



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

12/01/2020

RE: 2536763
Summit/1 Woodside

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

Site Information:

Customer: Project Name: 2536763
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 85 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43587781	A04	11/12/2020	21	I43587801	B08	11/12/2020
2	I43587782	A05	11/12/2020	22	I43587802	B09	11/12/2020
3	I43587783	A06	11/12/2020	23	I43587803	B10	11/12/2020
4	I43587784	A07	11/12/2020	24	I43587804	B11	11/12/2020
5	I43587785	A07A	11/12/2020	25	I43587805	BG	11/12/2020
6	I43587786	A08	11/12/2020	26	I43587806	C10	11/12/2020
7	I43587787	A10	11/12/2020	27	I43587807	CJ05	11/12/2020
8	I43587788	A11	11/12/2020	28	I43587808	CJ10	11/12/2020
9	I43587789	A12	11/12/2020	29	I43587809	CJ11	11/12/2020
10	I43587790	A13	11/12/2020	30	I43587810	D07	11/12/2020
11	I43587791	A14	11/12/2020	31	I43587811	D08	11/12/2020
12	I43587792	A15	11/12/2020	32	I43587812	E01	11/12/2020
13	I43587793	A16	11/12/2020	33	I43587813	E02	11/12/2020
14	I43587794	B01	11/12/2020	34	I43587814	E03	11/12/2020
15	I43587795	B02	11/12/2020	35	I43587815	E04	11/12/2020
16	I43587796	B03	11/12/2020	36	I43587816	E05	11/12/2020
17	I43587797	B04	11/12/2020	37	I43587817	J01	11/12/2020
18	I43587798	B05	11/12/2020	38	I43587818	J02	11/12/2020
19	I43587799	B06	11/12/2020	39	I43587819	J03	11/12/2020
20	I43587800	B07	11/12/2020	40	I43587820	J04	11/12/2020

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: Johnson, Andrew
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 12, 2020



RE: 2536763 - Summit/1 Woodside

MiTek USA, Inc.

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Chesterfield, MO 63017
314-434-1200

Site Information:

Project Customer: Project Name: 2536763

Lot/Block:

Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
41	I43587821	J05	11/12/2020	85	I43587865	V12	11/12/2020
42	I43587822	J06	11/12/2020				
43	I43587823	J07	11/12/2020				
44	I43587824	J08	11/12/2020				
45	I43587825	J09	11/12/2020				
46	I43587826	J10	11/12/2020				
47	I43587827	J11	11/12/2020				
48	I43587828	J12	11/12/2020				
49	I43587829	J13	11/12/2020				
50	I43587830	J14	11/12/2020				
51	I43587831	J15	11/12/2020				
52	I43587832	J16	11/12/2020				
53	I43587833	J17	11/12/2020				
54	I43587834	J18	11/12/2020				
55	I43587835	J19	11/12/2020				
56	I43587836	J20	11/12/2020				
57	I43587837	J21	11/12/2020				
58	I43587838	J22	11/12/2020				
59	I43587839	J23	11/12/2020				
60	I43587840	J24	11/12/2020				
61	I43587841	J25	11/12/2020				
62	I43587842	J26	11/12/2020				
63	I43587843	J28	11/12/2020				
64	I43587844	J29	11/12/2020				
65	I43587845	J30	11/12/2020				
66	I43587846	J31	11/12/2020				
67	I43587847	J32	11/12/2020				
68	I43587848	J33	11/12/2020				
69	I43587849	J34	11/12/2020				
70	I43587850	J35	11/12/2020				
71	I43587851	J36	11/12/2020				
72	I43587852	K13	11/12/2020				
73	I43587853	LG1	11/12/2020				
74	I43587854	LG2	11/12/2020				
75	I43587855	LG3	11/12/2020				
76	I43587856	LG4	11/12/2020				
77	I43587857	M27	11/12/2020				
78	I43587858	PB01	11/12/2020				
79	I43587859	V01	11/12/2020				
80	I43587860	V04	11/12/2020				
81	I43587861	V05	11/12/2020				
82	I43587862	V06	11/12/2020				
83	I43587863	V08	11/12/2020				
84	I43587864	V11	11/12/2020				

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	A04	HIP GIRDER	1	2	143587781

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:12:49 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFXPDf-PU39?TMM5z9RYhbKHBhFEpzwSkwMJgcU67e0ORyKFzS

-0-10-8 4-4-1 8-8-1 13-0-0 16-10-3 20-8-5 24-6-8 28-9-4 33-0-0 36-11-7 40-10-14 46-0-0
0-10-8 4-4-1 4-3-15 4-3-15 3-10-3 3-10-3 3-10-3 4-2-12 4-2-12 3-11-7 3-11-7 5-1-2

Scale = 1:99.1

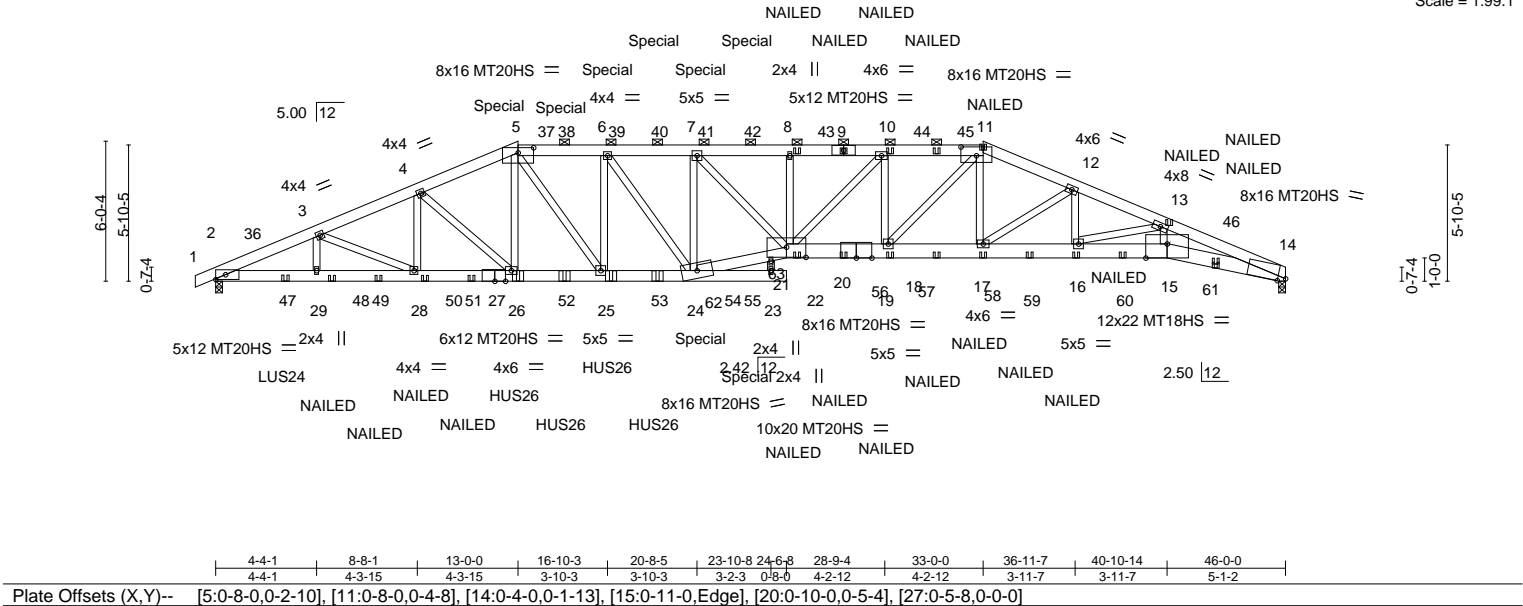


Plate Offsets (X,Y)-- [5:0-8-0,0-2-10], [11:0-8-0,0-4-8], [14:0-4-0,0-1-13], [15:0-11-0,Edge], [20:0-10-0,0-5-4], [27:0-5-8,0-0-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.89	in (loc)	l/defl	MT20	197/144
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.66	Vert(LL)	0.84 22	MT20HS	148/108
TCDL	10.0	Rep Stress Incr	NO	WB	0.47	Vert(CT)	-1.00 22	MT18HS	197/144
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MS		Horz(CT)	0.33 14		Weight: 610 lb FT = 20%
BCDL	10.0								

LUMBER-		BRACING-	
TOP CHORD	2x6 SPF No.2 *Except* 5-9,11-14: 2x6 SPF 2100F 1.8E	TOP CHORD	Structural wood sheathing directly applied or 3-6-7 oc purlins, except 2-0-0 oc purlins (3-0-11 max.): 5-11.
BOT CHORD	2x8 SP 2400F 2.0E *Except* 2-27: 2x6 SP 2400F 2.0E, 22-27,20-24: 2x6 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied or 6-4-3 oc bracing. Except: 6-0-0 oc bracing: 20-21
WEBS	2x4 SPF No.2		

REACTIONS.	
(size)	14=0-3-8, 2=0-3-8
Max Horz	2=93(LC 9)
Max Uplift	14=-2966(LC 10), 2=-4207(LC 10)
Max Grav	14=5691(LC 80), 2=7153(LC 78)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-15965/9685, 3-4=-16194/10255, 4-5=-15838/10360, 5-6=-17219/11352, 6-7=-18061/11752, 7-8=-20632/12936, 8-10=-20647/12947, 10-11=-18179/10932, 11-12=-15590/9091, 12-13=-17680/9966, 13-14=-22464/12201
BOT CHORD	2-29=-8841/14658, 28-29=-8841/14658, 26-28=-9408/15018, 25-26=-9485/14709, 24-25=-11200/17252, 18-20=-10786/18174, 17-18=-8349/14533, 16-17=-9181/16417, 15-16=-10915/20109, 14-15=-11296/20857, 21-24=-11939/18602, 20-21=-12002/18725
WEBS	3-29=-181/329, 5-26=-711/2138, 5-25=-3056/4592, 6-25=-2168/1646, 11-17=-856/2031, 13-15=-1753/3500, 3-28=-981/662, 4-28=0/726, 4-26=-1091/95, 11-18=-3510/5276, 10-18=-3350/2294, 12-17=-2710/1045, 12-16=-848/2040, 13-16=-4096/1823, 21-23=-353/659, 7-24=-3750/2394, 6-24=-701/1494, 8-20=-453/318, 7-20=-1761/3835, 10-20=-2909/3599

- 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 0-4-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=6ft; 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; Pf=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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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.



November 11, 2020

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	A04	HIP GIRDER	1	2	I43587781
					Job Reference (optional)

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:12:49 2020 Page 2
ID:qMeyVrAyR40V1rvltLjLFizXPdF-PU39?TMM5z9RYhbkHBhFEpzwSkwMJgcU67e0ORyKFzS

- NOTES-**
- 10) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=2966, 2=4207.
 - 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 at 3-0-0 from the left end to connect truss(es) to front face of bottom chord.
 - 15) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 13-0-0 from the left end to 19-0-0 to connect truss(es) to front face of bottom chord.
 - 16) Fill all nail holes where hanger is in contact with lumber.
 - 17) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 18) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 401 lb down and 669 lb up at 13-0-0, 401 lb down and 691 lb up at 15-0-0, 401 lb down and 691 lb up at 17-0-0, 401 lb down and 691 lb up at 19-0-0, and 401 lb down and 691 lb up at 21-0-0, and 401 lb down and 691 lb up at 23-0-0 on top chord, and 859 lb down and 519 lb up at 21-0-0, and 859 lb down and 519 lb up at 23-0-0, and 18 lb down and 12 lb up at 40-10-14 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: 1-5=-60, 5-11=-60, 11-14=-60, 24-33=-20, 22-24=-20, 15-20=-20, 15-30=-20, 20-21=-20
- Concentrated Loads (lb)
- Vert: 5=245(F) 9=-51(F) 15=-18 26=-814(F) 25=-814(F) 6=245(F) 17=-105(F) 11=-51(F) 13=-145(F) 18=-105(F) 10=-51(F) 16=-203(F) 38=245(F) 40=245(F) 41=245(F) 42=245(F) 43=-51(F) 45=-51(F) 46=-168(F) 47=-310(F) 48=-203(F) 49=-203(F) 50=-203(F) 51=-203(F) 52=-814(F) 53=-814(F) 54=-814(F) 55=-814(F) 56=-105(F) 57=-105(F) 58=-105(F) 59=-98(F) 60=-203(F) 61=-75(F)

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587782
2536763	A05	Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:12:51 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPdf-LsBvQ9OcdaP9n?l6PckjJE2GtXaWnVknZR76SJyKFzQ

-0-10-8	5-8-1	11-4-1	17-0-0	24-6-8	29-0-0	34-11-7	40-10-14	46-0-0
0-10-8	5-8-1	5-7-15	5-7-15	7-6-8	4-5-8	5-11-7	5-11-7	5-1-2

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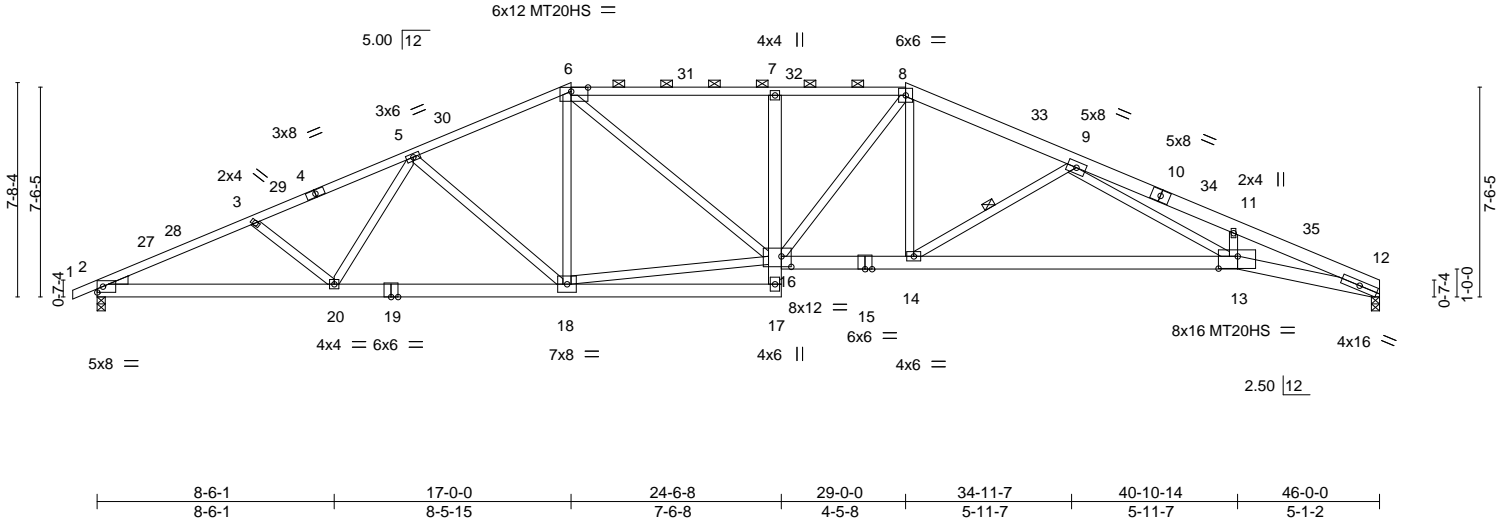


Plate Offsets (X,Y)-- [6:0-7-4,0-1-12], [13:0-8-4,0-5-4], [16:0-4-4,0-4-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP	
TCLL 20.0		Plate Grip DOL 1.15		TC 0.90		Vert(LL) -0.48 13-14	>999	240		MT20	197/144
(Roof Snow=20.0)		Lumber DOL 1.15		BC 0.81		Vert(CT) -0.93 13-14	>596	180		MT20HS	148/108
TCDL 10.0		Rep Stress Incr YES		WB 0.82		Horz(CT) 0.31 12	n/a	n/a			
BCLL 0.0		Code IRC2018/TPI2014		Matrix-AS							
BCDL 10.0										Weight: 241 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 6-8: 2x4 SPF 1650F 1.5E, 8-10: 2x6 SPF No.2 10-12: 2x6 SPF 2100F 1.8E	TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-2-0 max.): 6-8.
BOT CHORD	2x6 SPF No.2 *Except* 2-19,12-13,13-15: 2x6 SPF 2100F 1.8E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 9-14
WEDGE			
Left: 2x4 SP No.3			

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=120(LC 13)
Max Uplift 2=-195(LC 14), 12=-168(LC 14)
Max Grav 2=2250(LC 33), 12=2200(LC 33)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4746/505, 3-5=-4387/481, 5-6=-3484/461, 6-7=-3678/525, 7-8=-3708/522,
8-9=-4126/498, 9-11=-7920/829, 11-12=-8074/762
BOT CHORD 2-20=-418/4306, 18-20=-340/3761, 17-18=-25/702, 7-16=-706/123, 14-16=-271/3665,
13-14=-471/4970, 12-13=-658/7449
WEBS 3-20=-453/116, 5-20=0/402, 5-18=-860/131, 6-18=0/441, 16-18=-220/2430,
6-16=-103/986, 8-16=-102/439, 8-14=-45/1155, 9-14=-1504/233, 9-13=-233/2763

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=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 17-0-0, Exterior(2R) 17-0-0 to 21-2-15, Interior(1) 21-2-15 to 29-0-0, Exterior(2R) 29-0-0 to 33-2-15, Interior(1) 33-2-15 to 46-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCDL: ASCE 7-16; Pf=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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Bearing at joint(s) 12 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=195, 12=168.
- 10) 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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587782
2536763	A05	Hip	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/1 Woodside	I43587783
2536763	A06	Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:12:53 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLzXPdf-HfIgrPs9Bf1lvVW1mBOF7cwLDGFMW30lcDXCyKFzO

0-10-8	6-8-5	13-5-6	21-0-0	25-0-0	30-4-3	35-6-11	40-10-14	46-0-0
0-10-8	6-8-5	6-9-1	7-6-10	4-0-0	5-4-3	5-2-7	5-4-3	5-1-2

Scale = 1:85.8

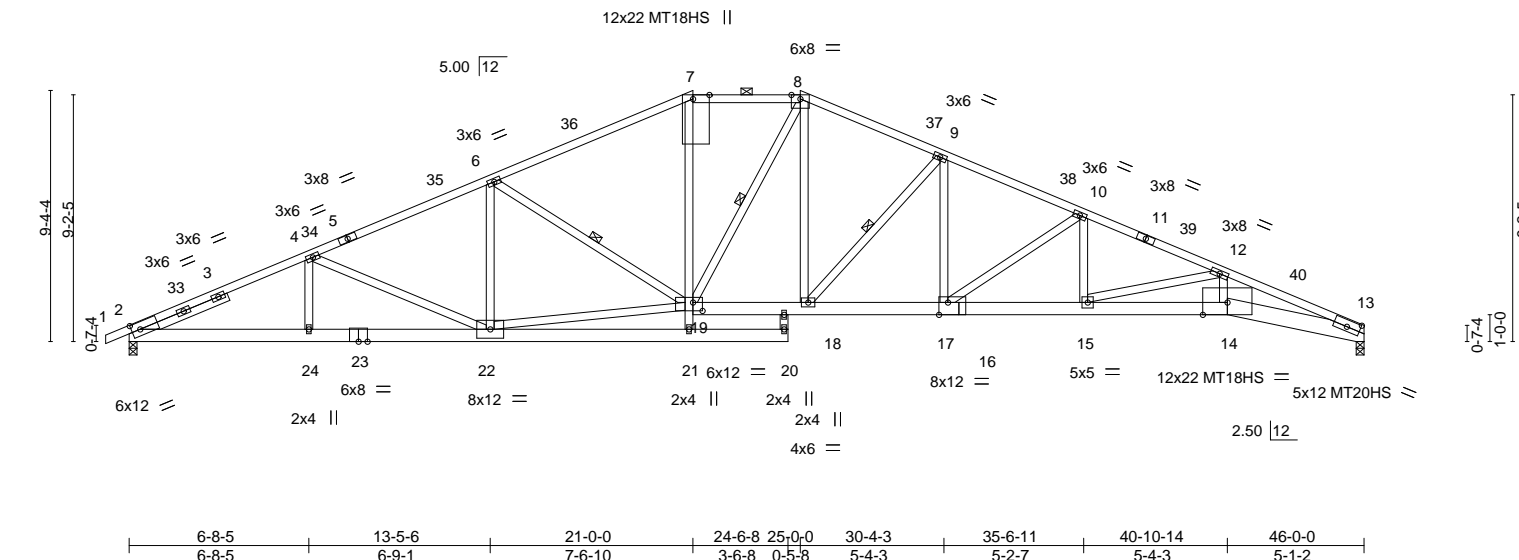


Plate Offsets (X,Y)-- [2:0-3-12,0-3-3], [2:0-2-10,0-0-0], [7:0-1-13,Edge], [13:0-6-0,0-3-0], [16:0-4-0,Edge], [16:0-0-0,0-2-12], [19:0-4-4,0-3-12]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL 20.0		Plate Grip DOL 1.15		TC 0.86		Vert(LL) -0.55 17-18 >998 240		MT20 197/144	
(Roof Snow=20.0)		Lumber DOL 1.15		BC 0.92		Vert(CT) -0.93 20 >593 180		MT20HS 148/108	
TCDL 10.0		Rep Stress Incr YES		WB 0.99		Horz(CT) 0.34 13 n/a n/a		MT18HS 197/144	
BCLL 0.0		Code IRC2018/TPI2014		Matrix-AS				Weight: 253 lb FT = 20%	
BCDL 10.0									

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
7-8,1-5: 2x4 SPF No.2
BOT CHORD 2x6 SPF 2100F 1.8E *Except*
20-25: 2x4 SPF No.2, 16-19,20-23: 2x6 SPF No.2
13-14: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 3-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (2-7-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-19, 9-18, 6-19

REACTIONS.

(size) 2=0-3-8, 13=0-3-8
Max Horz 2=148(LC 13)
Max Uplift 2=184(LC 14), 13=152(LC 14)
Max Grav 2=2402(LC 33), 13=2336(LC 33)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-4913/440, 4-6=-4547/435, 6-7=-3985/415, 7-8=-3559/418, 8-9=-3940/428,
9-10=-4926/474, 10-12=-6164/540, 12-13=-8227/710
BOT CHORD 2-24=-348/4493, 22-24=-348/4493, 18-19=-160/3535, 17-18=-272/4457, 15-17=-395/5650,
14-15=-597/7424, 13-14=-612/7617
WEBS 4-22=-423/85, 19-21=0/327, 7-19=-44/1024, 9-17=-41/876, 12-14=-48/1056,
8-18=-78/1113, 8-19=-227/311, 9-18=-1343/164, 6-19=-671/135, 19-22=-280/4040,
12-15=-1837/216, 10-15=-24/767, 10-17=-1445/154

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=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 21-0-0, Exterior(2E) 21-0-0 to 25-0-0, Exterior(2R) 25-0-0 to 29-2-15, Interior(1) 29-2-15 to 46-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Bearing at joint(s) 13 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=184, 13=152.
- 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

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/1 Woodside	I43587783
2536763	A06	Hip	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/1 Woodside	143587784
2536763	A07	Roof Special	1	1		

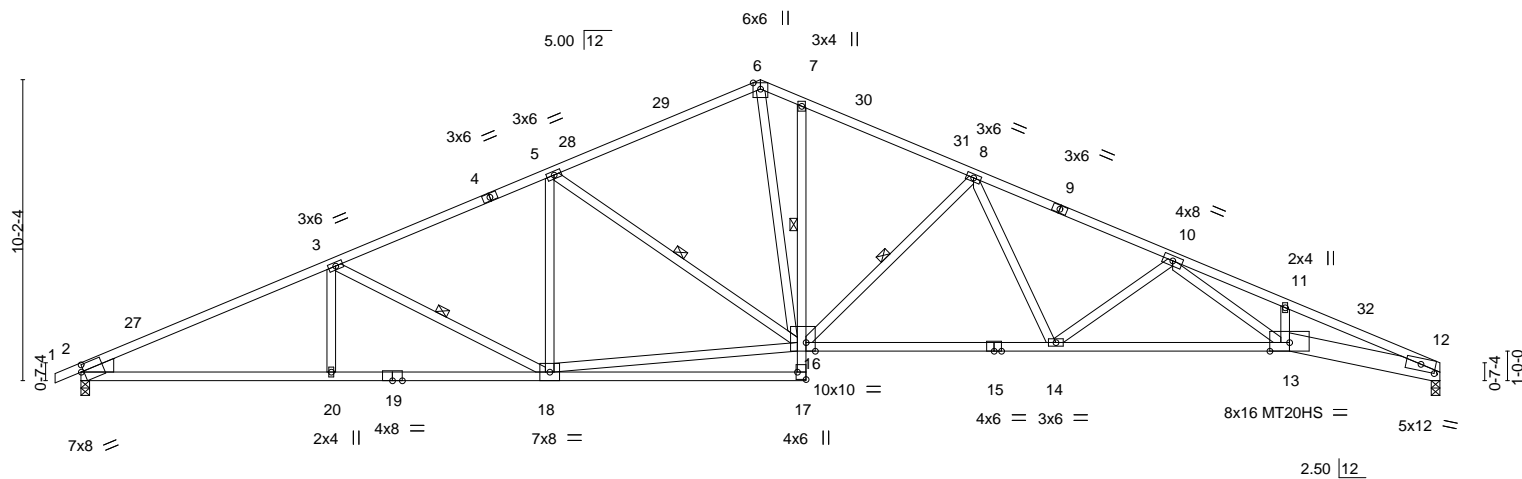
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:12:54 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPdf-IRs22BQUwVnkeSUh4kHQxtgm3lZo_u6DFPMn3eyKFzN

-0-10-8	8-5-11	15-10-7	23-0-0	24-6-8	30-2-9	36-11-7	40-10-14	46-0-0
0-10-8	8-5-11	7-4-12	7-1-10	1-6-8	5-8-1	6-8-14	3-11-7	5-1-2

Scale = 1:78.0



8-5-11	15-10-7	24-6-8	33-0-0	40-10-14	46-0-0
8-5-11	7-4-12	8-8-2	8-5-8	7-10-14	5-1-2

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

LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.90	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.90	Vert(LL) -0.42 14-16 >999 240	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.65	Vert(CT) -0.94 14-16 >590 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.33 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 213 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-19,13-15: 2x4 SPF 1650F 1.5E, 12-13: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 7-16
WEBS 1 Row at midpt 3-18, 8-16, 5-16

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=162(LC 13)
Max Uplift 2=195(LC 14), 12=168(LC 14)
Max Grav 2=1893(LC 1), 12=1840(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3749/465, 3-5=-3149/445, 5-6=-2549/420, 6-7=-2710/471, 7-8=-2839/449,
8-10=-4009/526, 10-11=-6191/768, 11-12=-6261/720
BOT CHORD 2-20=-357/3364, 18-20=-357/3364, 7-16=-301/114, 14-16=-296/3274, 13-14=-469/4379,
12-13=-619/5781
WEBS 3-20=0/255, 3-18=-601/122, 5-18=0/323, 8-16=-1089/183, 8-14=-48/855,
10-14=-939/192, 10-13=-183/1689, 16-18=-243/2647, 5-16=-794/145, 6-16=-247/1719

- 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=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 23-0-0, Exterior(2R) 23-0-0 to 26-0-0, Interior(1) 26-0-0 to 46-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCDL: ASCE 7-16; Pf=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
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) All plates are MT20 plates unless otherwise indicated.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) Bearing at joint(s) 12 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 100 lb uplift at joint(s) except (jt=lb) 2=195, 12=168.
 - 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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587785
2536763	A07A	Roof Special	1	1	Job Reference (optional)	

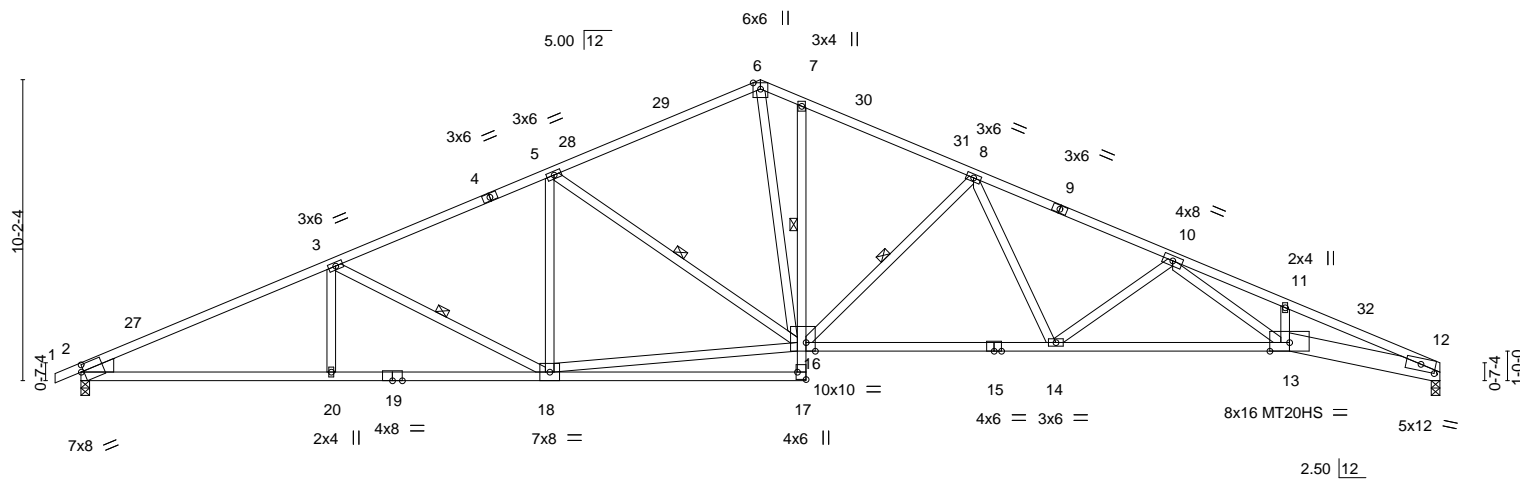
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:12:56 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPdf-iq_oTsSIS61Sume4B9Ju0ll6YYFGSncWjrt8XyKfZL

-0-10-8	8-5-11	15-10-7	23-0-0	24-6-8	30-2-9	36-11-7	40-10-14	46-0-0
0-10-8	8-5-11	7-4-12	7-1-10	1-6-8	5-8-1	6-8-14	3-11-7	5-1-2

Scale = 1:78.0



	8-5-11	15-10-7	24-6-8	33-0-0	40-10-14	46-0-0
	8-5-11	7-4-12	8-8-2	8-5-8	7-10-14	5-1-2

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

LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.90	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.90	Vert(LL) -0.42 14-16 >999 240	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.65	Vert(CT) -0.94 14-16 >590 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.33 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 213 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-19,13-15: 2x4 SPF 1650F 1.5E, 12-13: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 7-16
WEBS 1 Row at midpt 3-18, 8-16, 5-16

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=162(LC 13)
Max Uplift 2=195(LC 14), 12=168(LC 14)
Max Grav 2=1893(LC 1), 12=1840(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3749/465, 3-5=-3149/445, 5-6=-2549/420, 6-7=-2710/471, 7-8=-2839/449,
8-10=-4009/526, 10-11=-6191/768, 11-12=-6261/720
BOT CHORD 2-20=-357/3364, 18-20=-357/3364, 7-16=-301/114, 14-16=-296/3274, 13-14=-469/4379,
12-13=-619/5781
WEBS 3-20=0/255, 3-18=-601/122, 5-18=0/323, 8-16=-1089/183, 8-14=-48/855,
10-14=-939/192, 10-13=-183/1689, 16-18=-243/2647, 5-16=-794/145, 6-16=-247/1719

- 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=6ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 23-0-0, Exterior(2R) 23-0-0 to 26-0-0, Interior(1) 26-0-0 to 46-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pf=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
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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) 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) except (jt=lb) 2=195, 12=168.
 - This truss 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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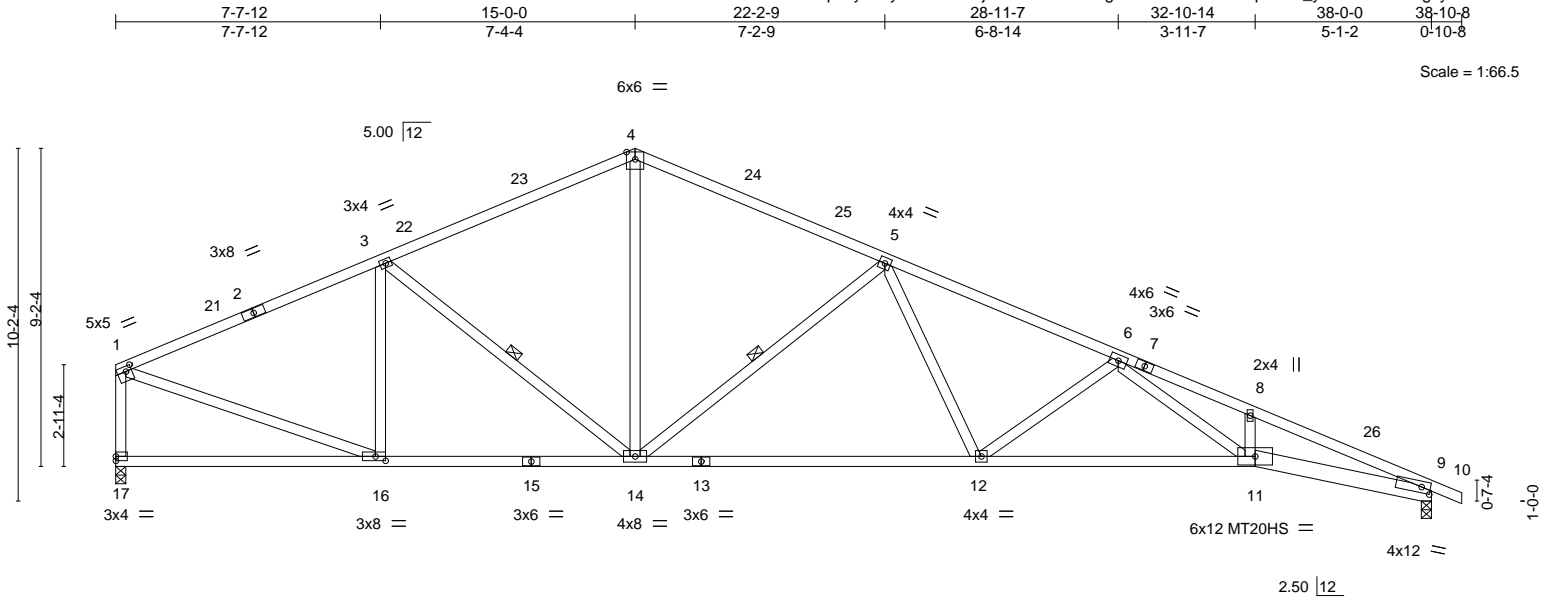


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587786
2536763	A08	Roof Special	5	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:12:57 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFizXPDf-A0YAgCSNDQ9JVwCGltq7YVIJ_ydKBHXfxNaRgzyKFzK



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.79	Vert(LL)	-0.31 11-12	>999	240	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.79	Vert(CT)	-0.68 11-12	>667	180	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.48	Horz(CT)	0.19 9	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 163 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-14, 5-14

REACTIONS.

(size) 17=0-3-8, 9=0-3-8
Max Horz 17=-208(LC 12)
Max Uplift 17=-138(LC 14), 9=-165(LC 14)
Max Grav 17=1514(LC 1), 9=1567(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1845/275, 3-4=-1795/319, 4-5=-1790/327, 5-6=-3041/405, 6-8=-4906/600,
8-9=-4986/547, 1-17=-1438/228
BOT CHORD 14-16=-87/1632, 12-14=-179/2417, 11-12=-325/3411, 9-11=-443/4576
WEBS 3-16=-414/131, 4-14=-94/902, 5-14=-1165/203, 5-12=-28/798, 6-12=-842/174,
6-11=-148/1426, 1-16=-194/1644

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=5ft; 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 15-0-0, Exterior(2R) 15-0-0 to 18-0-0, Interior(1) 18-0-0 to 38-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=138, 9=165.
- This truss 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 2536763	Truss A10	Truss Type Roof Special	Qty 1	Ply 1	Summit/1 Woodside I43587787
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

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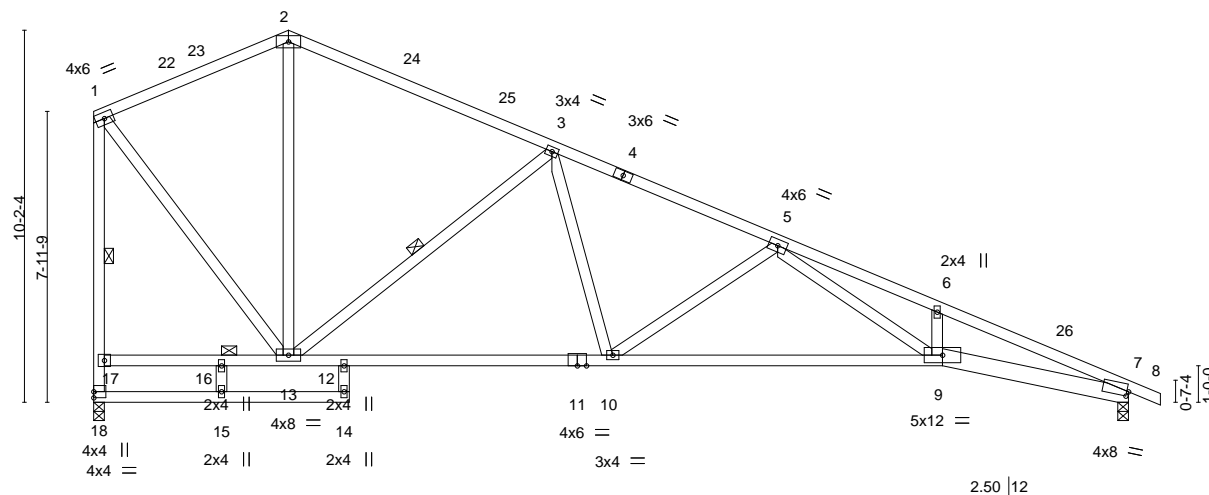
ID:qMeyVrAyR40V1rvltLjLFizXPDf-A0YAgCSNDQ9JVwCGltq7YVIM2ybaBHgfnNaRgzyKFzK

5-4-0 7-0-0 12-6-9 18-8-12 23-2-14 28-4-0 29-2-8
5-4-0 1-8-0 5-6-9 6-2-3 4-6-3 5-1-2 0-10-8

5.00 | 12

4x8 =

Scale = 1:63.1



3-6-0 5-4-0 7-0-0 14-2-9 23-2-14 28-4-0
3-6-0 1-10-0 1-8-0 7-2-9 9-0-5 5-1-2

Plate Offsets (X,Y)-- [7-0-0-9,0-1-9]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	Plate Grip DOL 1.15	TC 0.60	Vert(LL) -0.24	9-10	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.90	Vert(CT) -0.57	9-10	>588	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.47	Horz(CT) 0.16	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 140 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
7-9: 2x6 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.
WEBS 1 Row at midpt 3-13, 1-18
JOINTS 1 Brace at Jt(s): 16

REACTIONS.

(size) 18=0-3-8, 7=0-3-8
Max Horz 18=-307(LC 12)
Max Uplift 18=-108(LC 14), 7=-125(LC 14)
Max Grav 18=1127(LC 1), 7=1216(LC 20)

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

TOP CHORD 1-2=-667/203, 2-3=-772/205, 3-5=-1856/272, 5-6=-3677/469, 6-7=-3721/404,
17-18=-1101/190, 1-17=-1085/183
BOT CHORD 16-17=-188/306, 13-16=-188/306, 12-13=-54/1490, 10-12=-54/1490, 9-10=-195/2261,
7-9=-306/3408
WEBS 3-13=-1142/197, 3-10=-18/690, 5-10=-755/168, 5-9=-141/1378, 1-13=-145/982

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 3-1-12, Interior(1) 3-1-12 to 5-4-0, Exterior(2R) 5-4-0 to 8-4-0, Interior(1) 8-4-0 to 29-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCDL: ASCE 7-16; Pf=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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=108, 7=125.
- 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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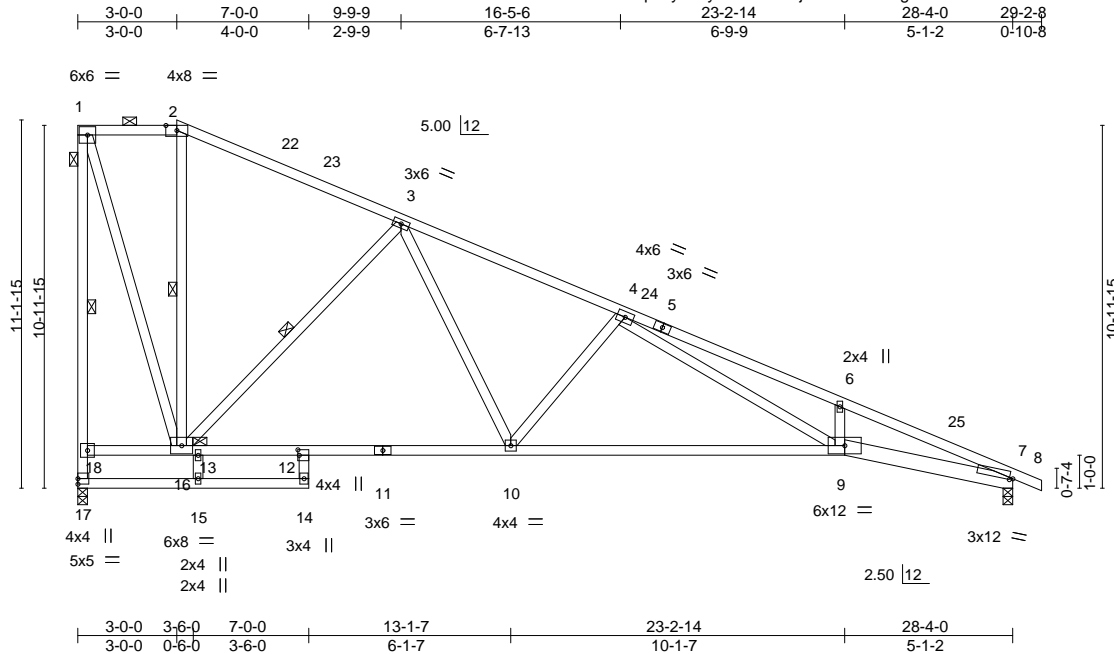


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	A11	Roof Special	1	1	143587788
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:12:59 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFizXPdf-6PgX5uUdl1P0IDMftHtbewNfwmGKf9kyPh3YlsyKFzI



Scale = 1:69.8

Plate Offsets (X,Y)-- [7:0-1-3,0-0-9], [12:0-2-0,0-0-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d
TCLL 20.0		Plate Grip DOL	1.15	TC 0.76		Vert(LL)	-0.33 9-10	>999	240
(Roof Snow=20.0)		Lumber DOL	1.15	BC 0.94		Vert(CT)	-0.75 9-10	>450	180
TCDL 10.0		Rep Stress Incr	YES	WB 0.62		Horz(CT)	0.19 7	n/a	n/a
BCLL 0.0		Code IRC2018/TPI2014		Matrix-AS					
BCDL 10.0									
								Weight: 150 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 *Except*		BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 1-2.
7-9: 2x6 SPF 2100F 1.8E		WEBS	Rigid ceiling directly applied.
WEBS 2x4 SPF No.2		JOINTS	1 Row at midpt 1-17, 3-16, 2-16
			1 Brace at Jt(s): 1, 16

REACTIONS. (size) 17=0-3-8, 7=0-3-8
Max Horz 17=-377(LC 12)
Max Uplift 17=-113(LC 14), 7=-120(LC 14)
Max Grav 17=1393(LC 30), 7=1359(LC 30)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 17-18=-1369/219, 1-18=-1396/194, 1-2=-433/172, 2-3=-603/161, 3-4=-2115/262,
4-6=-4279/477, 6-7=-4298/385
BOT CHORD 16-18=-121/310, 13-16=0/1414, 12-13=0/1414, 10-12=0/1408, 9-10=-131/2390,
7-9=-290/3946
WEBS 3-16=-1422/215, 3-10=-74/1008, 4-10=-873/183, 4-9=-196/1801, 6-9=-260/140,
1-16=-148/1462

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 3-0-0, Exterior(2R) 3-0-0 to 6-0-0, Interior(1) 6-0-0 to 29-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 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) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=113, 7=120.
- This truss 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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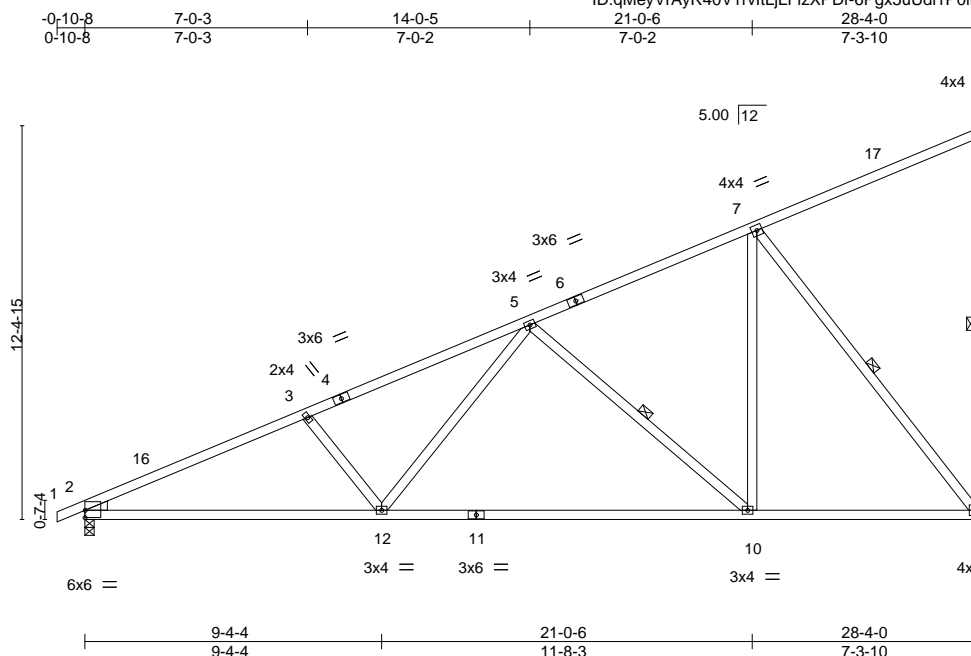


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587789
2536763	A12	Monopitch	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:12:59 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFzXPdF-6PgX5uUdl1P0lDMftHtbewNffmGUf69yPh3YlsyKFzI



Scale = 1:72.6

Plate Offsets (X,Y)-- [2:0-0-1,0-0-0], [2:0-5-11,0-0-1], [2:Edge,0-2-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.72	Vert(LL)	-0.38 10-12	>891	240	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.93	Vert(CT)	-0.81 10-12	>418	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.79	Horz(CT)	0.06 9	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 129 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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-9, 5-10, 7-9

REACTIONS.

(size) 9=0-3-8, 2=0-3-8
Max Horz 2=341(LC 14)
Max Uplift 9=-174(LC 14), 2=-59(LC 14)
Max Grav 9=1370(LC 19), 2=1216(LC 19)

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

TOP CHORD 2-3=-2223/100, 3-5=-1987/93, 5-7=-950/8, 8-9=-306/81
BOT CHORD 2-12=-384/1981, 10-12=-265/1383, 9-10=-128/813
WEBS 3-12=-365/154, 5-12=-42/658, 5-10=-785/184, 7-10=-29/768, 7-9=-1292/203

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 28-2-4 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 except (jt=lb) 9=174.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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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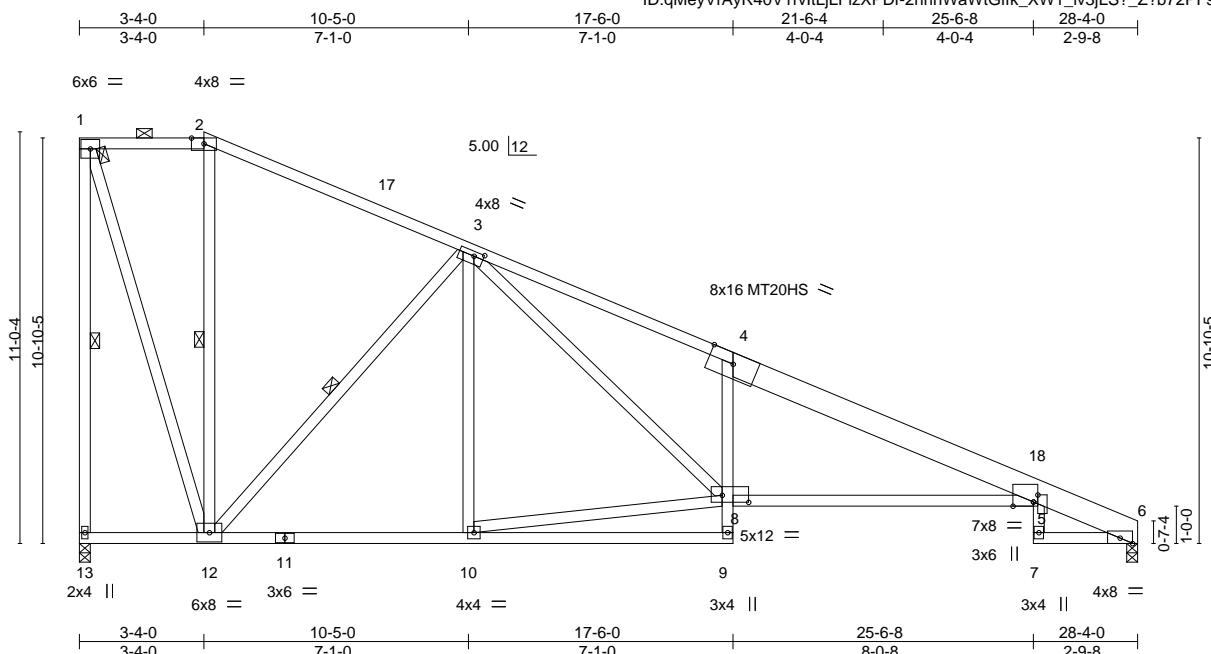
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587790
2536763	A13	Half Hip	1	1	Job Reference (optional)	

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

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ID:qMeyVrAyR40V1rvltLjLFizXPDf-2nnhWaWtGffk_XW1_iv3jLS?_Z7b72PFs?YepkyKFzG



Scale = 1:61.7

Plate Offsets (X,Y)-- [3:0-3-2,0-1-8], [5:0-2-4,0-1-7], [5:0-6-9,Edge], [8:0-8-8,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	Vert(LL)	-0.42	5-8	>793	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.76	Vert(CT)	-0.81	5-8	>415	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.68	Horz(CT)	0.30	6	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 171 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
5-8: 2x4 SPF 1650F 1.5E
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.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 1-13, 2-12, 3-12

REACTIONS.

(size) 13=0-3-8, 6=0-3-8
Max Horz 13=-288(LC 14)
Max Uplift 13=-158(LC 14), 6=-47(LC 14)
Max Grav 13=1378(LC 30), 6=1313(LC 30)

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

TOP CHORD 1-13=-1353/221, 1-2=-427/65, 2-3=-602/36, 3-4=-2975/188, 4-5=-2926/92, 5-6=-595/52
BOT CHORD 12-13=-168/308, 10-12=0/1327, 4-8=-972/183, 5-8=0/2762
WEBS 1-12=-211/1416, 3-12=-1355/185, 8-10=0/1193, 3-8=-154/1790

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 3-4-0, Exterior(2R) 3-4-0 to 7-6-15, Interior(1) 7-6-15 to 28-2-9 zone; cantilever left and right exposed ; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- Unbalanced snow loads have been considered for this design.
- 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) 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 100 lb uplift at joint(s) 6 except (jt=lb) 13=158.
- This truss 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/1 Woodside
2536763	A14	Half Hip	1	1	

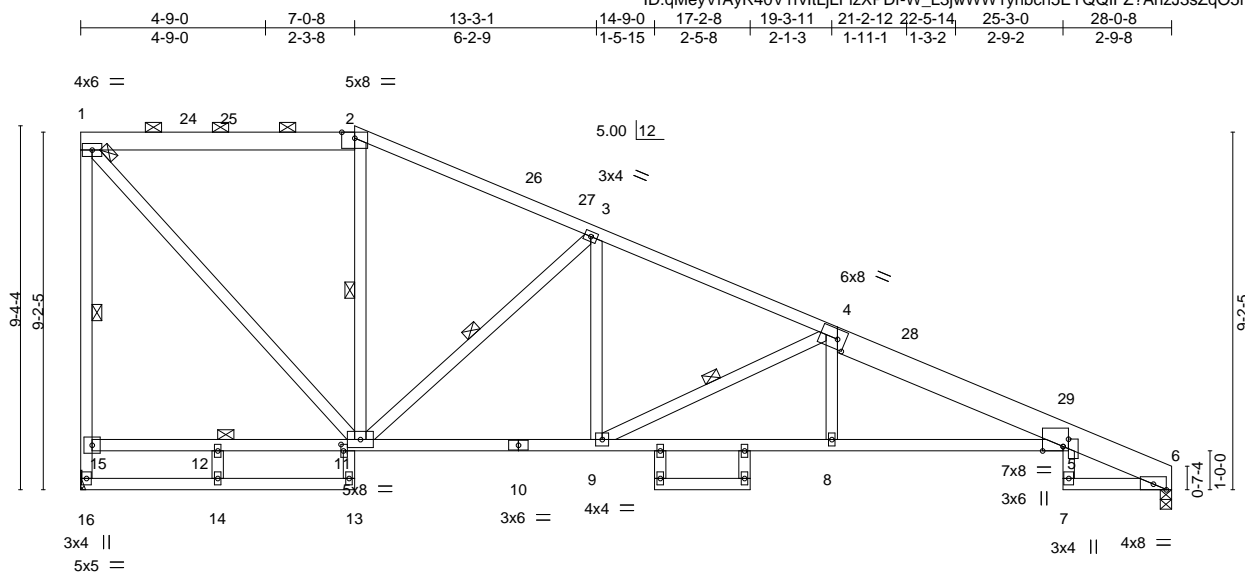
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:02 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-W_L3jwWW1ynbch5EYQQIFZ?AhzJ3sZqO5f1CLByKFzF

Job Reference (optional)



Scale = 1:59.2

Plate Offsets (X,Y)--	4:0-2-8,0-3-0,	5:0-6-5,Edge,	5:0-2-4,0-1-11,	11:0-2-0,0-0-12
-----------------------	----------------	---------------	-----------------	-----------------

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	Vert(LL)	-0.53	13	>634	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.88	Vert(CT)	-1.09	13	>305		
TCDL 10.0	Lumber DOL 1.15	WB 0.41	Horz(CT)	0.33	6	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 159 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-2: 2x6 SPF No.2, 4-6: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
5-10: 2x4 SPF 1650F 1.5E
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.
BOT CHORD Rigid ceiling directly applied. Except:
10-0-0 oc bracing: 11-12, 8-9
WEBS 1 Row at midpt 1-16, 2-11, 3-11, 4-9
JOINTS 1 Brace at Jt(s): 1, 12

REACTIONS.

(size) 16=Mechanical, 6=0-3-8
Max Horz 16=-239(LC 14)
Max Uplift 16=-116(LC 14), 6=-57(LC 14)
Max Grav 16=1262(LC 30), 6=1362(LC 30)

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

TOP CHORD 15-16=-1266/136, 1-15=-1180/172, 1-2=-984/85, 2-3=-1180/60, 3-4=-2219/116,
4-5=-3302/152, 5-6=-619/59
BOT CHORD 12-15=-140/277, 11-12=-140/277, 9-11=0/1939, 8-9=-65/3159, 5-8=-68/3157
WEBS 12-14=0/285, 1-11=-152/1441, 3-9=-26/652, 3-11=-1287/173, 4-9=-1345/134

NOTES-

- 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 3-1-12, Interior(1) 3-1-12 to 7-0-8, Exterior(2R) 7-0-8 to 11-3-7, Interior(1) 11-3-7 to 27-11-1 zone; cantilever left and right exposed; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pf=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
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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 100 lb uplift at joint(s) 6 except (jt=lb) 16=116.
- This truss 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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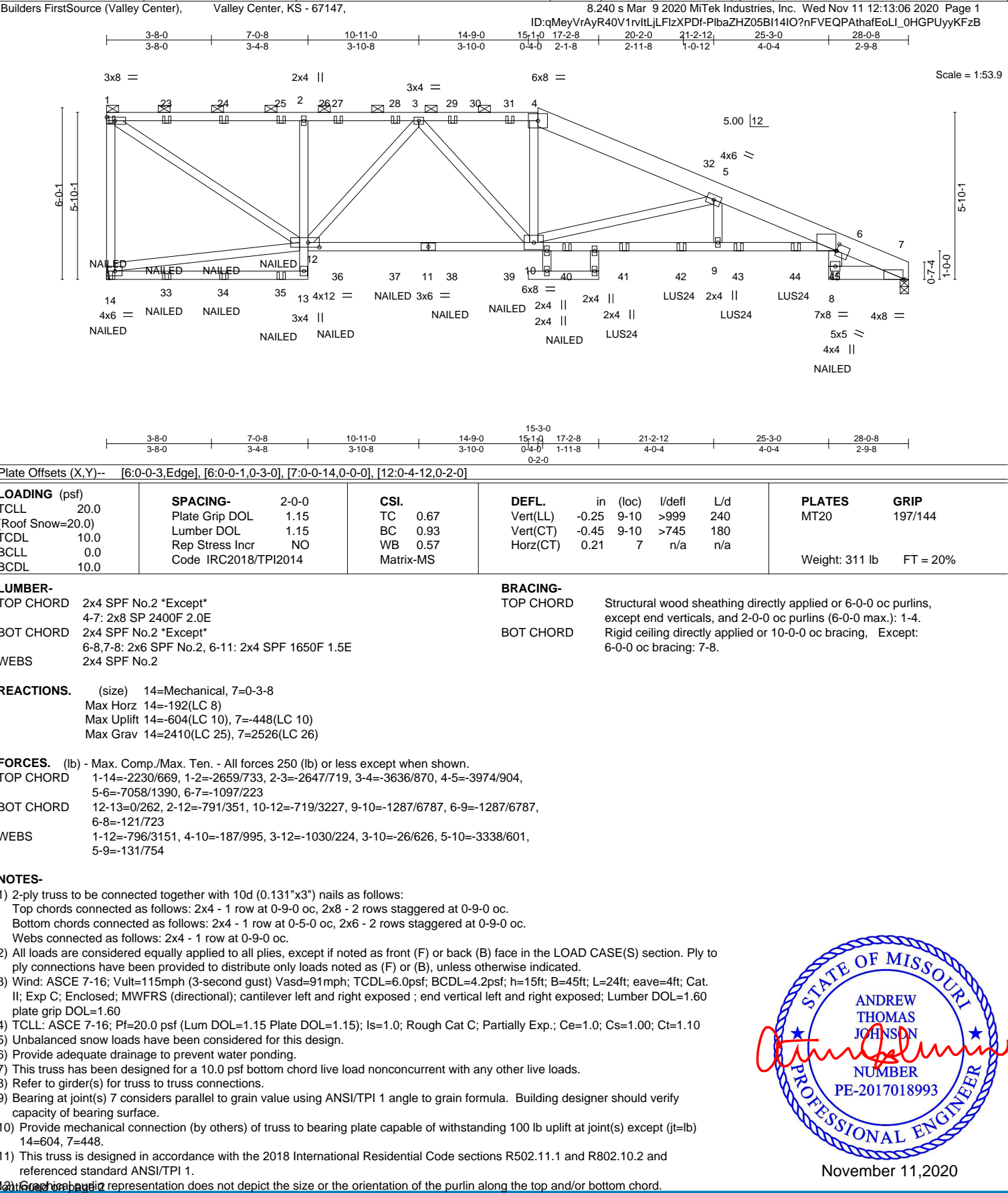


16023 Swingley Ridge Rd
Chesterfield, MO 63017



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587793
2536763	A16	Half Hip Girder	1	2	Job Reference (optional)	



November 11,2020



Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	A16	Half Hip Girder	1	2	I43587793
Job Reference (optional)					

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.240 s Mar 9 2020 MiTek Industries, Inc.
Wed Nov 11 12:13:06 2020
Page 2
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- NOTES-**
- 13) 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 18-1-4 from the left end to 24-1-4 to connect truss(es) to back face of bottom chord.
 - 14) Fill all nail holes where hanger is in contact with lumber.
 - 15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 88 lb down and 34 lb up at 8-1-4, 88 lb down and 34 lb up at 10-1-4, and 88 lb down and 34 lb up at 12-1-4, and 88 lb down and 34 lb up at 14-1-4 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: 1-4=-60, 4-6=-60, 6-7=-60, 13-14=-20, 6-12=-20, 8-20=-20
- Concentrated Loads (lb)
 - Vert: 14=-58(B) 1=-129(B) 23=-98(B) 24=-98(B) 25=-98(B) 27=-85(B) 28=-85(B) 29=-85(B) 31=-85(B) 33=-48(B) 34=-48(B) 35=-48(B) 36=-71 37=-71 38=-71 39=-71 40=-53(B) 41=-202(B) 42=-202(B) 43=-202(B) 44=-202(B) 45=-156(B)

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587794
2536763	B01	GABLE COMMON	1	1		

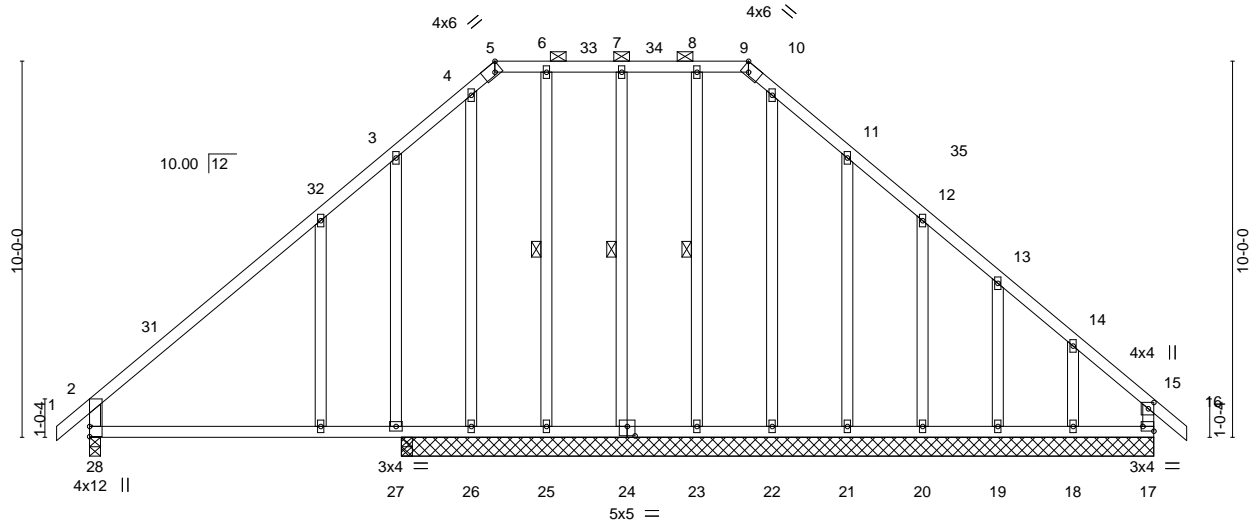
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:07 2020 Page 1

ID:qMeyVrAyR40V1rvltJLFlzXPDf-tx8yndaesVQuiSzBLz0Tyci4K_7BXox7Ex?z1OyKFzA

-0-10-8	5-6-6	10-9-5	17-6-3	22-9-2	28-3-8	29-2-0
0-10-8	5-6-6	5-2-14	6-8-14	5-2-14	5-6-6	0-10-8

Scale = 1:61.2



	5-6-6	8-3-8	10-9-5	17-6-3	22-9-2	28-3-8	
	5-6-6	2-9-2	2-5-13	6-8-14	5-2-14	5-6-6	
Plate Offsets (X,Y)--	[2:0-1-7,0-1-12], [5:0-2-4,Edge], [9:Edge,0-2-11], [15:0-2-0,0-1-12], [17:Edge,0-1-8], [24:0-2-8,0-3-0], [28:0-0-0,0-1-12]						
LOADING (psf)	SPACING-		CSI.	DEFL.		PLATES	GRIP
TCLL 20.0	2-0-0			in (loc)	l/defl	L/d	
(Roof Snow=20.0)	Plate Grip DOL 1.15	TC 0.54	Vert(LL) -0.09 27-28 >999 240				MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.43	Vert(CT) -0.20 27-28 >489 180				
BCLL 0.0	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.01 17 n/a n/a				
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					
						Weight: 165 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, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-24, 6-25, 8-23

REACTIONS.

All bearings 20-0-0 except (jt=length) 28=0-3-8, 27=0-3-8.
(lb) - Max Horz 28=255(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 24, 22, 21, 20, 19 except 28=161(LC 12), 17=127(LC 9), 26=328(LC 18), 18=134(LC 10), 27=250(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 24, 25, 26, 23, 22, 21, 20, 19, 18 except 28=526(LC 1), 17=525(LC 18), 27=775(LC 18)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-416/205, 3-4=-476/412, 4-5=-250/262, 5-6=-269/292, 6-7=-269/292, 7-8=-268/291, 8-9=-268/291, 9-10=-267/273, 10-11=-385/350, 11-12=-386/274, 12-13=-408/217, 13-14=-401/155, 14-15=-490/149, 2-28=-462/201, 15-17=-425/126
BOT CHORD 27-28=-97/332, 26-27=-97/332, 25-26=-97/332, 24-25=-97/332, 23-24=-97/330, 22-23=-97/330, 21-22=-97/330, 20-21=-97/330, 19-20=-97/330, 18-19=-97/330, 17-18=-97/330
WEBS 4-26=-235/256, 3-27=-565/303

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-9-5, Exterior(2R) 10-9-5 to 15-0-3, Interior(1) 15-0-3 to 17-6-3, Exterior(2R) 17-6-3 to 21-9-2, Interior(1) 21-9-2 to 29-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 22, 21, 20, 19 except (jt=lb) 28=161, 17=127, 26=328, 18=134, 27=250.
- This truss 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

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/1 Woodside	I43587794
2536763	B01	GABLE COMMON	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/1 Woodside	I43587795
2536763	B02	Piggyback Base	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:08 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-L7iL_zbGdoYIKcYOugXiVqFGzORzGlcHTbIWZqyKFz9

-0-10-8 5-6-6 10-9-5 17-6-3 22-9-2 28-3-8 29-2-0
0-10-8 5-6-6 5-2-14 6-8-14 5-2-14 5-6-6 0-10-8

Scale = 1:60.8

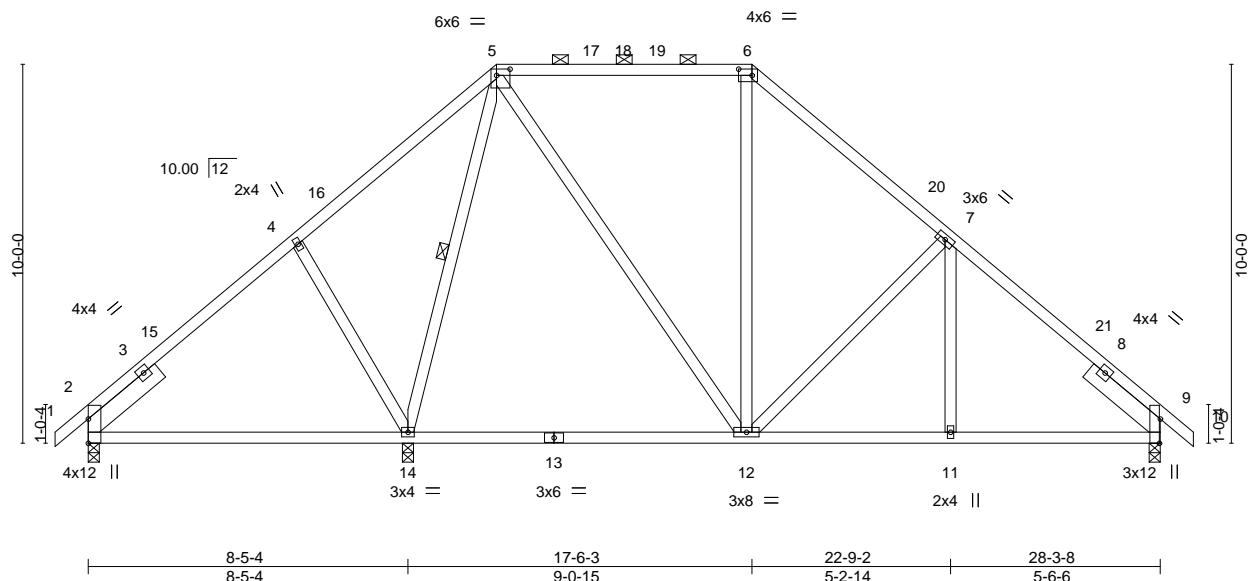


Plate Offsets (X,Y)-- [5:0-4-4,0-2-0], [6:0-4-4,0-2-0], [9:0-7-11,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.49	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.53	Vert(LL) -0.11 12-14 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.33	Vert(CT) -0.22 12-14 >999 180		
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: 139 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-14

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 9=0-3-8
Max Horz 2=-229(LC 10)
Max Uplift 2=-80(LC 12), 14=-71(LC 12), 9=-108(LC 12)
Max Grav 2=473(LC 1), 14=1014(LC 1), 9=882(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-387/105, 5-6=-463/195, 6-7=-703/182, 7-9=-967/135
BOT CHORD 2-14=-56/328, 12-14=0/287, 11-12=-17/665, 9-11=-19/670
WEBS 4-14=-320/157, 5-14=-610/41, 5-12=-38/412, 7-12=-333/133

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-9-5, Exterior(2R) 10-9-5 to 15-0-3, Interior(1) 15-0-3 to 17-6-3, Exterior(2R) 17-6-3 to 21-9-2, Interior(1) 21-9-2 to 29-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCLL: ASCE 7-16; Pf=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
 - 3) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14 except (jt=lb) 9=108.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) 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

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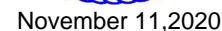


TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-12

Max Horz 1=-211(LC 10)
Max Uplift 1=-84(LC 12), 8=-95(LC 12), 12=-26(LC 12)
Max Grav 1=442(LC 1), 8=834(LC 1), 12=978(LC 1)

TOP CHORD 1-3=-422/148, 3-4=-269/214, 4-5=-471/208, 5-6=-705/201, 6-8=-921/154
BOT CHORD 1-12=-88/366, 10-12=-22/318, 9-10=-44/644, 8-9=-44/644
WEBS 3-12=-307/155, 4-12=-577/11, 4-10=-22/409, 6-10=-299/130

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCdL=4.2psf; h=15ft; B=45ft; L=28ft; 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 10-9-5, Exterior(2R) 10-9-5 to 15-0-3, Interior(1) 15-0-3 to 17-6-3, Exterior(2R) 17-6-3 to 21-9-2, Interior(1) 21-9-2 to 28-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 12.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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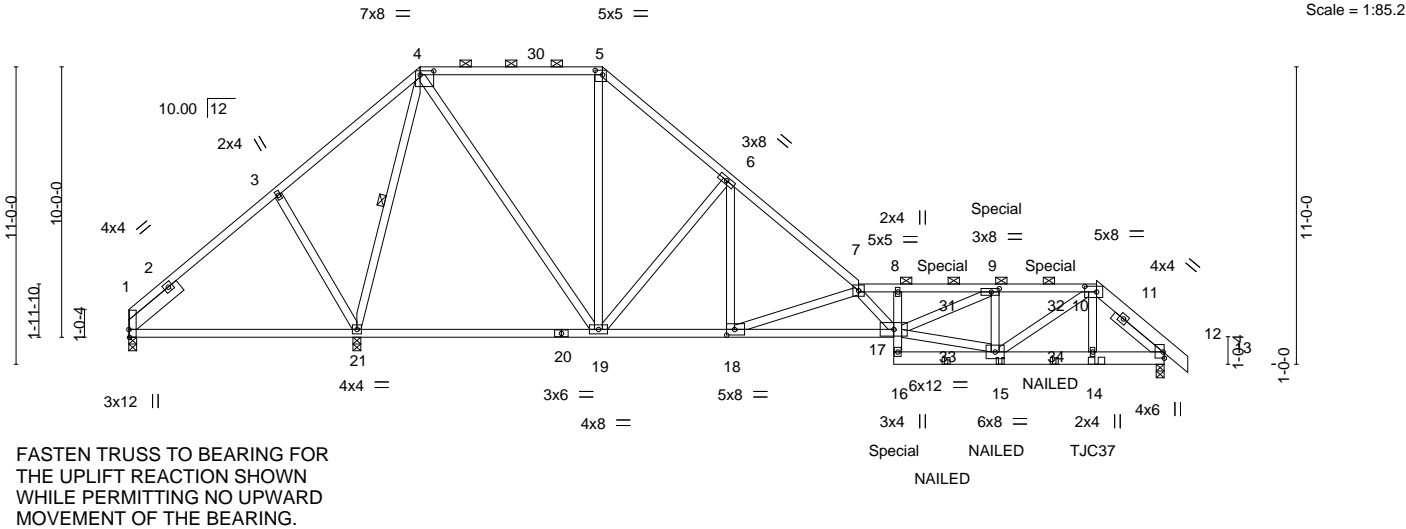


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	B04	Piggyback Base Girder	1	2	I43587797

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:10 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFizXPDf-HWq5PfcX9QoSZvim05ZAaFKWCC1Jk7raxvEddjyKFz7

5-6-6 10-9-5 17-6-3 22-3-1 26-11-14 28-3-8 32-0-8 35-9-8 38-3-8 39-2-0
5-6-6 5-2-14 6-8-14 4-8-14 4-8-14 1-3-10 3-9-0 3-9-0 2-6-0 0-10-8



LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-4: 2x4 SPF 1650F 1.5E, 10-13: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (4-5-2 max.): 4-5, 7-10.
BOT CHORD 2x4 SPF No.2 *Except* 12-16: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-21,19-21.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 4-21
SLIDER Left 2x6 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-3-8	

REACTIONS.	(size) 1=0-3-8, 12=0-3-8, 21=0-3-8
	Max Horz 1=240(LC 6)
	Max Uplift 1=1526(LC 1), 12=233(LC 8), 21=373(LC 8)
	Max Grav 1=118(LC 8), 12=2105(LC 1), 21=4370(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-3=-401/2536, 3-4=-107/2656, 4-5=-280/281, 5-6=-424/316, 6-7=-1614/219, 7-8=-6893/690, 8-9=-6678/681, 9-10=-3683/384, 10-12=-2484/263
BOT CHORD	1-21=-1750/248, 19-21=-1104/258, 18-19=-13/1192, 17-18=-574/6236, 8-17=-295/64, 15-16=-61/617, 14-15=-116/1766, 12-14=-116/1757
WEBS	3-21=-480/179, 4-21=-3777/289, 4-19=-169/2069, 5-19=-289/57, 6-19=-1738/271, 6-18=-163/1952, 7-18=-5359/596, 15-17=-254/3261, 9-17=-313/3192, 9-15=-2010/268, 10-15=-218/2359, 7-17=-216/1012

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x4 - 2 rows staggered at 0-3-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=38ft; eave=5ft; 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; Pf=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
 - This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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) 1=1526, 12=233, 21=373.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

On the ground 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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MiTek

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	B04	Piggyback Base Girder	1	2	I43587797
					Job Reference (optional)

Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.240 s Mar 9 2020
MiTek Industries, Inc.
Wed Nov 11 12:13:10 2020
Page 2
ID:qMeyVrAyR40V1rvltLjLFizXPdF-HWq5PfcX9QoSZvim05ZAaFKWCC1Jk7raxvEddjyKFz7

- NOTES-**
- This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
 - Use Simpson Strong-Tie TJC37 (4 nail, 30-90) or equivalent at 35-9-8 from the left end to connect truss(es) to back face of bottom chord, skewed 26.6 deg.to the left, 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.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 175 lb down and 69 lb up at 30-2-12, and 175 lb down and 69 lb up at 32-2-12, and 175 lb down and 69 lb up at 34-2-12 on top chord, and 874 lb down and 108 lb up at 28-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-4=-60, 4-5=-60, 5-7=-60, 7-10=-60, 10-13=-60, 17-22=-20, 16-26=-20
 - Concentrated Loads (lb)
 - Vert: 17=-874(B) 9=-175(B) 15=-69(B) 14=-230(B) 31=-175(B) 32=-175(B) 33=-69(B) 34=-69(B)

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587798
2536763	B05	Piggyback Base	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:12 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPdf-EvyqrLenh12AoDs97WcefgQsi?nZCyXsOCjkicyKFz5

Job Reference (optional)

5-6-6 10-9-5 17-6-3 21-9-1 25-11-14 28-3-8 34-9-8 38-3-8 39-2-0
5-6-6 5-2-14 6-8-14 4-2-14 4-2-14 2-3-10 6-6-0 3-6-0 0-10-8

Scale = 1:70.0

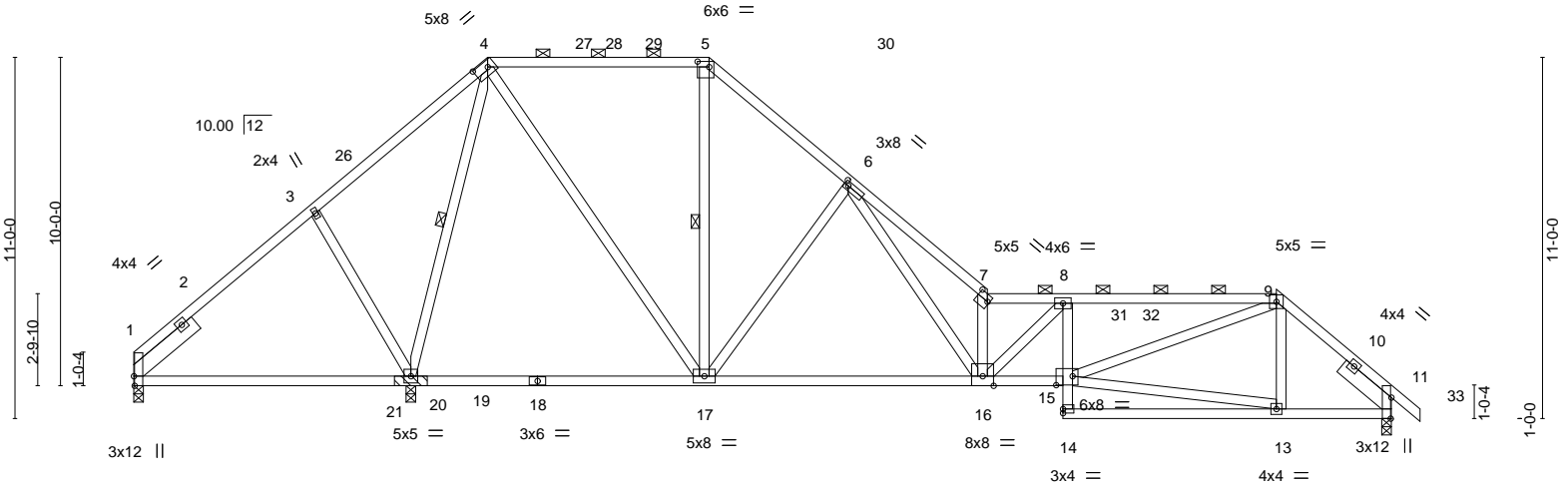


Plate Offsets (X,Y)--	[1:0-3-8,Edge], [4:0-5-4,0-2-4], [5:0-4-4,0-2-0], [6:0-1-8,0-1-8], [7:0-4-4,0-2-4], [11:0-7-11,Edge], [15:0-6-0,0-3-4]
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LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.89	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.61	Vert(LL) -0.20 16 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.97	Vert(CT) -0.46 16-17 >787 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.07 1 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 193 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (3-2-10 max.): 4-5, 7-9.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x6 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-0-0	WEBS 1 Row at midpt 4-20, 5-17

REACTIONS. (size) 1=0-3-8, 11=0-3-8, 20=(0-3-8 + bearing block) (req. 0-4-1)
Max Horz 1=241(LC 11)
Max Uplift 1=481(LC 1), 11=119(LC 12), 20=-214(LC 12)
Max Grav 1=28(LC 12), 11=1016(LC 1), 20=2581(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-576/1074, 3-4=-27/1214, 4-5=-329/199, 5-6=-467/200, 6-7=-2906/471,
7-8=-2294/320, 8-9=-2269/347, 9-11=-1185/171
BOT CHORD 1-20=-799/181, 17-20=-473/219, 16-17=-1/817, 15-16=-229/2272, 8-15=-401/80,
11-13=-56/859
WEBS 3-20=-404/192, 4-20=-2102/225, 4-17=-131/1192, 6-17=-894/241, 6-16=-342/2460,
7-16=-1927/330, 13-15=-74/666, 9-15=-195/1521

NOTES-

- 2x4 SPF No.2 bearing block 12" long at jt. 20 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-9-15, Interior(1) 3-9-15 to 10-9-5, Exterior(2R) 10-9-5 to 14-7-4, Interior(1) 14-7-4 to 17-6-3, Exterior(2R) 17-6-3 to 21-4-2, Interior(1) 21-4-2 to 34-9-8, Exterior(2R) 34-9-8 to 38-7-7, Interior(1) 38-7-7 to 39-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); ls=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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) 1=481, 11=119, 20=214.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

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/1 Woodside	143587799
2536763	B06	Piggyback Base	1	1	Job Reference (optional)	

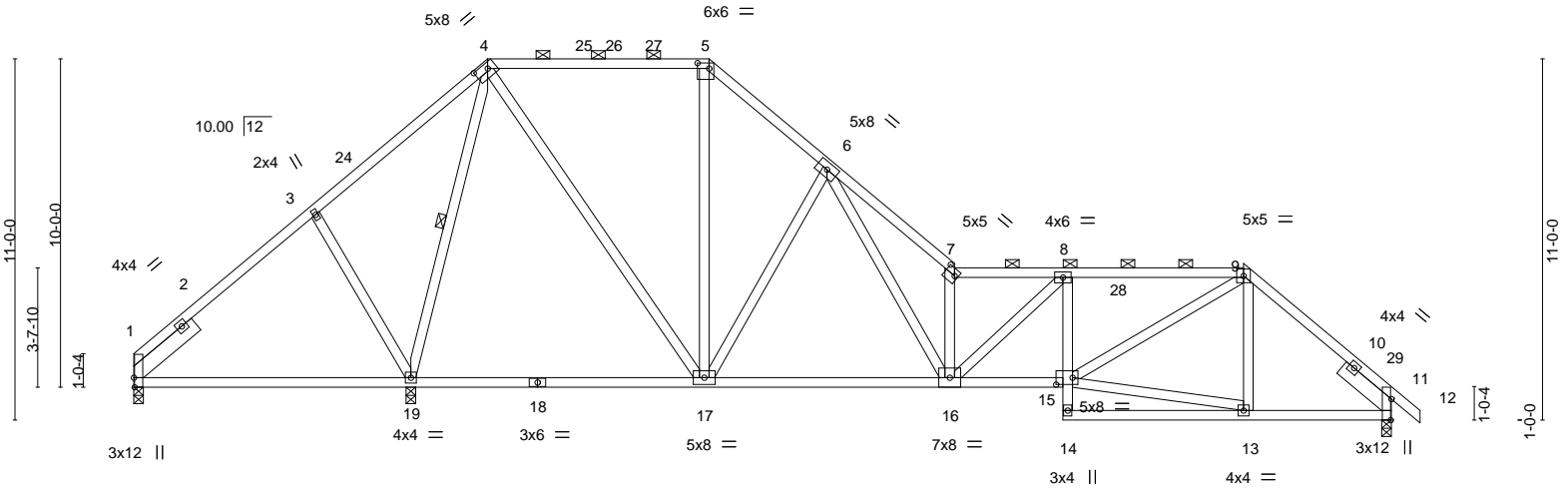
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:13 2020 Page 1

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5-6-6	10-9-5	17-6-3	21-1-5	24-11-14	28-3-8	33-9-8	38-3-8	39-2-0
5-6-6	5-2-14	6-8-14	3-7-2	3-10-10	3-3-10	5-6-0	4-6-0	0-10-8

Scale = 1:70.0



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LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-0-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-10-9 max.): 4-5, 7-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-19

REACTIONS. (size) 1=0-3-8, 11=0-3-8, 19=0-3-8
Max Horz 1=241(LC 11)
Max Uplift 1=218(LC 19), 11=128(LC 12), 19=177(LC 12)
Max Grav 1=13(LC 8), 11=1092(LC 1), 19=2237(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-528/697, 3-4=0/842, 4-5=-458/221, 5-6=-658/236, 6-7=-2585/459, 7-8=-2013/311,
8-9=-1929/310, 9-11=-1285/195
BOT CHORD 1-19=-547/144, 17-19=-275/189, 16-17=-3/908, 15-16=-173/1938, 8-15=-405/93,
11-13=-55/914
WEBS 3-19=-377/187, 4-19=-1783/183, 4-17=-119/1099, 7-16=-1792/337, 13-15=-68/801,
9-15=-143/1200, 6-17=-922/245, 6-16=-323/2100

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=38ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-9-15, Interior(1) 3-9-15 to 10-9-5, Exterior(2R) 10-9-5 to 14-7-4, Interior(1) 14-7-4 to 17-6-3, Exterior(2R) 17-6-3 to 21-1-5, Interior(1) 21-1-5 to 33-9-8, Exterior(2R) 33-9-8 to 37-7-7, Interior(1) 37-7-7 to 39-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pf=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
 - This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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) 1=218, 11=128, 19=177.
 - This truss 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

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587801
2536763	B08	Piggyback Base	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:14 2020 Page 1

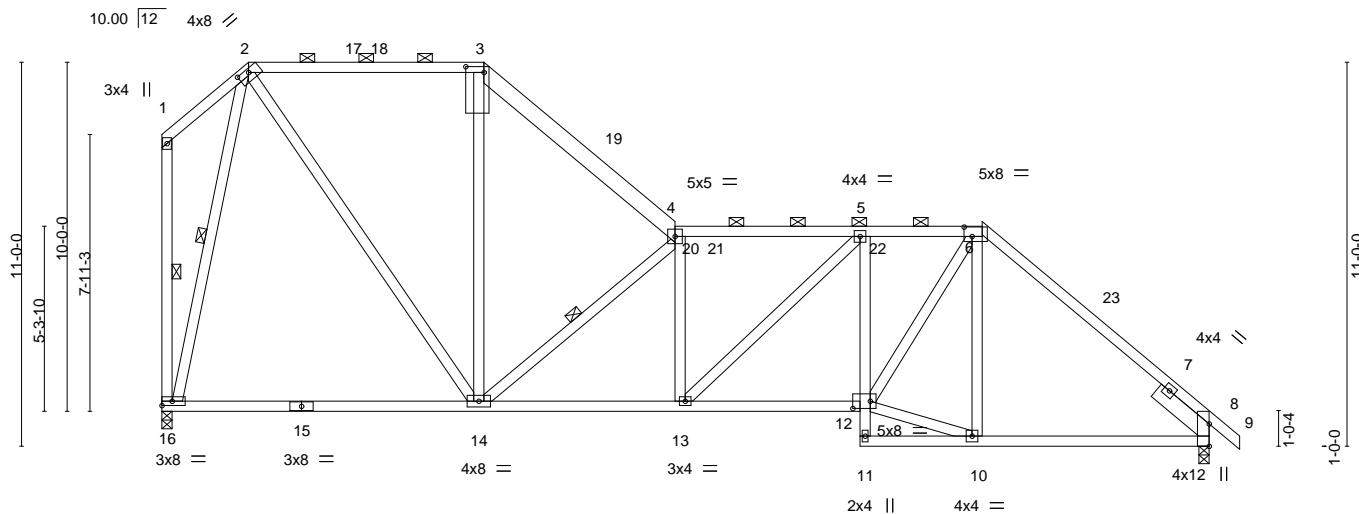
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Job Reference (optional)

2-5-13	9-2-11	14-8-6	20-0-0	23-6-0	30-0-0	30-10-8
2-5-13	6-8-14	5-5-11	5-3-10	3-6-0	6-6-0	0-10-8

8x16 MT20HS ||

Scale = 1:66.0



Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	B09	Piggyback Base	1	1	I43587802

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:15 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-eUd_SMgfzyQlfhbkpe9LHI2SkDoBPQqJ4AxOJwyKFz2

Job Reference (optional)

2-5-13	9-2-11	14-9-2	20-0-0	23-6-12	30-0-0	30-10-8
2-5-13	6-8-14	5-6-7	5-2-14	3-6-12	6-5-4	0-10-8

8x16 MT20HS ||

Scale = 1:68.0

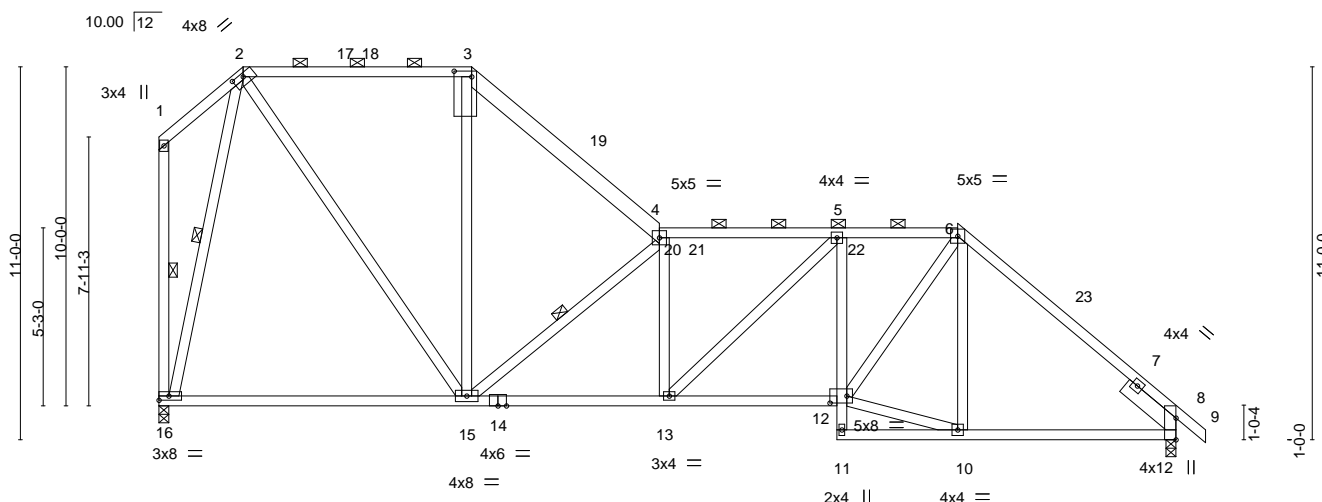


Plate Offsets (X,Y)--	[2:0-4-0,0-1-4], [3:0-2-0,0-6-4], [12:0-6-0,0-2-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.45	Vert(LL)	-0.18 15-16	>999	240	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.68	Vert(CT)	-0.38 15-16	>956	180	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.49	Horz(CT)	0.06 8	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 172 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x6 SPF No.2 2-0-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-0-9 max.): 2-3, 4-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-15, 1-16, 2-16

REACTIONS. (size) 16=0-3-8, 8=0-3-8
Max Horz 16=-329(LC 10)
Max Uplift 16=-113(LC 12), 8=-131(LC 12)
Max Grav 16=1194(LC 1), 8=1247(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-800/247, 3-4=-1144/252, 4-5=-1816/301, 5-6=-1611/271, 6-8=-1466/224
BOT CHORD 15-16=-61/377, 13-15=-123/1819, 12-13=-94/1631, 5-12=-455/91, 8-10=-45/1038
WEBS 2-15=-153/941, 3-15=-25/383, 4-15=-1358/256, 5-13=-37/256, 10-12=-38/1034, 6-12=-80/1006, 2-16=-1110/304

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-5-13, Exterior(2R) 2-5-13 to 5-5-13, Interior(1) 5-5-13 to 9-2-11, Exterior(2R) 9-2-11 to 12-2-11, Interior(1) 12-2-11 to 23-6-12, Exterior(2R) 23-6-12 to 26-6-12, Interior(1) 26-6-12 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=113, 8=131.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	B10	Piggyback Base	1	1	I43587803

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:16 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPdf-6gBMfihkGYcHq9wMMgaqWaekc798t4SJqhrNykFz1

Job Reference (optional)

2-5-13	9-2-11	15-9-2	20-0-0	24-6-12	30-0-0	30-10-8
2-5-13	6-8-14	6-6-7	4-2-14	4-6-12	5-5-4	0-10-8

8x16 MT20HS ||

Scale = 1:68.0

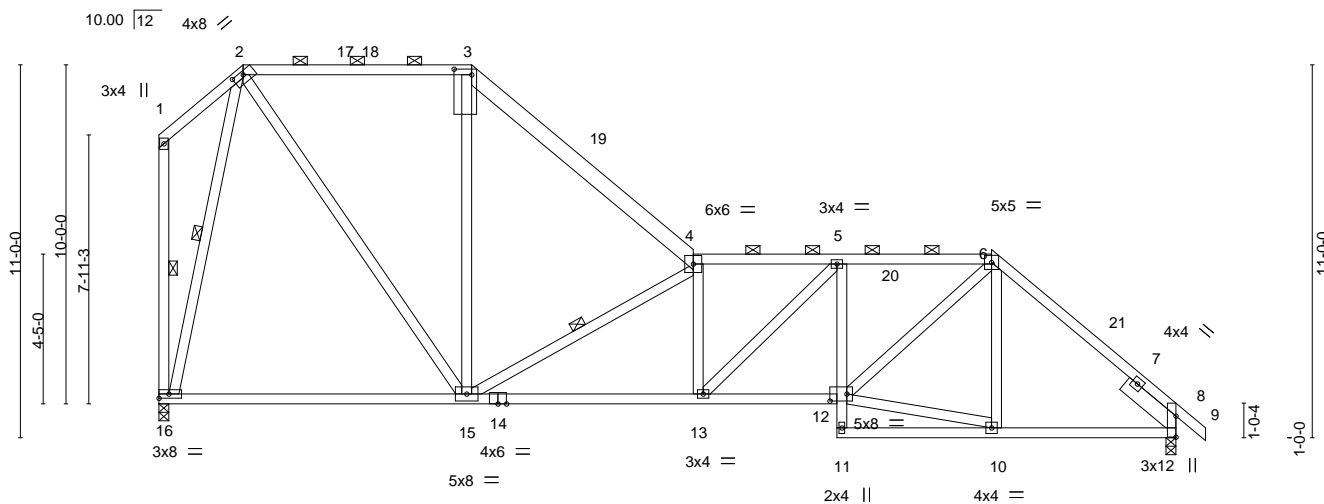


Plate Offsets (X,Y)--	[2:0-4-0,0-1-4], [3:0-2-0,0-6-4], [12:0-6-0,0-2-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.44	Vert(LL)	-0.18 15-16	>999	240	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.76	Vert(CT)	-0.37 15-16	>976	180	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.49	Horz(CT)	0.07 8	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 170 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	3-4: 2x6 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Right 2x6 SPF No.2 2-0-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-10-4 max.): 2-3, 4-6.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-15, 1-16, 2-16

REACTIONS.

(size)	16=0-3-8, 8=0-3-8
Max Horz	16=-329(LC 10)
Max Uplift	16=-113(LC 12), 8=-131(LC 12)
Max Grav	16=1194(LC 1), 8=1247(LC 1)

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

TOP CHORD	2-3=-802/246, 3-4=-1163/240, 4-5=-2173/331, 5-6=-1930/300, 6-8=-1495/219
BOT CHORD	15-16=-61/376, 13-15=-178/2177, 12-13=-144/1945, 5-12=-510/99, 8-10=-57/1057
WEBS	2-15=-154/946, 3-15=-4/371, 4-15=-1620/291, 5-13=-43/318, 10-12=-62/990, 6-12=-118/1196, 2-16=-1110/301

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-5-13, Exterior(2R) 2-5-13 to 5-5-13, Interior(1) 5-5-13 to 9-2-11, Exterior(2R) 9-2-11 to 12-2-11, Interior(1) 12-2-11 to 24-6-12, Exterior(2R) 24-6-12 to 27-6-12, Interior(1) 27-6-12 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=113, 8=131.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss B11	Truss Type Piggyback Base	Qty 1	Ply 1	Summit/1 Woodside 143587804
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:17 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFizXPdf-aslkt2iwVZgTv_k6w3BpMj7np0UllbYUQUUNpyKFz0

2-5-13	9-2-11	12-10-3	16-9-2	20-0-0	25-6-12	30-0-0	30-10-8
2-5-13	6-8-14	3-7-8	3-11-0	3-2-14	5-6-12	4-5-4	0-10-8

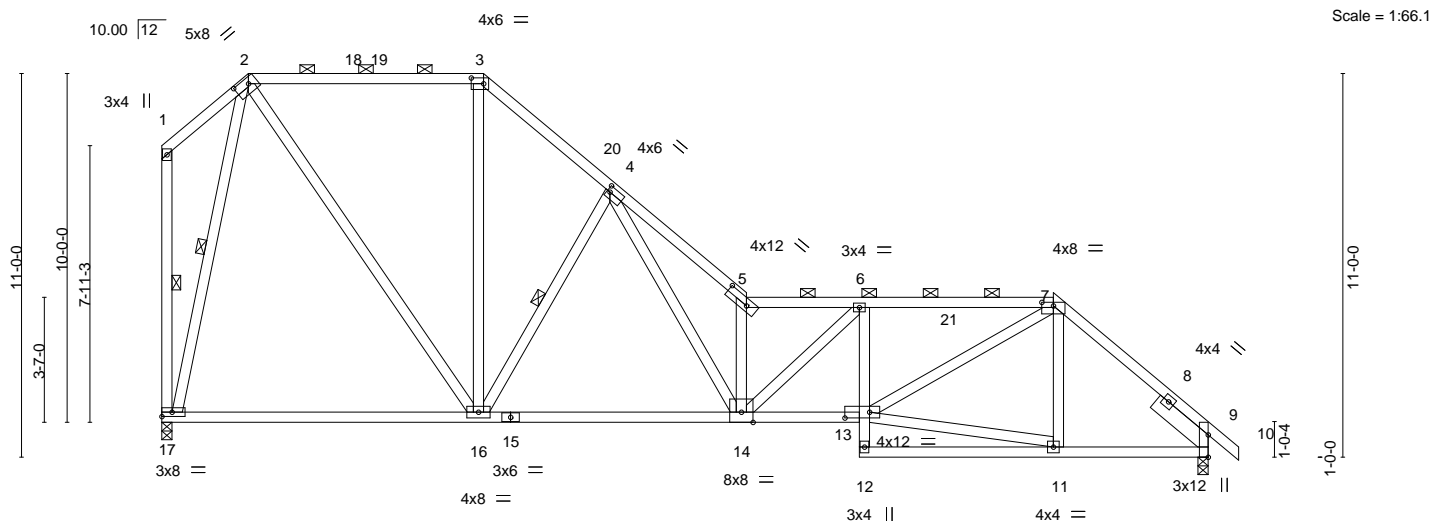


Plate Offsets (X,Y)--	[2:0-5-0,0-2-0], [3:0-4-4,0-2-0], [4:0-1-0,0-2-0], [5:0-8-4,0-2-4], [7:0-4-0,0-1-4], [13:0-8-8,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.67	Vert(LL) -0.19 14 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.62	Vert(CT) -0.38 14-16 >934 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.07 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 170 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 (3-4-5 max.): 2-3, 5-7.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Right 2x6 SPF No.2 2-0-0	WEBS 1 Row at midpt 1-17, 2-17, 4-16

REACTIONS. (size) 17=0-3-8, 9=0-3-8
Max Horz 17=-329(LC 10)
Max Uplift 17=-113(LC 12), 9=-131(LC 12)
Max Grav 17=1194(LC 1), 9=1247(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-797/243, 3-4=-1098/273, 4-5=-3401/534, 5-6=-2660/369, 6-7=-2422/353,
7-9=-1492/211
BOT CHORD 16-17=-60/377, 14-16=-44/1316, 13-14=-218/2439, 6-13=-558/104, 9-11=-68/1073
WEBS 2-16=-146/934, 3-16=-65/406, 5-14=-2304/384, 6-14=-25/302, 11-13=-80/941,
7-13=-178/1582, 2-17=-1122/304, 4-16=-1062/240, 4-14=-356/2518

- NOTES-**
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=30ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-5-13, Exterior(2R) 2-5-13 to 5-5-13, Interior(1) 5-5-13 to 9-2-11, Exterior(2R) 9-2-11 to 12-2-11, Interior(1) 12-2-11 to 25-6-12, Exterior(2R) 25-6-12 to 28-6-12, Interior(1) 28-6-12 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pf=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
 - This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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) 17=113, 9=131.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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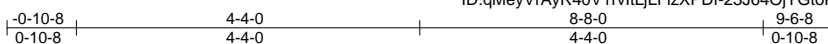
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587805
2536763	BG	GABLE	1	1	Job Reference (optional)	

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

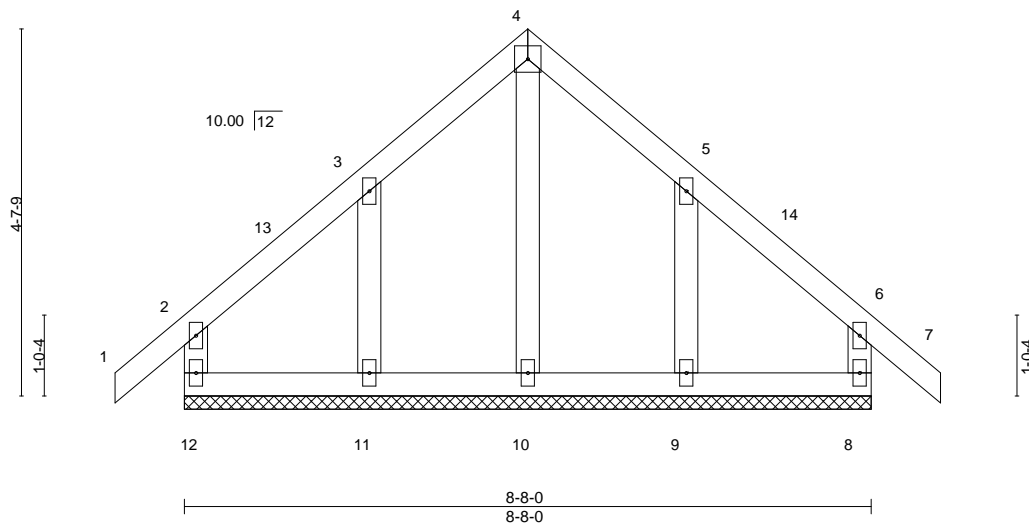
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:18 2020 Page 1

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4x4 =

Scale = 1:29.1



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0		TC 0.07	Vert(LL)	0.00	6	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.04	Vert(CT)	-0.00	6	n/r	120		
BCLL 0.0	Rep Stress Incr YES		WB 0.05	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 37 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 6-0-0 oc bracing.

REACTIONS.

All bearings 8-8-0.
(lb) - Max Horz 12=-126(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 12, 8, 11, 9
Max Grav All reactions 250 lb or less at joint(s) 12, 8, 10, 11, 9

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) -0-10-8 to 2-4-0, Interior(1) 2-4-0 to 4-4-0, Exterior(2R) 4-4-0 to 7-4-0, Interior(1) 7-4-0 to 9-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8, 11, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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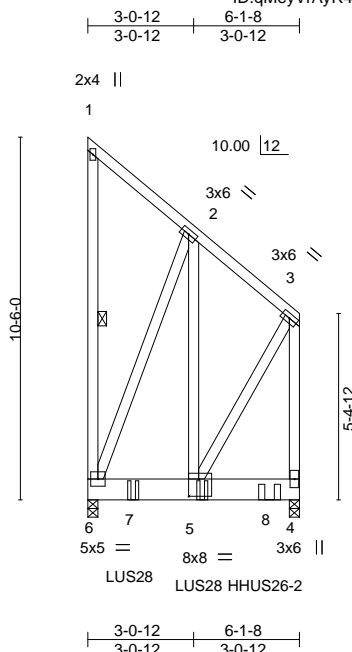
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	C10	Roof Special Girder	1	2	143587806

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:19 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPDf-XFtVikjA1BwB8luV2UEHR8CBtqH9LG5u?ovbSiyKFz_



Scale = 1:66.7

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	Vert(LL)	-0.01	5	>999	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.17	Vert(CT)	-0.02	5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.34	Horz(CT)	0.00	4	n/a		
BCLL 0.0	Rep Stress Incr NO	Matrix-MP						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 135 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 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.
WEBS 1 Row at midpt 1-6

REACTIONS.

(size) 4=0-3-8, 6=0-3-8
Max Horz 6=-332(LC 19)
Max Uplift 4=-715(LC 5), 6=-520(LC 4)
Max Grav 4=3219(LC 1), 6=2161(LC 1)

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

TOP CHORD 2-3=-717/187, 3-4=-1412/283
BOT CHORD 5-6=-205/537
WEBS 2-6=-1443/409, 2-5=-423/1569, 3-5=-282/1047

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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; Pf=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
- 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) 4=715, 6=520.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-3-12 from the left end to 3-3-12 to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 5-3-2 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

- 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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	C10	Roof Special Girder	1	2	I43587806
					Job Reference (optional)

LOAD CASE(S) Standard
 Uniform Loads (plf)
 Vert: 1-3=-60, 4-6=-20
 Concentrated Loads (lb)
 Vert: 5=-1278(F) 7=-1242(F) 8=-2393(F)

Job 2536763	Truss CJ05	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587807
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:20 2020 Page 1

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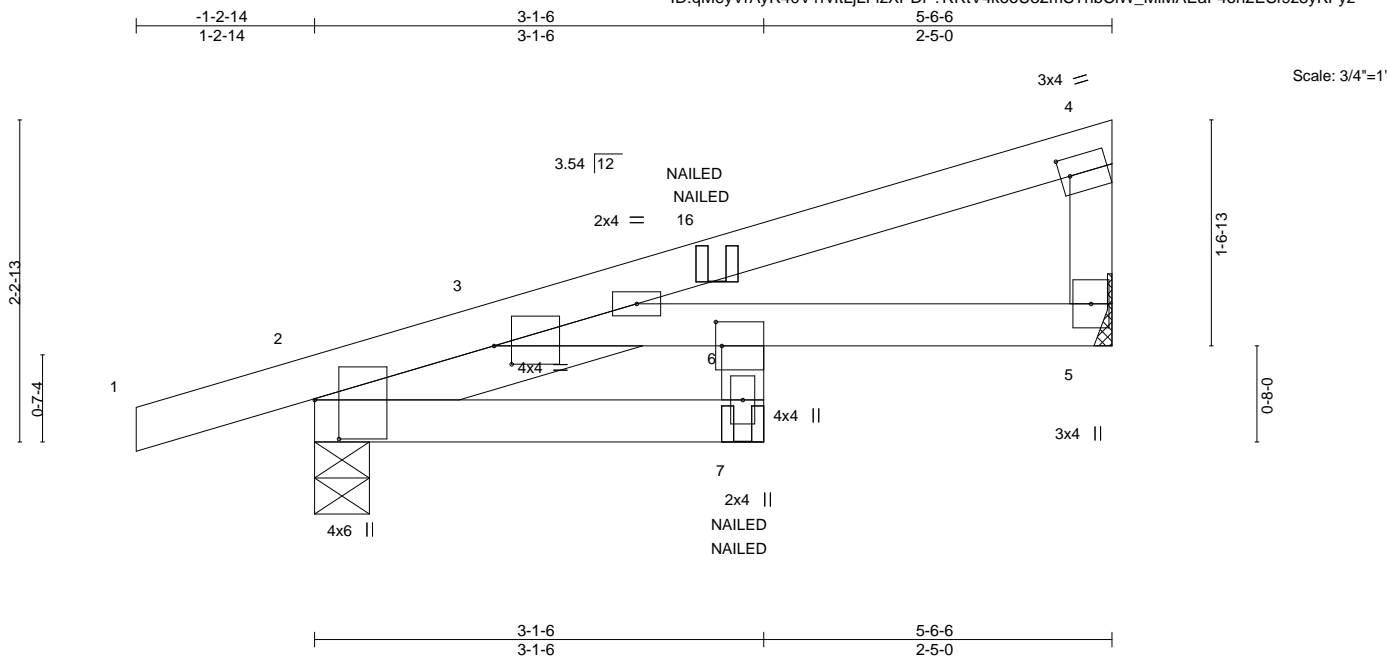


Plate Offsets (X,Y)-- [2:0-3-4,0-2-0], [3:0-1-7,0-1-8], [4:0-0-13,0-1-8], [6:0-2-0,0-0-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	Plate Grip DOL 1.15	TC 0.28	Vert(LL) -0.02	14	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.04	14	>999	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR					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 2-3-8

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 2=0-4-9
Max Horz 2=53(LC 7)
Max Uplift 5=18(LC 10), 2=59(LC 10)
Max Grav 5=282(LC 15), 2=411(LC 15)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-9=-396/13

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; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 5, 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- "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=-60, 7-8=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 7=-18(F=-9, B=-9)



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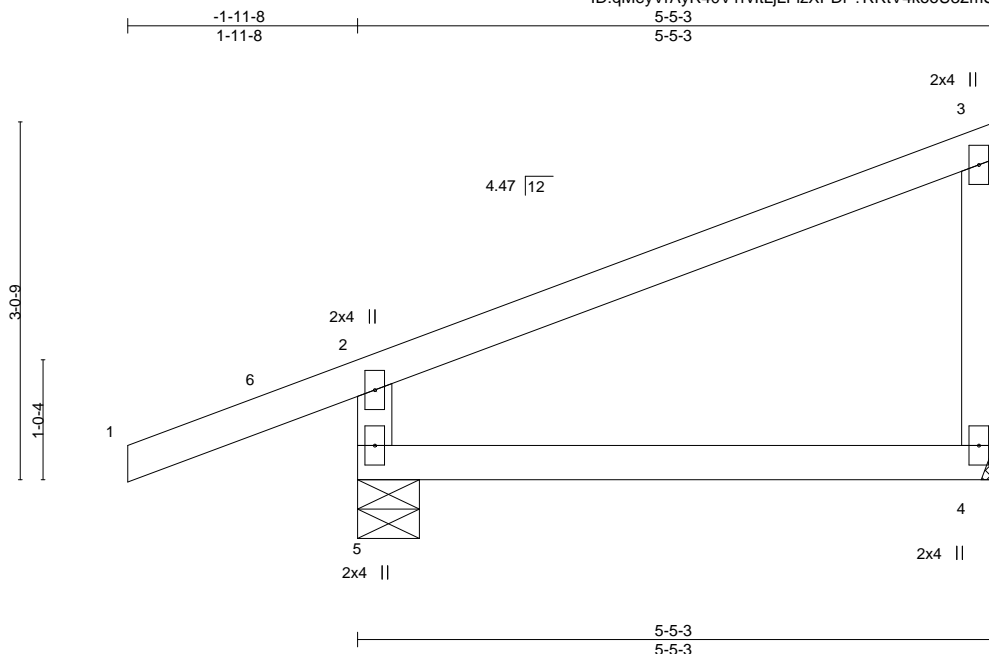


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss CJ10	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587808
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:20 2020 Page 1
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Scale = 1:19.6

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0 Plate Grip DOL 1.15	TC 0.55	Vert(LL)	-0.03 4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.27	Vert(CT)	-0.07 4-5	>856	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.03	Horz(CT)	0.00	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS					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 or 5-5-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-6-5, 4=Mechanical
Max Horz 5=104(LC 10)
Max Uplift 5=-74(LC 10), 4=-27(LC 10)
Max Grav 5=456(LC 15), 4=252(LC 15)

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

TOP CHORD 2-5=-410/102

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; Pf=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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 5, 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587809
2536763	CJ11	Roof Special Girder	1	1	Job Reference (optional)	

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

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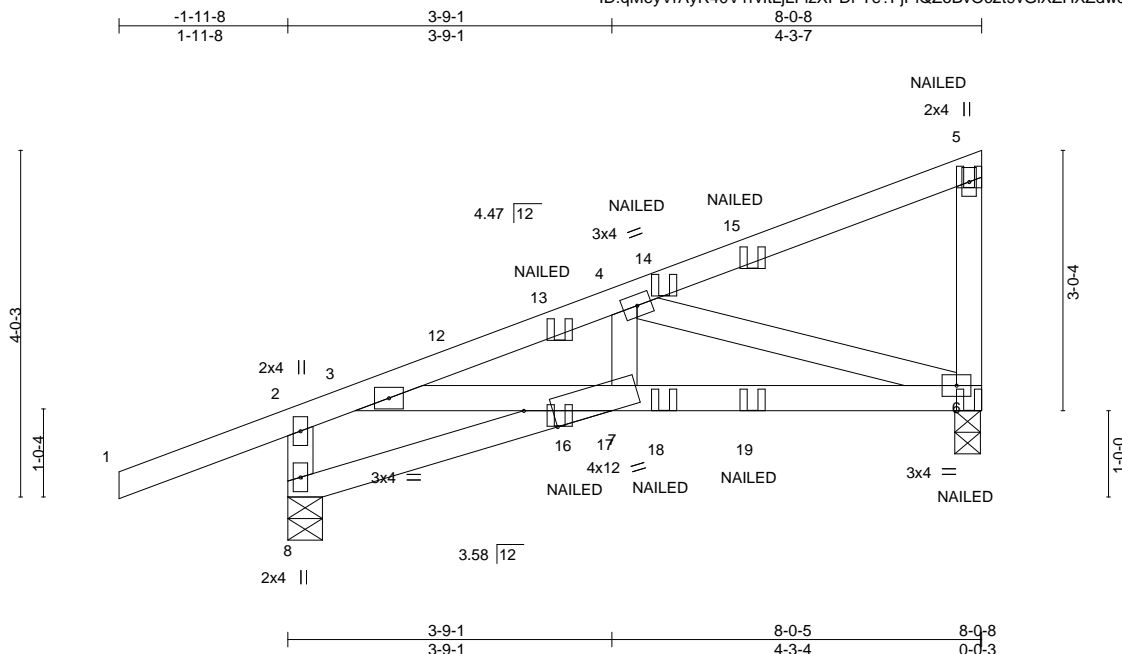


Plate Offsets (X,Y)-- [7:0-3-14,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) -0.02	7	>999	240	MT20	197/144
(Roof Snow=20.0)	Lumber DOL 1.15	BC 0.33	Vert(CT) -0.04	6-7	>999	180		
TCDL 10.0	Rep Stress Incr NO	WB 0.26	Horz(CT) 0.02	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-MP						
BCDL 10.0							Weight: 34 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.
BOT CHORD Rigid ceiling directly applied or 6'-0"-0 oc bracing.

REACTIONS.

(size) 8=0-4-13, 6=0-3-9
Max Horz 8=124(LC 7)
Max Uplift 8=131(LC 10), 6=157(LC 7)
Max Grav 8=545(LC 15), 6=484(LC 15)

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

TOP CHORD 3-4=-882/174, 2-8=-507/160
BOT CHORD 3-7=-122/823, 6-7=-239/823
WEBS 4-6=-858/229

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; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=131, 6=157.
- This truss 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=-60, 2-5=-60, 7-8=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 5=-27(F) 6=-33(F) 14=-20(B) 15=-3(F) 16=2(F) 18=-47(B) 19=-15(F)



November 11, 2020

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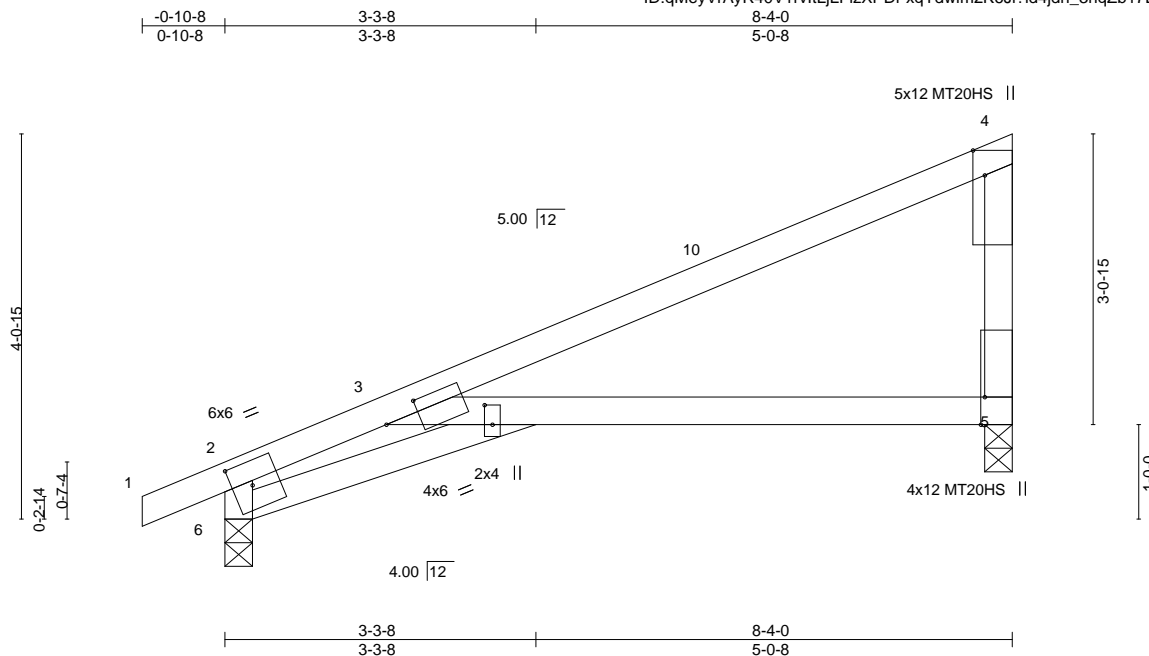


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587810
2536763	D07	Monopitch	3	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:22 2020 Page 1
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Scale = 1:24.4

Plate Offsets (X,Y)-- [2:0-2-9,0-3-0], [2:0-1-14,0-0-0], [3:0-2-8,0-1-0], [3:0-4-5,0-1-8], [4:0-3-3,Edge], [5:0-3-8,Edge], [6:0-0-11,0-1-11]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.86	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.91	Vert(LL) -0.23 5-9 >427 240	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.37 5-9 >262 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.20 5 n/a n/a		
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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 6=0-3-8
Max Horz 6=123(LC 11)
Max Uplift 5=36(LC 14), 6=67(LC 14)
Max Grav 5=428(LC 19), 6=422(LC 19)

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

TOP CHORD 3-4=-300/81, 4-5=-260/160, 2-6=-422/185

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) -0-10-8 to 2-4-14, Interior(1) 2-4-14 to 8-2-4 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) TCDL: ASCE 7-16; Pf=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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6.
- 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

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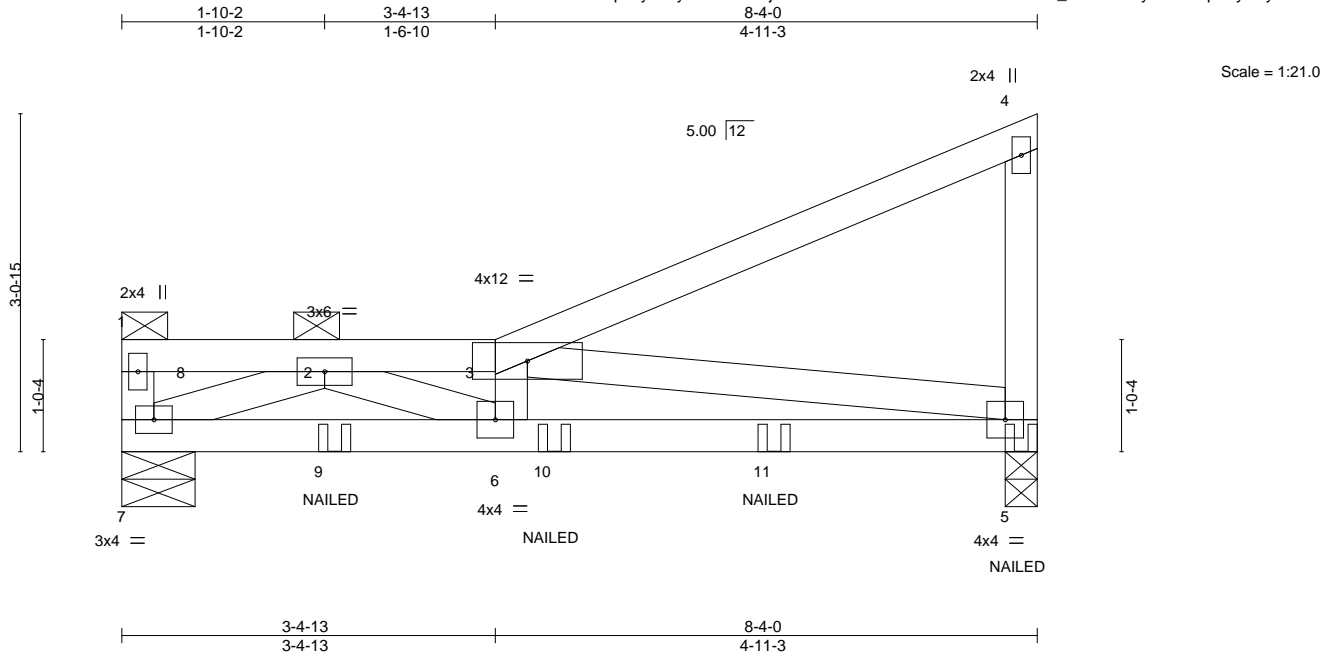
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587811
2536763	D08	Roof Special Girder	1	1	Job Reference (optional)	

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

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LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.70	Vert(LL)	-0.09	5-6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.90	Vert(CT)	-0.17	5-6	>552	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.89	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP						Weight: 32 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 8-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-10 max.): 1-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=0-8-0, 5=0-3-8
Max Horz 7=93(LC 41)
Max Grav 7=706(LC 24), 5=935(LC 25)

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

TOP CHORD 2-3=-2251/0
BOT CHORD 6-7=0/1249, 5-6=0/2266
WEBS 3-5=-2292/0, 2-7=-1359/0, 2-6=0/1188

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

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 5=-213(B) 9=-206(B) 10=-206(B) 11=-206(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/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



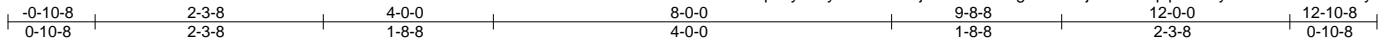
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss E01	Truss Type Hip Girder	Qty 1	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587812
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:24 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPdF-tCgOLRnJsJZTF3nSq1pS8CvyGrrV0bmd94dM6vyKFyv



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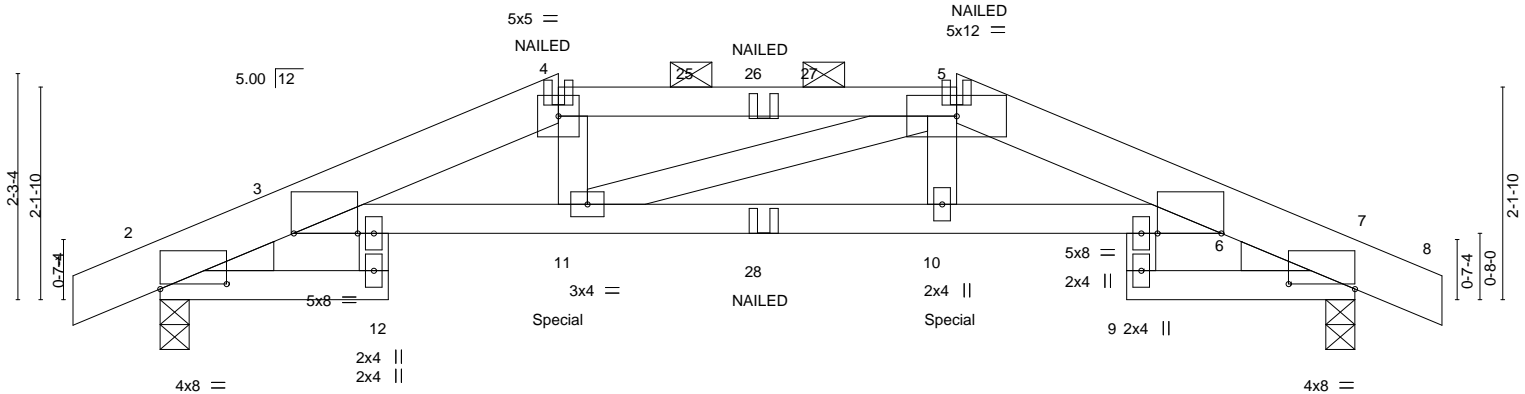


Plate Offsets (X,Y)--	[2:0-8-0,0-0-10], [3:0-7-11,Edge], [6:0-7-11,Edge], [7:0-8-0,0-0-10]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.66	Vert(LL) -0.14	12	>999	240	MT20	197/144
(Roof Snow=20.0)	Lumber DOL 1.15	BC 0.73	Vert(CT) -0.25	12	>585	180		
TCDL 10.0	Rep Stress Incr NO	WB 0.12	Horz(CT) 0.15	7	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-MS						
BCDL 10.0							Weight: 49 lb	FT = 20%

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

REACTIONS.	(size)
2=0-3-8, 7=0-3-8	
Max Horz 2=-33(LC 46)	
Max Uplift 2=-85(LC 10), 7=-85(LC 10)	
Max Grav 2=1152(LC 29), 7=1154(LC 29)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	3-14=-373/50, 3-4=-2955/159, 4-5=-2892/159, 5-6=-2962/160, 6-7=-373/50
BOT CHORD	3-11=-100/2835, 10-11=-100/2903, 6-10=-102/2842
WEBS	4-11=0/497, 5-10=0/496

- 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; Pf=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
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
 - 5) Provide adequate drainage to prevent water ponding.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 314 lb down and 46 lb up at 4-0-0, and 314 lb down and 46 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 12) 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	
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November 11, 2020

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	E01	Hip Girder	1	1	I43587812
Job Reference (optional)					

LOAD CASE(S)
Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 4-5=-60, 5-6=-60, 6-8=-60, 12-13=-20, 16-19=-20, 9-22=-20
Concentrated Loads (lb)
Vert: 4=-79(F) 5=-79(F) 11=-314(F) 10=-314(F) 26=-79(F) 28=-60(F)

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587813
2536763	E02	Roof Special	1	1	Job Reference (optional)	

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

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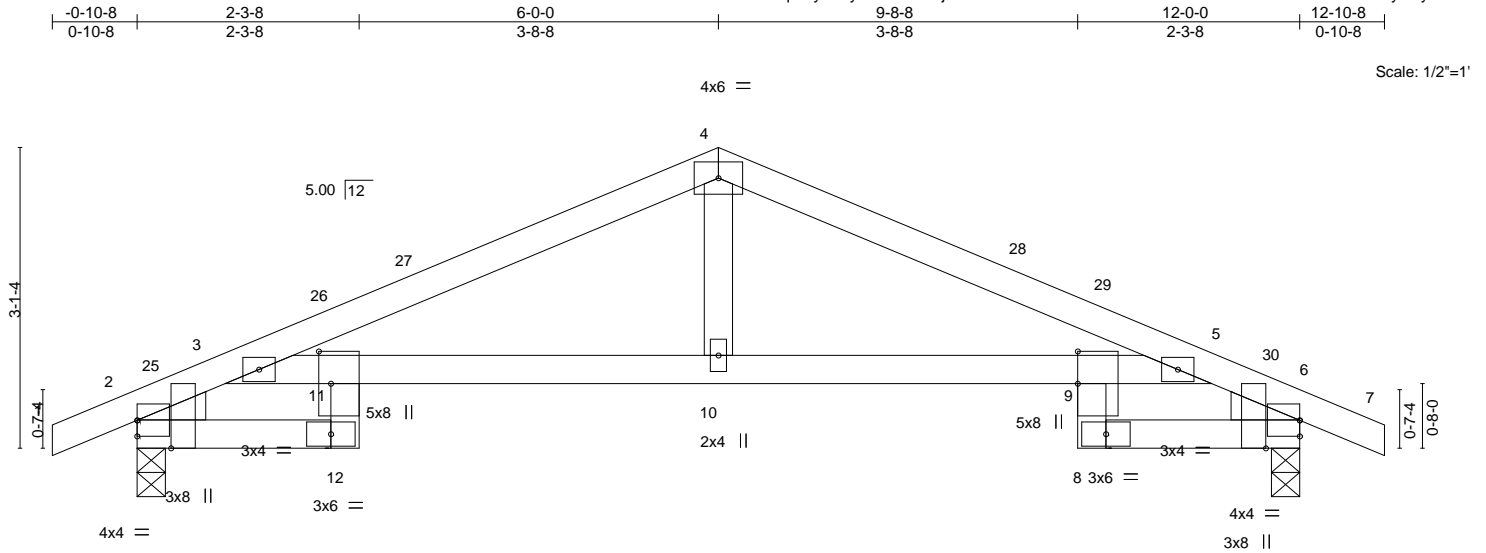


Plate Offsets (X,Y)--		[2:0-3-7,Edge], [6:0-3-7,Edge], [9:0-4-0,0-0-0], [11:0-4-0,0-1-8]							
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.46	in (loc)	l/defl	MT20	GRIP
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.99	-0.12 10-11	>999		197/144
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	-0.19 10-11	>754		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS		Horz(CT)	0.08 6		
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
 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. Except:
 2-2-0 oc bracing: 9-10

REACTIONS.

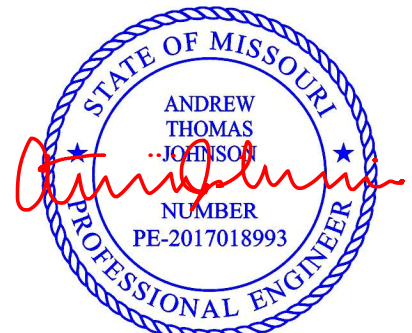
(size) 2=0-3-8, 6=0-3-8
 Max Horz 2=-47(LC 12)
 Max Uplift 2=-70(LC 14), 6=-70(LC 14)
 Max Grav 2=617(LC 19), 6=617(LC 20)

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

TOP CHORD 3-14=-670/221, 3-4=-949/320, 4-5=-949/320, 5-6=-670/222
 BOT CHORD 2-12=-143/482, 3-11=-75/537, 10-11=-196/841, 9-10=-196/841, 5-9=-76/537,
 6-8=-142/482
 WEBS 4-10=-41/341

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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, 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

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587815
2536763	E04	Common	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:27 2020 Page 1

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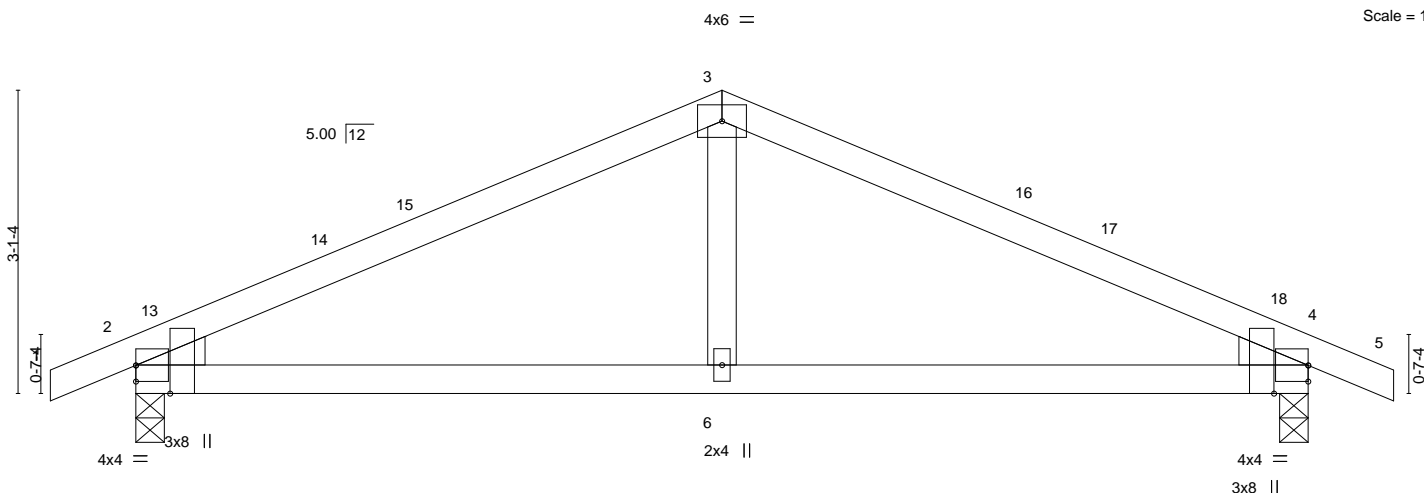
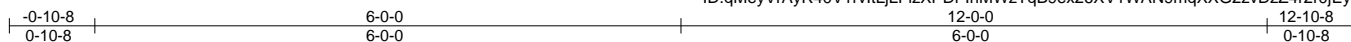


Plate Offsets (X,Y)--	[2:0-3-7,Edge], [4:0-3-7,Edge]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.42	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.37	Vert(LL) -0.06 6-9 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.08 6-9 >999 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.01 2 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 35 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=47(LC 13)
Max Uplift 2=70(LC 14), 4=70(LC 14)
Max Grav 2=617(LC 19), 4=617(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-732/257, 3-4=-732/257
BOT CHORD 2-6=-140/593, 4-6=-140/593

- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) TCDL: ASCE 7-16; Pf=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
 - 3) Unbalanced snow loads have been considered for this design.
 - 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 2, 4.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587816
2536763	E05	Common	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:28 2020 Page 1
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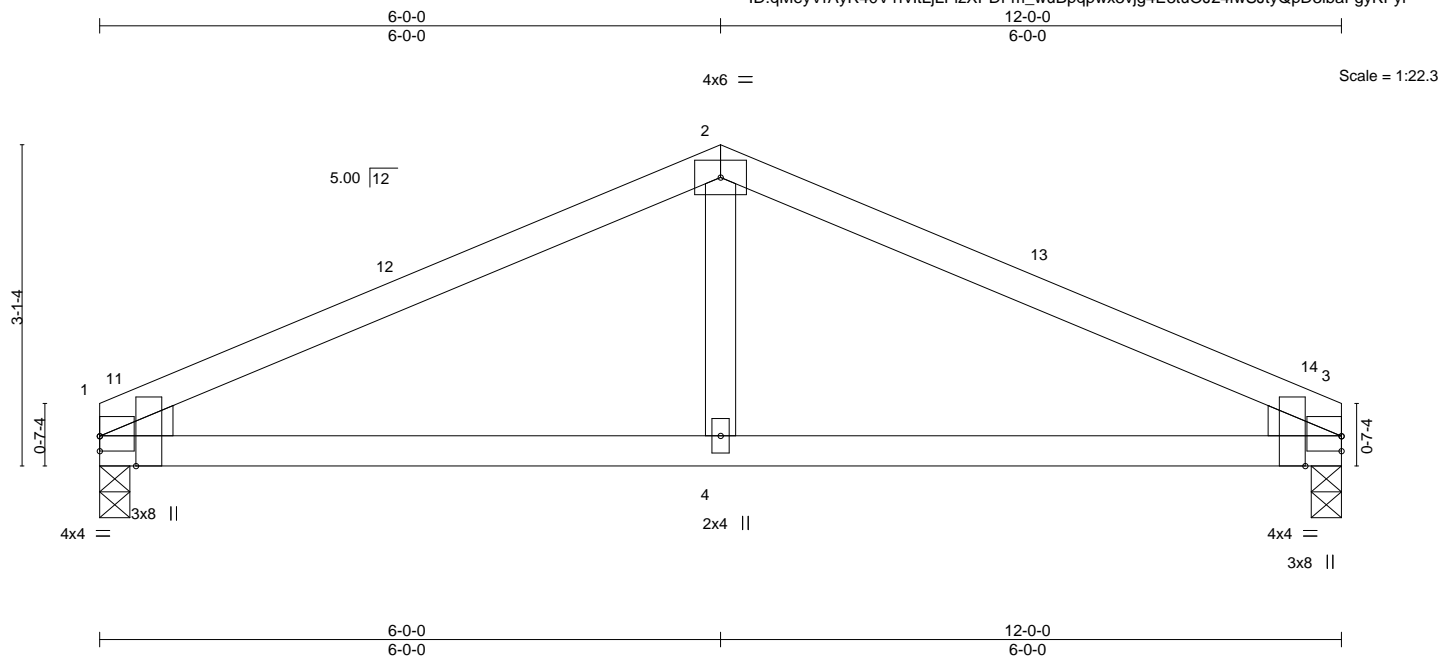


Plate Offsets (X,Y)--		[1:0-0-0,0-1-12], [1:0-3-7,Edge], [3:0-0-0,0-1-12], [3:0-3-7,Edge]	
LOADING (psf)	SPACING	CSI	DEFL.
TCLL 20.0	2-0-0	TC 0.42	in (loc) l/defl L/d
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.38	Vert(LL) -0.06 4-7 >999 240
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Vert(CT) -0.08 4-7 >999 180
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.02 1 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		
			PLATES MT20
			GRIP 197/144
			Weight: 33 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 3=0-3-8
Max Horz 1=-41(LC 12)
Max Uplift 1=-44(LC 14), 3=-44(LC 14)
Max Grav 1=564(LC 18), 3=564(LC 19)

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

TOP CHORD 1-2=-741/266, 2-3=-741/266
BOT CHORD 1-4=-171/602, 3-4=-171/602

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 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCDL: ASCE 7-16; Pf=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
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 11, 2020

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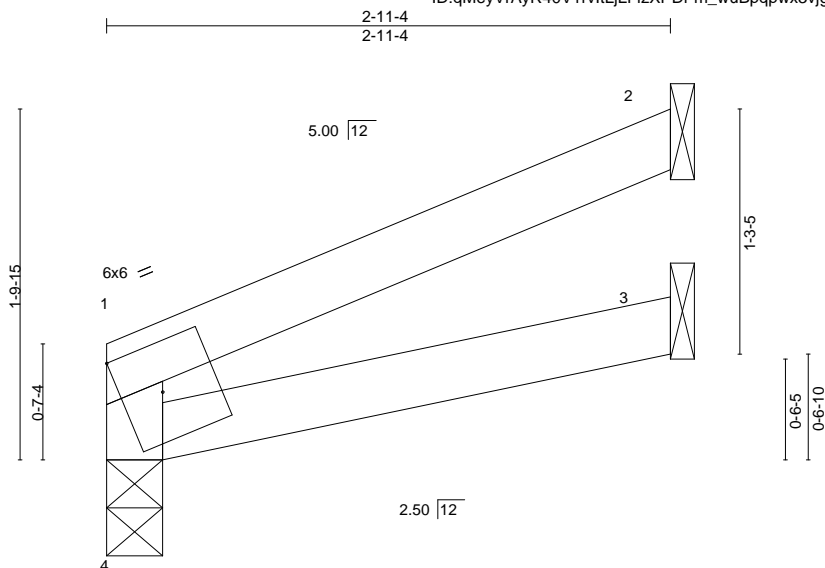
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587817
2536763	J01	Jack-Open	2	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:28 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPDf-m_wuBqpwx3vjg4E3tuOJ24mXSNoYQgD3ibaFgyKFyr



Scale: 1"=1'

Plate Offsets (X,Y)-- [1:0-1-14,0-0-0], [4:0-0-11,0-1-10]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.13	Vert(LL)	-0.00	3-4	>999	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.07	Vert(CT)	-0.01	3-4	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	2	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 2-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 2=Mechanical, 3=Mechanical, 4=0-3-8
Max Horz 4=40(LC 14)
Max Uplift 2=-26(LC 14)
Max Grav 2=103(LC 18), 3=52(LC 5), 4=140(LC 18)

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; Pf=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
- 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) 4 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) 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.



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/1 Woodside	I43587818
2536763	J02	Jack-Open	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:29 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-EAUHO9rRgFBmLqQdbPdrFdyxsjthtmNIMK7n7yKfyq

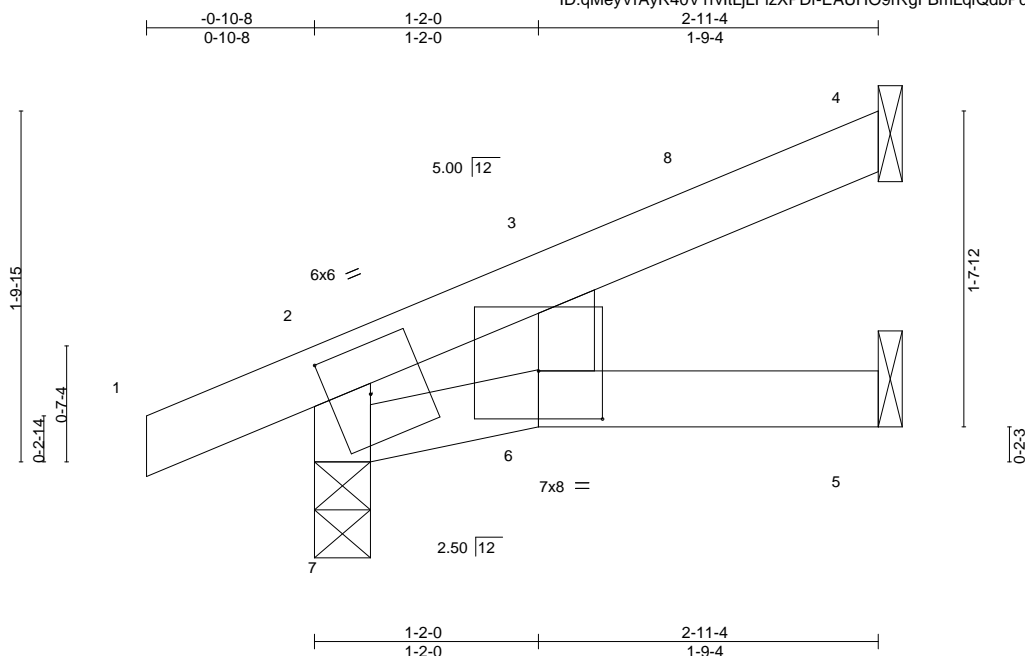


Plate Offsets (X,Y)-- [2:0-1-14,0-0-0], [2:0-2-9,0-3-0], [3:0-1-12,0-0-12], [6:0-4-0,0-3-0], [7:0-0-11,0-1-10]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.09	Vert(LL)	-0.00	6	>999	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	-0.01	6	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.01	Horz(CT)	0.00	4	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-MP						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 9 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 2-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=58(LC 14)
Max Uplift 4=19(LC 14), 7=34(LC 14)
Max Grav 4=88(LC 19), 5=45(LC 5), 7=250(LC 19)

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; 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-16; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 4, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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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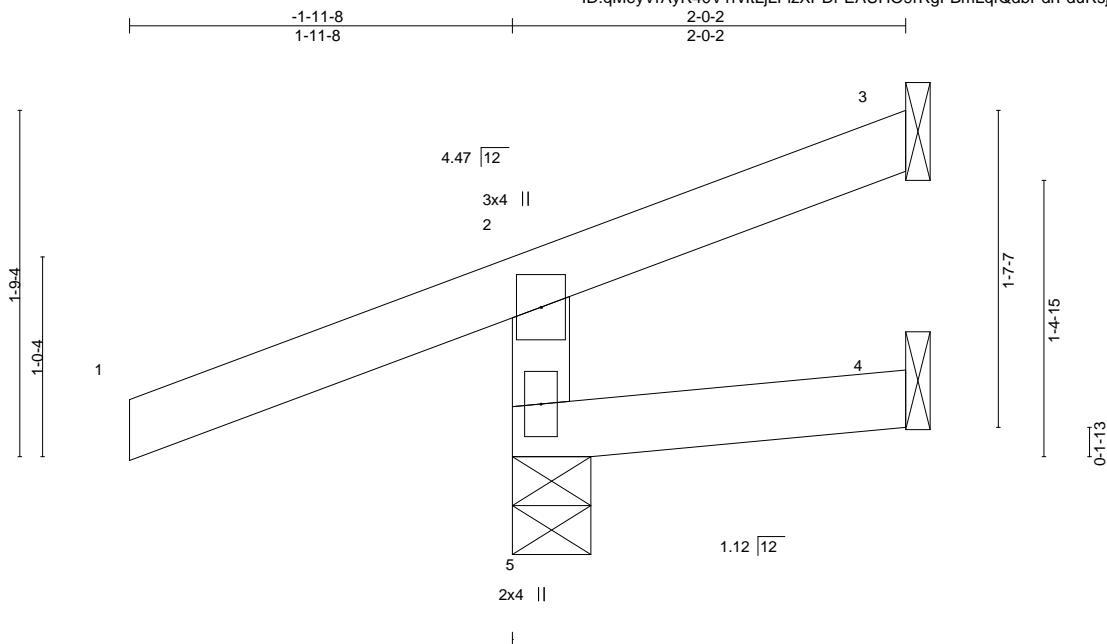
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss J03	Truss Type Jack-Open	Qty 1	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587819
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:29 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPDf-EAUHO9rRgFBmLqfQdbPdrFduRsjZhtvNIMK7n7yKFyq



Scale = 1:11.8

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0		TC 0.37	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.10	Vert(CT)	0.00	4-5	>999	180		
BCLL 0.0	Rep Stress Incr YES		WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 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 2-0-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=0-4-13, 3=Mechanical, 4=Mechanical
Max Horz 5=70(LC 14)
Max Uplift 5=84(LC 14), 3=32(LC 18), 4=11(LC 19)
Max Grav 5=380(LC 19), 3=9(LC 12), 4=27(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-334/263

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; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 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

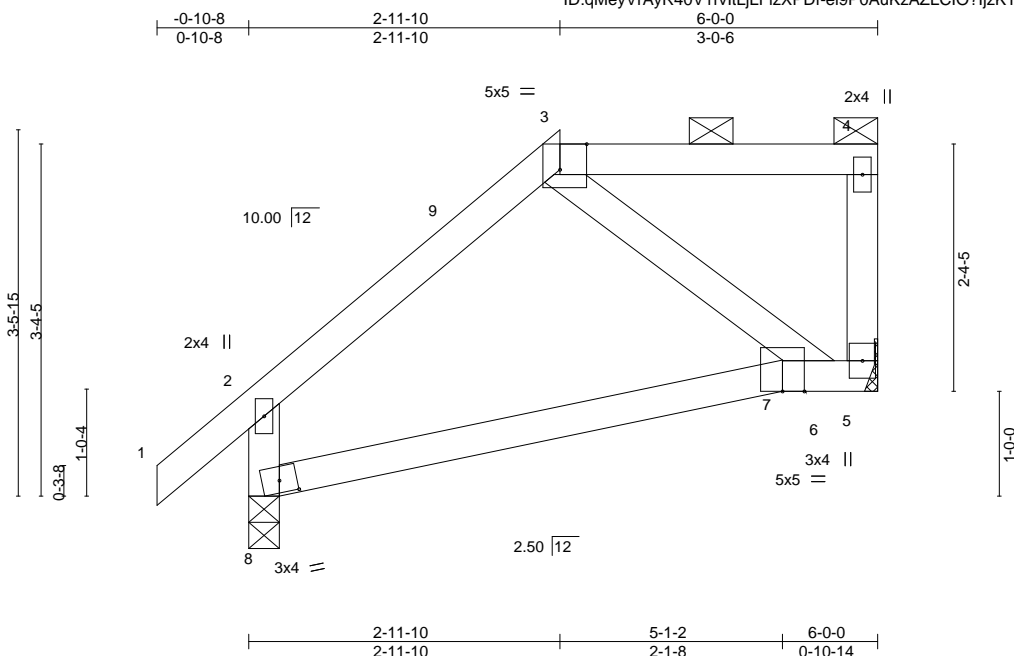
Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587822
2536763	J06	Half Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:32 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-el9P0AuKzAZLCIO?ljzKTuFQN3jquDFp_KZnORyKfyn

Job Reference (optional)



Scale = 1:22.0

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	Vert(LL)	-0.03	7-8	>999	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.19	Vert(CT)	-0.05	7-8	>999		
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-AS						
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

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

REACTIONS. (size) 5=Mechanical, 8=0-3-8
Max Horz 8=103(LC 9)
Max Uplift 5=-49(LC 9), 8=-46(LC 12)
Max Grav 5=223(LC 1), 8=295(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-255/174

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-10, Exterior(2E) 2-11-10 to 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=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
- 3) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 8.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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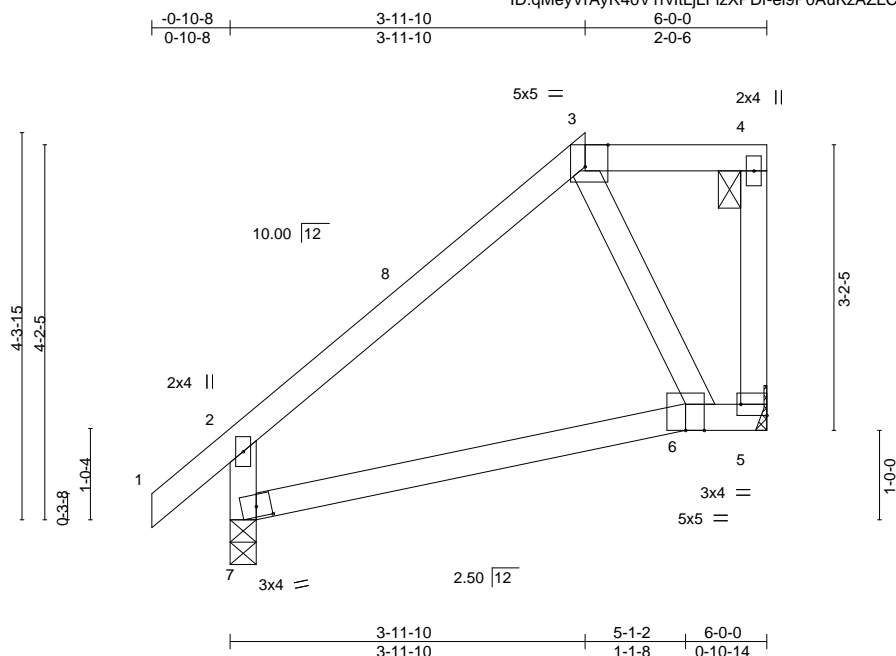
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587823
2536763	J07	Half Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:32 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPDf-el9P0AuKzAZLCIO?ljzKTuFQ53iguD6p_KZnORyKFyn



Scale = 1:25.8

Plate Offsets (X,Y)-- [3:0-3-1,Edge], [5:Edge,0-1-8], [7:0-2-0,0-1-7]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) -0.03	6-7	>999	240	MT20	197/144
(Roof Snow=20.0)	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.06	6-7	>999	180		
TCDL 10.0	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00	5	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-AS						
BCDL 10.0							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, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 5=Mechanical, 7=0-3-8
Max Horz 7=132(LC 9)
Max Uplift 5=61(LC 9), 7=43(LC 12)
Max Grav 5=230(LC 18), 7=295(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-251/164

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-10, Exterior(2E) 3-11-10 to 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 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.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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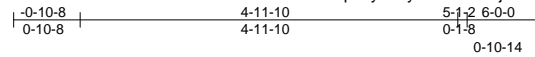
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587824
2536763	J08	Half Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:33 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-6xjnEWuykUhCqSzBsQUZ05nYJT00dgOyD_ILwuyKFym



Scale = 1:30.3

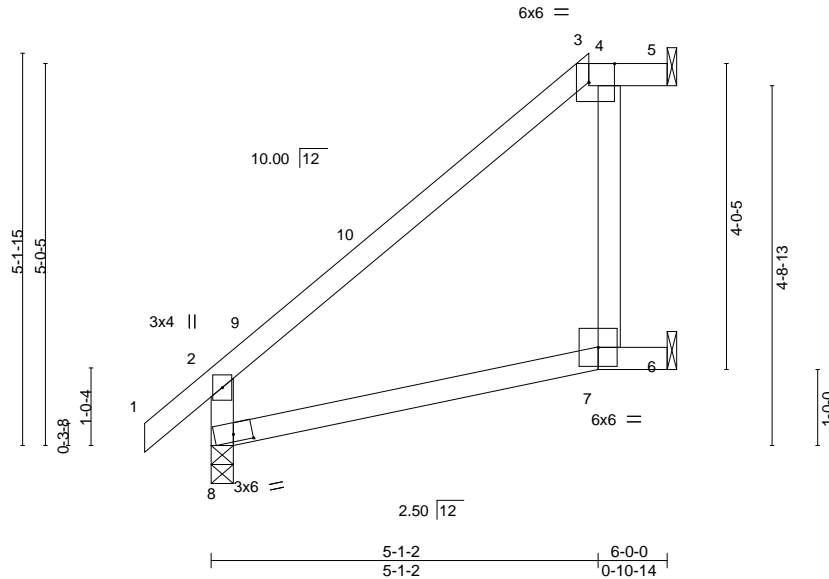


Plate Offsets (X,Y)-- [3:0-0-0,0-1-7], [3:0-4-1,Edge], [4:0-1-12,0-0-0], [8:0-3-0,0-1-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.45	Vert(LL) 0.13	7-8	>543	240	MT20	197/144
(Roof Snow=20.0)	Lumber DOL 1.15	BC 0.32	Vert(CT) -0.12	7-8	>592	180		
TCDL 10.0	Rep Stress Incr YES	WB 0.03	Horz(CT) -0.19	5	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
OTHERS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 6=Mechanical, 8=0-3-8
Max Horz 8=164(LC 12)
Max Uplift 5=12(LC 12), 6=63(LC 12)
Max Grav 5=123(LC 3), 6=130(LC 18), 8=298(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-11-10, Exterior(2E) 4-11-10 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 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.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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.
- 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/1 Woodside
2536763	J09	Jack-Open	5	1	I43587825
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:33 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPDf-6xjnEWuykUhCqSzBsQUZ05nYOT02dgMyD_ILwuyKFym

0-10-8 5-1-2 6-0-0
0-10-8 5-1-2 0-10-14

Scale = 1:33.0

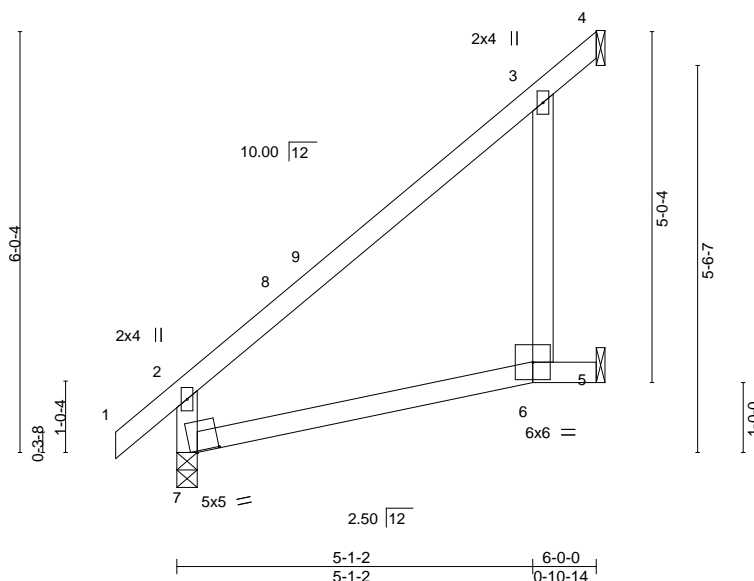


Plate Offsets (X,Y)-- [7:0-3-14,0-0-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.44	Vert(LL) 0.14	6-7	>498	240		MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.38	Vert(CT) -0.12	6-7	>575	180			
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT) -0.10	4	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 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=189(LC 12)
Max Uplift 4=24(LC 12), 5=73(LC 12)
Max Grav 4=127(LC 3), 5=140(LC 18), 7=298(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 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.
- 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 2536763	Truss J10	Truss Type Jack-Open	Qty 6	Ply 1	Summit/1 Woodside 143587826
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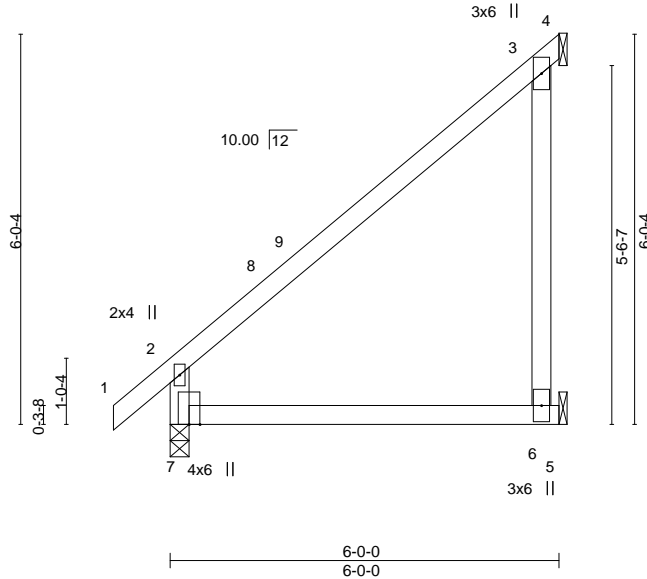
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:34 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPdF-a8HARsvaVnp3RbXNQ8?oYJKkitLAM016Se2uTKyKFyl

0-10-8 3-1-7 6-0-0
0-10-8 3-1-7 2-10-9

Scale = 1:35.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.34	Vert(LL) 0.08	6-7	>892	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.39	Vert(CT) -0.10	6-7	>701	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.46	Horz(CT) -0.07	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 24 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 6=Mechanical, 7=0-3-8
Max Horz 7=188(LC 12)
Max Uplift 4=-678(LC 18), 6=-499(LC 12)
Max Grav 4=385(LC 12), 6=969(LC 18), 7=268(LC 1)

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

TOP CHORD 3-4=-441/617
WEBS 3-6=-896/1267

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=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
- 3) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 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) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 4=678, 6=499.
- 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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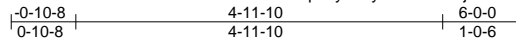
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587827
2536763	J11	Half Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:34 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPdf-a8HARsvaVnp3RbXNQ8?oYJKltOOM5?6Se2uTKyKFyl



Scale = 1:31.2

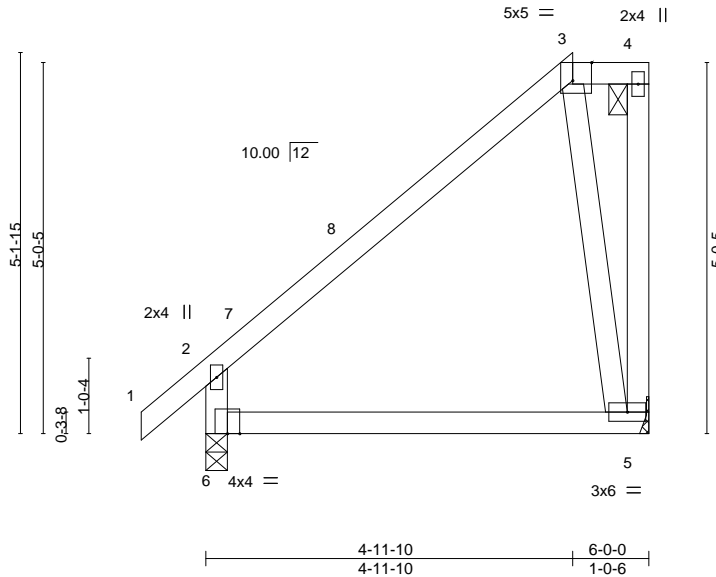


Plate Offsets (X,Y)-- [3:0-3-1,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.27	Vert(LL)	-0.04	5-6	>999	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.25	Vert(CT)	-0.07	5-6	>929		
TCDL 10.0	Lumber DOL 1.15	WB 0.14	Horz(CT)	-0.00	5	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 28 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.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=Mechanical, 6=0-3-8
Max Horz 6=176(LC 11)
Max Uplift 5=-76(LC 9), 6=-43(LC 12)
Max Grav 5=247(LC 18), 6=295(LC 1)

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

WEBS 3-5=-349/485

NOTES-

- 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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-11-10, Exterior(2E) 4-11-10 to 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 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.
- 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 100 lb uplift at joint(s) 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.
- 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/1 Woodside	143587828
2536763	J12	Half Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:35 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-3KrYfCwCG5xv3l6a_rW15Wty4Hk15ZOZhHnR?myKFyk



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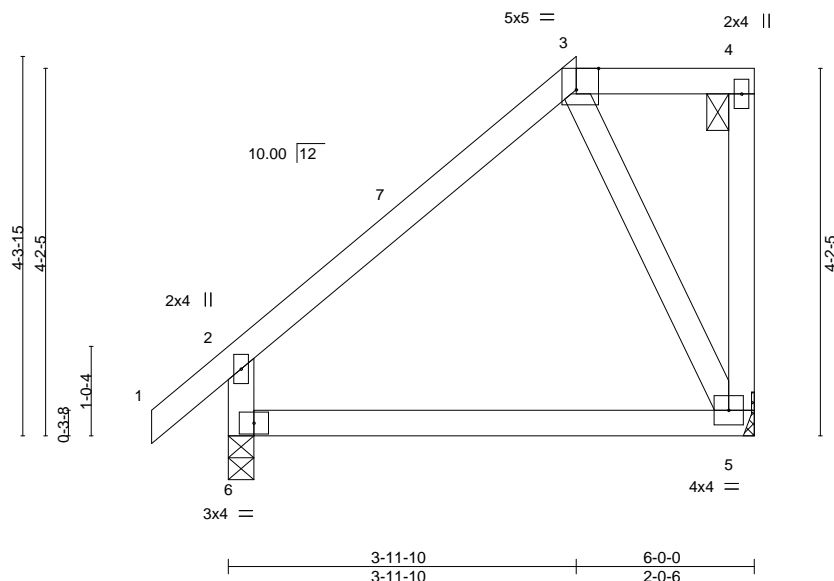


Plate Offsets (X,Y)-- [3:0-3-1,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.17	Vert(LL) -0.03	5-6	>999	240	MT20	197/144
(Roof Snow=20.0)	Lumber DOL 1.15	BC 0.22	Vert(CT) -0.07	5-6	>998	180		
TCDL 10.0	Rep Stress Incr YES	WB 0.07	Horz(CT) -0.00	5	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-AS						
BCDL 10.0							Weight: 26 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 6=0-3-8
Max Horz 6=147(LC 11)
Max Uplift 5=-62(LC 9), 6=-46(LC 12)
Max Grav 5=230(LC 18), 6=295(LC 1)

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

WEBS 3-5=-203/276

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-10, Exterior(2E) 3-11-10 to 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 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.
- 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 100 lb uplift at joint(s) 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.
- 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

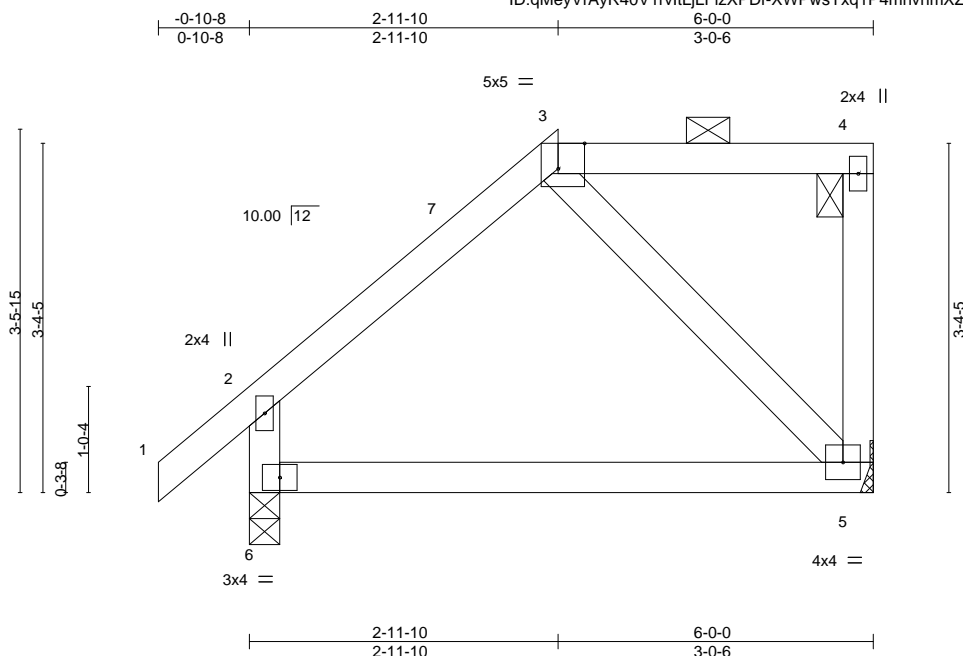
Job 2536763	Truss J13	Truss Type Half Hip	Qty 1	Ply 1	Summit/1 Woodside 143587829
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:36 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPdf-XWPwsYxq1P4mhvhmXZ1GekP7Gg4Qq1xOvxX?XDyKFyJ

Job Reference (optional)



Scale = 1:22.2

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	Vert(LL)	-0.03	5-6	>999	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.21	Vert(CT)	-0.06	5-6	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	-0.00	5	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014							
							Weight: 25 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.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 5=Mechanical, 6=0-3-8
Max Horz 6=118(LC 11)
Max Uplift 5=50(LC 9), 6=48(LC 12)
Max Grav 5=223(LC 1), 6=295(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-10, Exterior(2E) 2-11-10 to 5-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 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.
- 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 100 lb uplift at joint(s) 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.
- 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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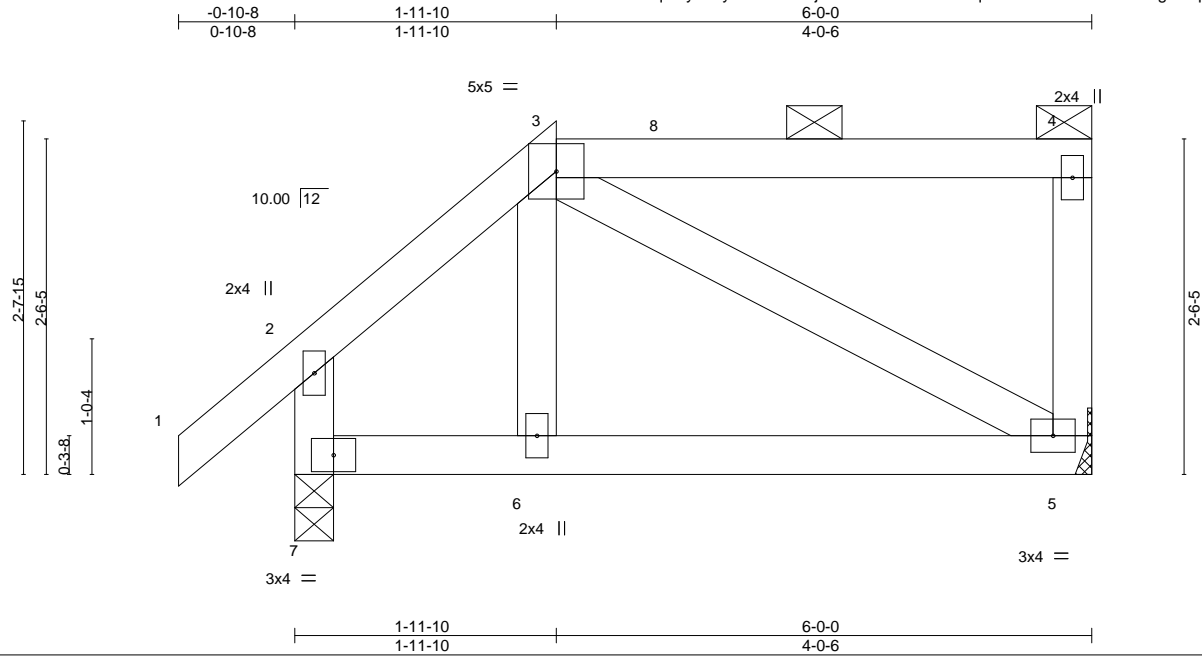
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587830
2536763	J14	Half Hip	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:36 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLzFizXPDf-XWPwsYxq1P4mhvhmXZ1GekP7?g5Wq1tOvX?XDyKFjy



LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	Plate Grip DOL 1.15	TC 0.16	Vert(LL) -0.01	5-6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT) -0.02	5-6	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 26 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=Mechanical, 7=0-3-8
Max Horz 7=89(LC 11)
Max Uplift 5=41(LC 9), 7=50(LC 12)
Max Grav 5=223(LC 1), 7=295(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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; Pf=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
- 3) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) 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 100 lb uplift at joint(s) 5, 7.
- 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.
- 11) 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

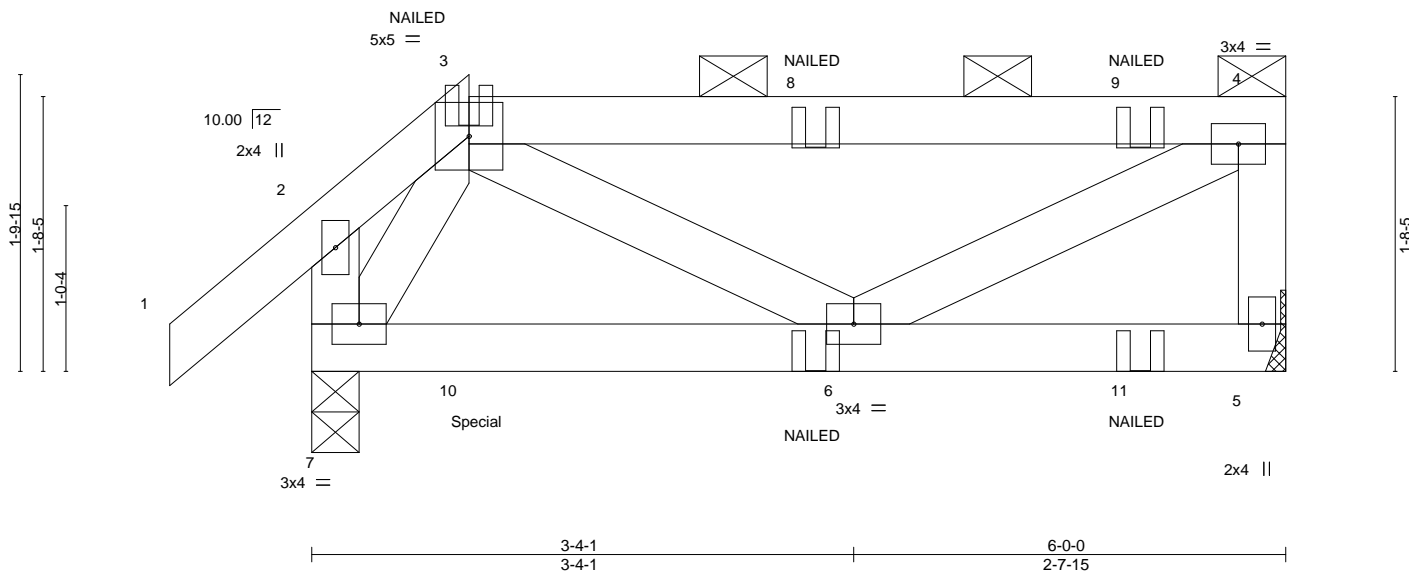
Job 2536763	Truss J15	Truss Type Half Hip Girder	Qty 1	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587831
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:37 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFizXPDf-?jyl3uxToiCdI3Gy5GYVAxyBk4RRZU9Y8bGY4fyKFYi



Scale = 1:14.2



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.00 6-7 >999 240	MT20		197/144	
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.10	Vert(CT)	-0.01 6-7 >999 180				
TCDL	10.0	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00 5 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MP							
BCDL	10.0										
								Weight: 25 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.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=Mechanical, 7=0-3-8
Max Horz 7=60(LC 28)
Max Uplift 5=-36(LC 5), 7=-70(LC 8)
Max Grav 5=330(LC 18), 7=383(LC 1)

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

TOP CHORD 4-5=-296/48
WEBS 3-7=-279/17

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; Pf=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
- This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 5, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 25 lb up at 0-11-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-7=-20
Concentrated Loads (lb)
Vert: 3=-38(B) 6=-24(B) 8=-38(B) 9=-45(B) 10=-20(B) 11=-26(B)



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

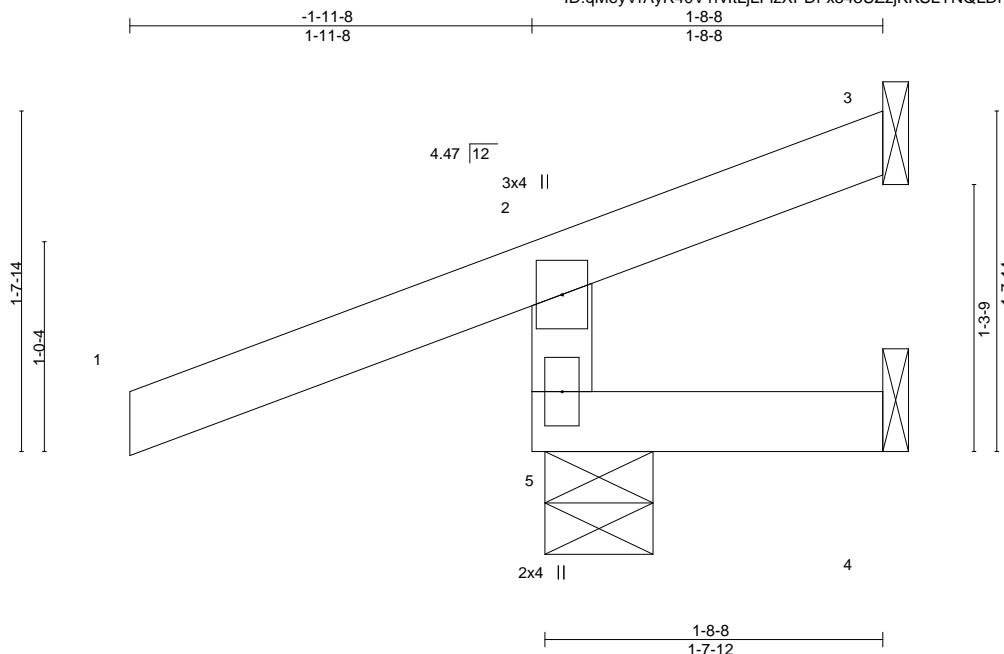
16023 Swingley Ridge Rd
Chesterfield, MO 63017

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss J18	Truss Type Jack-Open	Qty 1	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587834
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:39 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFizXPDf-x543UZZjKKSLYNQLDhzbzFM1b_u7y1OOrbvf8XyKFyg



Scale = 1:11.2

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	Plate Grip DOL 1.15		TC 0.37	Vert(LL) 0.00	4-5	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.09	Vert(CT) 0.00	4-5	>999	180			
BCLL 0.0	Rep Stress Incr YES		WB 0.00	Horz(CT) -0.01	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						Weight: 7 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-6-5
Max Horz 5=67(LC 14)
Max Uplift 3=44(LC 18), 4=17(LC 19), 5=89(LC 14)
Max Grav 3=12(LC 10), 4=21(LC 5), 5=380(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-332/270

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) 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; Pf=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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 3, 4, 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.



November 11, 2020

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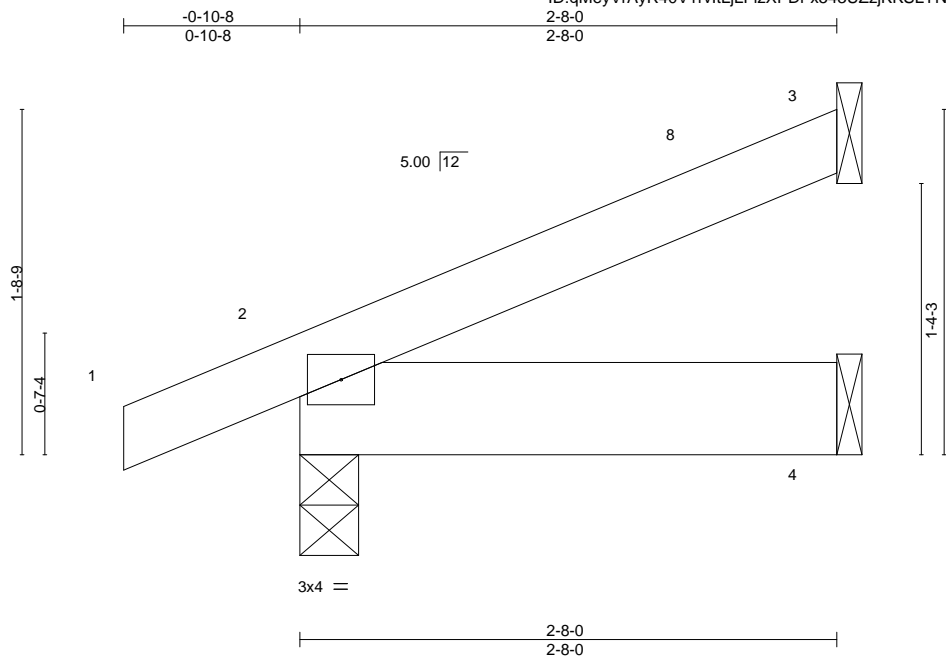
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss J19	Truss Type Jack-Open	Qty 3	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587835
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:39 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-x543UZzjKKSlyNQLDhzbFM1ffu8k1OOrbvf8XyKFyg



Scale = 1:11.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0 Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00	7	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP					Weight: 9 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=46(LC 14)
Max Uplift 3=18(LC 14), 2=32(LC 14)
Max Grav 3=80(LC 19), 2=225(LC 19), 4=53(LC 5)

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-7-4 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; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 3, 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.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587836
2536763	J20	Half Hip Girder	1	1		
Job Reference (optional)						

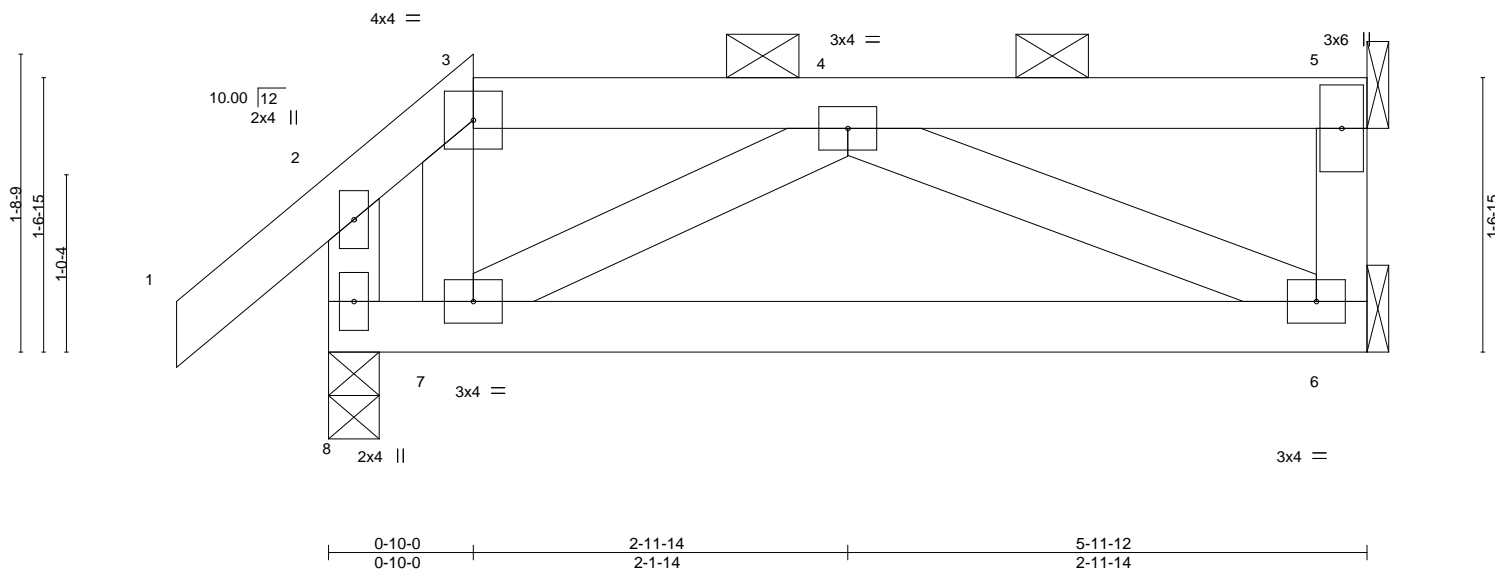
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:40 2020 Page 1

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0-10-8	0-10-0	2-11-14	5-11-12
0-10-8	0-10-0	2-1-14	2-11-14

Scale = 1:13.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.06 6-7 >999 240	MT20		197/144	
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.15 6-7 >466 180				
TCDL	10.0	Rep Stress Incr	NO	WB	0.05	Horz(CT)	-0.01 5 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MP							
BCDL	10.0										
								Weight: 24 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 5-11-12 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 8=0-3-8, 5=Mechanical
Max Horz 8=50(LC 7)
Max Uplift 6=-16(LC 5), 8=-67(LC 8), 5=-28(LC 5)
Max Grav 6=176(LC 18), 8=328(LC 1), 5=80(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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; Pf=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
- 3) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8, 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) Girder carries hip end with 0-0-0 right side setback, 0-10-0 left side setback, and 2-8-0 end setback.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 14 lb down and 6 lb up at 0-10-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) 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: 1-3=-60, 3-5=-68(F=-8), 6-8=-23(F=-3)
- Concentrated Loads (lb)
Vert: 3=-10(F)



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss J21	Truss Type Half Hip	Qty 1	Ply 1	Summit/1 Woodside I43587837
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:40 2020 Page 1

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Job Reference (optional)



Scale = 1:15.3

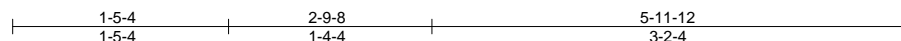
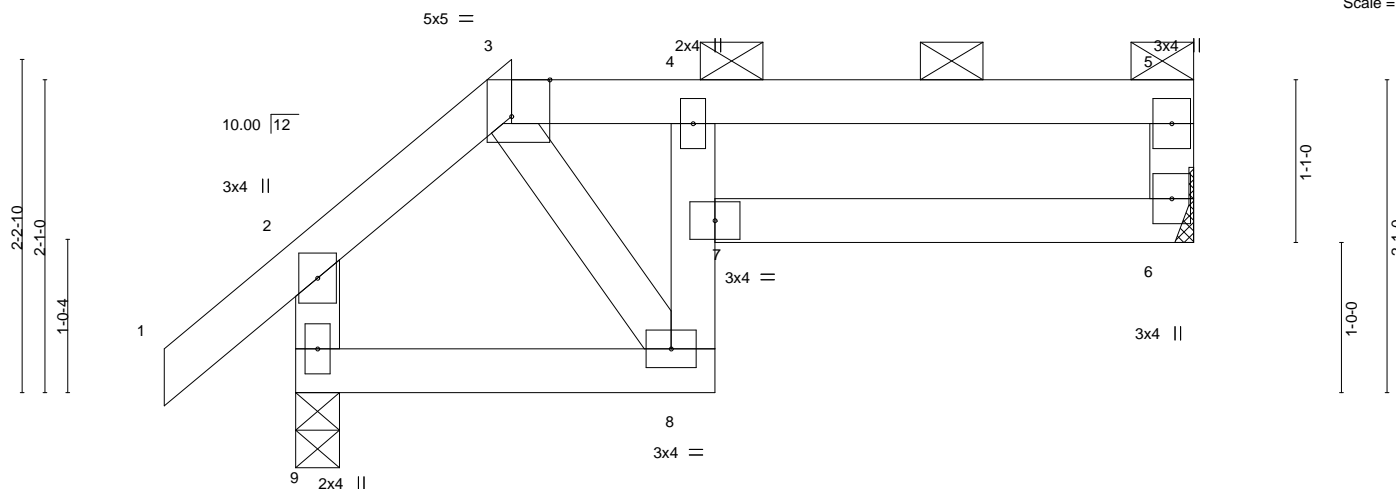


Plate Offsets (X,Y)-- [3:0-3-1,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.19	Vert(LL)	-0.02	7	>999	240	MT20	197/144
(Roof Snow=20.0)	Lumber DOL	1.15	BC 0.23	Vert(CT)	-0.04	7	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.02	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014		Matrix-AS							
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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins: 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 6=Mechanical, 9=0-3-8
Max Horz 9=64(LC 12)
Max Uplift 6=-35(LC 9), 9=-49(LC 12)
Max Grav 6=222(LC 1), 9=294(LC 1)

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

TOP CHORD 2-9=-263/168

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) TCDL: ASCE 7-16; Pf=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
- 3) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587838
2536763	J22	Half Hip	1	1		

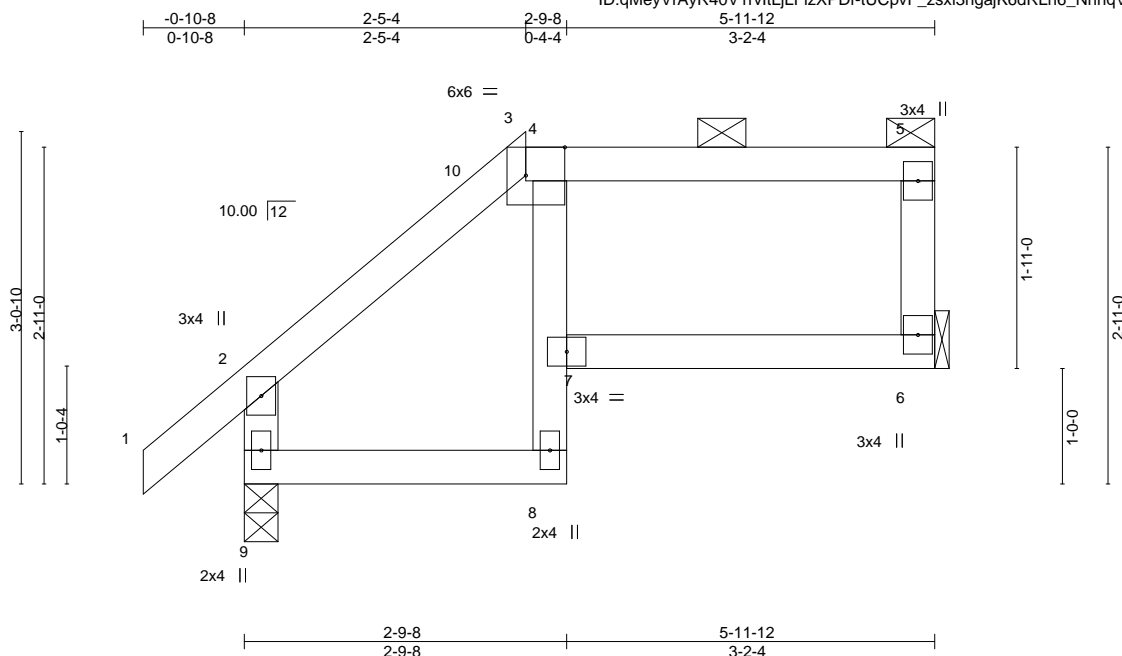
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:41 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-tUCpvF_zsxi3ngajK6dRLn6_NhnqVlu83DEmDQyKFye

Job Reference (optional)



Scale = 1:20.0

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.18	Vert(LL) 0.03	7	>999	240	MT20	197/144
(Roof Snow=20.0)	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.04	7	>999	180		
TCDL 10.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.02	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-AS						
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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins: 3-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=Mechanical, 9=0-3-8
Max Horz 9=87(LC 9)
Max Uplift 6=43(LC 9), 9=47(LC 12)
Max Grav 6=222(LC 1), 9=294(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-261/168

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-5-4, Exterior(2E) 2-5-4 to 5-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=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
- 3) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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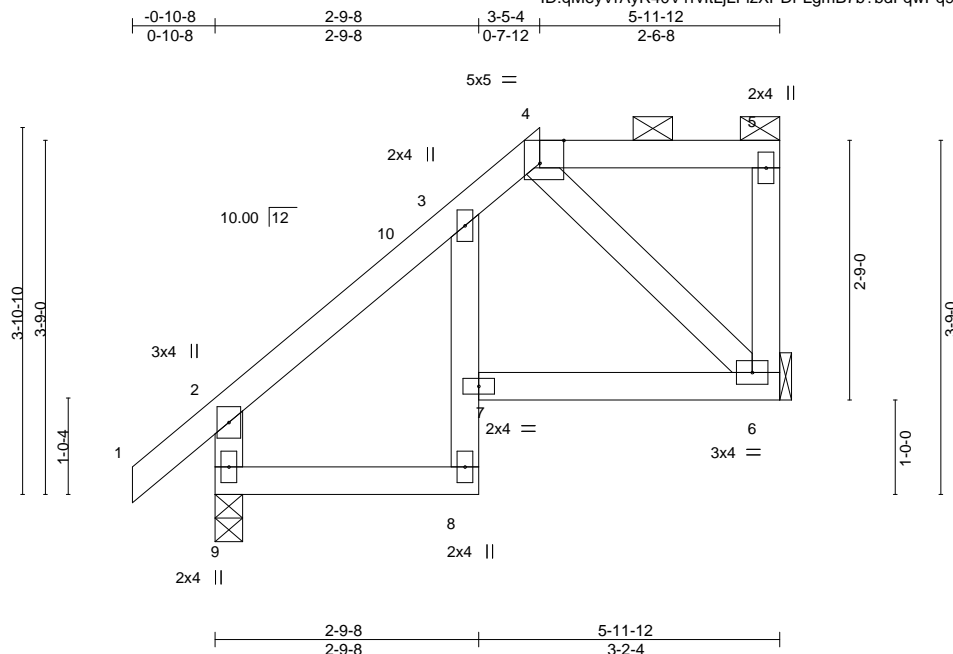
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587839
2536763	J23	Half Hip	1	1		

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:42 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPDf-LgmB7b?bdFqwPq9wup8gt_f9t58nEIVHlt_JlsyKFyd



Scale = 1:24.4

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	Vert(LL) 0.02	6-7	>999	240	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.15	Vert(CT) -0.02	6-7	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT) -0.02	6	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
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

BRACING-

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

REACTIONS.

(size) 6=Mechanical, 9=0-3-8
Max Horz 9=116(LC 9)
Max Uplift 6=-54(LC 9), 9=-45(LC 12)
Max Grav 6=222(LC 1), 9=294(LC 1)

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

TOP CHORD 2-9=-268/166

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-5-4, Exterior(2E) 3-5-4 to 5-10-0 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
- TCLL: ASCE 7-16; Pf=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
- This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 6, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

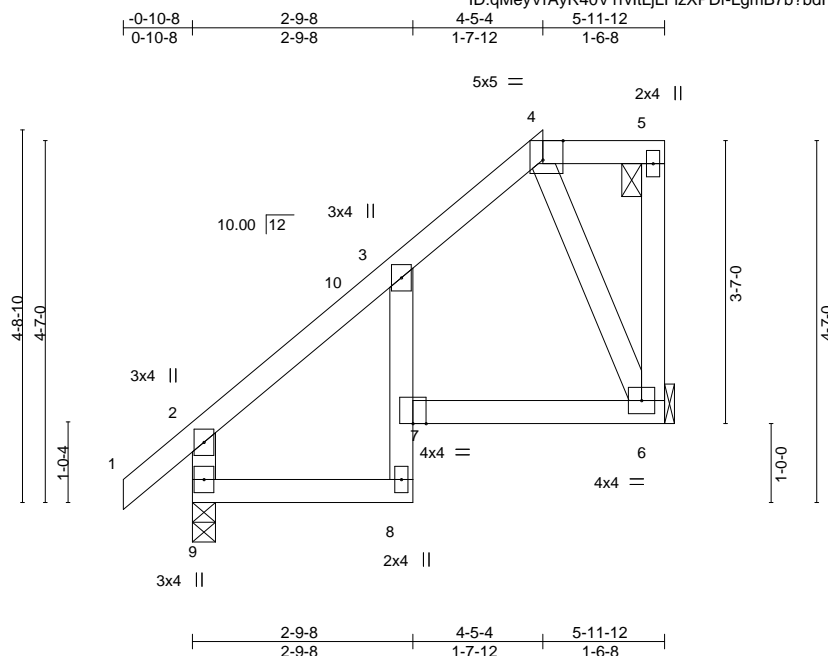


Plate Offsets (X,Y)-- [4:0-3-1,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	0.04 6-7 >999 240	MT20	197/144
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.04 6-7 >999 180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.03 6 n/a n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 28 lb	FT = 20%
BCDL	10.0								

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: 4-5.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 6=Mechanical, 9=0-3-8
 Max Horz 9=146(LC 9)
 Max Uplift 6=-67(LC 9), 9=-42(LC 12)
 Max Grav 6=236(LC 18), 9=294(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-9=-267/159
WEBS 4-6=-232/262

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-5-4, Exterior(2E) 4-5-4 to 5-10-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=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
- 3) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	143587841
2536763	J25	Half Hip	1	1	Job Reference (optional)	

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

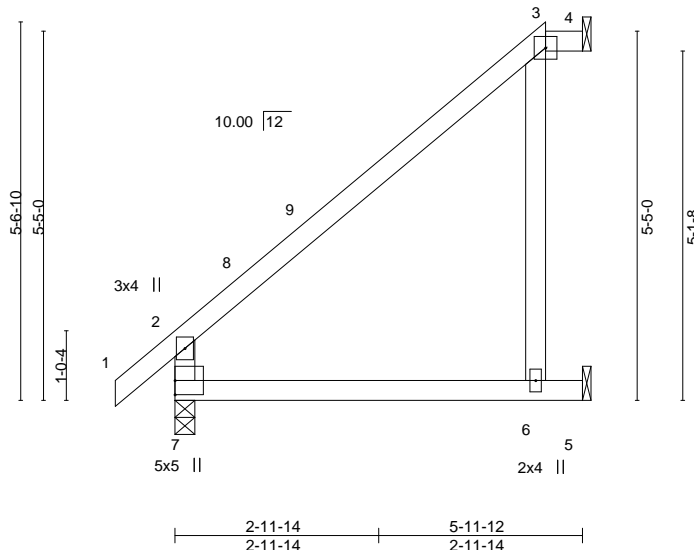
8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:43 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPdf-qsKZKx0DNYyn0_k6SXfvQCCGxVRhzCmQWxjtHJyKfyc

0-10-8 5-5-4 5-11-12
0-10-8 5-5-4 0-6-8

4x4 =

Scale = 1:33.8



LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.44	Vert(LL) 0.13	6-7	>554	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.11	6-7	>629	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.04	Horz(CT) -0.13	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 7=0-3-8, 5=Mechanical
Max Horz 7=174(LC 12)
Max Uplift 5=85(LC 12)
Max Grav 4=161(LC 3), 7=298(LC 1), 5=140(LC 18)

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-5-4, Exterior(2E) 5-5-4 to 5-11-0 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
- 2) TCLL: ASCE 7-16; Pf=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
- 3) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	J26	Jack-Open	4	1	I43587842
Job Reference (optional)					

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

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ID:qMeyVrAyR40V1rvltLjLFzXPDf-I3uyYH1s8s4ee8II?EA8yPkRUvGifdalBTQplyKFyb

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

Scale = 1:35.4

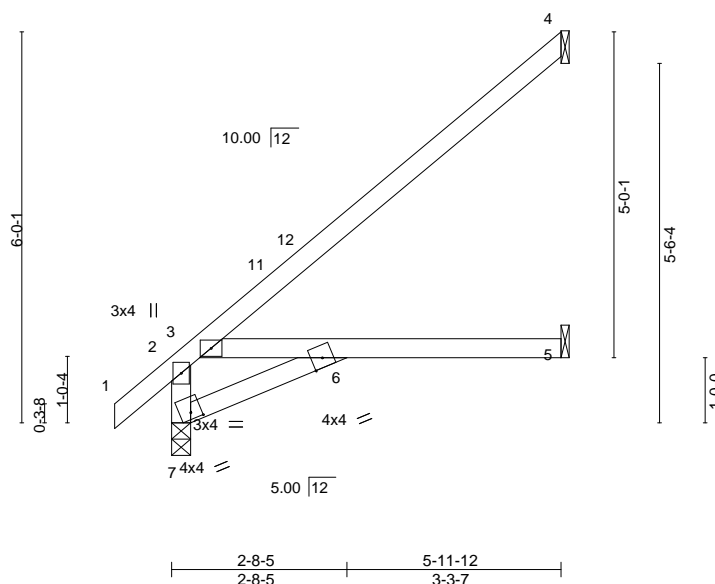


Plate Offsets (X,Y)-- [7:0-2-0,0-1-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0 Plate Grip DOL 1.15	TC 0.38	Vert(LL) 0.11	5-6	>632	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.41	Vert(CT) -0.13	5-6	>552	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.05	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 21 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=189(LC 12)
Max Uplift 4=79(LC 12), 5=14(LC 12)
Max Grav 4=163(LC 18), 5=128(LC 3), 7=331(LC 1)

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

TOP CHORD 2-7=-304/109, 2-3=-291/170
BOT CHORD 6-7=-469/294, 3-6=-290/457

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-0 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
- 2) TCLL: ASCE 7-16; Pf=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
- 3) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 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) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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) 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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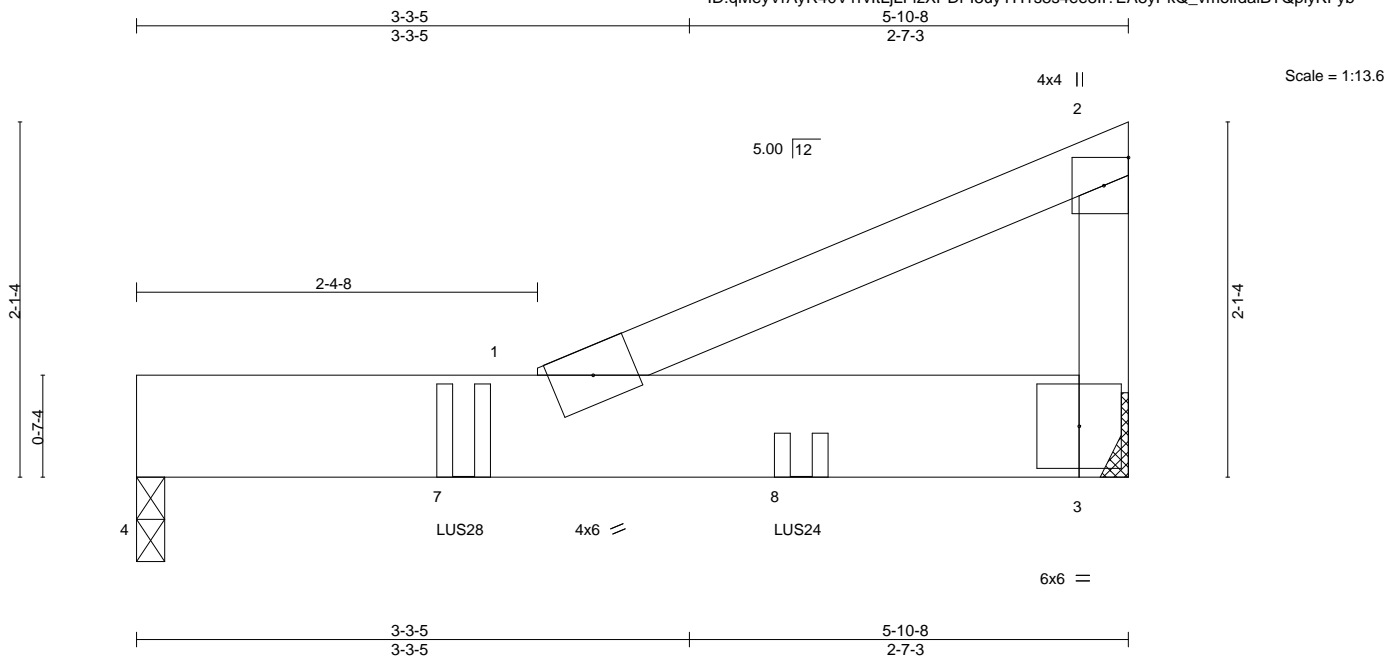


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss J28	Truss Type Roof Special Girder	Qty 1	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587843
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0 Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.04	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.08	5	>847	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.00	Horz(CT) 0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP					Weight: 24 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=0-2-0, 3=Mechanical
Max Horz 4=55(LC 9)
Max Uplift 4=50(LC 10), 3=88(LC 10)
Max Grav 4=856(LC 14), 3=894(LC 14)

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

TOP CHORD 1-2=-260/34

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; Pf=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
- 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 at joint(s) 4.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.
- Use Simpson Strong-Tie LUS28 (6-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 1-11-4 from the left end to connect truss(es) to front face of bottom chord.
- Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 3-11-4 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- 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=-60, 1-4=-80, 1-3=-20
- Concentrated Loads (lb)
Vert: 7=-589(F) 8=-603(F)



November 11, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss J29	Truss Type Jack-Open	Qty 3	Ply 1	Summit/1 Woodside 143587844
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:45 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPdF-mFRKId2UvACVGItVZyiNVdHbCJ34R6cj_rCzMByKFya



Scale = 1:18.2

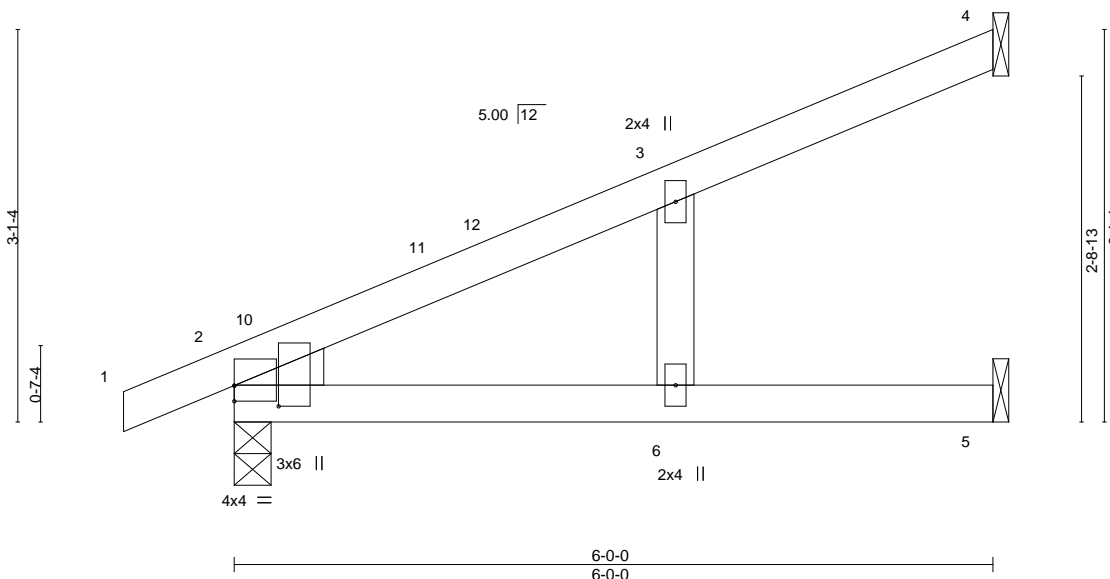


Plate Offsets (X,Y)-- [2:0-0-0,0-1-8], [2:0-1-15,0-4-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.45	in (loc) l/defl L/d	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.56	Vert(LL) -0.13 6-9 >561 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.02	Vert(CT) -0.20 6-9 >356 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.03 2 n/a 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
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=84(LC 14)
Max Uplift 4=-32(LC 14), 2=-32(LC 14), 5=-5(LC 14)
Max Grav 4=194(LC 19), 2=375(LC 19), 5=130(LC 19)

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 4, 2, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

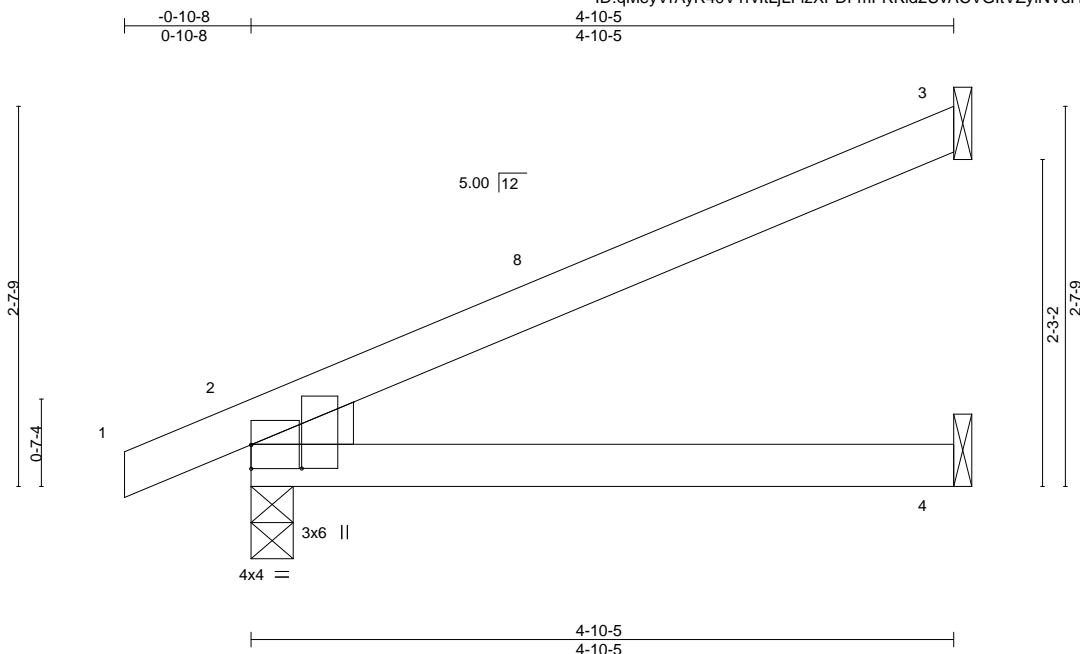
Job 2536763	Truss J30	Truss Type Jack-Open	Qty 1	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587845
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:45 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPDf-mFRKld2UvACVGltVZyiNVdHdVJ7HR6tj_rCzMByKFya



Scale: 3/4"=1'

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL)	-0.04	4-7	>999	MT20	197/144
(Roof Snow=20.0)	Lumber DOL 1.15	BC 0.29	Vert(CT)	-0.07	4-7	>837		
TCDL 10.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.01	2	n/a		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-AS						
BCDL 10.0							Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=71(LC 14)
Max Uplift 3=-38(LC 14), 2=-31(LC 14)
Max Grav 3=185(LC 19), 2=351(LC 19), 4=86(LC 5)

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-9-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCCL: ASCE 7-16; Pf=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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 3, 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 2536763	Truss J31	Truss Type Jack-Open	Qty 1	Ply 1	Summit/1 Woodside I43587846
Job Reference (optional)					

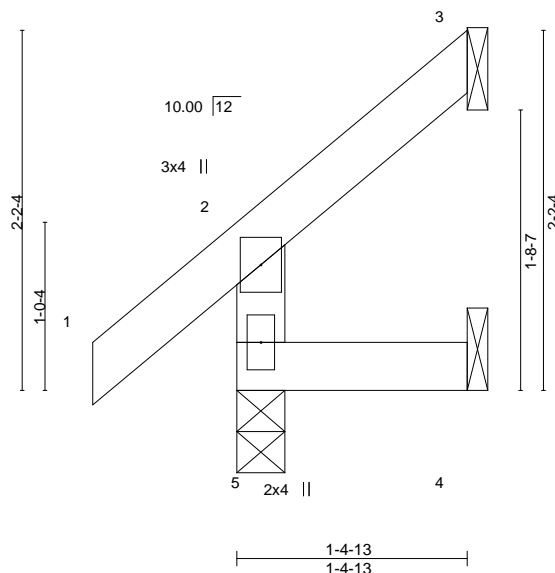
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:46 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-ER?iyz26gTKMuRShfDc1qqskWYAZ7tCVyXudyKFyZ

-0-10-8
0-10-8
1-4-13
1-4-13

Scale = 1:14.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0 Plate Grip DOL 1.15	TC 0.11	Vert(LL)	-0.00 5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.07	Vert(CT)	-0.00 5	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR					Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-4-13 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 12)
Max Uplift 5=-1(LC 12), 3=-24(LC 12), 4=-15(LC 12)
Max Grav 5=136(LC 1), 3=28(LC 18), 4=22(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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; Pf=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
- 3) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 11, 2020

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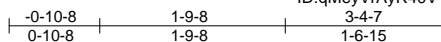
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	J32	Jack-Open	1	1	I43587847
Job Reference (optional)					

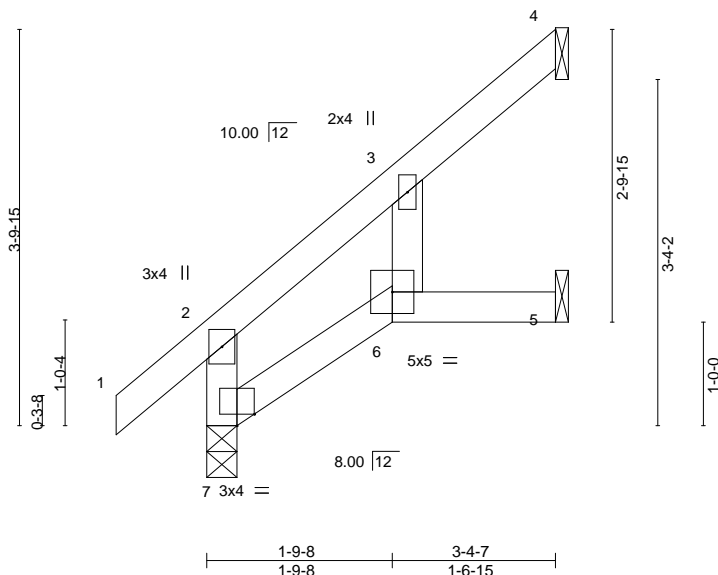
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:46 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-ER?iyz26gTKMuRSh7fDc1qqrIU_AZwtCVyXudyKFyZ



Scale = 1:22.3



LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.17	Vert(LL)	0.02	6	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	0.02	6	>999		
BCLL 0.0	Lumber DOL 1.15	WB 0.01	Horz(CT)	-0.03	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP						
	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 or 3-4-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=129(LC 12)
Max Uplift 4=48(LC 12), 5=-17(LC 12)
Max Grav 4=84(LC 18), 5=55(LC 18), 7=198(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 1-11-4, Interior(1) 1-11-4 to 3-3-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=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
- 3) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 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) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.



November 11, 2020

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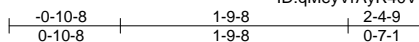
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside	I43587848
2536763	J33	Jack-Open	1	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:47 2020 Page 1

ID:qMeyVrAyR40V1rvItLjLfzXPDf-ieZ4Al3kRnSCVb1thNkra2M?Z6r8v0G0R9h4Q4yKFyY



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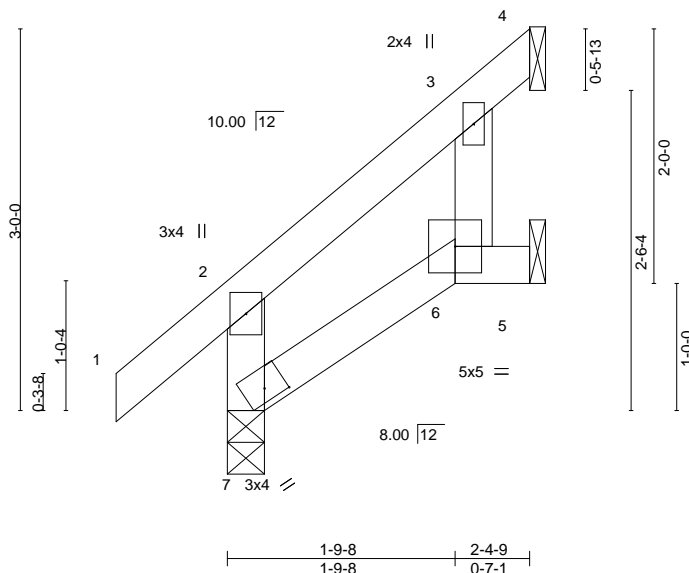


Plate Offsets (X,Y)-- [7:0-2-0,0-1-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) 0.01	6-7	>999	240	MT20	197/144
(Roof Snow=20.0)	Lumber DOL 1.15	BC 0.14	Vert(CT) -0.00	6	>999	180		
TCDL 10.0	Rep Stress Incr YES	WB 0.01	Horz(CT) -0.01	4	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
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-4-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=106(LC 12)
Max Uplift 4=-51(LC 12), 5=-2(LC 12)
Max Grav 4=63(LC 18), 5=29(LC 18), 7=162(LC 1)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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; Pf=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
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 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/1 Woodside	I43587849
2536763	J34	Jack-Open	1	1	Job Reference (optional)	

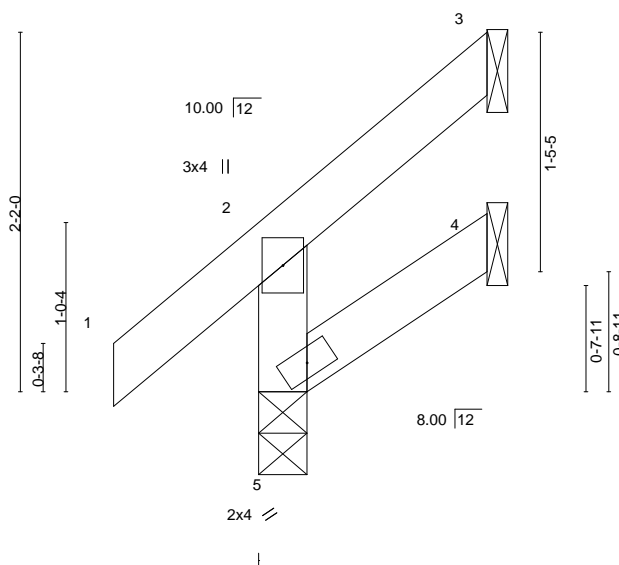
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:48 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPdF-Aq7SNe4MC5a37lc4E4F7FvBjWCLeTdAgpRdyWyKFyX

-0-10-8
0-10-8
1-4-9
1-4-9

Scale = 1:13.9



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0 Plate Grip DOL 1.15	TC 0.11	Vert(LL)	-0.00 5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT)	-0.00 5	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR					Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-4-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=84(LC 12)
Max Uplift 3=-27(LC 12), 4=-17(LC 12)
Max Grav 3=28(LC 18), 4=21(LC 10), 5=136(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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; Pf=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
- 3) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 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) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

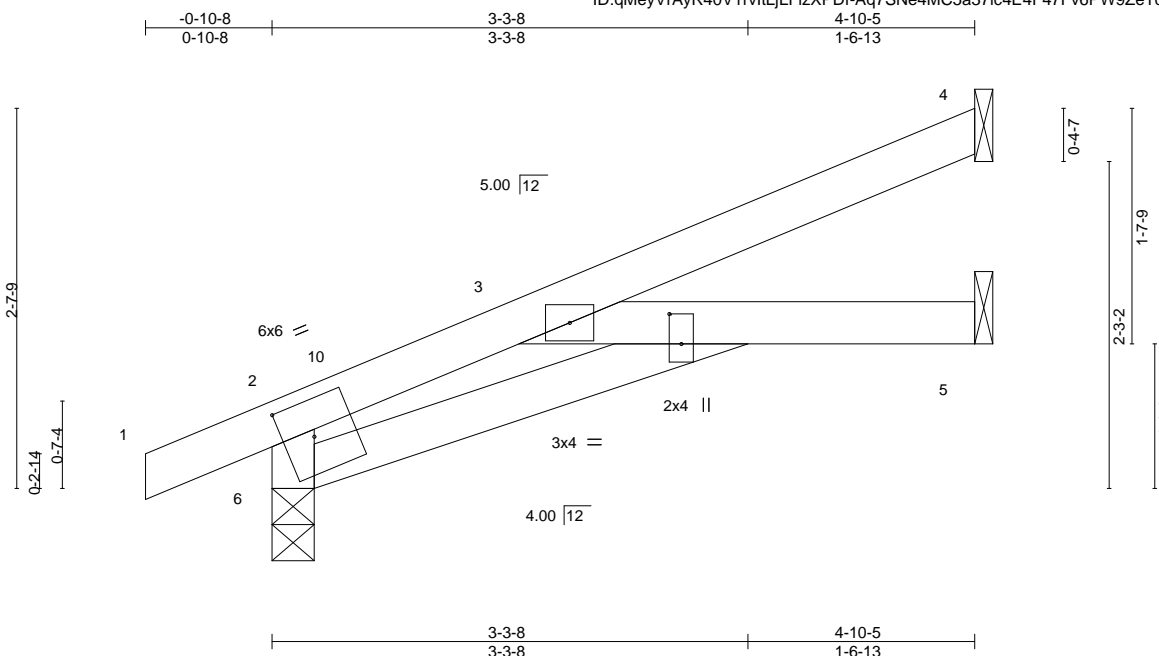
Job 2536763	Truss J35	Truss Type Jack-Open	Qty 1	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587850
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:48 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-Aq7SNe4MC5a37lc4E4F47Fv6PW9ZeTdAgpRdyWyKFyX



Scale: 3/4"=1'

Plate Offsets (X,Y)-- [2:0-1-14,0-0-0], [2:0-2-9,0-3-0], [3:0-2-8,0-1-0], [6:0-0-11,0-1-11]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL 20.0		Plate Grip DOL 1.15		TC 0.39		Vert(LL) -0.04 9 >999 240		MT20 197/144	
(Roof Snow=20.0)		Lumber DOL 1.15		BC 0.32		Vert(CT) -0.07 9 >830 180			
TCDL 10.0		Rep Stress Incr YES		WB 0.00		Horz(CT) 0.05 5 n/a n/a			
BCLL 0.0		Code IRC2018/TPI2014		Matrix-AS				Weight: 15 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 4=Mechanical, 5=Mechanical, 6=0-3-8
Max Horz 6=83(LC 14)
Max Uplift 4=-30(LC 14), 5=-4(LC 14), 6=-43(LC 14)
Max Grav 4=151(LC 19), 5=90(LC 19), 6=333(LC 19)

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

TOP CHORD 2-6=-333/137

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) -0-10-8 to 2-4-14, Interior(1) 2-4-14 to 4-9-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCCL: ASCE 7-16; Pf=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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 6.
- 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

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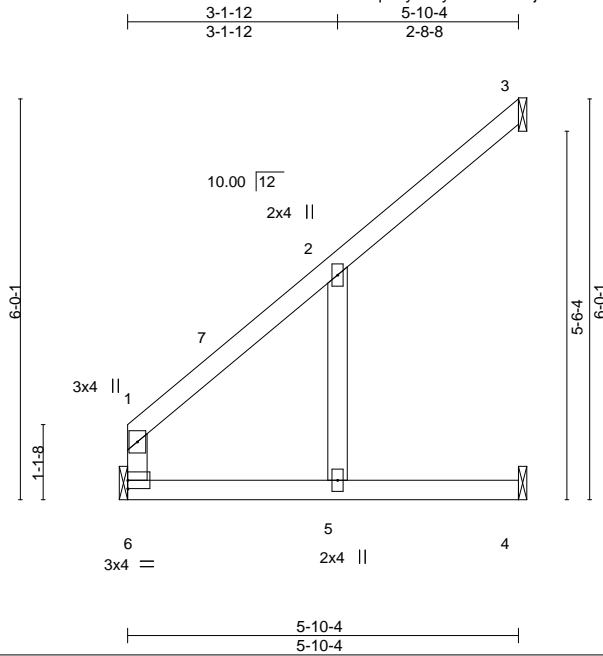
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	J36	Jack-Open	4	1	I43587851
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:49 2020 Page 1

ID:qMeyVrAyR40V1rvItLjLFizXPdf-e0hrb_5_zOiwlvBGonmJfTS1wSSNwOJvTABVyyKFyW



Scale = 1:34.5

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0 Plate Grip DOL 1.15	TC 0.33	Vert(LL) 0.16	5-6	>420	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.13	5-6	>509	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) -0.10	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 20 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 6=Mechanical, 3=Mechanical, 4=Mechanical
Max Horz 6=151(LC 12)
Max Uplift 3=67(LC 12), 4=30(LC 12)
Max Grav 6=226(LC 1), 3=143(LC 17), 4=111(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-267/99

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 3-1-12, Interior(1) 3-1-12 to 5-9-8 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
- 2) TCLL: ASCE 7-16; Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.00; Cs=1.00; Ct=1.10
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



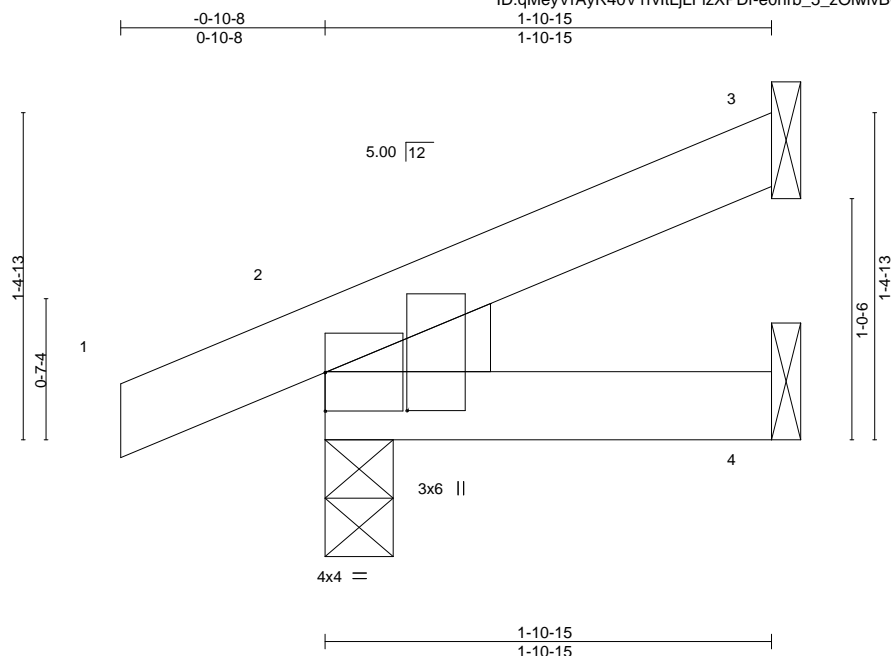
November 11, 2020

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



Scale = 1:9.9

Plate Offsets (X,Y)-- [2:0-1-15,0-4-3]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00 7 >999	240	MT20 197/144
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00 7 >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: 7 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=37(LC 14)
Max Uplift 3=-12(LC 14), 2=-31(LC 14)
Max Grav 3=55(LC 19), 2=187(LC 19), 4=32(LC 5)

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; Pf=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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 3, 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.



November 11, 2020



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss LG1	Truss Type GABLE	Qty 1	Ply 1	Summit/1 Woodside 143587853
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:50 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFizXPDf-6DFDoK5dkignM3mSMVHYCg_XKKtv6MCS77wk1PyKFyV

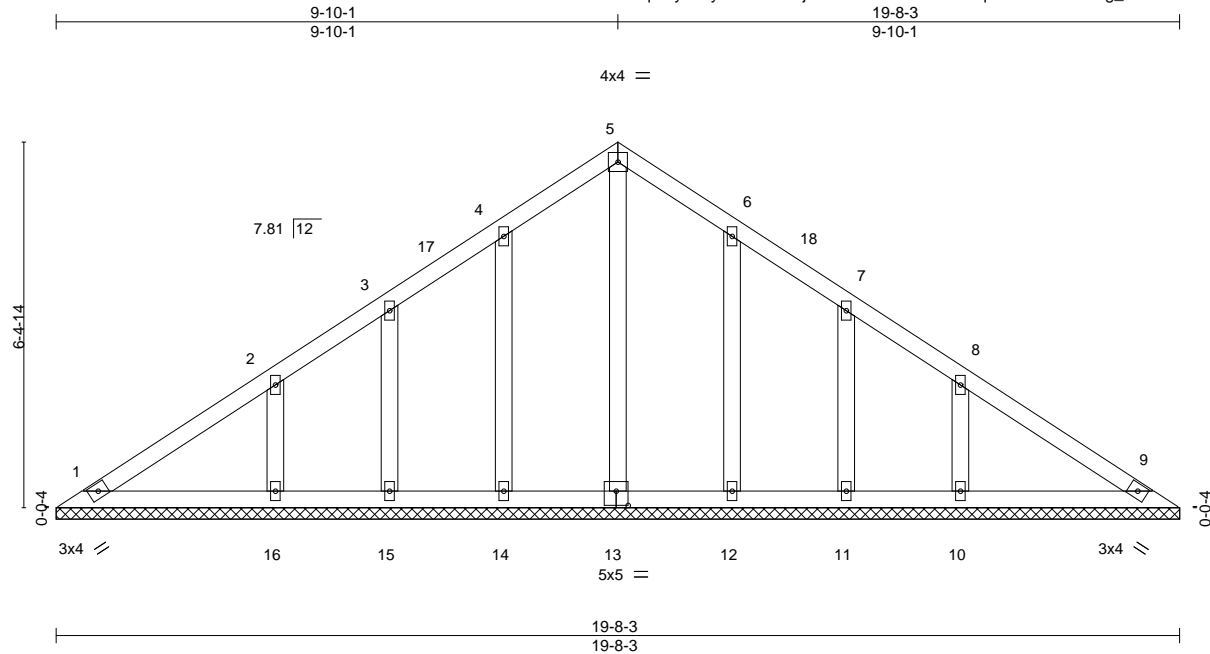


Plate Offsets (X,Y)-- [13:0-2-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.11	Vert(LL) n/a	-	n/a	999	MT20	197/144
(Roof Snow=20.0)	Lumber DOL 1.15	BC 0.07	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Rep Stress Incr YES	WB 0.06	Horz(CT) 0.00	9	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-S						
BCDL 10.0							Weight: 77 lb	FT = 20%

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

REACTIONS. All bearings 19-8-3.
(lb) - Max Horz 1=128(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 14, 15, 16, 12, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 14, 15, 12, 11 except 16=281(LC 17), 10=281(LC 18)

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) 0-5-14 to 3-5-14, Interior(1) 3-5-14 to 9-10-1, Exterior(2R) 9-10-1 to 12-10-1, Interior(1) 12-10-1 to 19-2-4 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; Pf=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
- 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) 14, 15, 16, 12, 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.



November 11, 2020

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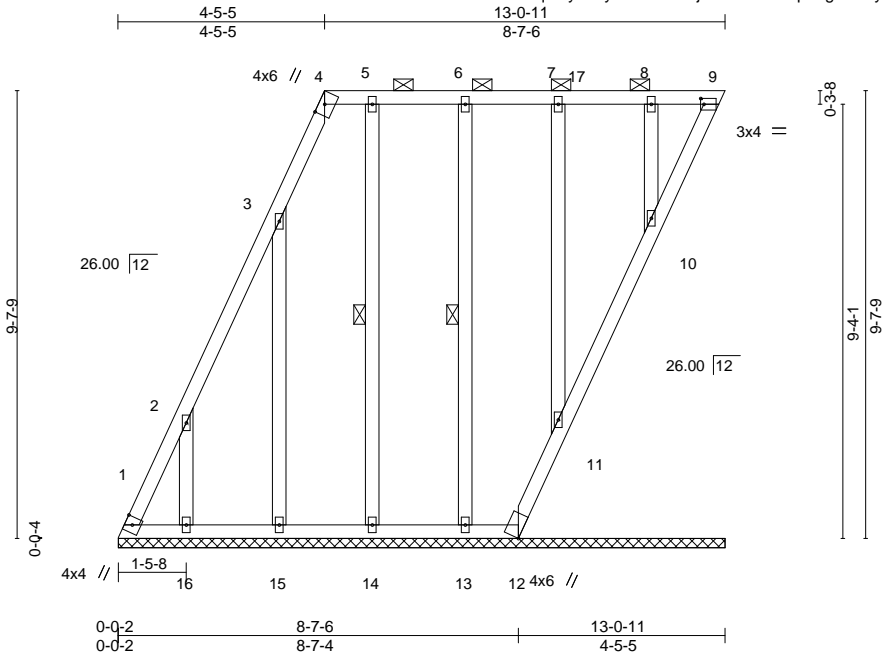
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	LG2	GABLE	1	1	I43587854
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:51 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPdf-bPpb0g6FV0ye_DLfwConkuXhJElrIMcMnflZryKFyU



Scale = 1:49.6

Plate Offsets (X,Y)-- [4:0-2-13,Edge], [9:0-0-13,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.26	Horz(CT)	-0.01	9	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 86 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.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-14, 6-13

REACTIONS.

All bearings 13-0-9.
(lb) - Max Horz 1=264(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 9, 12, 14, 13, 11, 10 except 1=300(LC 10), 16=266(LC 12), 15=214(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 9, 12, 14, 13, 11, 10 except 1=426(LC 12), 16=310(LC 10), 15=275(LC 18)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-636/519, 2-3=-269/223
WEBS 2-16=-365/389, 3-15=-315/319

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) 0-2-12 to 3-2-12, Exterior(2) 3-2-12 to 9-11-1, Corner(3) 9-11-1 to 12-11-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCDL: ASCE 7-16; Pf=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
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 12, 14, 13, 11, 10 except (it=lb) 1=300, 16=266, 15=214.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 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.
- 10) 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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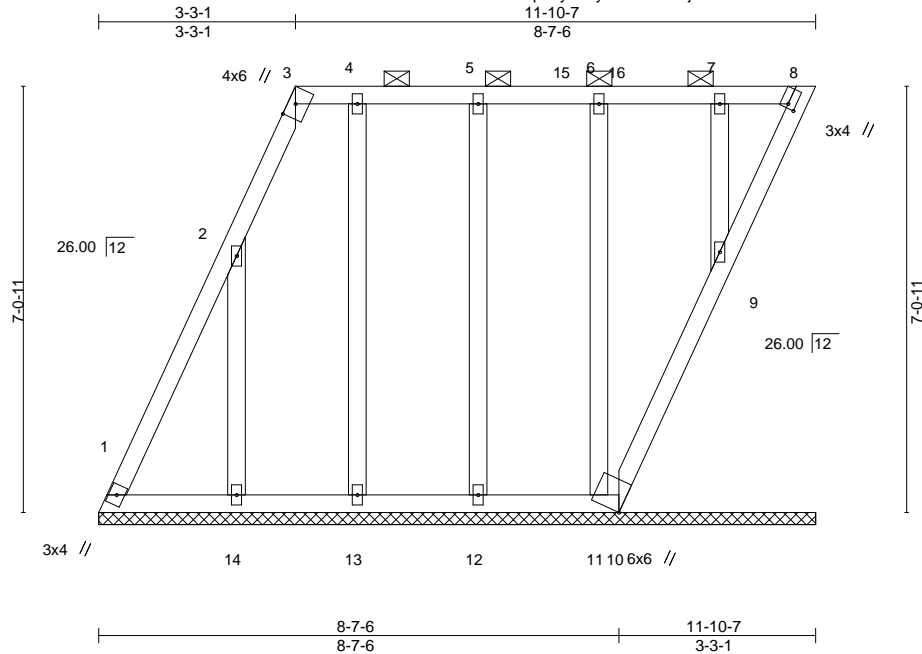
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	LG3	GABLE	1	1	I43587855
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:52 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFzXPDf-3bMzD07tGJ5VcNwrTwK0H54sM7afaFplbRPr5HyKFyT



Scale = 1:38.1

Plate Offsets (X,Y)-- [3:0-2-13,Edge], [8:0-0-13,0-1-8], [10:0-1-9,0-0-12], [11:0-0-12,0-1-9]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
(Roof Snow=20.0)	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.12	Horz(CT)	-0.00	8	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 67 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.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 11-10-7.
(lb) - Max Horz 1=187(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 8, 10, 13, 12, 11, 9 except 1=124(LC 10), 14=268(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 8, 10, 13, 12, 11, 9 except 14=332(LC 17)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-346/284
WEBS 2-14=-366/390

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) C-C wind load user defined.
- 3) TCCL: ASCE 7-16; Pf=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
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 10, 13, 12, 11, 9 except (jt=lb) 1=124, 14=268.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 9.
- 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) Load case(s) 4, 5 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard Except:

- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=27, 3-16=50, 8-16=66, 1-10=-8, 8-10=-8
Horz: 1-3=-39
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60



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/1 Woodside
2536763	LG3	GABLE	1	1	I43587855
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:52 2020 Page 2
ID:qMeyVrAyR40V1rvltLjLFizXPDF-3bMzD07tGJ5VcNwrTwK0H54sM7afaFplbRPr5HyKFyT

LOAD CASE(S) Standard Except:

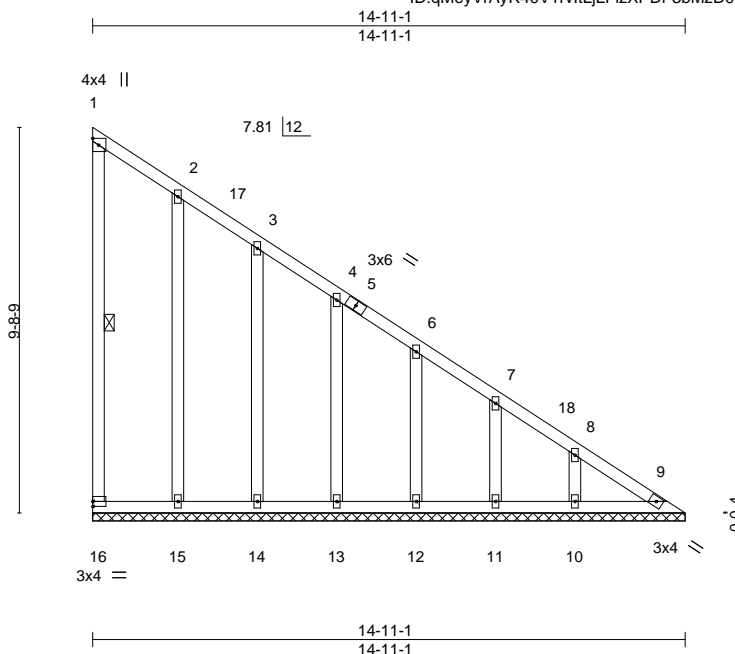
- Uniform Loads (plf)
- Vert: 1-3=27, 3-16=50, 8-16=66, 1-10=-8, 8-10=-8
- Horz: 1-3=-39
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-51, 3-8=-32, 1-10=-20, 8-10=-20
- Horz: 1-3=31
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-51, 3-8=-32, 1-10=-20, 8-10=-20
- Horz: 1-3=31
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-7, 3-15=18, 8-15=14, 1-10=-8, 8-10=-8
- Horz: 1-3=-5
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=8, 3-4=14, 4-8=18, 1-10=-8, 8-10=-8
- Horz: 1-3=-20
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-42, 3-8=-21, 1-10=-20, 8-10=-20
- Horz: 1-3=22
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-10, 3-8=-21, 1-10=-20, 8-10=-20
- Horz: 1-3=-10
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=16, 3-8=16, 1-10=-8, 8-10=-8
- Horz: 1-3=-28
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=1, 3-8=1, 1-10=-8, 8-10=-8
- Horz: 1-3=-13
- 14) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-21, 3-8=-21, 1-10=-20, 8-10=-20
- Horz: 1-3=1
- 15) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-21, 3-8=-21, 1-10=-20, 8-10=-20
- Horz: 1-3=1
- 17) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-66, 3-8=-51, 1-10=-20, 8-10=-20
- Horz: 1-3=16
- 18) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-43, 3-8=-51, 1-10=-20, 8-10=-20
- Horz: 1-3=-7
- 19) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-51, 3-8=-51, 1-10=-20, 8-10=-20
- Horz: 1-3=1
- 20) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-51, 3-8=-51, 1-10=-20, 8-10=-20
- Horz: 1-3=1
- 22) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=-28, 3-8=-28, 1-10=-8, 8-10=-8
- Horz: 1-3=16
- 23) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
- Vert: 1-3=4, 3-8=4, 1-10=-8, 8-10=-8
- Horz: 1-3=-16

Job	Truss	Truss Type	Qty	Ply	Summit/1 Woodside
2536763	LG4	GABLE	1	1	I43587856
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:52 2020 Page 1

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Scale = 1:58.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.45	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.20	Horz(CT)	0.01	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 78 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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.
WEBS 1 Row at midpt 1-16

REACTIONS.

All bearings 14-11-1.
(lb) - Max Horz 16=-324(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 16, 15, 14, 13, 9, 12, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 16, 15, 14, 13, 9, 12, 11, 10

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-6=-291/251, 6-7=-342/285, 7-8=-391/315, 8-9=-449/359
BOT CHORD 15-16=-303/393, 14-15=-303/393, 13-14=-303/393, 12-13=-303/393, 11-12=-303/393, 10-11=-303/393, 9-10=-303/393

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 14-5-3 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; Pf=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
- 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) 16, 15, 14, 13, 9, 12, 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.



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 2536763	Truss M27	Truss Type Jack-Open	Qty 3	Ply 1	Summit/1 Woodside 143587857
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:53 2020 Page 1
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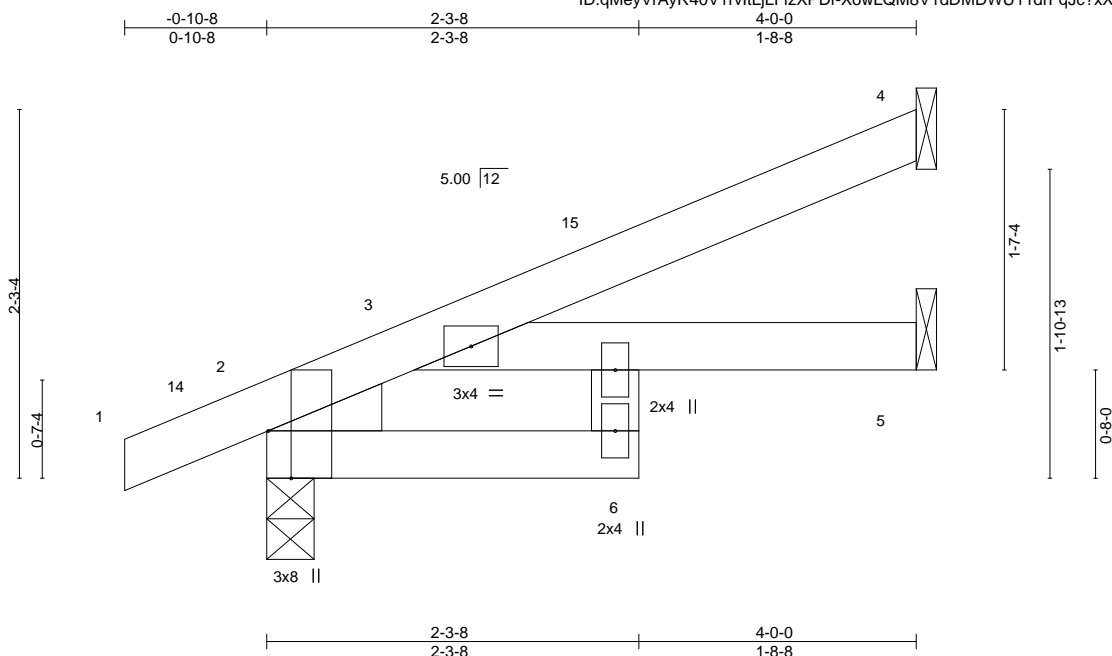


Plate Offsets (X,Y)-- [2:0-0-0,0-0-1], [2:0-0-1,0-5-11], [2:0-3-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.27	Vert(LL) -0.03	6	>999	240	MT20	197/144
(Roof Snow=20.0)	Lumber DOL 1.15	BC 0.26	Vert(CT) -0.07	6	>701	180		
TCDL 10.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.02	5	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-AS						
BCDL 10.0							Weight: 14 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=61(LC 14)
Max Uplift 4=23(LC 14), 2=24(LC 14)
Max Grav 4=139(LC 19), 2=321(LC 19), 5=80(LC 19)

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) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pf=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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 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 100 lb uplift at joint(s) 4, 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 2536763	Truss PB01	Truss Type Piggyback	Qty 12	Ply 1	Summit/1 Woodside Job Reference (optional)
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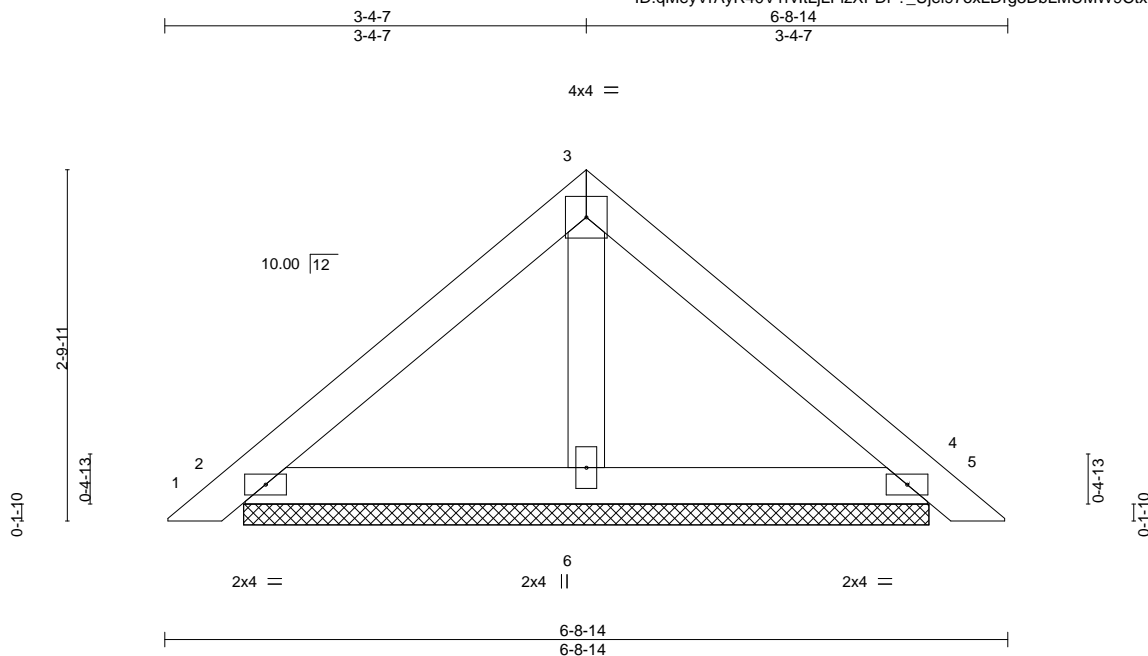
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:54 2020 Page 1

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Scale = 1:18.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.13	Vert(LL)	0.00	4	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT)	0.00	5	n/r	120		
BCLL 0.0	Rep Stress Incr YES	WB 0.02	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						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) 2=5-5-12, 4=5-5-12, 6=5-5-12
 Max Horz 2=-60(LC 10)
 Max Uplift 2=-40(LC 12), 4=-40(LC 12)
 Max Grav 2=150(LC 1), 4=150(LC 1), 6=185(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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; Pf=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
- 3) This truss has been designed for greater of min roof live load of 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



November 11, 2020

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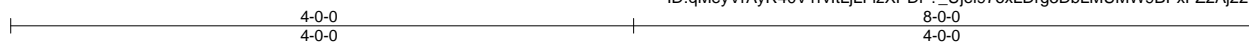


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

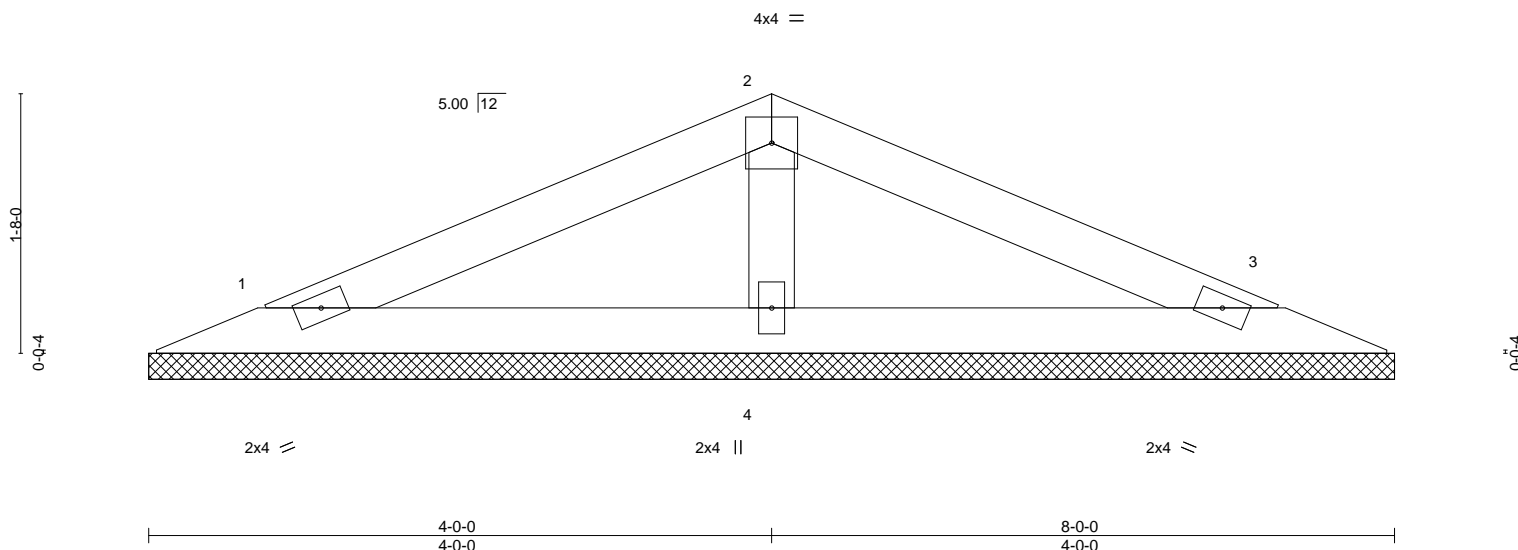
Job 2536763	Truss V01	Truss Type Valley	Qty 1	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587859
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:54 2020 Page 1
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Scale = 1:14.8



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	MT20		197/144	
(Roof Snow=20.0)		Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-P							
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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=8-0-0, 3=8-0-0, 4=8-0-0
Max Horz 1=22(LC 13)
Max Uplift 1=20(LC 14), 3=20(LC 14), 4=7(LC 14)
Max Grav 1=168(LC 18), 3=168(LC 19), 4=264(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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; Pf=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
- 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, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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.

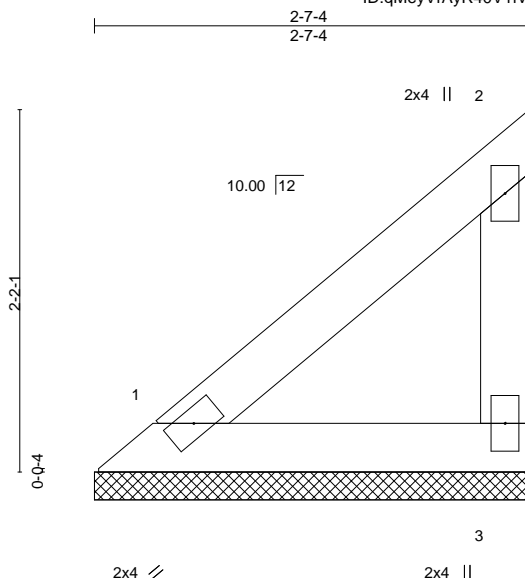
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 2536763	Truss V04	Truss Type Valley	Qty 1	Ply 1	Summit/1 Woodside I43587860
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:55 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFizXPDf-TA26r29IZET4TqeQ92tjvkiORLcandLBHPdVicyKFyQ



Scale = 1:13.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.08	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 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 2-7-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-7-4, 3=2-7-4
Max Horz 1=60(LC 9)
Max Uplift 1=-4(LC 12), 3=-25(LC 9)
Max Grav 1=83(LC 18), 3=93(LC 17)

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; Pf=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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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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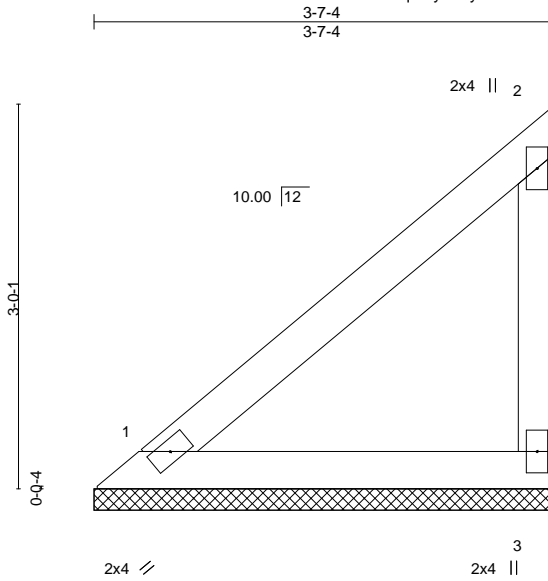
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss V05	Truss Type Valley	Qty 1	Ply 1	Summit/1 Woodside 143587861
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:55 2020 Page 1
ID:qMeyVrAyR40V1rvItLjLFzXPDf-TA26r29IZET4TqeQ92tjvkiNvLbndLBHPdVicyKFyQ



Scale = 1:18.0

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.18	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 12 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 3-7-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-7-4, 3=3-7-4
Max Horz 1=89(LC 9)
Max Uplift 1=-6(LC 12), 3=-37(LC 9)
Max Grav 1=124(LC 18), 3=139(LC 17)

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; Pf=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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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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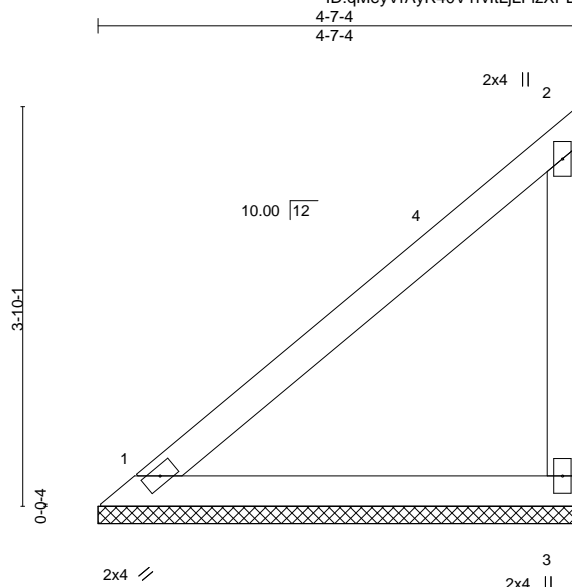
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss V06	Truss Type Valley	Qty 1	Ply 1	Summit/1 Woodside Job Reference (optional)	I43587862
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:56 2020 Page 1

ID:qMeyVrAyR40V1rvltLjLFizXPDf-xMcU3NANKYbx4_DcimOyRxEWwkvqW4bLW3N3F2yKFyP



Scale = 1:22.1

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.32	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.17	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=4-7-4, 3=4-7-4
Max Horz 1=118(LC 11)
Max Uplift 1=8(LC 12), 3=-49(LC 9)
Max Grav 1=164(LC 18), 3=184(LC 17)

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) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 4-5-8 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
- 2) TCLL: ASCE 7-16; Pf=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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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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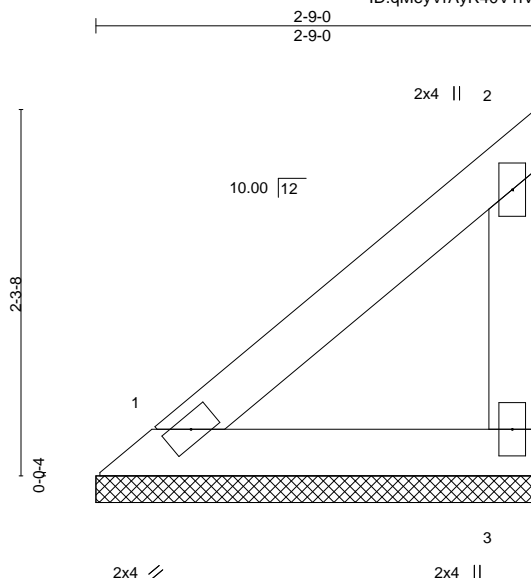
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss V11	Truss Type Valley	Qty 1	Ply 1	Summit/1 Woodside I43587864
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:57 2020 Page 1
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Scale = 1:14.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 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 2-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=2-9-0, 3=2-9-0
Max Horz 1=64(LC 9)
Max Uplift 1=-4(LC 12), 3=-26(LC 9)
Max Grav 1=89(LC 18), 3=100(LC 17)

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



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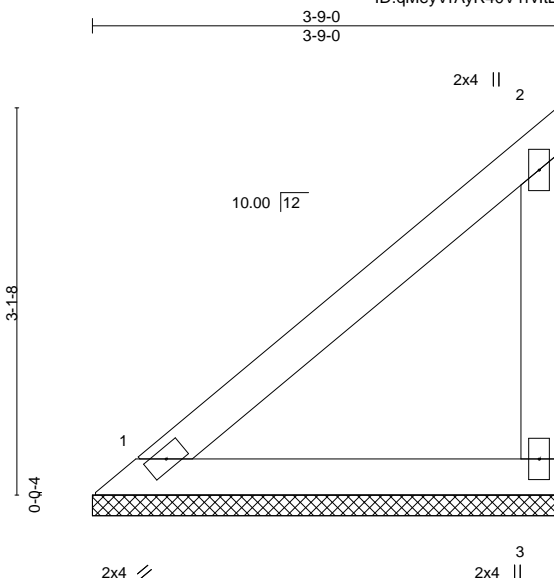


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2536763	Truss V12	Truss Type Valley	Qty 1	Ply 1	Summit/1 Woodside I43587865
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Nov 11 12:13:57 2020 Page 1
ID:qMeyVrAyR40V1rvltLjLFizXPDf-PZAsGjB04sjoI8ooGTvB_9ni78G5FXrUk6cnVyKFyO



Scale = 1:18.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0 (Roof Snow=20.0)	2-0-0	TC 0.20	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 12 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 3-9-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-9-0, 3=3-9-0
Max Horz 1=93(LC 11)
Max Uplift 1=-6(LC 12), 3=-39(LC 9)
Max Grav 1=130(LC 18), 3=145(LC 17)

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; Pf=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
- 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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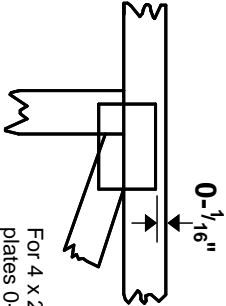
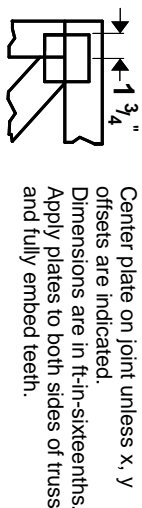
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

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

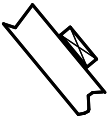
* Plate location details available in **MiTek 20/20 software** or upon request.

PLATE SIZE

4 X 4

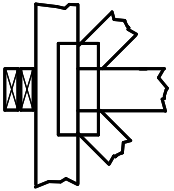
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

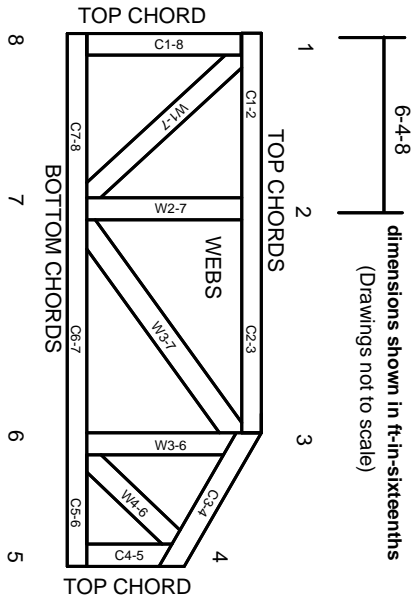
BEARING



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