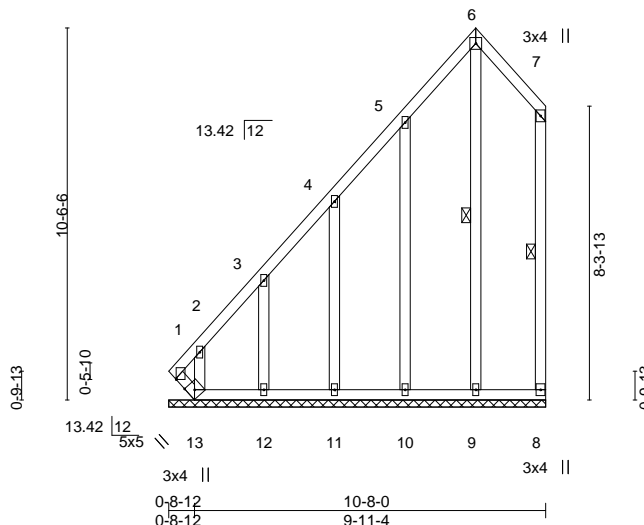
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:29 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-55154JStH1zpKj5XccwF5CpGwsNZWLnLET_hyKXeO

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

4x4 =

Scale = 1:65.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.40	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pt/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.18	n/a	-	n/a			
TCDL	10.0	Lumber DOL	1.15	WB	0.21	n/a	-	n/a			
BCLL	0.0	Rep Stress Incr	YES	Matrix-S		0.00	8	n/a			
BCDL	10.0	Code IRC2018/TPI2014							Weight: 71 lb	FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 1 Row at midpt 7-8, 6-9

REACTIONS.

All bearings 10-8-0.
(lb) - Max Horz 1=331(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 10, 11, 12 except 8=117(LC 14), 1=441(LC 12), 13=320(LC 14), 9=161(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 8, 9, 10, 11, 12 except 1=475(LC 11), 13=321(LC 24)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-761/756, 2-3=-442/443, 3-4=-315/322, 4-5=-266/221, 5-6=-251/264, 6-7=-280/301, 7-8=-263/258
BOT CHORD 1-13=-276/279
WEBS 6-9=-383/293, 2-13=-390/358

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-11 to 3-4-11, Interior(1) 3-4-11 to 8-8-4, Exterior(2E) 8-8-4 to 10-6-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 11, 12 except (jt=lb) 8=117, 1=441, 13=320, 9=161.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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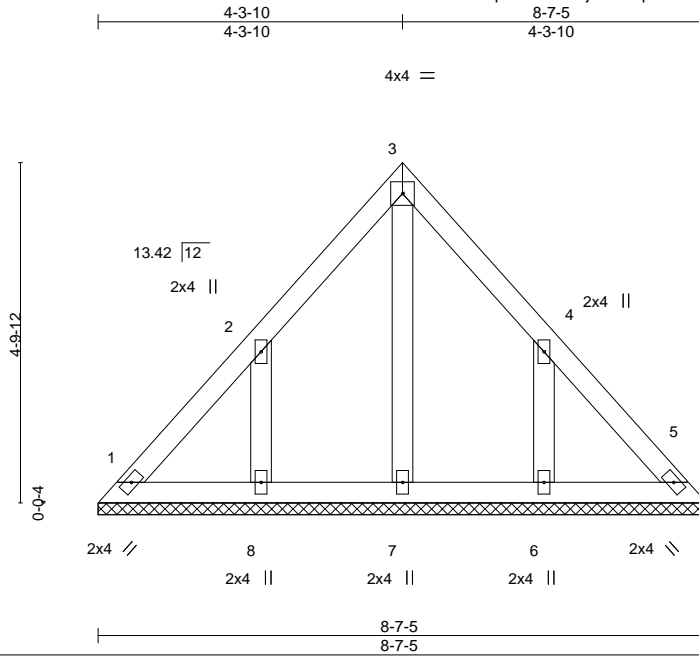


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss LG12	Truss Type GABLE	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574857
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:30 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-albTlftVSL5gxsKH5J89nll2AJEzIOwauCXW7yKXeN



Scale = 1:32.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-P						Weight: 33 lb	FT = 20%
BCDL 10.0										

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 8-7-5.
(lb) - Max Horz 1=-113(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-104(LC 14), 6=-104(LC 14)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=253(LC 23), 6=253(LC 24)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 4-3-10, Exterior(2R) 4-3-10 to 7-3-10, Interior(1) 7-3-10 to 8-3-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=104, 6=104.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss LG14	Truss Type GABLE	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574858
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

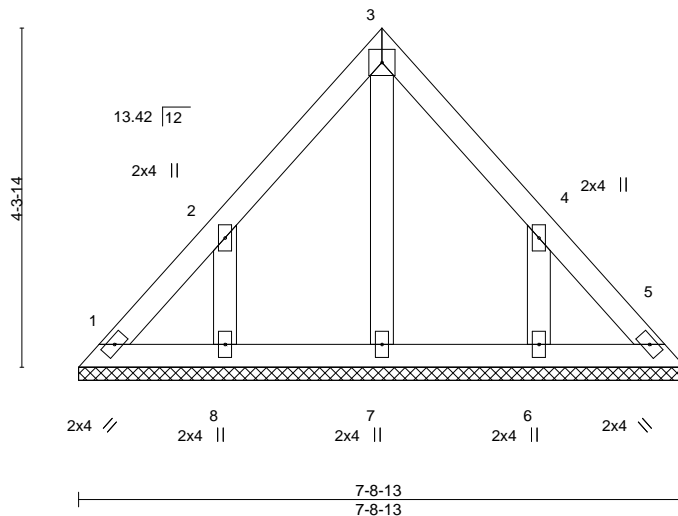
8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:31 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-2U9rV?T7DeDXZ0uUf1fOKWHE4jaH1Tg4pYy52ayKXeM

3-10-6 3-10-6 7-8-13 3-10-6

4x4 =

Scale = 1:29.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	5	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 29 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 7-8-13.
(lb) - Max Horz 1=-101(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-10-6, Exterior(2R) 3-10-6 to 6-10-6, Interior(1) 6-10-6 to 7-4-14 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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, 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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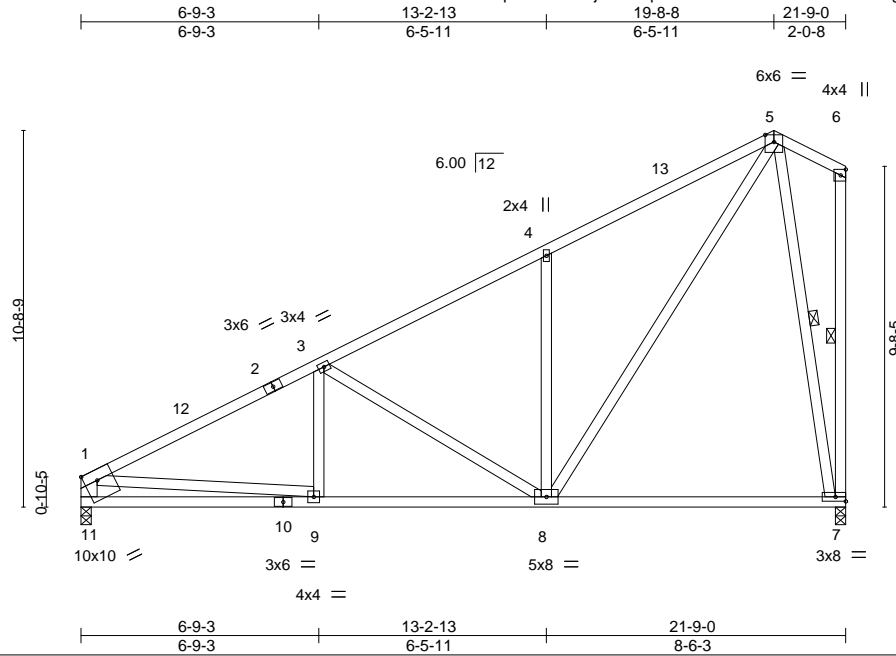
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside
2532764	M1	Common Supported Gable	1	1	143574859
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:40 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-HDCFO4an5PMG8P4CgQJVB9hkLWPeNqOtRd3tYrKXeD



Scale = 1:65.5

Plate Offsets (X,Y)-- [11:0-2-7,0-1-4], [11:Edge,0-3-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.45	Vert(LL)	-0.14	7-8	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.53	Vert(CT)	-0.29	7-8	>896	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.74	Horz(CT)	0.02	7	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 117 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
1-11: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-7, 5-7

REACTIONS. (size) 11=0-3-8, 7=0-3-8
Max Horz 11=346(LC 15)
Max Uplift 11=-68(LC 16), 7=-88(LC 16)
Max Grav 11=962(LC 2), 7=962(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1422/227, 3-4=-923/213, 4-5=-933/339, 1-11=-893/172
BOT CHORD 9-11=-506/540, 8-9=-436/1184
WEBS 3-8=-526/177, 4-8=-478/207, 5-8=-277/1080, 5-7=-886/410, 1-9=-48/803

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 19-8-8, Exterior(2E) 19-8-8 to 21-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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) 11, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574860
2532764	M2	Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:42 2020 Page 1
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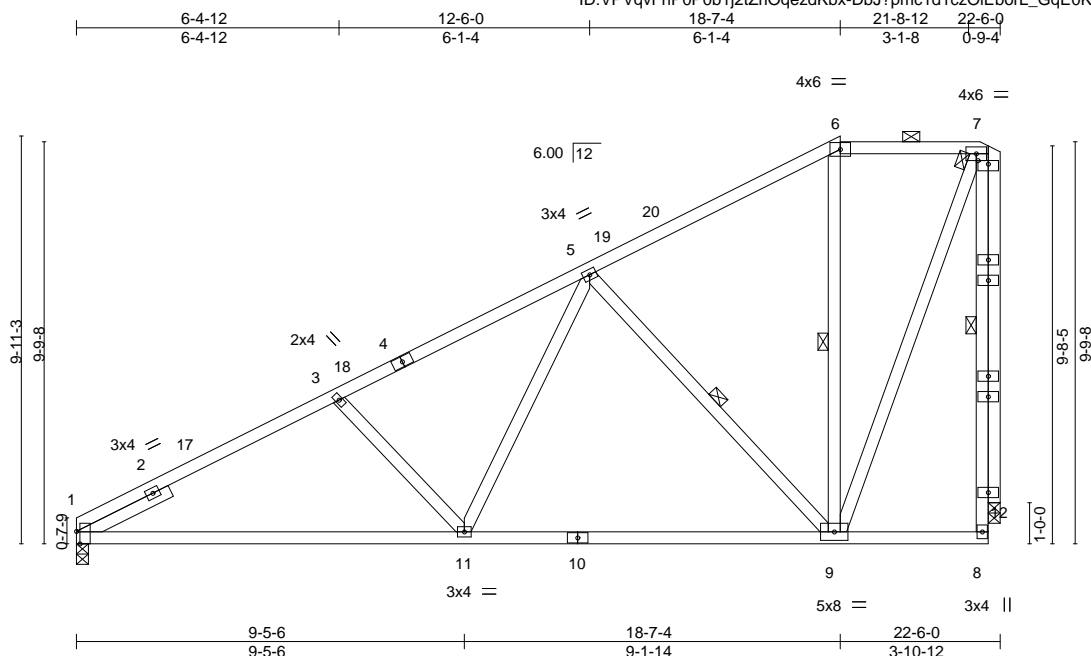


Plate Offsets (X,Y)-- [1:0-3-10,Edge], [7:0-3-0,0-1-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.12	9-11	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.25	9-11	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.03	12	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 121 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-9, 6-9, 7-8

REACTIONS. (size) 1=0-3-8, 12=0-3-8
Max Horz 1=329(LC 15)
Max Uplift 1=70(LC 16), 12=101(LC 13)
Max Grav 1=993(LC 2), 12=993(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1541/209, 3-5=-1373/206, 5-6=-523/174, 6-7=-353/180, 7-12=-980/202
BOT CHORD 1-11=-383/1369, 9-11=-279/933
WEBS 3-11=-384/136, 5-11=-30/528, 5-9=-867/178, 7-9=-217/992

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 18-7-4, Exterior(2E) 18-7-4 to 22-0-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 12=101.
 - This truss 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.



November 11, 2020

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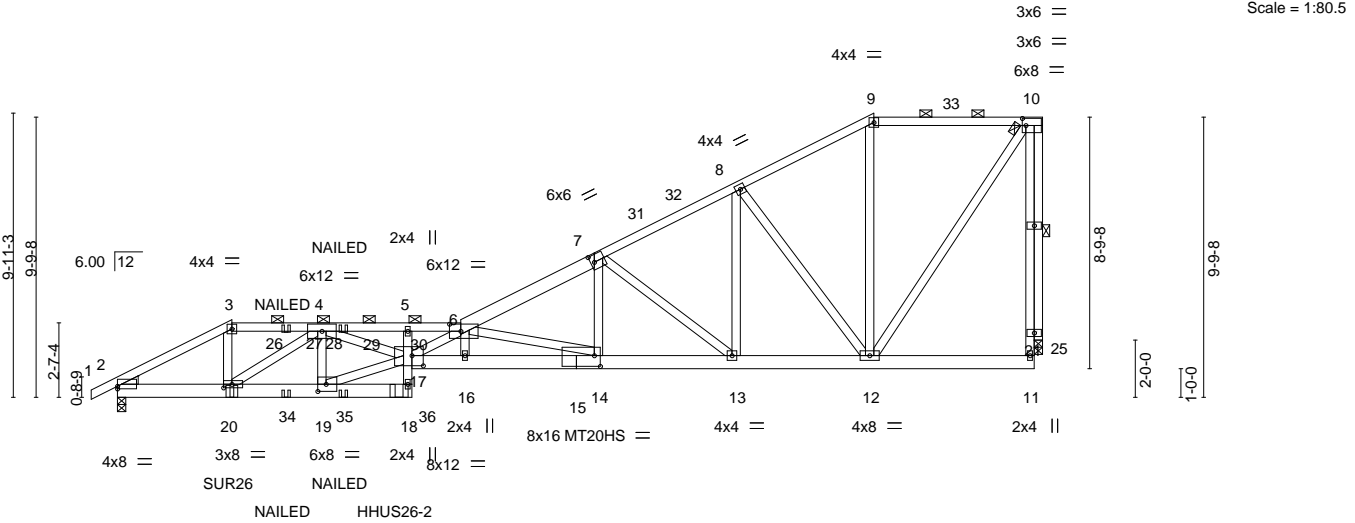
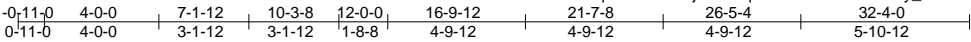


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside
2532764	M3	Roof Special Girder	1	2	143574861

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.240 s Mar 9 2020
MiTek Industries, Inc.
Tue Nov 10 16:06:45 2020
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.72	Vert(LL)	-0.49	16	>789	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.74	Vert(CT)	-0.87	16	>444	MT20HS	148/108
TCDL 10.0	Rep Stress Incr	NO	WB 0.85	Horz(CT)	0.12	25	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-MS						
BCDL 10.0								Weight: 383 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except*	TOP CHORD Structural wood sheathing directly applied or 5-11-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-15 max.): 3-6, 9-10.
3-6: 2x4 SPF 1650F 1.5E, 6-7: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD 2x6 SPF 2100F 1.8E *Except*	WEBS 1 Row at midpt 10-25
2-18: 2x6 SPF No.2	
WEBS 2x4 SPF No.2 *Except*	
5-18: 2x4 SPF 1650F 1.5E	
OTHERS 2x4 SPF No.2	
WEDGE	
Left: 2x4 SP No.3	

REACTIONS. (size) 2=0-3-8, 25=0-3-8

Max Horz 2=254(LC 12)

Max Uplift 2=-228(LC 12), 25=-188(LC 12)

Max Grav 2=2350(LC 38), 25=1692(LC 2)

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

TOP CHORD 2-3=-3923/357, 3-4=-3345/327, 4-5=-12315/1113, 5-6=-12863/1166, 6-7=-5099/371, 7-8=-2589/188, 8-9=-1260/112, 9-10=-1038/120

BOT CHORD 2-20=-515/3445, 19-20=-692/5887, 18-19=-76/767, 16-17=-1218/12346, 14-16=-1204/12245, 13-14=-478/4588, 12-13=-236/2228

WEBS 17-18=-647/747, 3-20=-107/1583, 4-20=-3070/222, 4-19=-1291/217, 17-19=-647/5372, 4-17=-647/6900, 6-17=-423/984, 6-16=-853/119, 6-14=-8102/756, 7-14=-181/2485, 7-13=-2931/301, 8-13=-132/1718, 8-12=-1961/223, 10-12=-198/1755, 10-25=-1693/188

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 - Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 - Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 oc.
 - Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs

Continued on page 2



November 11,2020

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MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside
2532764	M3	Roof Special Girder	1	2	I43574861
					Job Reference (optional)

- NOTES-**
- 8) Provide adequate drainage to prevent water ponding.
 - 9) All plates are MT20 plates unless otherwise indicated.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) Bearing at joint(s) 25 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=228, 25=188.
 - 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.
 - 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 15) Use Simpson Strong-Tie SUR26 (6-10d Girder, 6-10dx1 1/2 Truss) or equivalent at 4-0-0 from the left end to connect truss(es) to back face of bottom chord, skewed 45.0 deg.to the right, sloping 0.0 deg. down.
 - 16) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 9-10-2 from the left end to connect truss(es) to back face of bottom chord.
 - 17) Fill all nail holes where hanger is in contact with lumber.
 - 18) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

- LOAD CASE(S)** Standard
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-51, 3-6=-61, 6-9=-51, 9-10=-61, 18-22=-20, 11-17=-20
 - Concentrated Loads (lb)
 - Vert: 20=-263(B) 27=-71(B) 29=-71(B) 34=-25(B) 35=-25(B) 36=-707(B)

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574862
2532764	M4	Roof Special	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:47 2020 Page 1

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0-11-0	6-1-12	10-3-8	14-1-12	19-3-8	24-5-4	32-3-8
0-11-0	6-1-12	4-1-12	3-10-4	5-1-12	5-1-12	7-10-4

Scale = 1:70.2

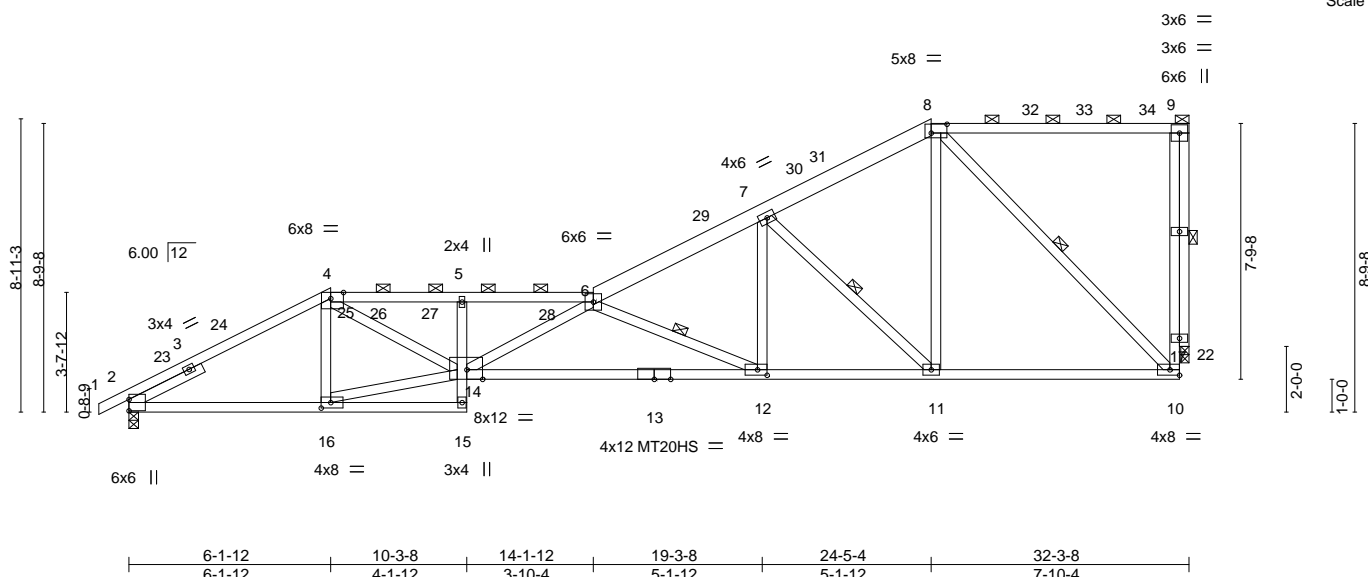


Plate Offsets (X,Y)--		[4:0-4-10,Edge], [8:0-5-12,0-3-4], [12:0-3-8,0-2-0], [14:0-5-12,Edge], [16:0-3-8,0-2-0]	
LOADING (psf)		SPACING	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	10.0	Rep Stress Incr	YES
BCLL	0.0	Code	IRC2018/TPI2014
BCDL	10.0		
		CSI	
		TC	0.81
		BC	0.93
		WB	0.77
		Matrix	AS
		DEFL.	
		Vert(LL)	-0.35 12-14 >999 240
		Vert(CT)	-0.77 12-14 >500 180
		Horz(CT)	0.16 22 n/a n/a
		PLATES	
		MT20	197/144
		MT20HS	148/108
		GRIP	
			Weight: 164 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-8: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
13-14,10-13: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-4-13 max.): 4-6, 8-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-12, 7-11, 8-10, 9-22

REACTIONS.

(size) 2=0-3-8, 22=0-3-0
Max Horz 2=224(LC 16)
Max Uplift 2=115(LC 16), 22=145(LC 16)
Max Grav 2=1512(LC 2), 22=1419(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2418/256, 4-5=-4228/477, 5-6=-4329/476, 6-7=-2630/247, 7-8=-1353/164,
10-17=-142/1169, 9-17=-142/1169
BOT CHORD 2-16=-431/2104, 5-14=-466/87, 12-14=-681/4805, 11-12=-352/2299, 10-11=-192/1175
WEBS 4-16=-432/128, 14-16=-386/1976, 4-14=-256/2455, 6-14=-669/40, 6-12=-2756/368,
7-12=-91/1308, 7-11=-1572/222, 8-11=-97/1184, 8-10=-1532/237, 9-22=-1421/200

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-1-12, Exterior(2R) 6-1-12 to 9-1-12, Interior(1) 9-1-12 to 24-5-4, Exterior(2R) 24-5-4 to 27-5-4, Interior(1) 27-5-4 to 31-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=115, 22=145.

Continued on page 2



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574862
2532764	M4	Roof Special	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:48 2020 Page 2
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- NOTES-**
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 12) 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.
 - 13) 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/5 Woodside	143574863
2532764	M5	Roof Special	1	1		

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020

MiTek Industries, Inc.

Tue Nov 10 16:06:50 2020

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-0-11-0

4-2-10

8-1-12

10-3-8

16-1-12

22-5-4

27-2-14

32-4-0

0-11-0

4-2-10

3-11-2

2-1-12

5-10-4

6-3-8

4-9-10

5-1-2

3x6 =

3x6 =

6x6 ||

4x6 =

4x4 =

6x6 ||

7-11-3

7-9-8

4-7-12

0-8-9

6.00 | 12

24

23 3

3x4 =

2

4x8 ||

6x6 =

3x4 =

8x8 =

29

7

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32

33

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28

6

13

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6x6 =

3x4 =

8x12 =

16

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4x8 =

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6x6 =

3x4 =

8x12 =

16

15

4x8 =

2x4 ||

14

8

13

12

11

10

8-1-12

10-3-8

16-1-12

22-5-4

32-4-0

8-1-12

2-1-12

5-10-4

6-3-8

9-10-12

Plate Offsets (X,Y)--

[2:0-4-10,Edge], [6:0-4-12,0-2-0], [14:0-5-4,0-3-4], [16:0-3-8,0-2-0]

LOADING (psf)

TCLL (roof)

25.0

Snow (Pf/Pg)

20.4/20.0

TCDL

10.0

BCLL

0.0

BCDL

10.0

SPACING-

2-0-0

Plate Grip DOL

1.15

Lumber DOL

1.15

Rep Stress Incr

YES

Code IRC2018/TPI2014

CSI.

TC

0.76

BC

0.95

WB

0.89

Matrix-AS

DEFL.

in (loc)

l/defl

L/d

Vert(LL)

-0.24

10-11

>999

240

Vert(CT)

-0.52

10-11

>742

180

Horz(CT)

0.12

22

n/a

n/a

PLATES

GRIP

MT20

197/144

Weight: 153 lb

FT = 20%

LUMBER-

TOP CHORD

2x4 SPF No.2

BOT CHORD

2x4 SPF No.2

WEBS

2x4 SPF No.2

OTHERS

2x4 SPF No.2

SLIDER

Left 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD

Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-6-5 max.): 4-6, 7-9.

BOT CHORD

Rigid ceiling directly applied.

WEBS

1 Row at midpt 6-11, 8-10

REACTIONS.

(size) 2=0-3-8, 22=0-3-8

Max Horz 2=197(LC 16)

Max Uplift 2=-122(LC 16), 22=-138(LC 16)

Max Grav 2=1513(LC 2), 22=1421(LC 2)

FORCES.

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

TOP CHORD

2-4=-2268/272, 4-5=-2986/393, 5-6=-3054/405, 6-7=-1853/219, 7-8=-1562/234, 10-17=-161/1270, 9-17=-161/1270

BOT CHORD

2-16=-403/2037, 5-14=-552/75, 13-14=-528/3465, 11-13=-526/3469, 10-11=-158/935

WEBS

4-16=-803/206, 14-16=-398/2147, 4-14=-220/1869, 6-14=-493/3, 6-11=-2172/321, 7-11=0/456, 8-11=-146/1032, 8-10=-1448/244, 9-22=-1424/193

NOTES-

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

2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 8-1-12, Exterior(2R) 8-1-12 to 11-1-12, Interior(1) 11-1-12 to 22-5-4, Exterior(2R) 22-5-4 to 25-5-4, Interior(1) 25-5-4 to 31-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.

4) Unbalanced snow loads have been considered for this design.

5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.

6) Provide adequate drainage to prevent water ponding.

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

8) Bearing at joint(s) 22 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 100 lb uplift at joint(s) except (jt=lb) 2=122, 22=138.

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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum concrete sheathing be applied directly to the bottom chord.

November 11,2020

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

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

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/5 Woodside	I43574863
2532764	M5	Roof Special	1	1	Job Reference (optional)	

NOTES-
 12) 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/5 Woodside	143574864
2532764	M6	Roof Special	1	1		

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

8.240 s Mar 9 2020
MiTek Industries, Inc.
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ID:VPVqvFnP0P0b1j2IZrlOqezdKbx-PjU97Wkw1P?PCPaixf2ZD8CrGbtLAE?JsZHFqlyKXe0

-0-11-0
5-2-10
10-1-12
18-1-12
21-2-0
21-10-12
26-11-10
32-4-0

0-11-0
5-2-10
4-11-2
8-0-0
3-0-4
0-8-12
5-0-14
5-4-6

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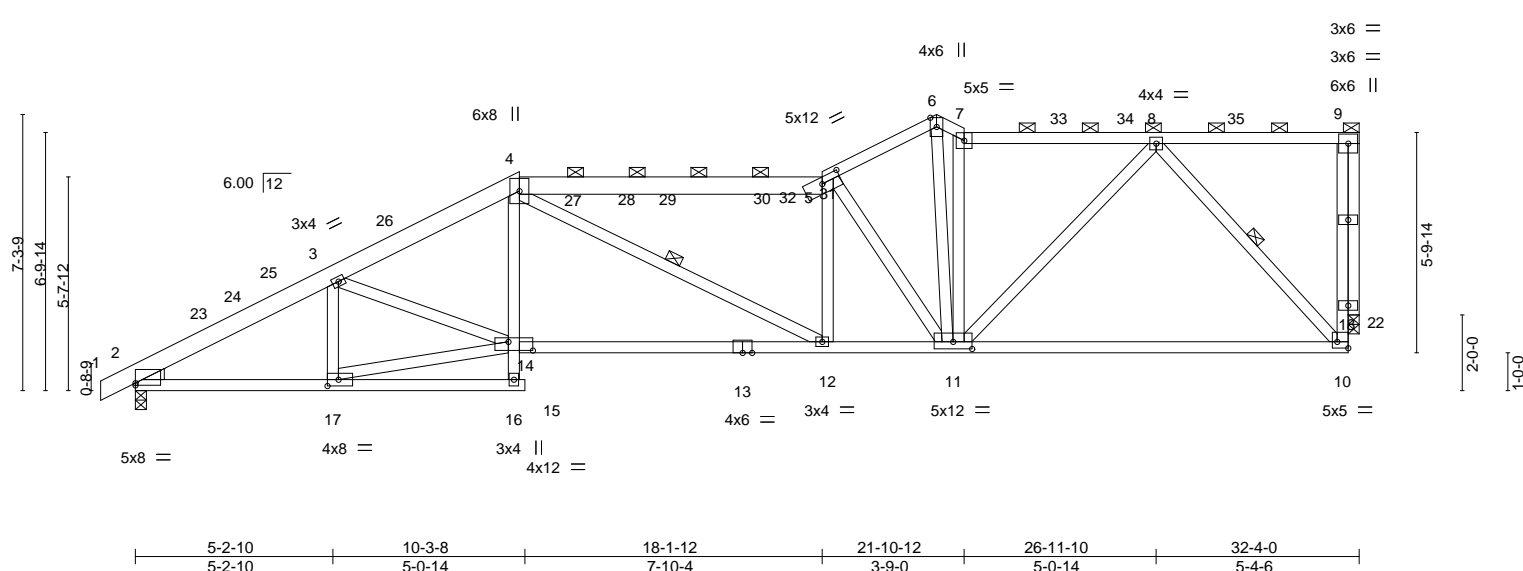


Plate Offsets (X,Y)--		[2:0-0-0,0-0-11], [5:0-6-0,0-2-0], [10:Edge,0-2-0], [11:0-6-0,0-2-4], [14:0-7-12,0-2-12], [17:0-3-8,0-2-0]	
LOADING (psf)		SPACING-	
TCLL (roof)	25.0	2-0-0	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15
TCDL	10.0	Lumber DOL	1.15
BCLL	0.0	Rep Stress Incr	YES
BCDL	10.0	Code IRC2018/TPI2014	
		CSL	
		TC	0.65
		BC	0.86
		WB	0.80
		Matrix-AS	
		DEFL.	
		in (loc)	l/defl
		Vert(LL)	-0.30 10-11 >999 240
		Vert(CT)	-0.63 10-11 >610 180
		Horz(CT)	0.09 22 n/a n/a
		PLATES	
		MT20	197/144
		GRIP	
		Weight: 172 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 1-4,4-5: 2x6 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-5-2 max.): 4-5, 7-9.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied. Except:
WEBS	2x4 SPF No.2		10-0-0 oc bracing: 14-16
OTHERS	2x4 SPF No.2	WEBS	1 Row at midpt 4-12, 8-10
WEDGE			
Left: 2x4 SP No.3			

REACTIONS. (size) 2=0-3-8, 22=0-3-8

Max Horz 2=172(LC 16)

Max Uplift 2=127(LC 16), 22=132(LC 16)

Max Grav 2=1517(LC 2), 22=1473(LC 43)

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

TOP CHORD 2-3=-2511/273, 3-4=-2693/366, 4-5=-2645/348, 5-6=-1969/263, 6-7=-2034/293, 7-8=-1881/267, 10-18=-155/1288, 9-18=-155/1288

BOT CHORD 2-17=-420/2131, 4-14=-22/546, 12-14=-434/2421, 11-12=-412/2640, 10-11=-190/1175

WEBS 3-17=-388/130, 14-17=-381/2057, 3-14=-14/439, 4-12=-17/334, 5-11=-1511/251, 6-11=-195/1723, 7-11=-1090/162, 8-11=-129/1038, 8-10=-1588/261, 9-22=-1477/188

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 21-2-0, Exterior(2E) 21-2-0 to 21-10-12, Interior(1) 21-10-12 to 31-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=127, 22=132.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Contr to standard ANSI/TPI 1.



November 11,2020

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574864
2532764	M6	Roof Special	1	1	Job Reference (optional)	

- NOTES-**
- 11) 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.
- 12) 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/5 Woodside	143574865
2532764	M7	Roof Special	1	1		

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

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-0-11-0	4-6-2	8-8-12	10-3-8	16-8-12	20-8-12	21-7-4	26-9-14	32-4-0
0-11-0	4-6-2	4-2-10	1-6-12	6-5-4	4-0-0	0-10-8	5-2-10	5-6-2

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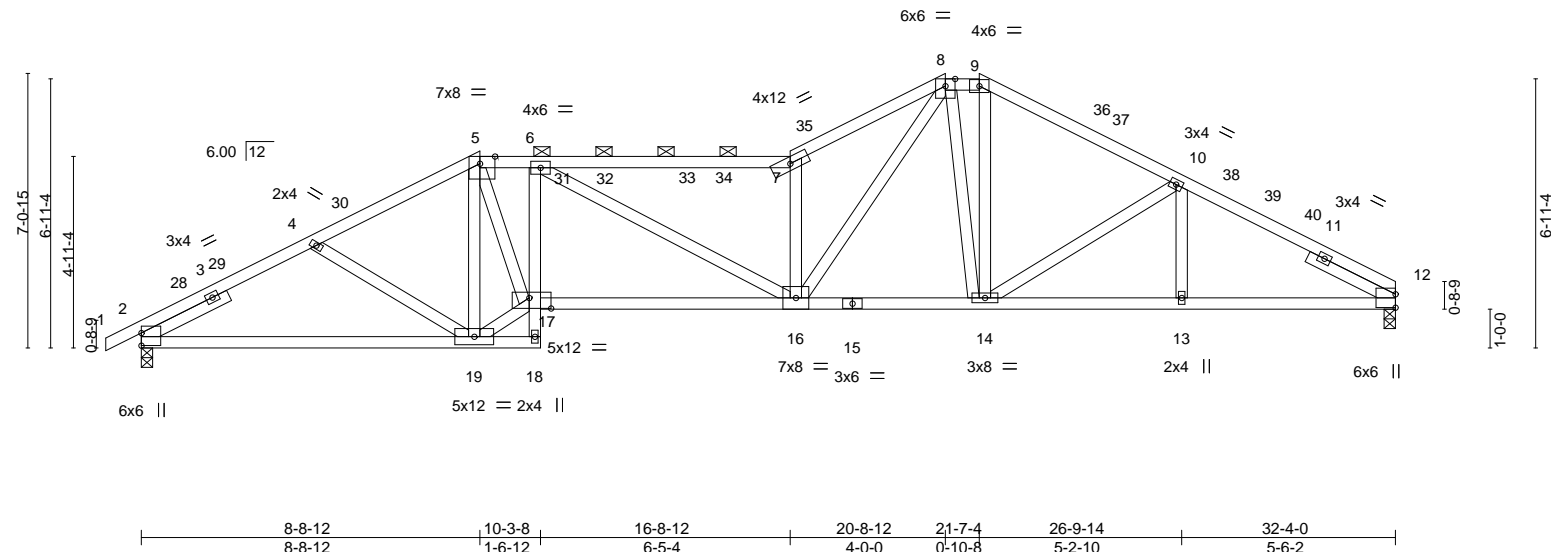


Plate Offsets (X,Y)-- [5:0-4-10,Edge], [17:0-6-12,0-3-4]		8-8-12		10-3-8	16-8-12	20-8-12	21-7-4	26-9-14	32-4-0
		8-8-12		1-6-12	6-5-4	4-0-0	0-10-8	5-2-10	5-6-2

LOADING (psf)	SPACING	2-0-0	CSI	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL 1.15		TC 0.81	Vert(LL) -0.26	16-17	>999	240		MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL 1.15		BC 0.76	Vert(CT) -0.50	16-17	>776	180			
TCDL 10.0	Rep Stress Incr YES		WB 0.56	Horz(CT) 0.15	12	n/a	n/a			
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0									Weight: 148 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, Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (2-2-0 max.): 5-7, 8-9.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 12=0-3-8, 2=0-3-8
Max Horz 2=124(LC 15)
Max Uplift 12=119(LC 16), 2=145(LC 16)
Max Grav 12=1519(LC 43), 2=1520(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2408/354, 4-5=-2269/334, 5-6=-2782/426, 6-7=-3219/477, 7-8=-3583/571,
8-9=-1856/340, 9-10=-2152/355, 10-12=-2484/349
BOT CHORD 2-19=-319/2088, 6-17=-693/150, 16-17=-352/2851, 14-16=-194/1908, 13-14=-247/2154,
12-13=-247/2154
WEBS 5-19=-1076/165, 17-19=-229/2265, 5-17=-276/2068, 6-16=-46/500, 7-16=-1915/350,
8-14=-464/87, 9-14=-92/590, 10-14=-393/84, 8-16=-330/2201

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-3-13, Interior(1) 2-3-13 to 8-8-12, Exterior(2R) 8-8-12 to 11-11-9, Interior(1) 11-11-9 to 20-8-12, Exterior(2E) 20-8-12 to 21-7-4, Exterior(2R) 21-7-4 to 24-10-1, Interior(1) 24-10-1 to 32-4-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - 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) 12=119, 2=145.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574866
2532764	M8	Roof Special	1	1		
Job Reference (optional)						

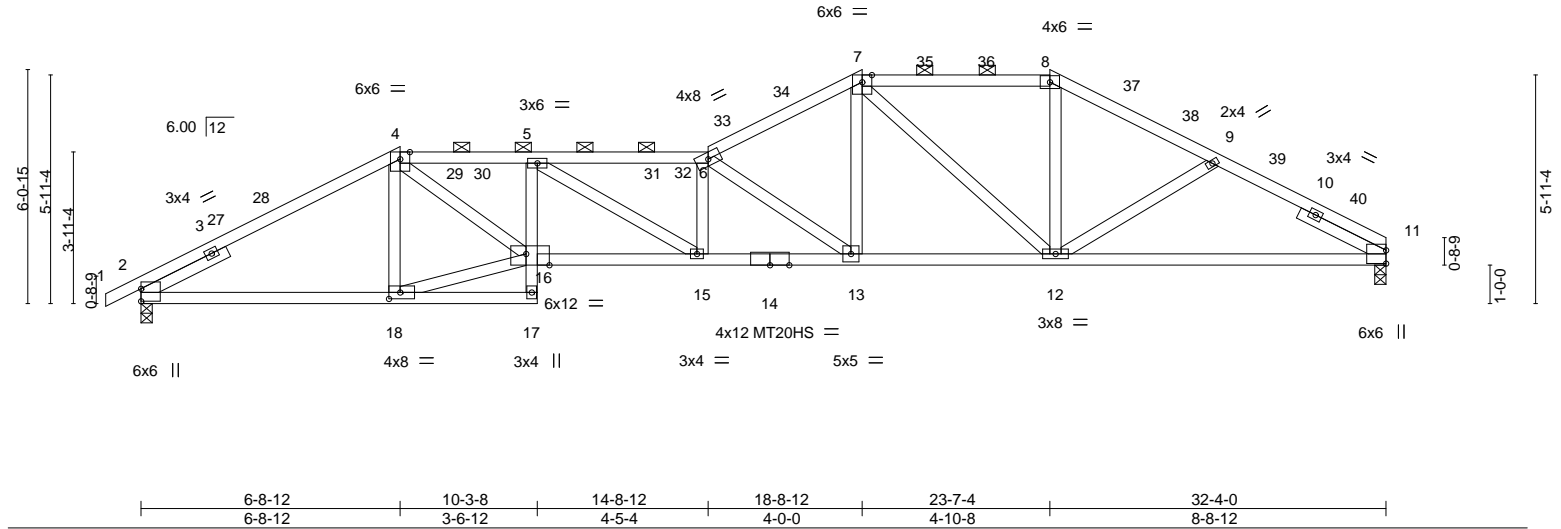
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:06:58 2020 Page 1

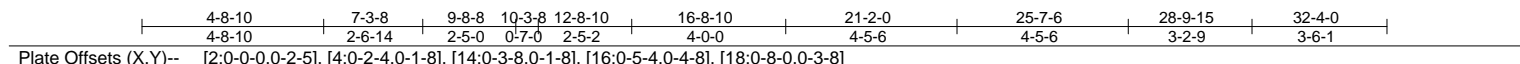
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-0-11-0	6-8-12	10-3-8	14-8-12	18-8-12	23-7-4	27-9-14	32-4-0
0-11-0	6-8-12	3-6-12	4-5-4	4-0-0	4-10-8	4-2-10	4-6-2

Scale = 1:59.8



Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MITek Industries, Inc. Tue Nov 10 16:07:02 2020 Page 1
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 0-11-0 4-8-10 2-6-14 3-0-0 2-5-2 4-0-0 4-5-6 4-5-6 3-2-9 3-6-1
 Scale = 1:59.8



LUMBER- TOP CHORD 2x4 SPF No.2 *Except* 3-6: 2x4 SPF 1650F 1.5E, 6-7: 2x6 SPF No.2 BOT CHORD 2x6 SPF 2100F 1.8E *Except* 11-15: 2x6 SPF No.2, 18-22: 2x4 SPF 1650F 1.5E WEBS 2x4 SPF No.2 WEDGE Left: 2x4 SP No.3, Right: 2x4 SP No.3	BRACING- TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins, except 2-0-0 oc purlins (2-5-1 max.): 3-6, 7-9. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 18-19
--	--

REACTIONS. (size) 11=0-3-8, 2=0-3-8
 Max Horz 2=83(LC 11)
 Max Uplift 11=-456(LC 12), 2=-407(LC 12)
 Max Grav 11=3196(LC 2), 2=2975(LC 2)

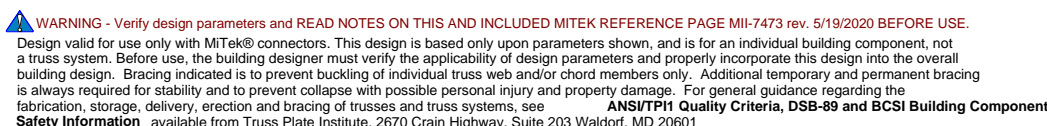
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-5238/707, 3-4=-7147/966, 4-5=-14104/1893, 5-6=-15857/2170, 6-7=-8878/1277, 7-8=-8101/1185, 8-9=-7511/1124, 9-10=-6193/941, 10-11=-5452/802
BOT CHORD	2-23=-615/4661, 22-23=-620/4682, 17-18=-1879/14231, 16-17=-2153/15948, 14-16=-1033/7508, 13-14=-768/5559, 12-13=-678/4775, 11-12=-678/4775, 19-22=-968/7425, 18-19=-962/7418
WEBS	3-23=-374/78, 3-22=-456/3614, 4-22=-4201/591, 4-18=-1047/7849, 5-18=-1466/234, 5-17=-316/2068, 6-17=-999/194, 6-16=-8543/1152, 7-16=-492/3647, 8-16=-81/923, 8-14=-988/137, 9-14=-342/2510, 9-13=-137/1025, 10-13=-161/1023, 10-12=-759/144

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 0-4-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 8) Provide adequate drainage to prevent water ponding.



November 11.2020



Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside
2532764	M9	Roof Special Girder	1	2	I43574867
					Job Reference (optional)

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:07:02 2020 Page 2
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- NOTES-**
- 9) All plates are MT20 plates unless otherwise indicated.
 - 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=456, 2=407.
 - 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.
 - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 11-2-0 from the left end to 15-2-0 to connect truss(es) to front face of bottom chord.
 - 15) Fill all nail holes where hanger is in contact with lumber.
 - 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 133 lb down and 69 lb up at 5-2-0, and 133 lb down and 66 lb up at 7-2-0 on top chord, and 273 lb down and 66 lb up at 4-8-10, 44 lb down at 5-2-0, 44 lb down at 7-1-12, 289 lb down and 71 lb up at 17-2-0, 289 lb down and 71 lb up at 19-2-0, 289 lb down and 71 lb up at 21-2-0, 289 lb down and 71 lb up at 23-2-0, and 289 lb down and 71 lb up at 25-2-0, and 638 lb down and 120 lb up at 25-7-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 17) Special hanger(s) or other connection device(s) shall be provided at 6-1-14 from the left end sufficient to connect trusses to front face of bottom chord, skewed 0.0 deg. to the right, sloping 0.0 deg down.. The design/selection of such special connection device(s) is the responsibility of others.
 - 18) Special hanger(s) or other connection device(s) shall be provided at 6-2-0 from the left end sufficient to connect trusses to front face of top chord, skewed 0.0 deg. to the right, sloping 0.0 deg down.. The design/selection of such special connection device(s) is the responsibility of others.

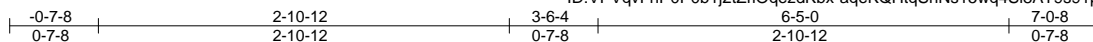
- LOAD CASE(S)** Standard
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-51, 3-6=-61, 6-7=-51, 7-9=-61, 9-11=-51, 22-27=-20, 20-22=-20, 18-24=-20, 18-19=-20
 - Concentrated Loads (lb)
 - Vert: 23=-273(F) 22=-36(F) 4=-101(F) 14=-289(F) 13=-638(F) 30=-104(F) 37=-36(F) 38=-250(F) 39=-289(F) 40=-252(F) 41=-289(F) 42=-289(F) 43=-289(F) 44=-289(F)

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574868
2532764	P1	Hip Girder	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:07:04 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-aeqKQHtqSnNs15wq4S18AT9s91pQFP?wOASKi9yKXdr



Scale = 1:16.2

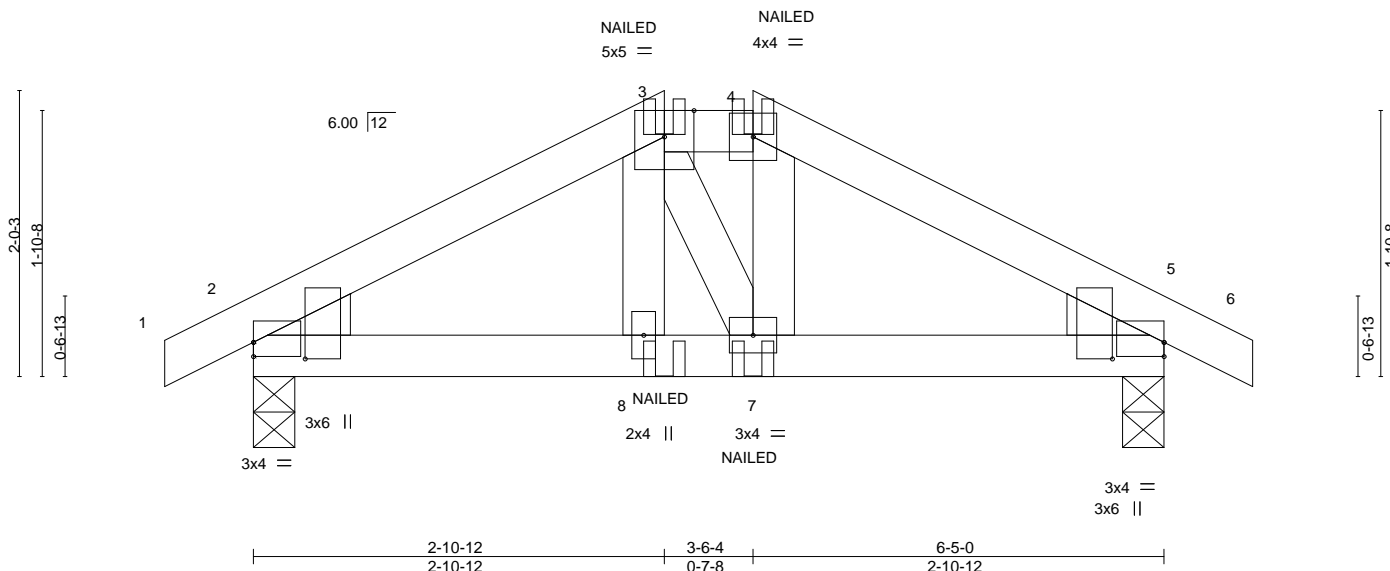


Plate Offsets (X,Y)-- [2:0-0-0,0-1-3], [2:0-1-6,0-4-6], [5:0-0-0,0-1-3], [5:0-1-6,0-4-6]

LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.09	Vert(LL) -0.00	8	>999	240		MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.13	Vert(CT) -0.01	8-11	>999	180			
TCDL 10.0	Lumber DOL 1.15	WB 0.02	Horz(CT) 0.00	5	n/a	n/a			
BCLL 0.0	Rep Stress Incr NO	Matrix-MP							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
 2-0-0 oc purlins (6-0-0 max.): 3-4.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 5=0-3-8
 Max Horz 2=32(LC 11)
 Max Uplift 2=42(LC 12), 5=42(LC 12)
 Max Grav 2=400(LC 35), 5=400(LC 35)

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

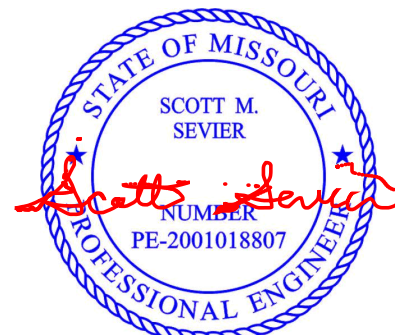
TOP CHORD 2-3=-416/36, 3-4=-331/43, 4-5=-417/36
 BOT CHORD 2-8=-2/335, 7-8=-2/330, 5-7=0/336

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-51, 3-4=-61, 4-6=-51, 9-12=-20



November 11, 2020

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/5 Woodside
2532764	P1	Hip Girder	1	1	I43574868
Job Reference (optional)					

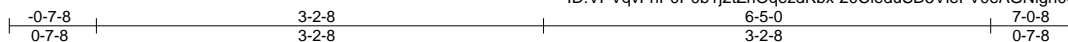
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-30(B) 4=-30(B) 7=-14(B) 8=-14(B)

Job 2532764	Truss P2	Truss Type Common	Qty 3	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574869
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:07:05 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-20CieduSD5VieFV0eAGNigh0qQ8s_rV4dqBuEcyKXdx



3x6 =

Scale = 1:16.5

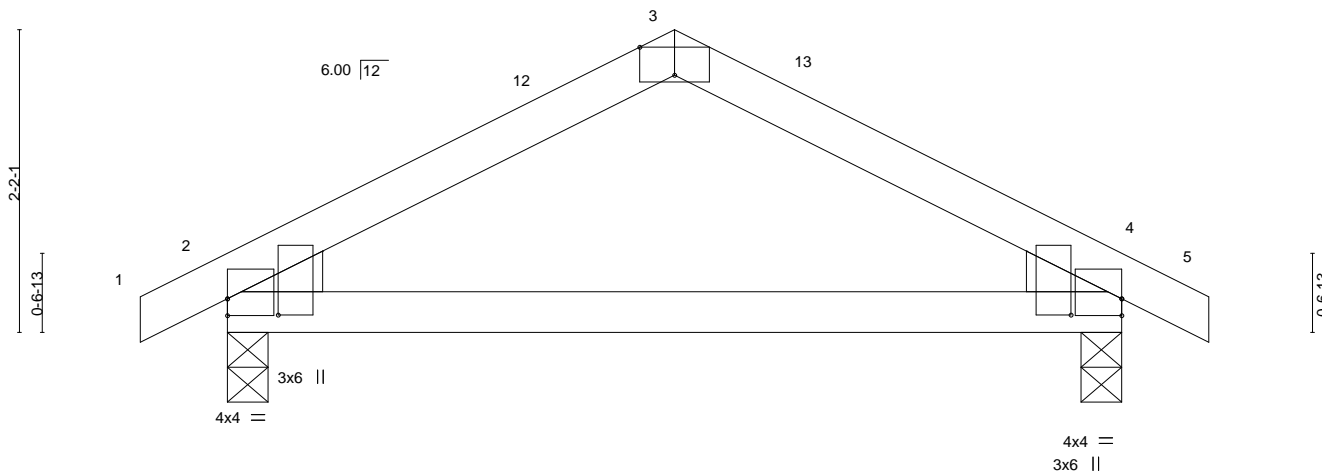


Plate Offsets (X,Y)-- [2:0-1-6,0-4-6], [2:0-0-0,0-1-7], [3:0-3-0,Edge], [4:Edge,0-1-7], [4:0-1-6,0-4-6]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	-0.02	8-11	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.05	8-11	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 19 lb	FT = 20%
BCDL 10.0										

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 4=0-3-8
Max Horz 2=37(LC 15)
Max Uplift 2=-42(LC 16), 4=-42(LC 16)
Max Grav 2=333(LC 2), 4=332(LC 2)

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

TOP CHORD 2-3=-263/163, 3-4=-263/163

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-7-8 to 2-4-8, Interior(1) 2-4-8 to 3-2-8, Exterior(2R) 3-2-8 to 6-5-0, Interior(1) 6-5-0 to 7-0-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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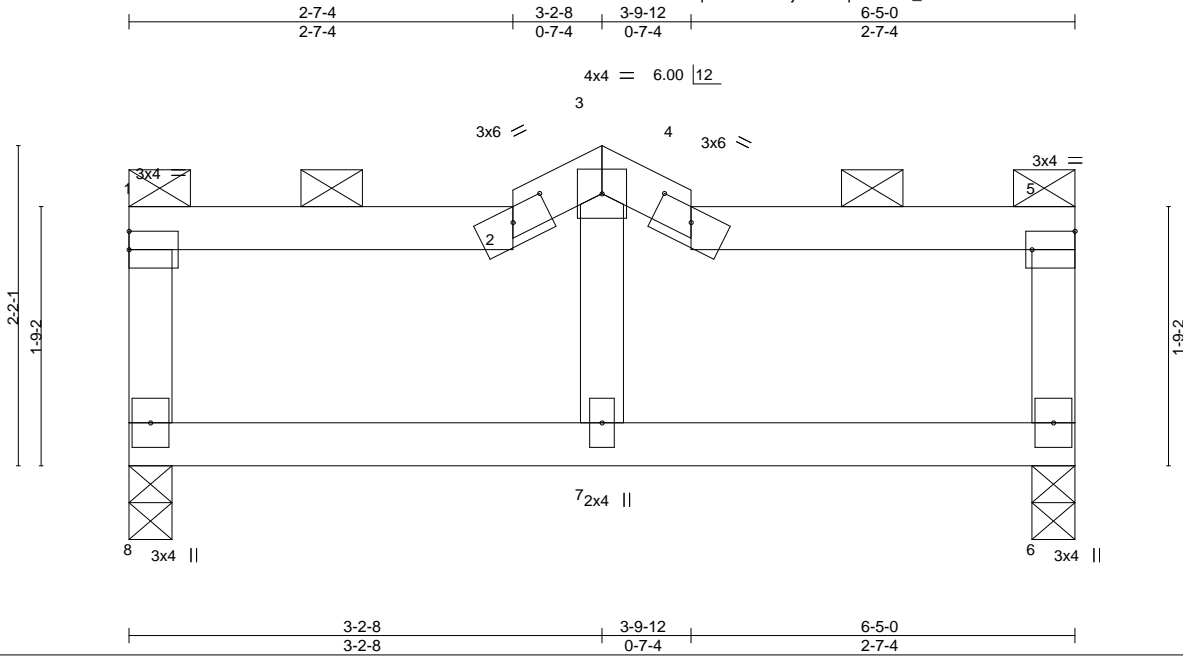
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	143574870
2532764	P3	Roof Special	1	1	Job Reference (optional)	

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

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ID:VPVqvFnP0P0b1j2tZrIQezdKbx-_PKS3JvikiQuYfOmblm5nL9EodSIIN48g?JUyKXdo



Scale = 1:15.6

Plate Offsets (X,Y)-- [2:0-3-0,0-1-2], [4:0-3-0,0-1-2], [5:Edge,0-1-8]		3-2-8 3-2-8		3-9-12 0-7-4		6-5-0 2-7-4	
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.04 7 >999 240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.07 7 >999 180
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00 6 n/a n/a
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS			
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2, 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 8=0-3-8, 6=0-3-8
Max Horz 8=54(LC 15)
Max Uplift 8=28(LC 12), 6=28(LC 13)
Max Grav 8=294(LC 40), 6=294(LC 40)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-7-4, Interior(1) 2-7-4 to 3-2-8, Exterior(2E) 3-2-8 to 3-9-12, Interior(1) 3-9-12 to 6-3-4 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
- TCCL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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) 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



November 11, 2020

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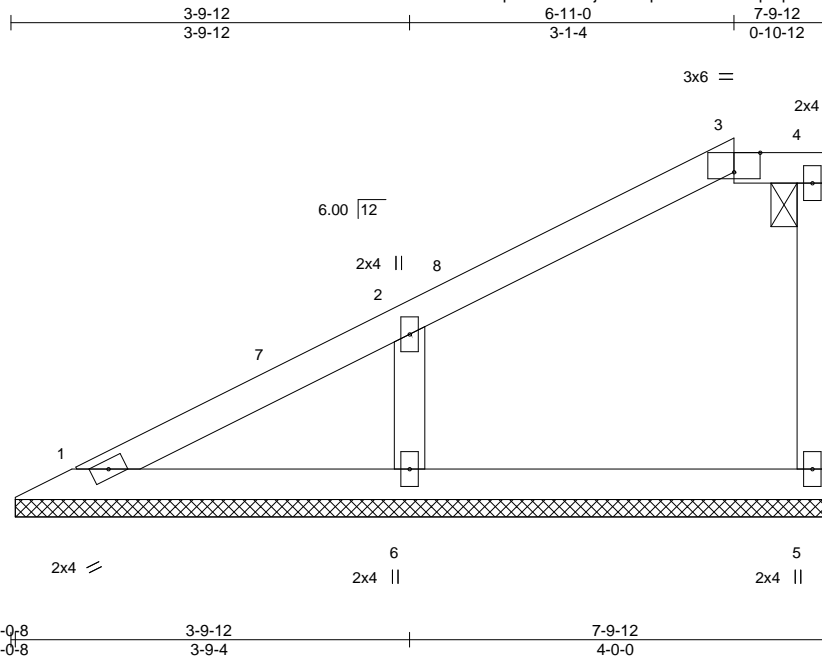


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss V2	Truss Type Valley	Qty 1	Ply 1	Summit/5 Woodside	I43574872
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Builders First Source, Valley Center, KS 67147

8.240 s Apr 4 2020 MiTek Industries, Inc. Wed Nov 11 09:32:59 2020 Page 1
ID:VPVqVFnP0P0b1j2tZrIQezdKbx-3krrhmqYsVW?xy2qTLkTknD9x0ZMWBwu6aYoHyKJl



Scale = 1:22.0

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	5	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-S						Weight: 23 lb	FT = 20%
BCDL 10.0										

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=89/7-9-4, 5=123/7-9-4, 6=294/7-9-4
Max Horz 1=106(LC 15)
Max Uplift 5=19(LC 13), 6=52(LC 16)
Max Grav 1=135(LC 35), 5=149(LC 2), 6=440(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-6=352/230

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-9-12, Interior(1) 3-9-12 to 6-11-0, Exterior(2E) 6-11-0 to 7-8-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 5 and 52 lb uplift at joint 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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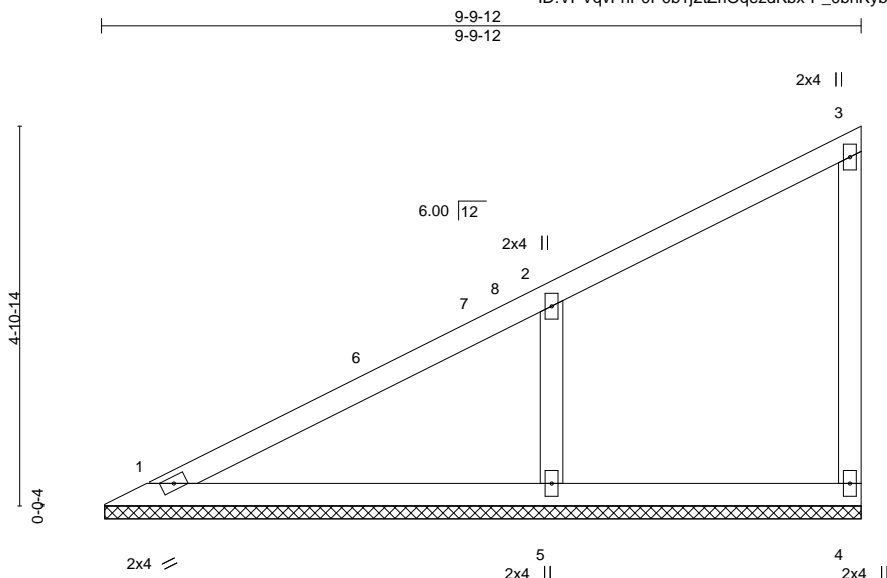


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss V3	Truss Type Valley	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574873
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:07:10 2020 Page 1
ID:VPVqvFnP0P0b1j2tZrOqezdKbx-P_0bhKyb1d8?i0NzRjrYPkPqoRryf6mpn6vfvpyKXdl



Scale = 1:29.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.34	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	-0.00	4	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 30 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=9-9-4, 4=9-9-4, 5=9-9-4
Max Horz 1=158(LC 13)
Max Uplift 4=-23(LC 13), 5=-81(LC 16)
Max Grav 1=189(LC 2), 4=141(LC 20), 5=512(LC 2)

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

WEBS 2-5=-386/243

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 9-8-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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) 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.



November 11, 2020

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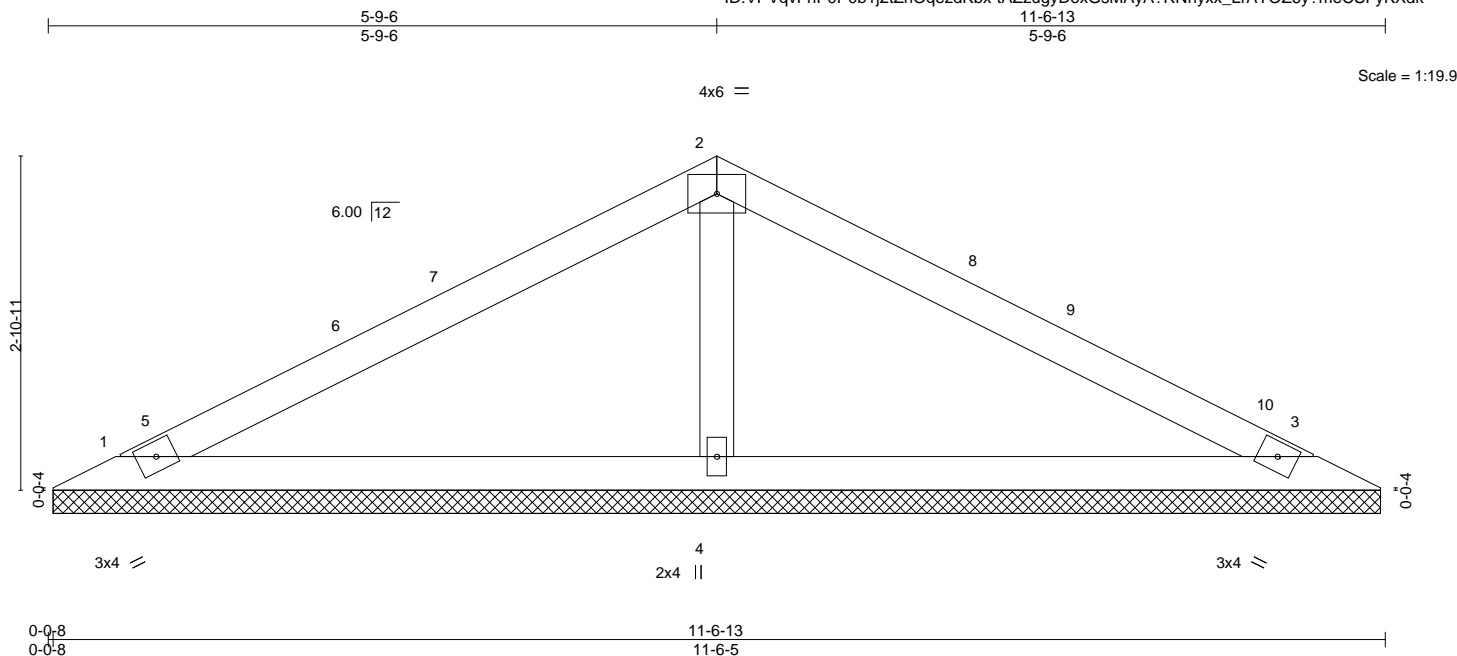
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss V4	Truss Type Valley	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574874
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:07:11 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-tAZzuyDoxGsMAyA?RNnyxx_LrAYOZ6y?meCSFyKXdk



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.42	in (loc)	I/defl	L/d	MT20	197/144	
Snow (Pt/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.22	n/a	-	n/a			
TCDL	10.0	Lumber DOL	1.15	WB	0.06	n/a	-	n/a			
BCLL	0.0	Rep Stress Incr	YES	Matrix-S		0.00	3	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 29 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=11-5-13, 3=11-5-13, 4=11-5-13
Max Horz 1=-49(LC 14)
Max Uplift 1=-26(LC 16), 3=-26(LC 16), 4=-23(LC 16)
Max Grav 1=224(LC 20), 3=224(LC 21), 4=505(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-349/169

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=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-9-6, Exterior(2R) 5-9-6 to 8-9-6, Interior(1) 8-9-6 to 10-11-4 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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.



November 11, 2020

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



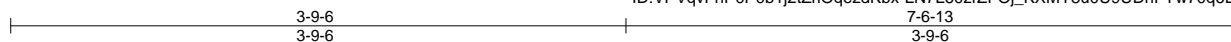
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574875
2532764	V5	Valley	1	1	Job Reference (optional)	

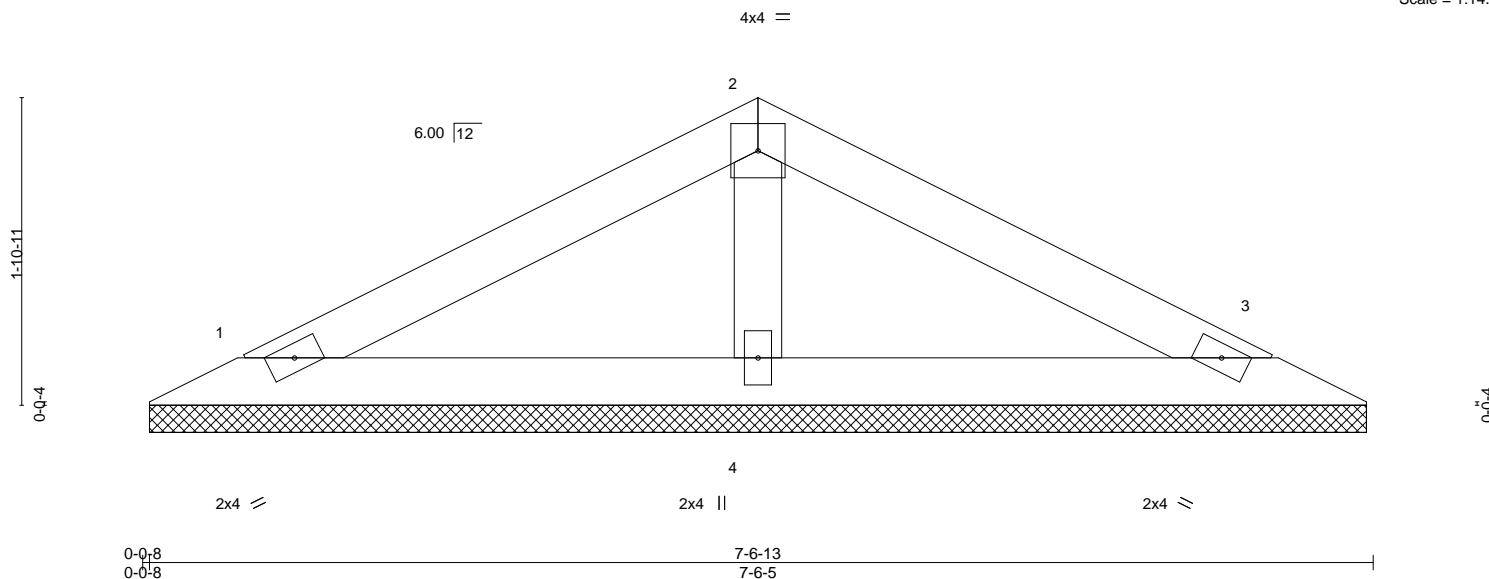
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:07:12 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-LN7L60zrZFOj_KXMY8u0U9UDhFYw70q6EQOm_iyKXdj



Scale = 1:14.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	2-0-0		TC	0.19	in (loc)	l/defl	L/d	MT20	197/144	
Snow (Pt/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.08	n/a	-	n/a			
TCDL	10.0	Lumber DOL	1.15	WB	0.03	n/a	-	n/a			
BCLL	0.0	Rep Stress Incr	YES	Matrix-P		0.00	3	n/a			
BCDL	10.0	Code IRC2018/TPI2014									
								Weight: 18 lb		FT = 20%	

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

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

REACTIONS. (size) 1=7-5-13, 3=7-5-13, 4=7-5-13
Max Horz 1=30(LC 15)
Max Uplift 1=21(LC 16), 3=21(LC 16), 4=3(LC 16)
Max Grav 1=148(LC 20), 3=148(LC 21), 4=279(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss V6	Truss Type Valley	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	I43574876
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:07:13 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-pZhjJM_TKYWacT6Y6rPF1M1QvfvesTUFT47JW8yKXdi

1-9-6 3-6-13
1-9-6 1-9-6

Scale = 1:7.1

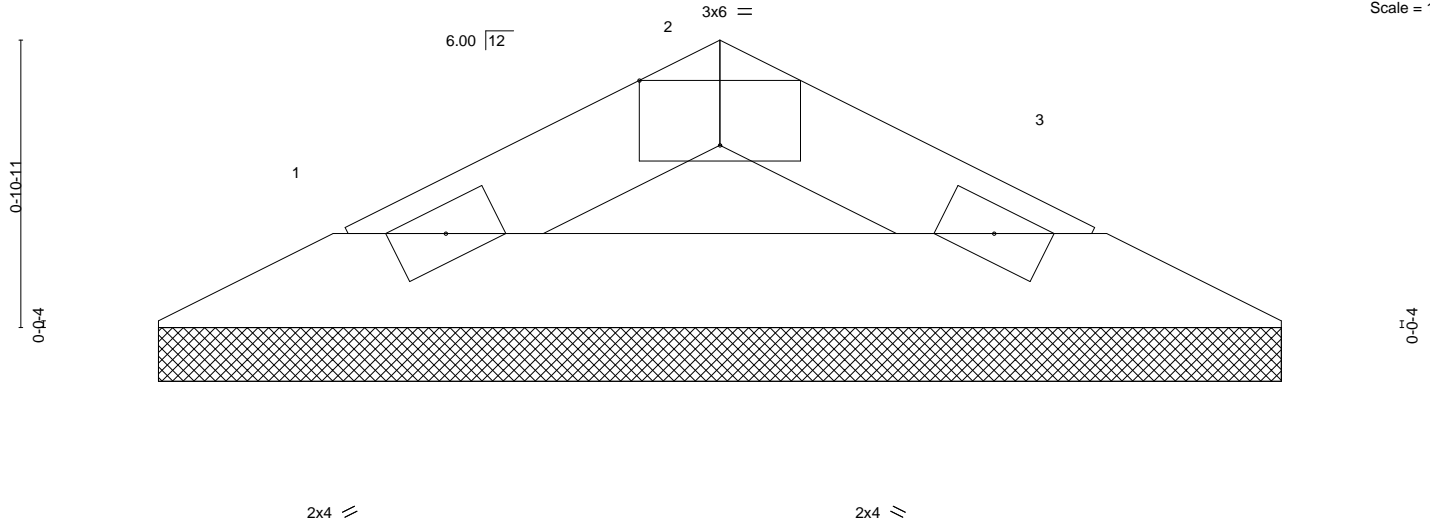


Plate Offsets (X,Y)-- [2:0-3:0,Edge]		0-0-8 0-0-8		3-6-13 3-6-5	
LOADING (psf)		SPACING-	2-0-0	CSI.	DEFL.
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC 0.03	in (loc) l/defl L/d
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC 0.05	Vert(LL) n/a - n/a 999
TCDL	10.0	Rep Stress Incr	YES	WB 0.00	Vert(CT) n/a - n/a 999
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P	Horz(CT) 0.00 3 n/a n/a
BCDL	10.0				
				Weight: 7 lb FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-5-13, 3=3-5-13
Max Horz 1=11(LC 15)
Max Uplift 1=8(LC 16), 3=8(LC 16)
Max Grav 1=104(LC 2), 3=104(LC 2)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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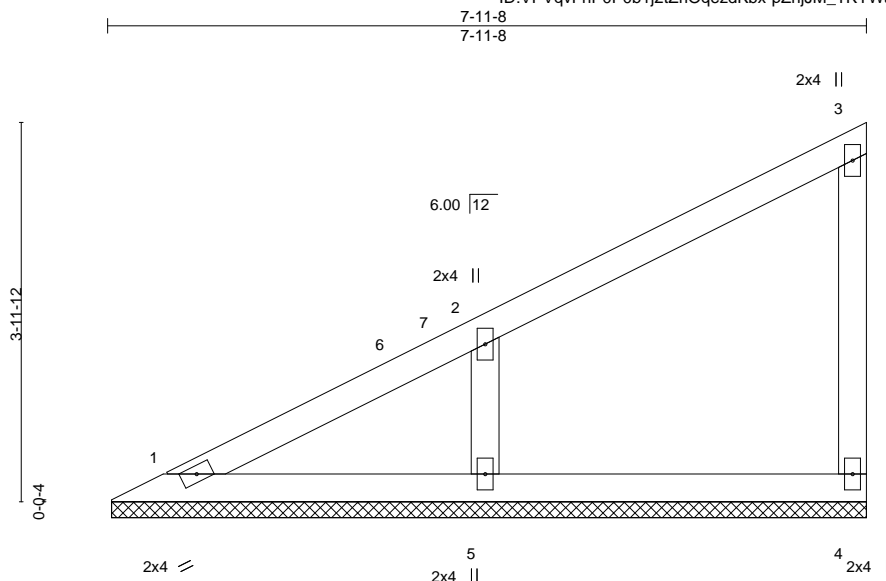
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2532764	Truss V7	Truss Type Valley	Qty 1	Ply 1	Summit/5 Woodside Job Reference (optional)	143574877
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:07:13 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-pZhjJM_TKYWacT6Y6rPF1M1N1fumsTpFT47JW8yKXdi



Scale: 1/2"=1'

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.21	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	-0.00	4	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 24 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-11-0, 4=7-11-0, 5=7-11-0
Max Horz 1=126(LC 13)
Max Uplift 4=21(LC 13), 5=64(LC 16)
Max Grav 1=111(LC 28), 4=154(LC 20), 5=413(LC 20)

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

WEBS 2-5=-323/232

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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) 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.



November 11, 2020

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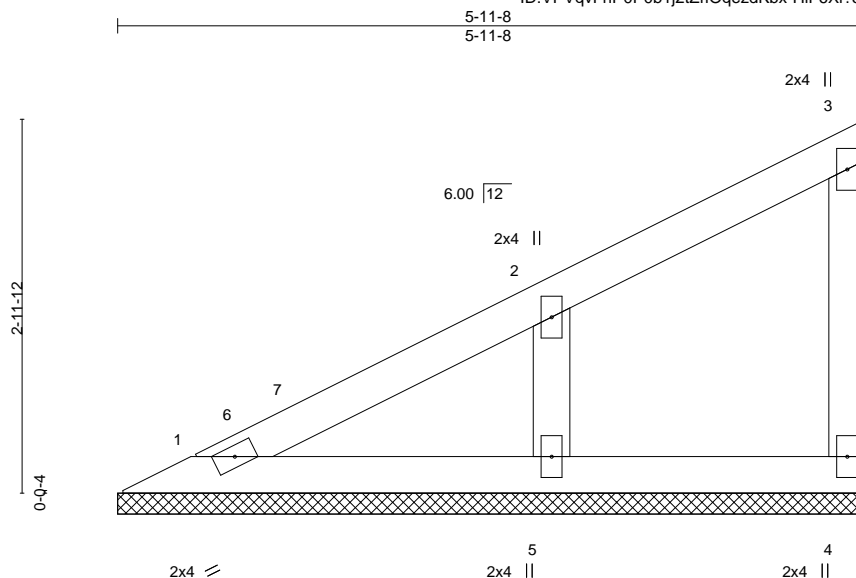
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/5 Woodside	I43574878
2532764	V8	GABLE	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Tue Nov 10 16:07:14 2020 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-HIF6Xi?55seRDhlgZwUZaZZ42FpbwAPhKts2ayKXdh



Scale = 1:18.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pt/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	4	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=5-11-8, 4=5-11-8, 5=5-11-8
Max Horz 1=91(LC 13)
Max Uplift 4=-14(LC 13), 5=-46(LC 16)
Max Grav 1=100(LC 2), 4=82(LC 20), 5=322(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-257/209

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-5-8, Interior(1) 3-5-8 to 5-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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) 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.



November 11, 2020

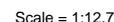
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

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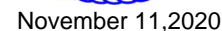
Weight: 10 lb FT = 20%

BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

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

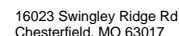
NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.



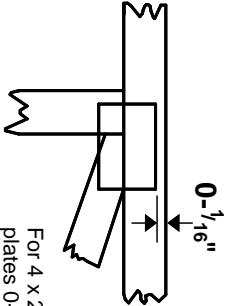
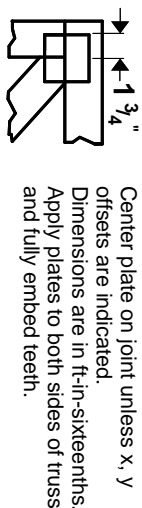
 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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Symbols

PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

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

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

PLATE SIZE

4 X 4

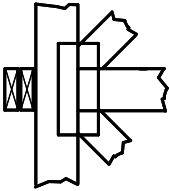
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

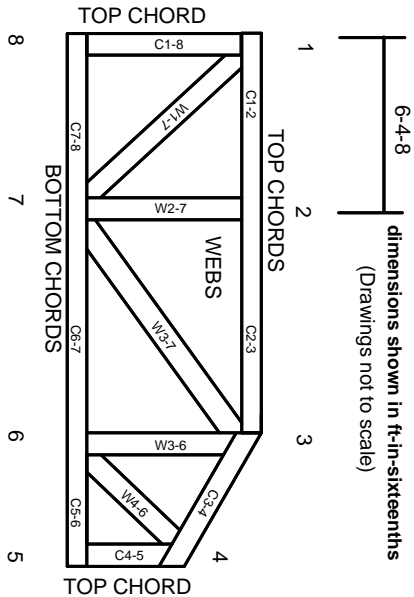
BEARING



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

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

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
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 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.