



RE: 2684908
Summit/67 Woodside

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

Site Information:

Customer: Project Name: 2684908
Lot/Block:
Address:
City:

Model:
Subdivision:
State:

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
03/18/2021

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 41 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I43520189	A1	2/25/2021	21	I43520209	C3	2/25/2021
2	I43520190	A2A	2/25/2021	22	I43520210	C4	2/25/2021
3	I43520191	A2B	2/25/2021	23	I43520211	D1	2/25/2021
4	I43520192	A2C	2/25/2021	24	I43520212	D2	2/25/2021
5	I43520193	A2D	2/25/2021	25	I43520213	D3	2/25/2021
6	I43520194	A2E	2/25/2021	26	I43520214	GR1	2/25/2021
7	I43520195	A2F	2/25/2021	27	I43520215	GR2	2/25/2021
8	I43520196	A3	2/25/2021	28	I43520216	JD1	2/25/2021
9	I43520197	A4	2/25/2021	29	I43520217	JD2	2/25/2021
10	I43520198	A5	2/25/2021	30	I43520218	JD3	2/25/2021
11	I43520199	A6	2/25/2021	31	I43520219	LG1	2/25/2021
12	I43520200	A7	2/25/2021	32	I43520220	LG2	2/25/2021
13	I43520201	A8	2/25/2021	33	I43520221	LG3	2/25/2021
14	I43520202	A9	2/25/2021	34	I43520222	LG4	2/25/2021
15	I43520203	A10	2/25/2021	35	I43520223	M1	2/25/2021
16	I43520204	A11	2/25/2021	36	I43520224	M2	2/25/2021
17	I43520205	A12	2/25/2021	37	I43520225	M3	2/25/2021
18	I43520206	A13	2/25/2021	38	I43520226	M4	2/25/2021
19	I43520207	C1	2/25/2021	39	I43520227	P1	2/25/2021
20	I43520208	C2	2/25/2021	40	I43520228	P2	2/25/2021

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

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





RE: 2684908 - Summit/67 Woodside

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Chesterfield, MO 63017
314-434-1200

Site Information:

Project Customer: Project Name: 2684908

Lot/Block:

Subdivision:

Address:

City, County:

State:

No.	Seal#	Truss Name	Date
41	I43520229	P3	2/25/2021

Job 2684908	Truss A1	Truss Type Common Supported Gable	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520189
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8,240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:16 2020 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-RPZbeCax9w3m6YSl6ezjwh5HtENo9mpn0c5mqSyM8jn

0-11-0
0-11-0

15-6-0
15-6-0

31-0-0
15-6-0

Scale = 1:54.5

4x4 =

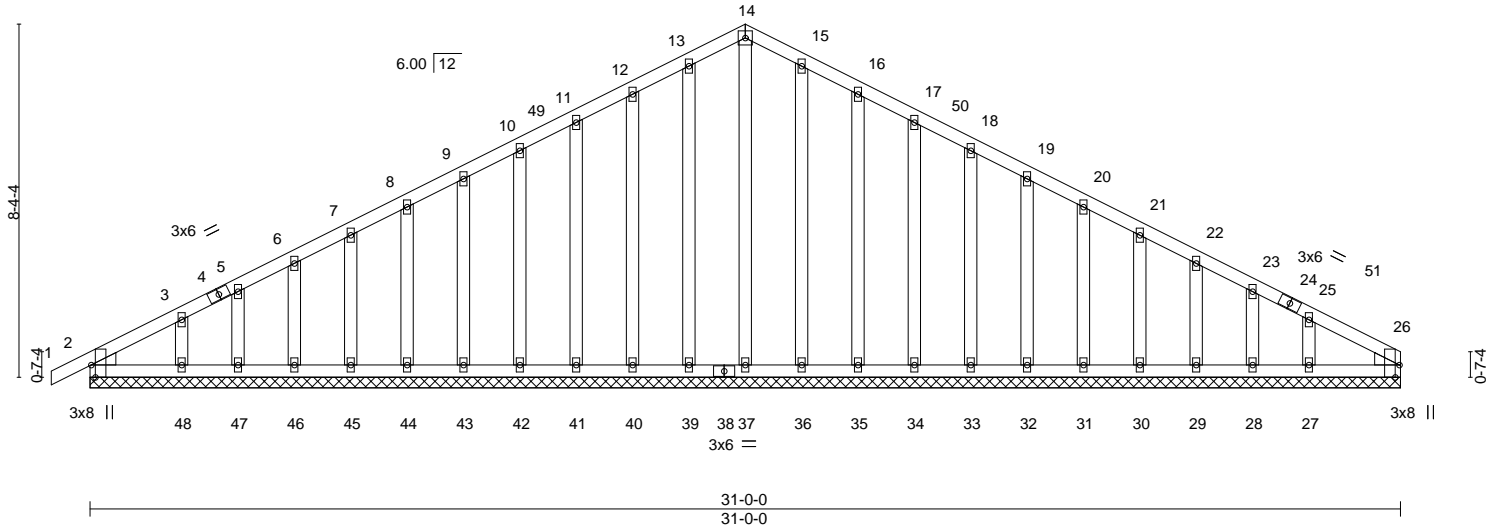


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [26:0-0-1,0-0-3], [26:0-0-3,0-5-0], [26:0-3-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.06	Vert(LL)	-0.00	1	n/r	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	0.00	1	n/r		
TCDL 10.0	Lumber DOL 1.15	WB 0.17	Horz(CT)	0.00	26	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 181 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 31-0-0.
(lb) - Max Horz 2=156(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 36, 35, 34, 33, 32,
31, 30, 29, 28, 27
Max Grav All reactions 250 lb or less at joint(s) 2, 37, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 36, 35, 34,
33, 32, 31, 30, 29, 28, 27, 26

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-2-0, Exterior(2N) 2-2-0 to 15-6-0, Corner(3R) 15-6-0 to 18-6-0, Exterior(2N) 18-6-0 to 31-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27.
- This truss 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 6, 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 2684908	Truss A2A	Truss Type Roof Special	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520190
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:29 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-ZvsWMfk55wiwAYynNsinyQ7LdTbbiWQh?7lynCyM8ja

-0-11-0 7-9-3 15-6-0 21-10-10 28-0-13 31-0-0
0-11-0 7-9-3 7-8-13 6-4-10 6-2-4 2-11-3

Scale = 1:59.4

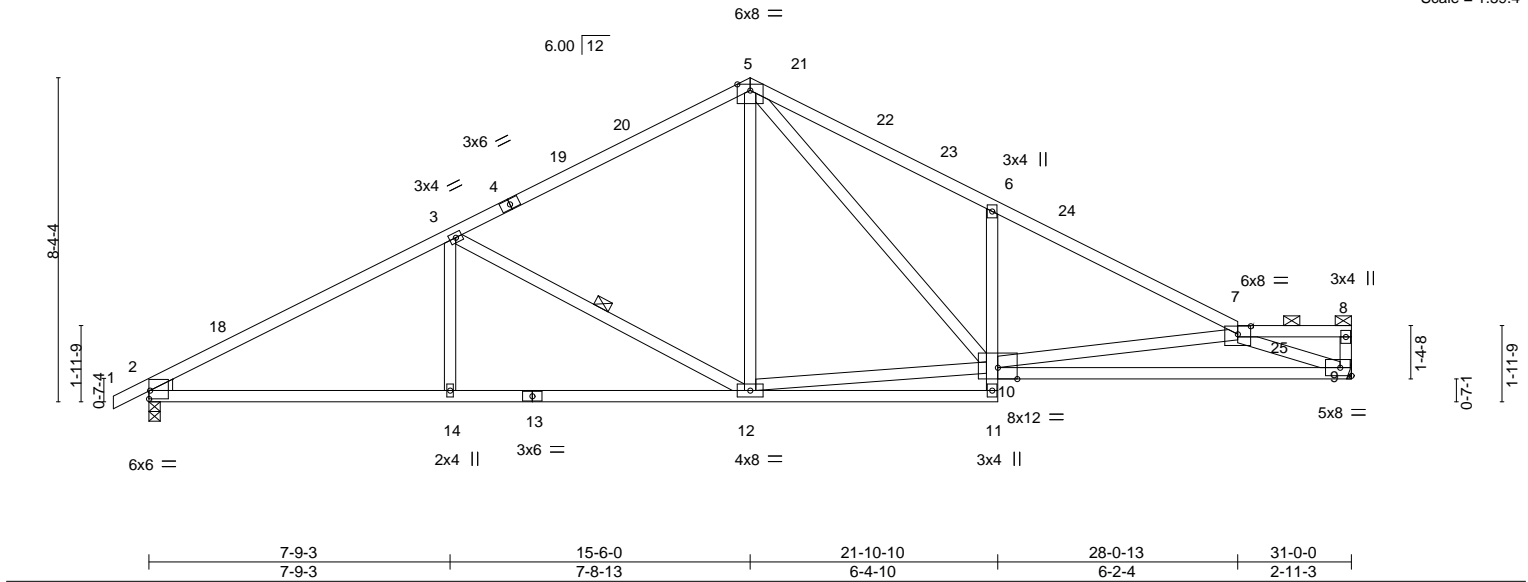


Plate Offsets (X,Y)-- [2:Edge,0-2-9], [2:0-5-0,0-0-3], [2:0-0-3,0-0-1], [7:0-4-0,0-2-8]														
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.			PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.20	9-10	>999	L/d	240	MT20	197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.46	9-10	>803		180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.11	9	n/a		n/a			
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS								Weight: 133 lb	FT = 20%	
BCDL	10.0													

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, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-12

REACTIONS.

(size) 9=Mechanical, 2=0-3-8
Max Horz 2=169(LC 15)
Max Uplift 9=113(LC 16), 2=141(LC 16)
Max Grav 9=1387(LC 2), 2=1454(LC 2)

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

TOP CHORD 2-3=-2369/290, 3-5=-1666/277, 5-6=-2437/404, 6-7=-2463/305
BOT CHORD 2-14=-251/2021, 12-14=-251/2021, 6-10=-589/174, 9-10=-423/3085
WEBS 3-14=0/293, 3-12=-772/155, 5-12=-8/444, 10-12=-49/1166, 5-10=-189/1285, 7-10=-958/195, 7-9=-3157/487

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 30-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=113, 2=141.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss A2B	Truss Type Roof Special	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520191
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:31 2020 Page 1
ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-VHzGnKmLdXyePs6AUHIF1rChHHGVARI_TRE3s5yM8jY

-0-11-0 7-9-3 15-6-0 21-10-10 25-4-13 31-0-0
0-11-0 7-9-3 7-8-13 6-4-10 3-6-4 5-7-3

Scale = 1:59.4

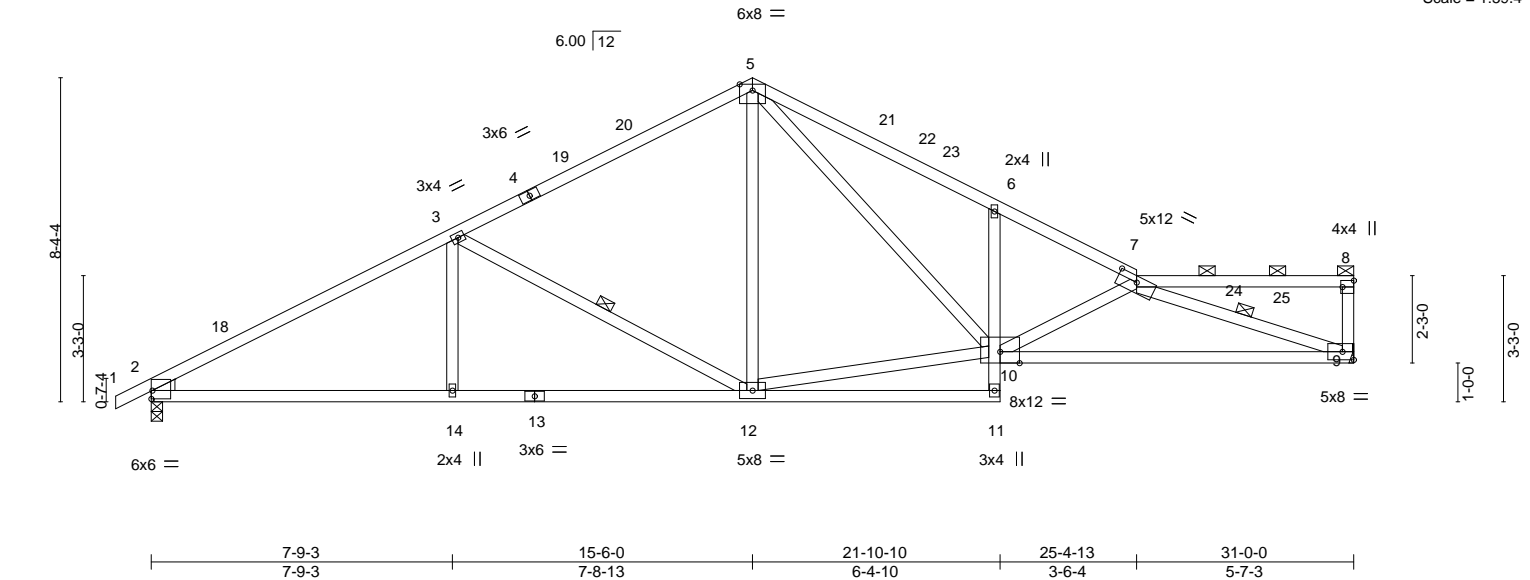


Plate Offsets (X,Y)-- [2:Edge,0-2-9], [2:0-5-0,0-0-3], [2:0-0-3,0-0-1], [7:0-6-0,0-1-14], [8:Edge,0-3-8]														
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.			PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.21	9-10	>999	240	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.48	9-10	>777	180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.12	9	n/a	n/a				
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 134 lb	FT = 20%		
BCDL	10.0													

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, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-12, 7-9

REACTIONS.

(size) 9=Mechanical, 2=0-3-8
Max Horz 2=179(LC 15)
Max Uplift 9=113(LC 16), 2=140(LC 16)
Max Grav 9=1387(LC 2), 2=1454(LC 2)

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

TOP CHORD 2-3=-2368/289, 3-5=-1668/277, 5-6=-2657/420, 6-7=-2662/322, 8-9=-258/60
BOT CHORD 2-14=-295/2020, 12-14=-295/2020, 6-10=-453/138, 9-10=-414/3048
WEBS 3-14=0/292, 3-12=-771/155, 5-12=-0/386, 10-12=-125/1293, 5-10=-207/1427, 7-10=-832/155, 7-9=-3094/424

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 30-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=113, 2=140.
- This truss 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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss A2C	Truss Type Roof Special	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520192
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:33 2020 Page 1
ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-Rg50C0nb99CLf9GZcinj6GI14?FePxHwjAwzyM8jW

-0-11-0	7-9-3	15-6-0	21-10-10	22-8-13	26-3-9	31-0-0
0-11-0	7-9-3	7-8-13	6-4-10	0-10-4	3-6-11	4-8-7

Scale = 1:59.4

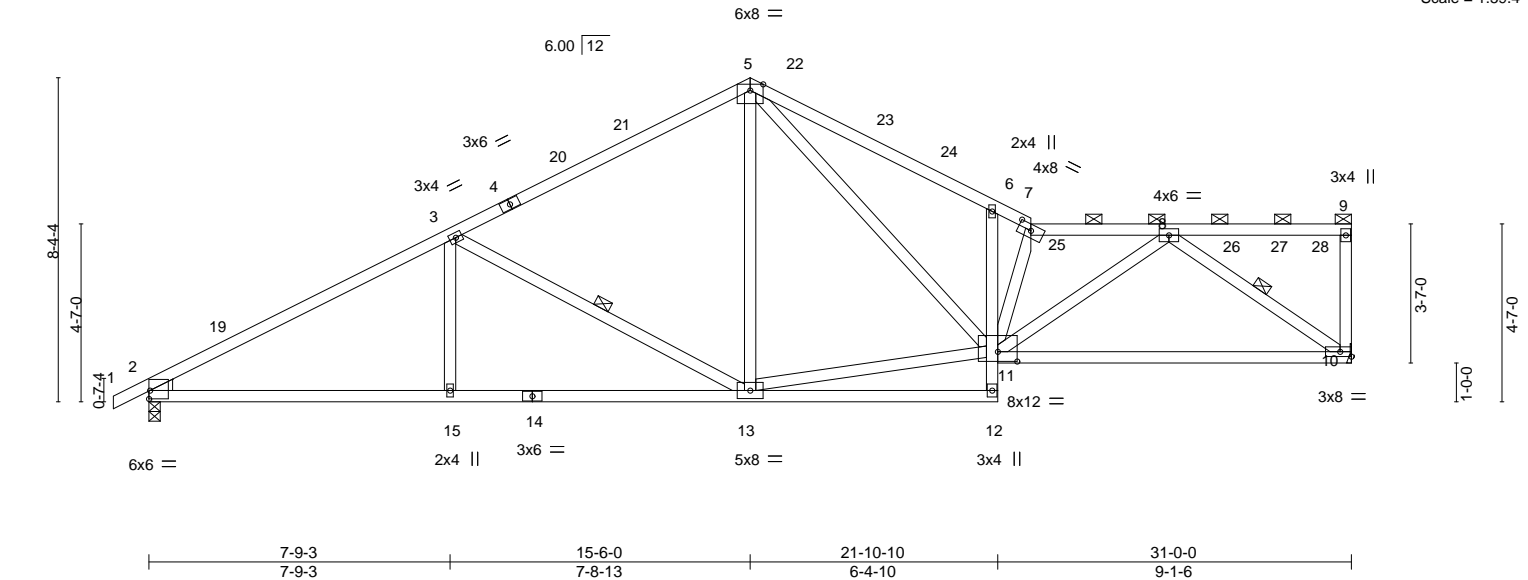


Plate Offsets (X,Y)-- [2:Edge,0-2-9], [2:0-5-0,0-0-3], [2:0-0-3,0-0-1], [7:0-4-0,0-1-14], [11:0-6-0,0-3-0]													
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.21	10-11	>999	240		MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.46	10-11	>805	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.09	10	n/a	n/a			
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								Weight: 140 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 (3-4-10 max.): 7-9.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEDGE		WEBS	1 Row at midpt
Left: 2x4 SPF No.2			3-13, 8-10

REACTIONS. (size) 10=Mechanical, 2=0-3-8
Max Horz 2=200(LC 15)
Max Uplift 10=-114(LC 16), 2=-139(LC 16)
Max Grav 10=1387(LC 2), 2=1454(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2368/290, 3-5=-1667/277, 5-6=-2667/423, 6-7=-2596/312, 7-8=-2692/329
BOT CHORD 2-15=-342/2020, 13-15=-342/2020, 6-11=-493/152, 10-11=-256/1639
WEBS 3-15=0/292, 3-13=-771/156, 5-13=-1/386, 11-13=-169/1296, 5-11=-209/1401,
7-11=-1232/130, 8-11=-124/1296, 8-10=-1954/292

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 30-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=114, 2=139.
 - This truss 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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520194
2684908	A2E	Roof Special	1	1	Job Reference (optional)	

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

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ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-KRLX2Or6CNin7nZKrYsfG6SjihM8aAqsrNhnN3kyM8jS

-0-11-0	7-9-3	15-6-0	21-10-10	26-8-13	31-0-0
0-11-0	7-9-3	7-8-13	6-4-10	4-10-4	4-3-3

Scale = 1:59.5

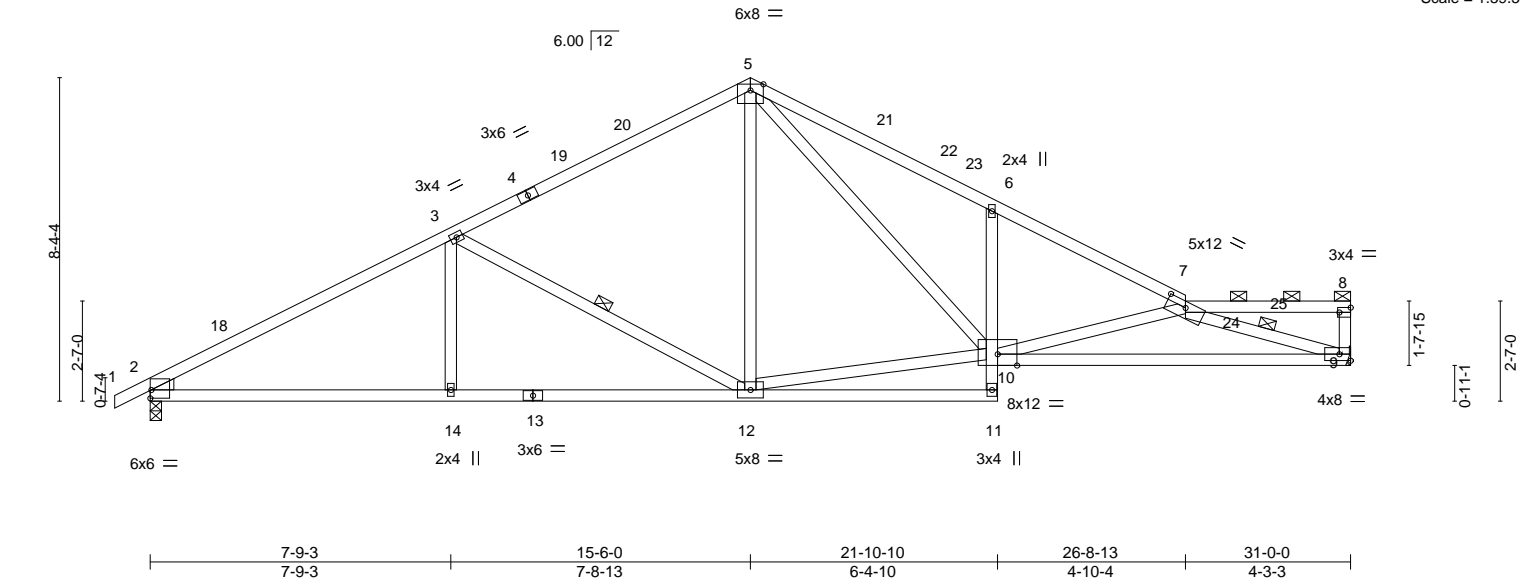


Plate Offsets (X,Y)--		[2:Edge,0-2-9], [2:0-5-0,0-0-3], [2:0-0-3,0-0-1], [7:0-6-0,0-1-14], [8:Edge,0-1-8]							
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.69	in (loc)	l/defl	L/d	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.71	Vert(LL)	-0.20 9-10	>999	240
TCDL	10.0	Lumber DOL	1.15	WB	0.56	Vert(CT)	-0.46 9-10	>805	180
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.12 9	n/a	n/a
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 133 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.): 7-8.
	9-10: 2x4 SPF 1650F 1.5E	WEBS	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		1 Row at midpt
WEDGE			3-12, 7-9
Left: 2x4 SPF No.2			

REACTIONS. (size) 9=Mechanical, 2=0-3-8
Max Horz 2=170(LC 15)
Max Uplift 9=113(LC 16), 2=140(LC 16)
Max Grav 9=1387(LC 2), 2=1454(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2368/290, 3-5=-1667/277, 5-6=-2617/418, 6-7=-2625/322
BOT CHORD 2-14=-271/2020, 12-14=-271/2020, 6-10=-520/157, 9-10=-458/3386
WEBS 3-14=0/292, 3-12=-771/155, 5-12=-2/398, 10-12=-95/1264, 5-10=-204/1446,
7-10=-1136/205, 7-9=-3402/488

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 30-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=113, 2=140.
- This truss 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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520195
2684908	A2F	Roof Special	1	1	Job Reference (optional)	

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

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ID:4rXhHd3_rBCgQSIY2gdJuzGwv6-GqSIS3sMk?yVN4jiyzu7MXy1dV1a23J9JhAU8dyM8jQ

0-11-0 7-9-3 15-6-0 21-10-10 22-5-7 29-4-13 31-0-0
0-11-0 7-9-3 7-8-13 6-4-10 0-6-13 6-11-7 1-7-3

Scale = 1:59.4

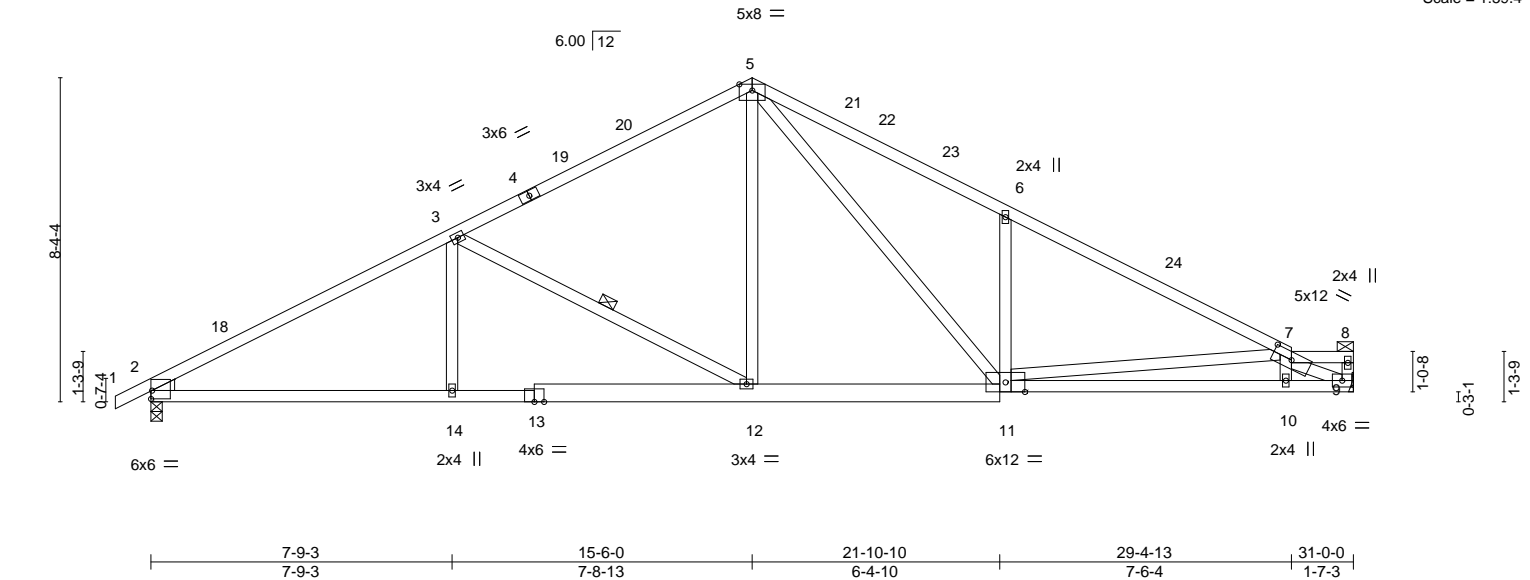


Plate Offsets (X,Y)--		[2:Edge,0-2-9], [2:0-5-0,0-0-3], [2:0-0-3,0-0-1], [7:0-6-0,0-2-6]							
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.79	in (loc)	l/defl	L/d	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.78	Vert(LL)	-0.14 10-11	>999	240
TCDL	10.0	Lumber DOL	1.15	WB	0.63	Vert(CT)	-0.30 10-11	>999	180
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.09 9	n/a	n/a
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 134 lb FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
11-13: 2x6 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, and 2-0-0 oc purlins (6-0-0 max.): 7-8.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-12

REACTIONS.

(size) 9=Mechanical, 2=0-3-8
Max Horz 2=167(LC 15)
Max Uplift 9=112(LC 16), 2=141(LC 16)
Max Grav 9=1387(LC 2), 2=1454(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2362/291, 3-5=-1671/277, 5-6=-2311/403, 6-7=-2308/288
BOT CHORD 2-14=-229/2016, 12-14=-229/2017, 11-12=-92/1380, 10-11=-282/2551, 9-10=-296/2537
WEBS 5-12=-12/523, 6-11=-667/192, 5-11=-189/1120, 3-14=0/272, 3-12=-761/155, 7-10=0/250, 7-11=-676/84, 7-9=-2742/312

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 30-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=112, 2=141.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520196
2684908	A3	Common	3	1	Job Reference (optional)	

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

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ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-k00ggPL_VI4M_ElvWgPMul4DpvMIncsJXLv1g3yM8jP

0-11-0 7-9-3 15-6-0 23-2-13 31-0-0 31-11-0
0-11-0 7-9-3 7-8-13 7-8-13 7-9-3 0-11-0

Scale = 1:54.7

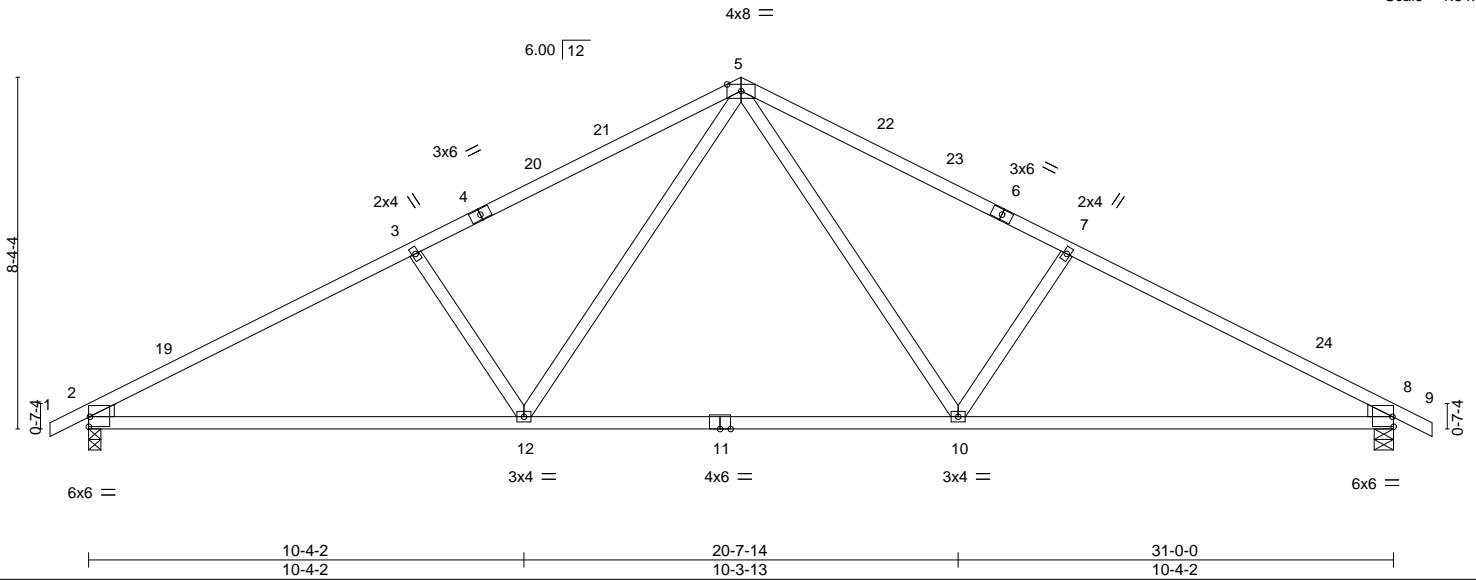


Plate Offsets (X,Y)-- [2:0-0-3,0-0-1], [2:0-5-0,0-0-3], [2:Edge,0-2-13], [8:0-0-3,0-0-1], [8:0-5-0,0-0-3], [8:Edge,0-2-13]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.76	Vert(LL)	-0.18 10-12	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.84	Vert(CT)	-0.42 10-12	>891	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.22	Horz(CT)	0.08 8	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 111 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, 8=0-5-8
Max Horz 2=157(LC 15)
Max Uplift 2=141(LC 16), 8=141(LC 16)
Max Grav 2=1459(LC 2), 8=1459(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2359/303, 3-5=-2085/327, 5-7=-2085/328, 7-8=-2359/303
BOT CHORD 2-12=-175/2015, 10-12=-44/1359, 8-10=-180/2015
WEBS 5-10=-74/763, 7-10=-517/177, 5-12=-74/763, 3-12=-517/177

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 31-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=141, 8=141.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss A4	Truss Type Common	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520197
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:42 2020 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-gP8Q55uF1wL4EYSH5RqzAAYJi2AFWKb?fo8llyyM8jN

-0-11-0 7-9-3 15-6-0 23-2-13 31-0-0
0-11-0 7-9-3 7-8-13 7-8-13 7-9-3

Scale = 1:54.3

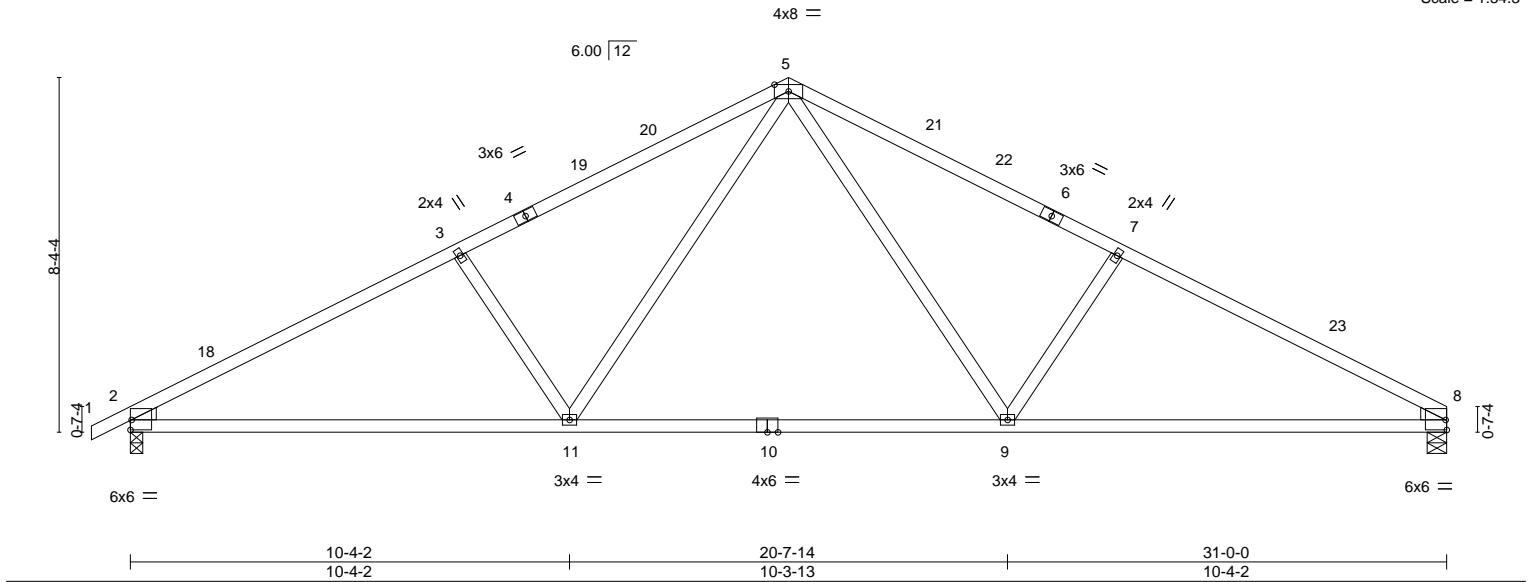


Plate Offsets (X,Y)-- [2:0-0-3,0-0-1], [2:0-5-0,0-0-3], [2:Edge,0-2-13], [8:0-0-3,0-0-1], [8:0-5-0,0-0-3], [8:Edge,0-2-13]													
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.18	9-11	>999	240		MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.42	9-11	>894	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.08	8	n/a	n/a			
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								Weight: 110 lb	FT = 20%
BCDL	10.0												

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

REACTIONS. (size) 2=0-3-8, 8=0-5-8
Max Horz 2=155(LC 15)
Max Uplift 2=141(LC 16), 8=113(LC 16)
Max Grav 2=1460(LC 2), 8=1394(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2361/304, 3-5=-2087/328, 5-7=-2091/334, 7-8=-2365/310
BOT CHORD 2-11=-201/2017, 9-11=-66/1361, 8-9=-195/2022
WEBS 5-9=-75/768, 7-9=-521/177, 5-11=-74/763, 3-11=-518/177

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 31-0-0 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; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=141, 8=113.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 6, 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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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:43 2020 Page 1
ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-8biolRvtoDTxri0UBpy3WNiiF6N0_gKIDJ8iHOym8jM

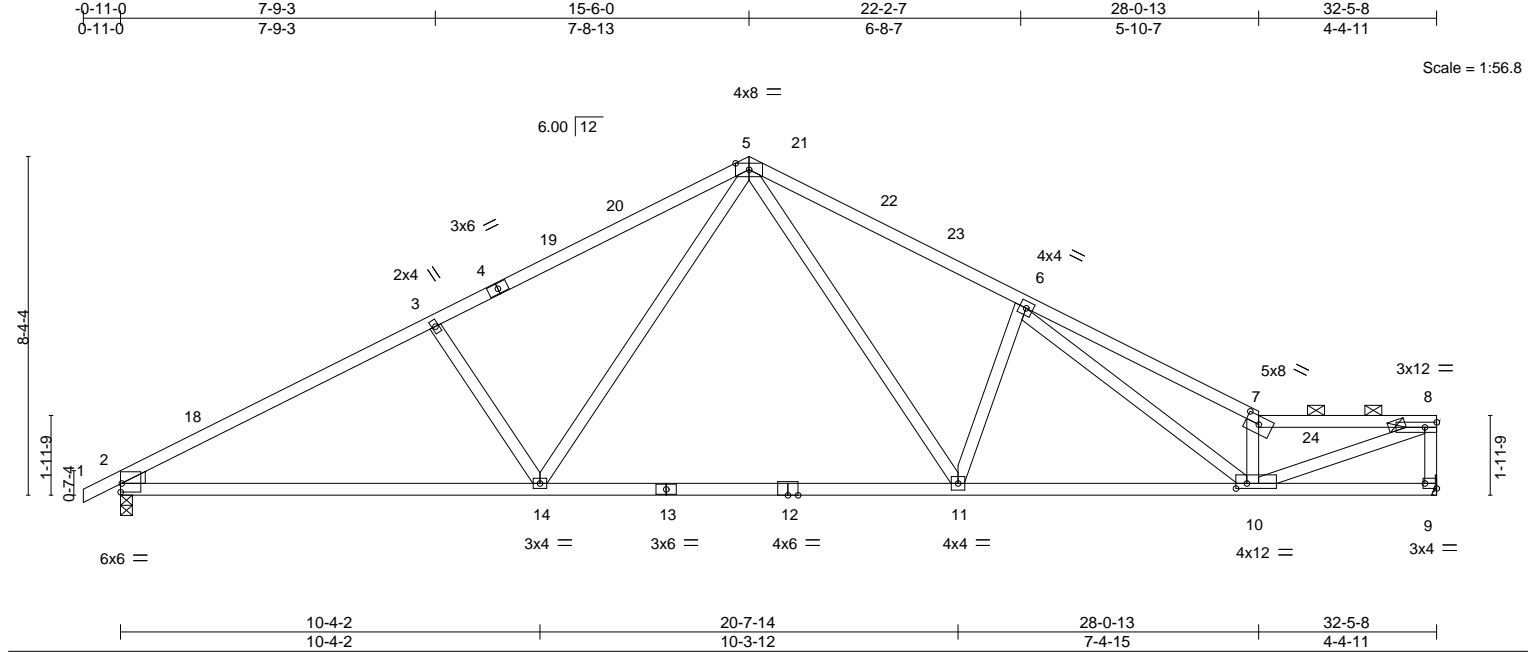


Plate Offsets (X,Y)-- [2:Edge,0-2-9], [2:0-5-0,0-0-3], [2:0-0-3,0-0-1], [7:0-4-0,0-2-6], [9:Edge,0-1-8], [10:0-3-4,0-1-8]															
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.24	11-14	>999	L/d	240	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.55	11-14	>705		180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.09	9	n/a	n/a					
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS								Weight: 128 lb	FT = 20%		
BCDL	10.0														

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, and 2-0-0 oc purlins (3-0-1 max.): 7-8.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 9=Mechanical, 2=0-3-8
 Max Horz 2=184(LC 15)
 Max Uplift 9=118(LC 16), 2=-146(LC 16)
 Max Grav 9=1453(LC 2), 2=1519(LC 2)

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

TOP CHORD	2-3=-2485/316, 3-5=-2210/340, 5-6=-2349/365, 6-7=-3503/433, 7-8=-3232/357, 8-9=-1383/182
BOT CHORD	2-14=-284/2127, 11-14=-148/1471, 10-11=-260/2228
WEBS	3-14=-516/178, 5-14=-73/761, 5-11=-119/1107, 6-11=-775/187, 6-10=-131/1099, 7-10=-1832/269, 8-10=-376/3335

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 32-3-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TALL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=118, 2=146.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum 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.



November 6, 2020

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

WARNING – verify design parameters READ NOTES ON THIS AND INCLUDED WITH THE KEY EXERCISES! SEE MIF-743-167, 3/15/2020 (BY ONE 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/67 Woodside	I43520199
2684908	A6	Roof Special	1	1	Job Reference (optional)	

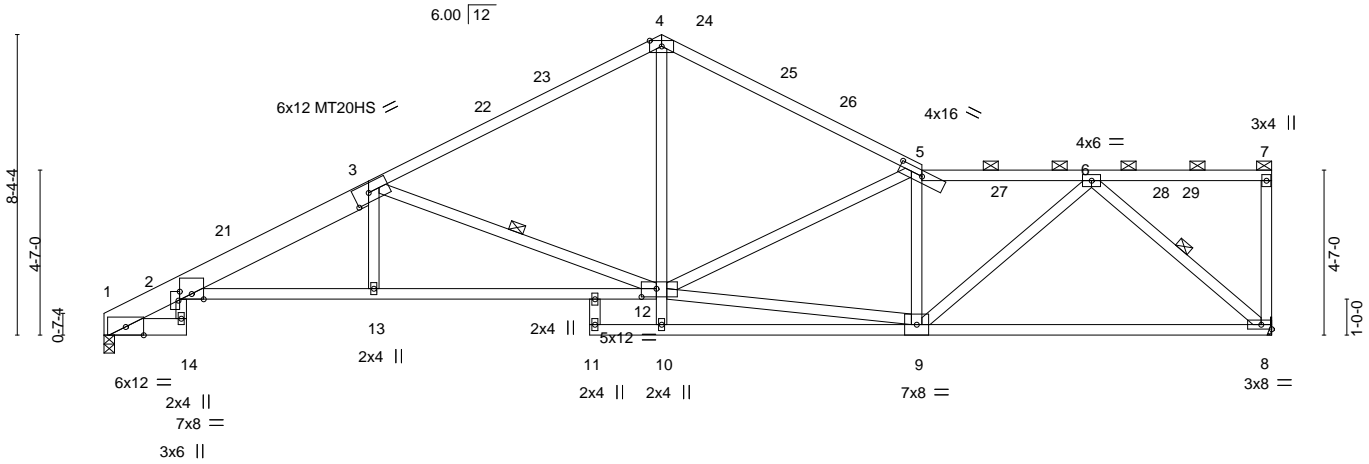
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:45 2020 Page 1
ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-5_pZj7x7Krje5?AsJD?Xboo0Xw1oSkw2hddoLHyM8jK

2-3-8	7-6-0	15-6-0	22-8-13	27-5-7	32-5-8
2-3-8	5-2-8	8-0-0	7-2-13	4-8-9	5-0-1

4x8 =

Scale: 3/16"=1'



2-3-8	7-6-0	13-6-0	15-6-0	22-8-13	32-5-8
2-3-8	5-2-8	6-0-0	2-0-0	7-2-13	9-8-11

Plate Offsets (X,Y)-- [2:0-3-0,0-0-7], [3:0-5-0,0-3-0], [5:0-8-0,0-1-14], [12:0-5-0,0-2-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.96	Vert(LL)	-0.23 8-9	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.98	Vert(CT)	-0.51 12-13	>756	180	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.81	Horz(CT)	0.24 8	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 167 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 "Except"
1-3: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 "Except"
1-14: 2x6 SPF No.2, 8-11: 2x4 SP No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-7-7 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-12, 6-8

REACTIONS.

(size) 8=Mechanical, 1=0-3-8
Max Horz 1=219(LC 15)
Max Uplift 8=112(LC 16), 1=106(LC 16)
Max Grav 8=1464(LC 2), 1=1471(LC 2)

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

TOP CHORD 2-16=-649/107, 2-3=-3202/358, 3-4=-2085/287, 4-5=-2027/282, 5-6=-2348/290
BOT CHORD 2-13=-477/2963, 12-13=-474/2973, 8-9=-216/1415
WEBS 3-13=0/360, 3-12=-1314/236, 4-12=-76/1214, 5-9=-966/194, 6-9=-106/1256, 5-12=-747/134, 6-8=-1833/249, 9-12=-295/2294

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 32-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are 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.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=112, 1=106.
- This truss 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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss A7	Truss Type Roof Special	Qty 1	Ply 1	Summit/67 Woodside	I43520200
Job Reference (optional)						

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:48 2020 Page 1

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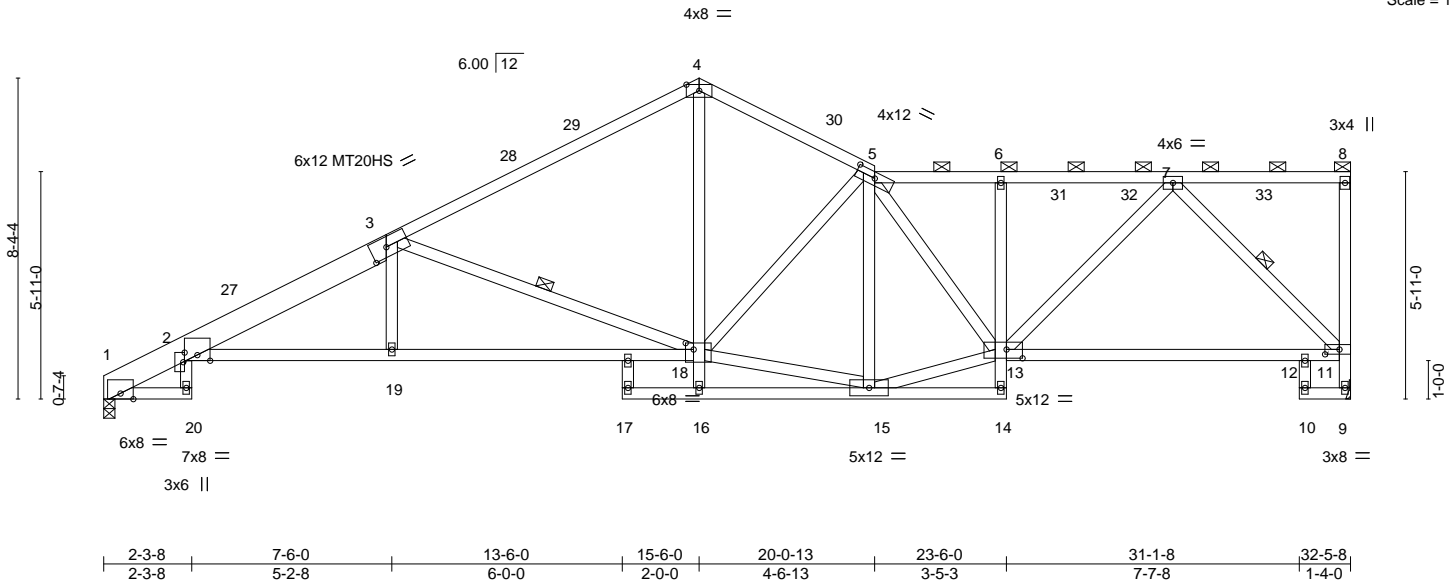


Plate Offsets (X,Y)-- [2:0-3-0,0-0-7], [3:0-5-0,0-0-3], [5:0-6-0,0-1-14], [11:0-4-8,0-1-8], [13:0-5-0,0-2-12], [18:0-2-8,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.75	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.98	Vert(LL) -0.22 19-26 >999 240	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.56	Vert(CT) -0.51 18-19 >763 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.29 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 175 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 "Except"	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
1-3: 2x8 SP 2400F 2.0E	2-0-0 oc purlins (3-11-0 max.): 5-8.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-18, 7-11

REACTIONS. (size) 9=Mechanical, 1=0-3-8
Max Horz 1=240(LC 15)
Max Uplift 9=113(LC 16), 1=105(LC 16)
Max Grav 9=1464(LC 2), 1=1471(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-22=669/108, 2-3=3210/350, 3-4=2080/285, 4-5=1973/279, 5-6=2071/265,
6-7=2088/263, 9-11=1426/176
BOT CHORD 2-19=533/2973, 18-19=530/2983, 6-13=379/65, 12-13=216/1229, 11-12=203/1281
WEBS 3-19=0/360, 3-18=1334/250, 15-18=302/1981, 4-18=110/1302, 5-18=490/115,
13-15=249/2031, 5-13=47/362, 7-13=117/1236, 7-11=1703/244, 5-15=945/175

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 32-3-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=113, 1=105.
- This truss 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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss A8	Truss Type Roof Special	Qty 1	Ply 1	Summit/67 Woodside	I43520201
Builders FirstSource (Valley Center), Valley Center, KS - 67147,						8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:50 2020 Page 1
Job Reference (optional)						ID:EIQM2g7HuQ96lywO8PYUgzGYvu-RxdSmq?G9NLxBn3q6nailsVsAxl7_VnqvKZ1UyM8jF

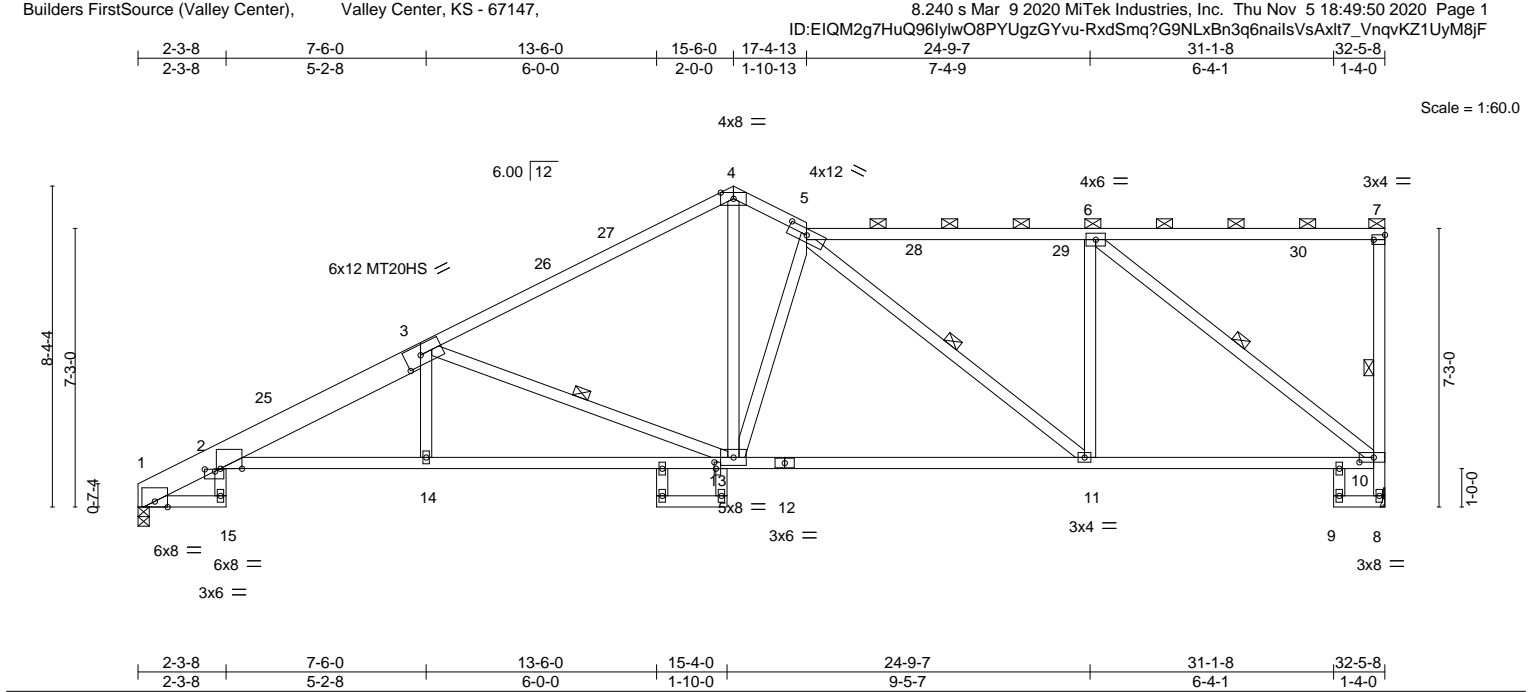


Plate Offsets (X,Y)--		[2:0-3-3,0-0-10], [2:0-6-12,0-0-0], [3:0-5-0,0-3-0], [5:0-6-0,0-1-14], [7:Edge,0-1-8], [10:0-4-8,0-1-8], [13:0-2-0,0-0-8]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	25.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	10.0	Rep Stress Incr	YES
BCLL	0.0	Code	IRC2018/TPI2014
BCDL	10.0		
		CSI.	
		TC	0.96
		BC	0.92
		WB	0.79
		Matrix-AS	
		DEFL.	
		Vert(LL)	-0.22 14-24 >999 240
		Vert(CT)	-0.42 11-13 >915 180
		Horz(CT)	0.25 8 n/a n/a
		PLATES	
		MT20	197/144
		MT20HS	148/108
		GRIP	
		Weight: 162 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 "Except" 1-3: 2x8 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 5-7.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 7-8, 3-13, 5-11, 6-10
OTHERS	2x4 SPF No.2		

REACTIONS.	(size) 8=Mechanical, 1=0-3-8
	Max Horz 1=261(LC 15)
	Max Uplift 8=111(LC 16), 1=113(LC 16)
	Max Grav 8=1482(LC 39), 1=1451(LC 2)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-20=-672/96, 2-3=-3141/364, 3-4=-2039/263, 4-5=-1942/284, 5-6=-1494/228, 8-10=-1458/185, 7-10=-284/59
BOT CHORD	2-14=-607/2912, 13-14=-605/2920, 11-13=-374/1944, 10-11=-265/1492
WEBS	3-14=0/294, 3-13=-1303/274, 5-13=-951/158, 5-11=-584/140, 6-11=-6/596, 6-10=-1856/251, 4-13=-148/1412

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-6-0, Exterior(2E) 15-6-0 to 17-4-13, Interior(1) 17-4-13 to 32-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=111, 1=113.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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 6, 2020

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520201
2684908	A8	Roof Special	1	1	Job Reference (optional)	

NOTES-

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

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss A9	Truss Type Roof Special	Qty 1	Ply 1	Summit/67 Woodside	143520202
Job Reference (optional)						

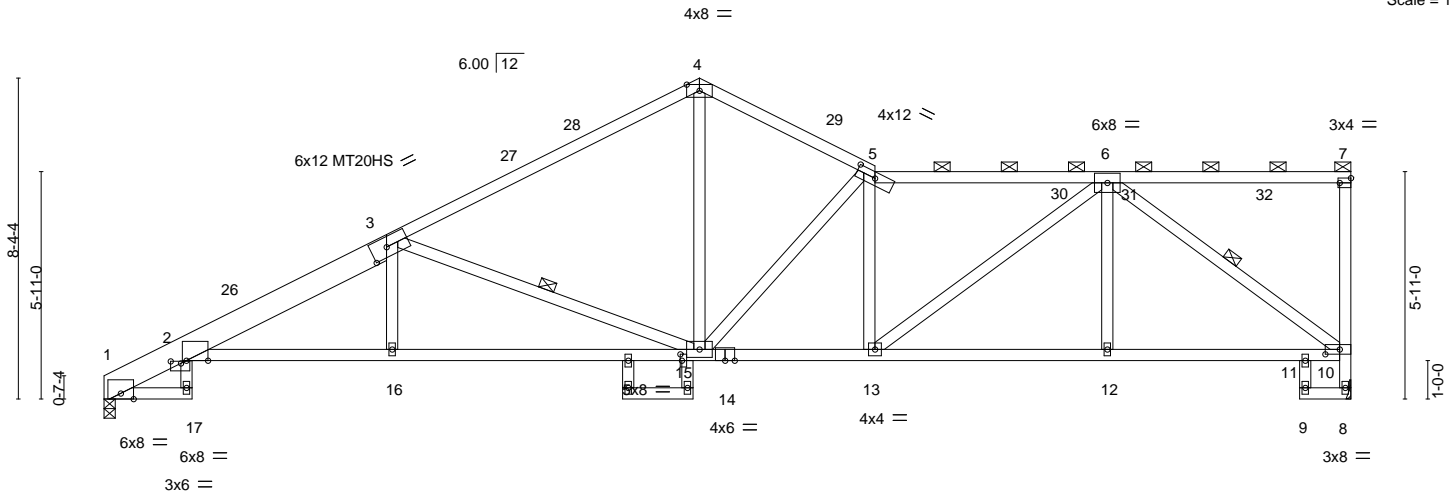
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:52 2020 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-OKICBW0Wg_bfQ4DCDCdANHaGZkR4bv24ICpg5NyM8jD

2-3-8	7-6-0	13-6-0	15-6-0	20-0-13	26-1-7	31-1-8	32-5-8
2-3-8	5-2-8	6-0-0	2-0-0	4-6-13	6-0-9	5-0-1	1-4-0

Scale = 1:60.0



2-3-8	7-6-0	13-6-0	15-6-0	20-0-13	26-1-7	31-1-8	32-5-8
2-3-8	5-2-8	6-0-0	1-10-0	4-6-13	6-0-9	5-0-1	1-4-0

Plate Offsets (X,Y)-- [2:0-3-3,0-0-10], [2:0-6-12,0-0-0], [3:0-5-0,0-3-0], [5:0-6-0,0-1-14], [7:Edge,0-1-8], [10:0-4-8,0-1-8], [15:0-2-0,0-0-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.71	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.94	Vert(LL) -0.22 16-25 >999 240	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.72	Vert(CT) -0.46 15-16 >835 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.26 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 161 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 "Except"	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
1-3: 2x8 SP 2400F 2.0E	2-0-0 oc purlins (3-3-6 max.): 5-7.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-15, 6-10

REACTIONS. (size) 8=Mechanical, 1=0-3-8
Max Horz 1=240(LC 15)
Max Uplift 8=120(LC 16), 1=114(LC 16)
Max Grav 8=1448(LC 2), 1=1450(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-21=660/112, 2-3=3148/377, 3-4=2029/300, 4-5=1962/298, 5-6=2386/328,
8-10=1416/179
BOT CHORD 2-16=557/2917, 15-16=555/2926, 13-15=377/2369, 12-13=259/1636, 11-12=259/1636,
10-11=267/1654
WEBS 3-16=0/321, 3-15=1319/263, 5-15=977/155, 5-13=470/127, 6-13=152/933,
6-12=0/271, 6-10=1994/250, 4-15=127/1284

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 32-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=120, 1=114.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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 6, 2020

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A9	Roof Special	1	1	I43520202
Job Reference (optional)					

NOTES-

14) 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/67 Woodside
2684908	A10	Roof Special	1	1	
Job Reference (optional)					

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:19 2020 Page 1

ID:EIQM2g7HuQ96IylwO8PYUgzGYvu-r_FkGEdpSrRLz0BsnmXQYJja5RAFM29DiaKQRnyM8jk

2-3-8	7-6-0	15-6-0	22-8-13	27-4-7	31-1-8	32-5-8
2-3-8	5-2-8	8-0-0	7-2-13	4-7-9	3-9-1	1-4-0

Scale = 1:67.1

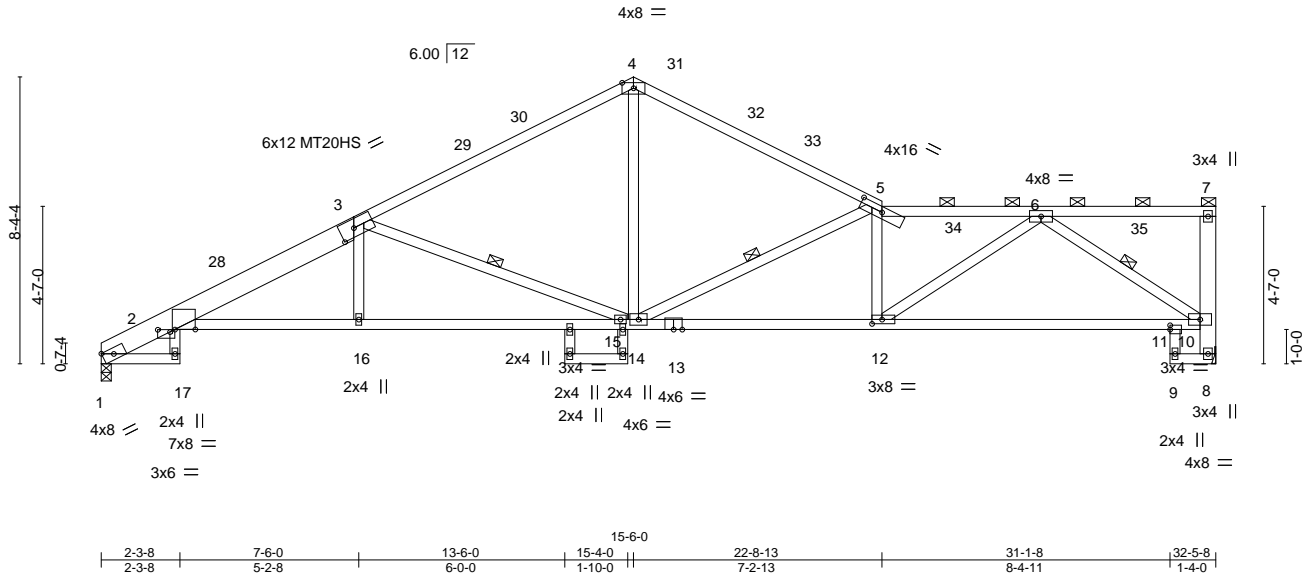


Plate Offsets (X,Y)-- [2:0-4-5,0-0-13], [2:0-7-2,0-0-1], [3:0-5-0,0-3-0], [5:0-8-0,0-1-14], [11:0-0-0,0-1-8], [12:0-3-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.96	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.95	Vert(LL) -0.24 15-16 >999 240	MT20HS	148/108
TCDL 10.0	Lumber DOL 1.15	WB 0.45	Vert(CT) -0.50 15-16 >771 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.32 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 153 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 "Except"	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
1-3: 2x8 SP 2400F 2.0E	2-0-0 oc purlins (3-2-2 max.): 5-7.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2 "Except"	WEBS 1 Row at midpt 3-15, 5-14, 6-10
7-8: 2x6 SPF No.2	

REACTIONS. (size) 8=Mechanical, 1=0-3-8
Max Horz 1=219(LC 15)
Max Uplift 8=118(LC 16), 1=113(LC 16)
Max Grav 8=1444(LC 2), 1=1449(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-24=646/111, 2-3=3131/393, 3-4=2035/301, 4-5=2013/300, 5-6=2978/362,
8-10=1354/192
BOT CHORD 2-16=510/2899, 15-16=508/2908, 14-15=266/1697, 12-14=400/2947, 11-12=278/1817,
10-11=234/1925
WEBS 3-16=0/321, 3-15=1293/258, 5-14=1379/192, 5-12=656/160, 6-12=156/1408,
6-10=2072/301, 4-14=90/1183

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 32-2-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=118, 1=113.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss A11	Truss Type Roof Special	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520204
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:22 2020 Page 1
ID:EIQM2g7HuQ96IylwO8PYUgzGYvu-GZxsuFfilmpvqTWrtu48AylL87eC6ZHpfOYY416yM8jh

2-3-8	7-6-0	15-6-0	20-5-7	25-4-13	31-1-8	32-5-8
2-3-8	5-2-8	8-0-0	4-11-7	4-11-7	5-8-11	1-4-0

Scale: 3/16"=1'

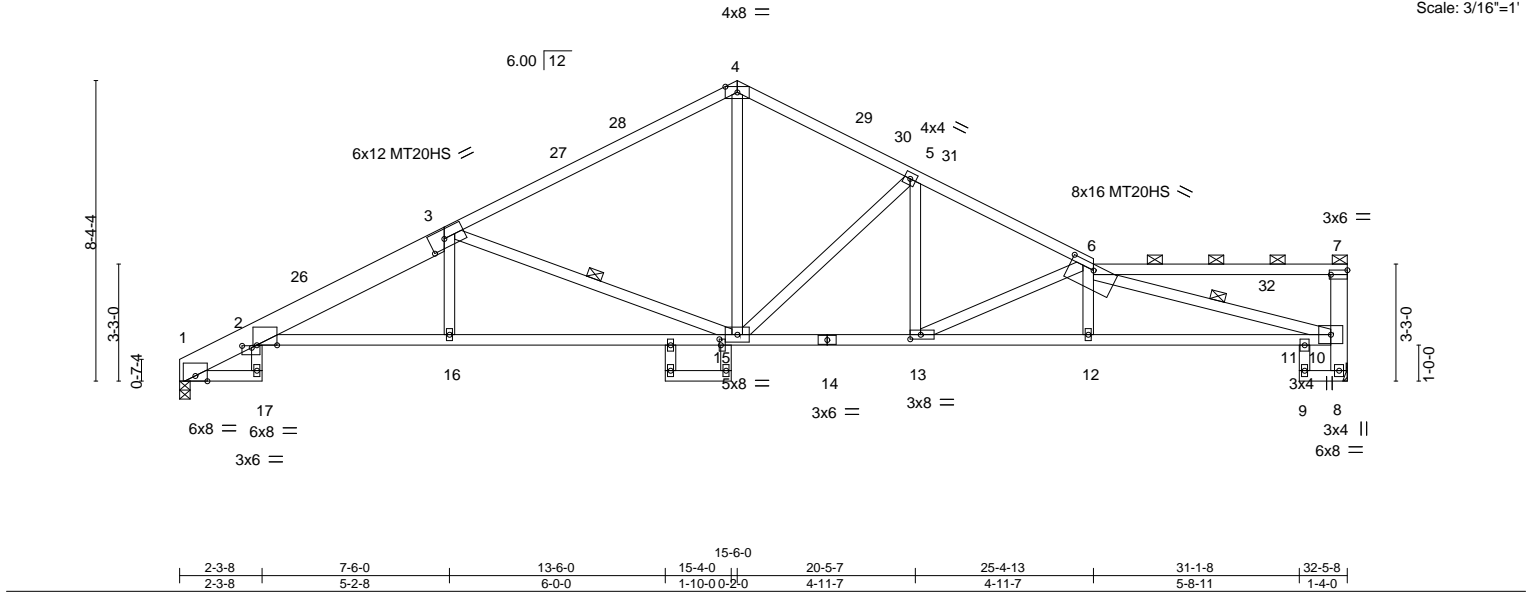


Plate Offsets (X,Y)-- [2:0-3-3,0-0-10], [2:0-6-12,0-0-0], [3:0-5-0,0-0-3-0], [6:0-8-0,0-1-14], [7:Edge,0-1-8], [13:0-3-8,0-1-8], [15:0-2-0,0-0-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.30 12-13 >999 240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.57 15-16 >675 180	MT20HS	148/108
TCDL	10.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.33 8 n/a n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS					
BCDL	10.0							Weight: 154 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-3: 2x8 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD 2x4 SPF No.2 *Except* 10-14: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2 *Except* 7-8: 2x6 SPF No.2	WEBS 1 Row at midpt 3-15, 6-10
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 8=Mechanical, 1=0-3-8
Max Horz 1=198(LC 15)
Max Uplift 8=118(LC 16), 1=115(LC 16)
Max Grav 8=1444(LC 2), 1=1447(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-21=-633/110, 2-3=-3137/387, 3-4=-2021/297, 4-5=-1949/312, 5-6=-2767/351,
6-7=-270/38, 8-10=-1353/170, 7-10=-330/65
BOT CHORD 2-16=-442/2907, 15-16=-439/2916, 13-15=-309/2391, 12-13=-472/3874, 11-12=-477/3869,
10-11=-461/3964
WEBS 3-16=0/318, 3-15=-1317/247, 5-15=-1007/163, 5-13=-41/712, 6-13=-1602/184,
6-10=-3766/443, 4-15=-121/1244

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 32-2-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=118, 1=115.

Continued on page 2



November 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520204
2684908	A11	Roof Special	1	1	Job Reference (optional)	

- NOTES-**
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss A12	Truss Type Roof Special	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520205
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:24 2020 Page 1

ID:4rXHhD3_rnBCgQSIY2gdJuzGww6-Cx2dJxgyGO3d3n4qaJ7cFNQXUSsC1Euyss1B6_yM8jf

-0-11-0	7-9-3	13-0-8	15-6-0	18-11-0	23-5-15	28-0-13	31-1-8	32-5-8
0-11-0	7-9-3	5-3-5	2-5-8	3-5-0	4-6-15	4-6-15	3-0-11	1-4-0

Scale = 1:59.4

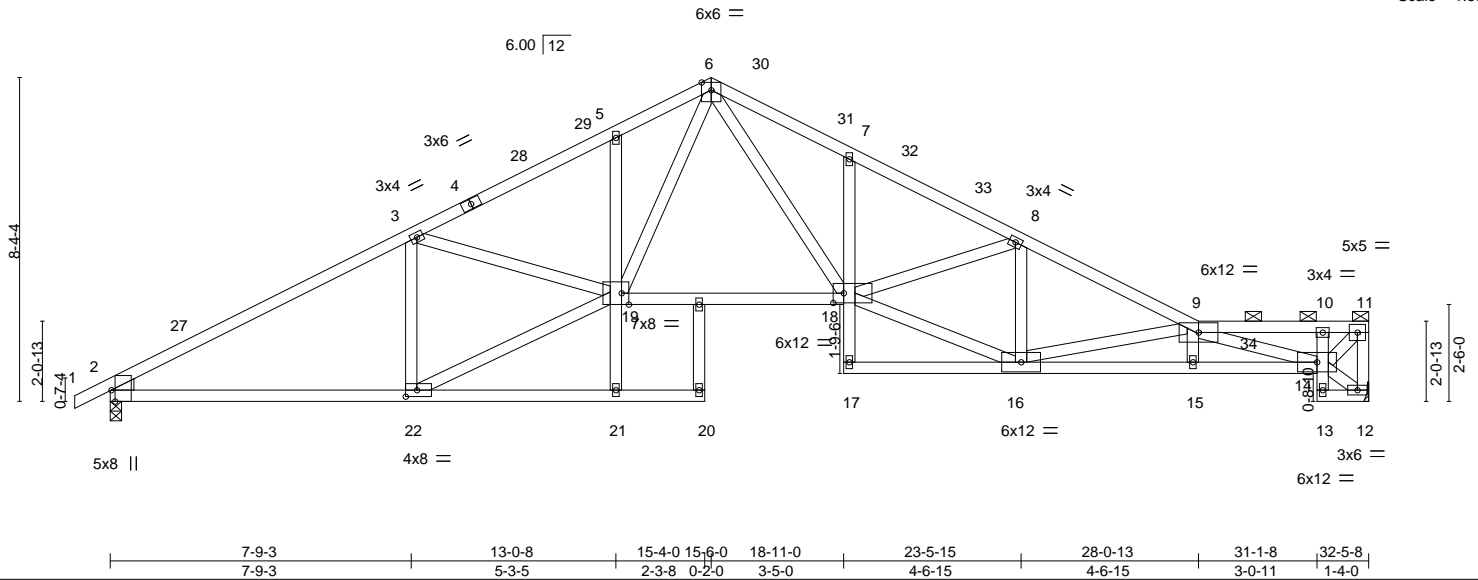


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [18:0-3-4,0-3-0], [19:0-2-4,Edge], [22:0-3-8,0-2-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	25.0	2-0-0		TC	0.53	in (loc)	l/defl	L/d	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.96	Vert(LL)	-0.33 18-19	>999	240
TCDL	10.0	Lumber DOL	1.15	WB	0.80	Vert(CT)	-0.63 18-19	>617	180
BCLL	0.0	Rep Stress Incr	YES	Matrix-AS		Horz(CT)	0.32 12	n/a	n/a
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 158 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 14-17: 2x4 SPF 1650F 1.5E
 WEBS 2x4 SPF No.2
 WEDGE
 Left: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-5-4 max.): 9-11.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 12=Mechanical, 2=0-3-8
 Max Horz 2=186(LC 15)
 Max Uplift 12=110(LC 16), 2=136(LC 16)
 Max Grav 12=1472(LC 2), 2=1543(LC 2)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2529/281, 3-5=-3087/369, 5-6=-3026/427, 6-7=-3515/477, 7-8=-3527/421,
 8-9=-3257/363, 9-10=-1613/175, 10-11=-1331/143, 11-12=-1382/164
 BOT CHORD 2-22=-252/2157, 18-19=-181/2168, 7-18=-321/113, 15-16=-542/4930, 14-15=-549/4936
 WEBS 3-22=-873/163, 16-18=-319/3042, 8-18=0/289, 8-16=-583/109, 9-16=-2093/234,
 9-14=-3499/363, 11-14=-220/1861, 5-19=-272/107, 19-22=-278/2352, 3-19=0/587,
 6-19=-175/1316, 6-18=-205/1774

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 to 32-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=110, 2=136.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2



November 6, 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/67 Woodside
2684908	A12	Roof Special	1	1	I43520205
Job Reference (optional)					

- NOTES-**
- 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

 **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 2684908	Truss A13	Truss Type Common Supported Gable	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520206
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:27 2020 Page 1

ID:EIQM2g7HuQ96lywO8PYUgzGYvu-cWklxzzqZJSCwEoPFSgJt?293f78EIJOYqGrJyM8jc

-0-11-0
0-11-0

15-6-0
15-6-0

30-5-13
14-11-13

Scale = 1:54.2

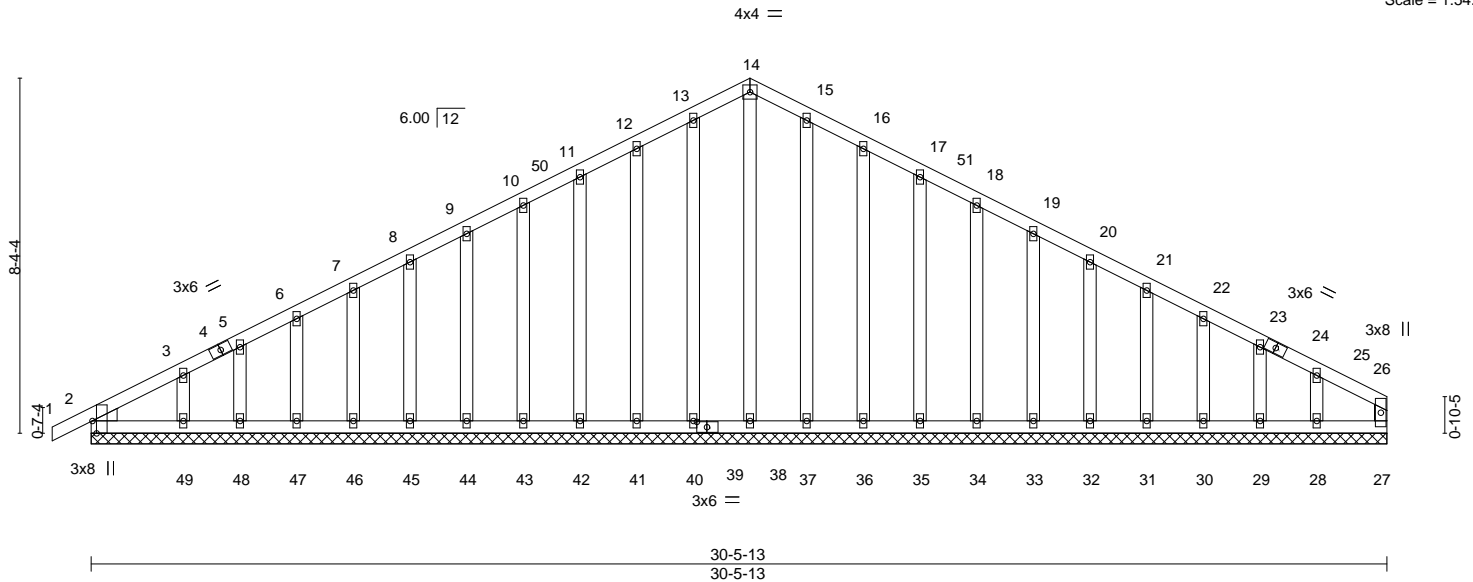


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [39:0-2-14,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.06	Vert(LL) -0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT) 0.00	1	n/r	120		
TCDL 10.0	Lumber DOL 1.15	WB 0.18	Horz(CT) 0.00	27	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 180 lb	FT = 20%

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

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

REACTIONS. All bearings 30-5-13.
(lb) - Max Horz 2=166(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 2, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28
Max Grav All reactions 250 lb or less at joint(s) 27, 2, 38, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 13-14=-106/252, 14-15=-106/252

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-2-0, Exterior(2N) 2-2-0 to 15-6-0, Corner(3R) 15-6-0 to 18-6-0, Exterior(2N) 18-6-0 to 30-4-1 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
- 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; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28.
- N/A
- This truss 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 6, 2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss C1	Truss Type Common Supported Gable	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520207
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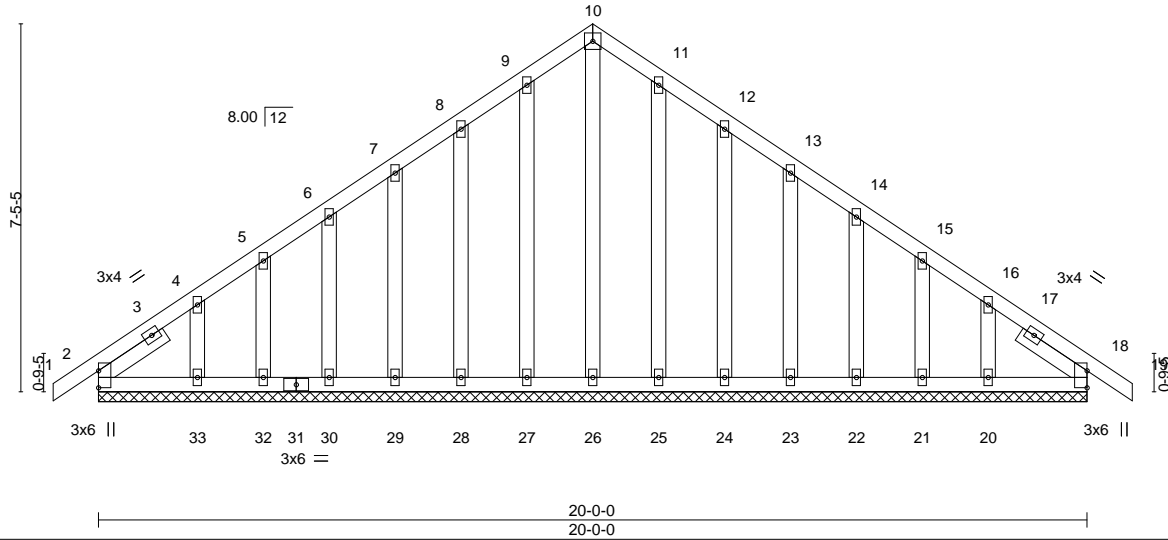
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:54 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-KjszcC2mCcrNgOMbLcfeTifnMYLn3ynNIWInAFyM8jB

0-11-0 10-0-0 20-0-0 20-11-0
0-11-0 10-0-0 10-0-0 0-11-0

4x4 =

Scale = 1:46.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00 18 n/r 120	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00 18 n/r 120				
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00 18 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-S							
BCDL	10.0										
								Weight: 116 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-7-8, Right 2x4 SPF No.2 1-7-8

BRACING-

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

REACTIONS.

All bearings 20-0-0.
(lb) - Max Horz 2=155(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 27, 28, 29, 30, 32, 33, 25, 24, 23, 22, 21, 20
Max Grav All reactions 250 lb or less at joint(s) 2, 26, 27, 28, 29, 30, 32, 33, 25, 24, 23, 22, 21, 20, 18

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-0-0, Exterior(2N) 2-0-0 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-11-0 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
- 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; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 27, 28, 29, 30, 32, 33, 25, 24, 23, 22, 21, 20.
- This truss 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 6, 2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520208
2684908	C2	Common	2	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:56 2020 Page 1
ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-G5_j1t31kD55viW_S1h6Y7I40LsuXr1fDqnuE8yM8j9

0-11-0 5-1-12 10-0-0 14-10-4 20-0-0 20-11-0
0-11-0 5-1-12 4-10-4 4-10-4 5-1-12 0-11-0

4x6 =

Scale = 1:46.0

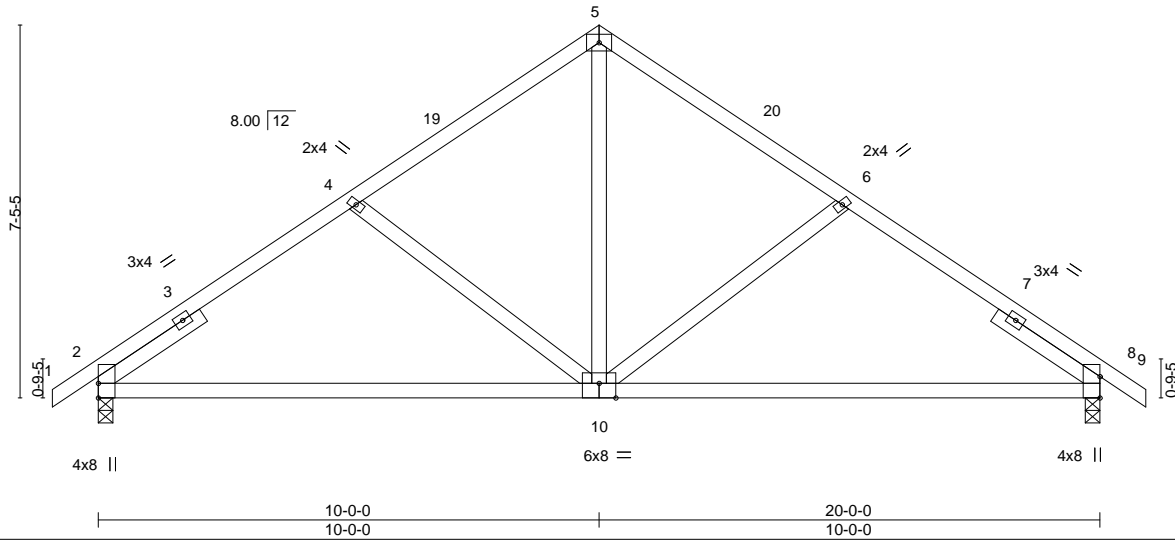


Plate Offsets (X,Y)-- [10:0-4-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.23	Vert(LL) -0.13	10-13	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.69	Vert(CT) -0.27	10-13	>893	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.21	Horz(CT) 0.02	8	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 80 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=155(LC 13)
Max Uplift 2=-101(LC 14), 8=-101(LC 14)
Max Grav 2=964(LC 2), 8=964(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1008/171, 4-5=-897/166, 5-6=-897/166, 6-8=-1008/171
BOT CHORD 2-10=-55/892, 8-10=-58/892
WEBS 5-10=-66/545, 6-10=-312/129, 4-10=-312/129

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 20-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=101, 8=101.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 6, 2020

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

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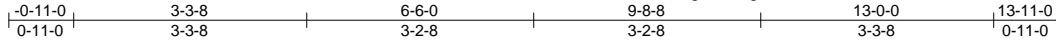
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520209
2684908	C3	GABLE	1	1	Job Reference (optional)	

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

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ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-klY5ED4fVXDxR5A0ICL4KHGaIK2GLbpSUXRnayM8j8



3x6 =
4x6 ||

Scale = 1:32.6

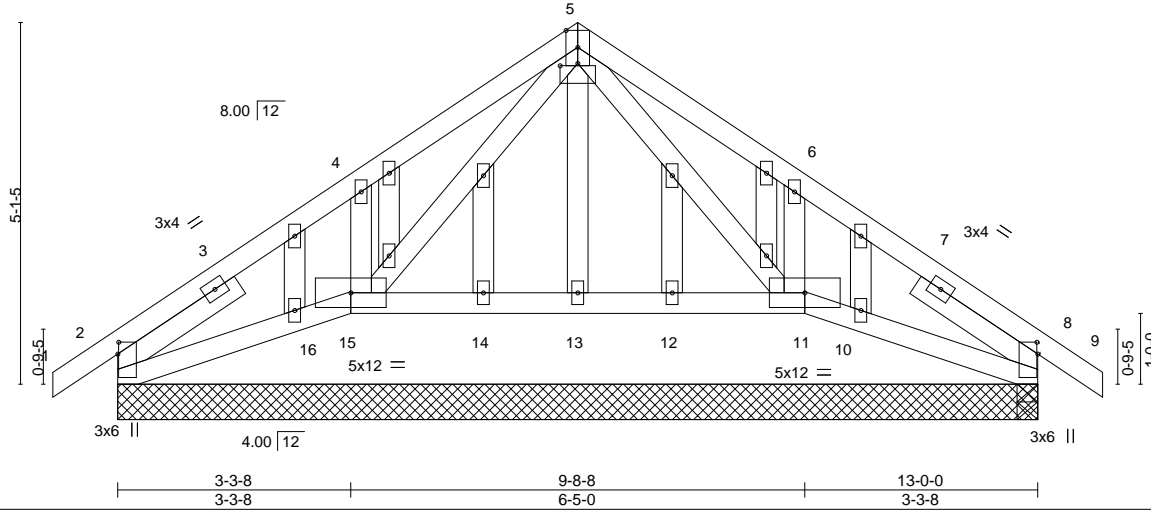


Plate Offsets (X,Y)-- [2:0-2-0,0-0-2], [5:0-3-0,0-0-6], [6:0-0-0,0-0-0], [8:0-0-0,0-0-0], [8:0-2-0,0-0-2], [21:0-0-0,0-0-0], [22:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.12	Vert(LL)	-0.01	15	>999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.18	Vert(CT)	-0.01	15	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.01	8	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 69 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-1-3, Right 2x4 SPF No.2 2-1-3

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

REACTIONS. All bearings 13-0-0.
(lb) - Max Horz 2=105(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 11, 8, 13, 16
Max Grav All reactions 250 lb or less at joint(s) 8, 8, 13, 14, 16, 12, 10 except 2=279(LC 2), 11=366(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-336/97, 4-5=-313/210
BOT CHORD 2-16=-34/260
WEBS 6-11=-257/160

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-12, Interior(1) 9-6-12 to 13-11-0 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
- 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; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11, 8, 13, 16.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 6, 2020

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520210
2684908	C4	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:59 2020 Page 1
ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-gggsfv6v18Ufm9FY7AFpAlNa6ZyIkD06vo0YrTyM8j6

-0-11-0 3-3-8 6-6-0 9-8-8 13-0-0 13-11-0
0-11-0 3-3-8 3-2-8 3-2-8 3-3-8 0-11-0

4x6 ||

Scale = 1:32.7

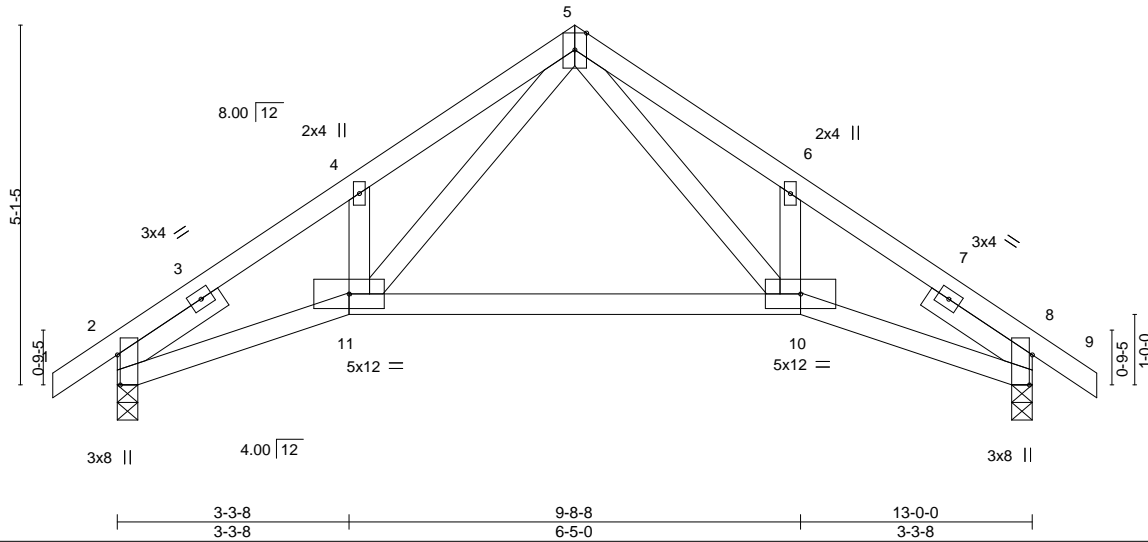


Plate Offsets (X,Y)-- [2:0-5-2,Edge], [6:0-0-0,0-0-0], [8:0-0-0,0-0-0], [8:0-5-2,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.24	Vert(LL)	-0.07 10-11	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.39	Vert(CT)	-0.17 10-11	>921	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.13	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: 54 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 1-10-0, Right 2x4 SPF No.2 1-10-0

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=105(LC 13)
Max Uplift 2=-75(LC 14), 8=-75(LC 14)
Max Grav 2=649(LC 2), 8=649(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1087/171, 4-5=-1032/273, 5-6=-1033/279, 6-8=-1087/175
BOT CHORD 2-11=-67/886, 10-11=0/494, 8-10=-78/876
WEBS 5-11=-144/570, 5-10=-148/537

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-12, Interior(1) 9-6-12 to 13-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2, 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) 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.
- 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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	D1	Hip Girder	1	1	I43520211
Job Reference (optional)					

LOAD CASE(S) Standard
 Concentrated Loads (lb)
 Vert: 10=1(B) 9=0(B) 8=1(B) 25=0(B) 26=0(B)

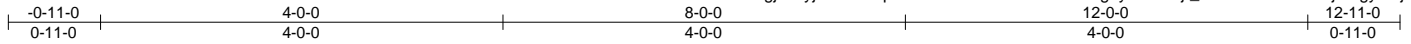


Job 2684908	Truss D2	Truss Type Hip	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520212
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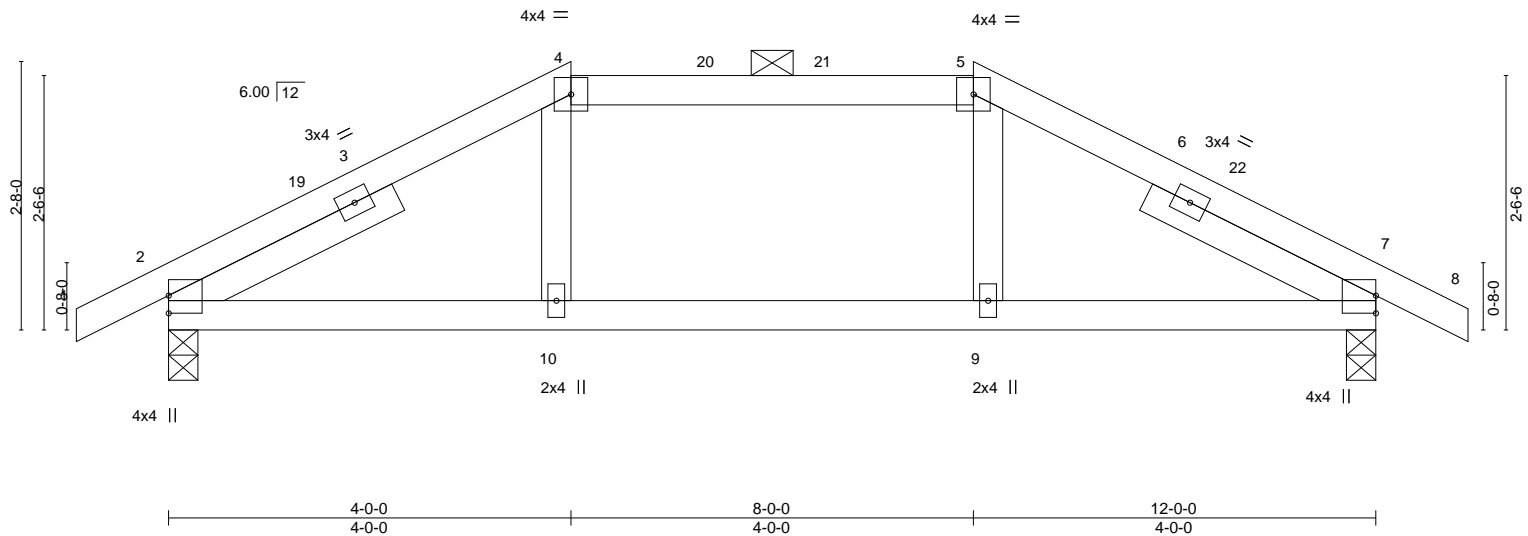
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:04 2020 Page 1

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Scale = 1:22.9



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	2-0-0 1.15	TC	0.29	Vert(LL)	-0.04	9	>999	L/d	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.05	9	>999		180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.02	7	n/a		n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS								Weight: 41 lb	FT = 20%
BCDL	10.0												

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
Max Horz 2=46(LC 15)
Max Uplift 2=-72(LC 16), 7=-72(LC 16)
Max Grav 2=608(LC 39), 7=608(LC 39)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-687/235, 4-5=-643/234, 5-7=-687/235
BOT CHORD 2-10=-126/648, 9-10=-127/643, 7-9=-125/648

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 4-0-0, Exterior(2E) 4-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 12-0-0, Interior(1) 12-0-0 to 12-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 6, 2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss D3	Truss Type Common	Qty 4	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520213
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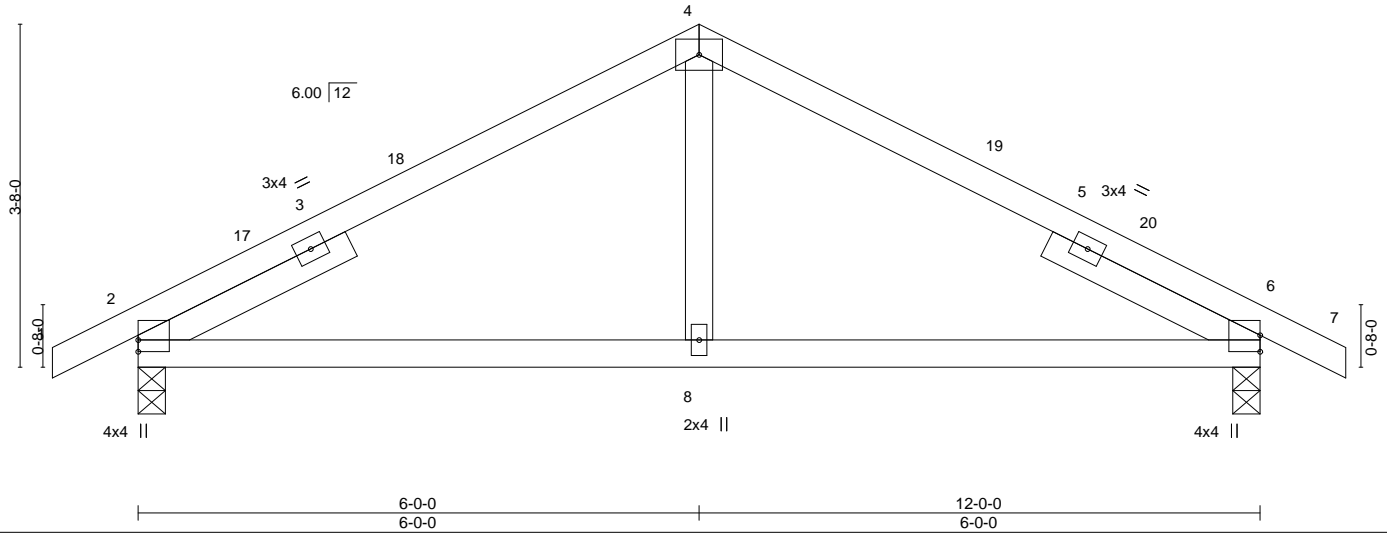
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:05 2020 Page 1
ID:2gjJ0LyjZmYPRpPutoMbQzFwGX-Vq17wyAgc_EpU4iiUQMDP0da0_137zg_HkTs36yM8j0

-0-11-0 6-0-0 12-0-0 12-11-0
0-11-0 6-0-0 6-0-0 0-11-0

4x6 =

Scale = 1:24.6



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	in	(loc)	l/defl	L/d	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(LL)	-0.04	8-15	>999				
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Vert(CT)	-0.07	8-15	>999				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS		Horz(CT)	0.02	2	n/a				
BCDL	10.0												
										Weight: 41 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=66(LC 15)
Max Uplift 2=-72(LC 16), 6=-72(LC 16)
Max Grav 2=604(LC 2), 6=604(LC 2)

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

TOP CHORD 2-4=-620/237, 4-6=-620/237
BOT CHORD 2-8=-95/547, 6-8=-95/547

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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 6, 2020

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

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

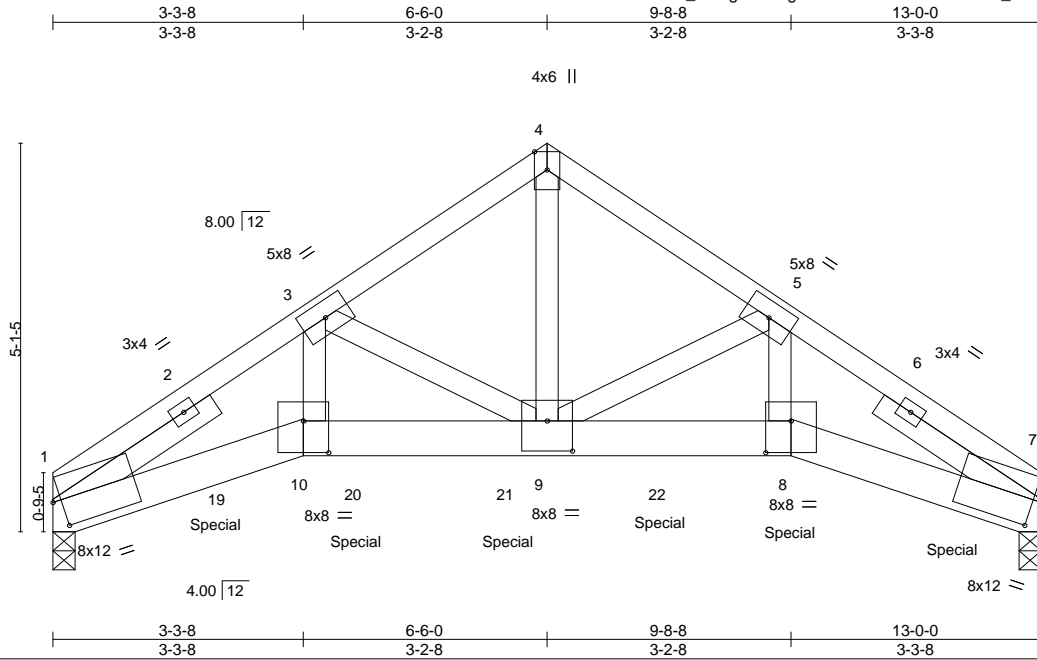


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss GR1	Truss Type Roof Special Girder	Qty 1	Ply 2	Summit/67 Woodside Job Reference (optional)	I43520214
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Builders First Source, Valley Center, KS 67147

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Nov 6 09:46:59 2020 Page 1
ID:4rXHhD3_rtbCgQSIY2gdJuzGwv6-UIKJvPBfNAkJd_zCHIV5roRv2kcirAdxo7GTqzyLxaA



Scale = 1:30.3

Plate Offsets (X,Y)-- [1:0-1-5,0-4-4], [5:0-0-0,0-0-0], [7:0-1-3,0-4-12], [7:0-0-0,0-0-0], [8:0-4-0,0-5-0], [9:0-4-0,0-4-12], [10:0-4-0,0-5-0]

LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.75	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.52	Vert(LL) -0.11 8-9 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.71	Vert(CT) -0.20 8-9 >785 180		
BCLL 0.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.14 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 124 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-92(LC 8)
Max Uplift 1=-386(LC 10), 7=-438(LC 10)
Max Grav 1=4395(LC 2), 7=4980(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-5347/479, 2-3=-9102/814, 3-4=-5667/531, 4-5=-5666/531, 5-6=-9319/833, 6-7=-5497/492
BOT CHORD 1-19=-620/7353, 10-19=-655/7791, 10-20=-594/7080, 20-21=-594/7080, 9-21=-594/7080, 9-22=-608/7240,
8-22=-608/7240, 7-8=-660/7818
WEBS 3-10=-277/3403, 3-9=-2676/282, 4-9=-518/5813, 5-9=-2857/298, 5-8=-295/3615

NOTES-

- 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
Web connected with 10d (0.148"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 1, 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 386 lb uplift at joint 1 and 438 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1367 lb down and 133 lb up at 2-0-0, 1367 lb down and 133 lb up at 4-0-0, 1367 lb down and 134 lb up at 6-0-0, 1367 lb down and 134 lb up at 8-0-0, and 1367 lb down and 133 lb up at 9-8-8, and 1367 lb down and 132 lb up at 12-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



November 6, 2020

Continued on page 2

LOAD CASE(S)

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	GR1	Roof Special Girder	1	2	143520214
					Job Reference (optional)

Builders First Source, Valley Center, KS 67147

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Nov 6 09:47:00 2020 Page 2
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LOAD CASE(S)

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 4-7=-51, 10-11=-20, 8-10=-20, 8-15=-20
Concentrated Loads (lb)
Vert: 8=-1187(B) 17=-1286(B) 19=-1241(B) 20=-1121(B) 21=-1150(B) 22=-1132(B)
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-7=-70, 10-11=-20, 8-10=-20, 8-15=-20
Concentrated Loads (lb)
Vert: 8=-1367(B) 17=-1367(B) 19=-1367(B) 20=-1367(B) 21=-1367(B) 22=-1367(B)
- 3) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-58, 4-7=-58, 10-11=-20, 8-10=-20, 8-15=-20
Concentrated Loads (lb)
Vert: 8=-1175(B) 17=-1175(B) 19=-1175(B) 20=-1175(B) 21=-1175(B) 22=-1175(B)
- 4) Dead + 0.75 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-43, 4-7=-43, 10-11=-20, 8-10=-20, 8-15=-20
Concentrated Loads (lb)
Vert: 8=-1039(B) 17=-1114(B) 19=-1080(B) 20=-990(B) 21=-1011(B) 22=-998(B)
- 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-20, 10-11=-40, 8-10=-40, 8-15=-40
Concentrated Loads (lb)
Vert: 8=-885(B) 17=-885(B) 19=-885(B) 20=-885(B) 21=-885(B) 22=-885(B)
- 6) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-2, 4-7=8, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 1-4=-10, 4-7=20
Concentrated Loads (lb)
Vert: 8=121(B) 17=121(B) 19=121(B) 20=122(B) 21=122(B) 22=122(B)
- 7) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=8, 4-7=-2, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 1-4=-20, 4-7=10
Concentrated Loads (lb)
Vert: 8=121(B) 17=121(B) 19=121(B) 20=122(B) 21=122(B) 22=122(B)
- 8) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-32, 4-7=-10, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=12, 4-7=10
Concentrated Loads (lb)
Vert: 8=133(B) 17=132(B) 19=133(B) 20=133(B) 21=134(B) 22=134(B)
- 9) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-10, 4-7=-32, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=-10, 4-7=-12
Concentrated Loads (lb)
Vert: 8=133(B) 17=132(B) 19=133(B) 20=133(B) 21=134(B) 22=134(B)
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=16, 4-7=16, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 1-4=-28, 4-7=28
Concentrated Loads (lb)
Vert: 8=121(B) 17=121(B) 19=121(B) 20=122(B) 21=122(B) 22=122(B)
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=1, 4-7=1, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 1-4=-13, 4-7=13
Concentrated Loads (lb)
Vert: 8=121(B) 17=121(B) 19=121(B) 20=122(B) 21=122(B) 22=122(B)
- 12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-21, 4-7=-21, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
Concentrated Loads (lb)
Vert: 8=133(B) 17=132(B) 19=133(B) 20=133(B) 21=134(B) 22=134(B)
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-21, 4-7=-21, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
Concentrated Loads (lb)
Vert: 8=133(B) 17=132(B) 19=133(B) 20=133(B) 21=134(B) 22=134(B)
- 14) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-20, 10-11=-20, 8-10=-20, 8-15=-20

Continued on page 3

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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/67 Woodside
2684908	GR1	Roof Special Girder	1	2	143520214
					Job Reference (optional)

Builders First Source, Valley Center, KS 67147

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Nov 6 09:47:00 2020 Page 3
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-yUth6lCl8TsAF8YOr?0KO0z4o8yxadt41n?0NQyLxa9

LOAD CASE(S)

- Concentrated Loads (lb)
Vert: 8=-597(B) 17=-597(B) 19=-597(B) 20=-597(B) 21=-597(B) 22=-597(B)
- 15) 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: 1-4=-52, 4-7=-36, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=9, 4-7=7
- Concentrated Loads (lb)
Vert: 8=26(B) 17=26(B) 19=26(B) 20=26(B) 21=27(B) 22=27(B)
- 16) 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: 1-4=-36, 4-7=-52, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=-7, 4-7=-9
- Concentrated Loads (lb)
Vert: 8=26(B) 17=26(B) 19=26(B) 20=26(B) 21=27(B) 22=27(B)
- 17) 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: 1-4=-44, 4-7=-44, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
- Concentrated Loads (lb)
Vert: 8=26(B) 17=26(B) 19=26(B) 20=26(B) 21=27(B) 22=27(B)
- 18) 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: 1-4=-44, 4-7=-44, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
- Concentrated Loads (lb)
Vert: 8=26(B) 17=26(B) 19=26(B) 20=26(B) 21=27(B) 22=27(B)
- 19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-66, 4-7=-50, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=9, 4-7=7
- Concentrated Loads (lb)
Vert: 8=26(B) 17=26(B) 19=26(B) 20=26(B) 21=27(B) 22=27(B)
- 20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-50, 4-7=-66, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=-7, 4-7=-9
- Concentrated Loads (lb)
Vert: 8=26(B) 17=26(B) 19=26(B) 20=26(B) 21=27(B) 22=27(B)
- 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-58, 4-7=-58, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
- Concentrated Loads (lb)
Vert: 8=26(B) 17=26(B) 19=26(B) 20=26(B) 21=27(B) 22=27(B)
- 22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-58, 4-7=-58, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
- Concentrated Loads (lb)
Vert: 8=26(B) 17=26(B) 19=26(B) 20=26(B) 21=27(B) 22=27(B)
- 23) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-17, 4-7=-12, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 1-4=5
- Concentrated Loads (lb)
Vert: 8=40(B) 17=39(B) 19=40(B) 20=40(B) 21=41(B) 22=41(B)
- 24) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 4-7=-17, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 4-7=-5
- Concentrated Loads (lb)
Vert: 8=40(B) 17=39(B) 19=40(B) 20=40(B) 21=41(B) 22=41(B)
- 25) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-7=-20, 10-11=-20, 8-10=-20, 8-15=-20
- Concentrated Loads (lb)
Vert: 8=-1367(B) 17=-1367(B) 19=-1367(B) 20=-1367(B) 21=-1367(B) 22=-1367(B)
- 26) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-70, 10-11=-20, 8-10=-20, 8-15=-20
- Concentrated Loads (lb)
Vert: 8=-1367(B) 17=-1367(B) 19=-1367(B) 20=-1367(B) 21=-1367(B) 22=-1367(B)
- 27) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-58, 4-7=-20, 10-11=-20, 8-10=-20, 8-15=-20

Continued on page 4

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	GR1	Roof Special Girder	1	2	143520214
					Job Reference (optional)

Builders First Source, Valley Center, KS 67147

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Nov 6 09:47:00 2020 Page 4
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-yUth6lCl8TsAF8YOr?0KO0z4o8yxadt41n?0NQyLxa9

LOAD CASE(S)

- Concentrated Loads (lb)
Vert: 8=-1175(B) 17=-1175(B) 19=-1175(B) 20=-1175(B) 21=-1175(B) 22=-1175(B)
- 28) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-58, 10-11=-20, 8-10=-20, 8-15=-20
Concentrated Loads (lb)
Vert: 8=-1175(B) 17=-1175(B) 19=-1175(B) 20=-1175(B) 21=-1175(B) 22=-1175(B)
- 29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-2, 4-7=8, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 1-4=-10, 4-7=20
Concentrated Loads (lb)
Vert: 8=-641(B) 17=-658(B) 19=-649(B) 20=-639(B) 21=-642(B) 22=-640(B)
- 30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=8, 4-7=-2, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 1-4=-20, 4-7=10
Concentrated Loads (lb)
Vert: 8=-641(B) 17=-658(B) 19=-649(B) 20=-639(B) 21=-642(B) 22=-640(B)
- 31) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-32, 4-7=-10, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=12, 4-7=10
Concentrated Loads (lb)
Vert: 8=-630(B) 17=-646(B) 19=-638(B) 20=-628(B) 21=-631(B) 22=-628(B)
- 32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-10, 4-7=-32, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=-10, 4-7=-12
Concentrated Loads (lb)
Vert: 8=-630(B) 17=-646(B) 19=-638(B) 20=-628(B) 21=-631(B) 22=-628(B)
- 33) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=16, 4-7=16, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 1-4=-28, 4-7=28
Concentrated Loads (lb)
Vert: 8=-641(B) 17=-658(B) 19=-649(B) 20=-639(B) 21=-642(B) 22=-640(B)
- 34) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=1, 4-7=1, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 1-4=-13, 4-7=13
Concentrated Loads (lb)
Vert: 8=-641(B) 17=-658(B) 19=-649(B) 20=-639(B) 21=-642(B) 22=-640(B)
- 35) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-21, 4-7=-21, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
Concentrated Loads (lb)
Vert: 8=-630(B) 17=-646(B) 19=-638(B) 20=-628(B) 21=-631(B) 22=-628(B)
- 36) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-21, 4-7=-21, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
Concentrated Loads (lb)
Vert: 8=-630(B) 17=-646(B) 19=-638(B) 20=-628(B) 21=-631(B) 22=-628(B)
- 37) Reversal: 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: 1-4=-52, 4-7=-36, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=9, 4-7=7
Concentrated Loads (lb)
Vert: 8=-953(B) 17=-1022(B) 19=-990(B) 20=-915(B) 21=-933(B) 22=-921(B)
- 38) Reversal: 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: 1-4=-36, 4-7=-52, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=-7, 4-7=-9
Concentrated Loads (lb)
Vert: 8=-953(B) 17=-1022(B) 19=-990(B) 20=-915(B) 21=-933(B) 22=-921(B)
- 39) Reversal: 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: 1-4=-44, 4-7=-44, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
Concentrated Loads (lb)
Vert: 8=-953(B) 17=-1022(B) 19=-990(B) 20=-915(B) 21=-933(B) 22=-921(B)
- 40) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 5

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	GR1	Roof Special Girder	1	2	I43520214
					Job Reference (optional)

Builders First Source, Valley Center, KS 67147

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Nov 6 09:47:00 2020 Page 5
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-yUth6lCl8TsAF8YOr?0KO0z4o8yxadt41n?0NQyLxa9

LOAD CASE(S)

- Uniform Loads (plf)
Vert: 1-4=-44, 4-7=-44, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
- Concentrated Loads (lb)
Vert: 8=-953(B) 17=-1022(B) 19=-990(B) 20=-915(B) 21=-933(B) 22=-921(B)
- 41) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-66, 4-7=-50, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=9, 4-7=7
- Concentrated Loads (lb)
Vert: 8=-1055(B) 17=-1067(B) 19=-1061(B) 20=-1053(B) 21=-1056(B) 22=-1054(B)
- 42) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-50, 4-7=-66, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=-7, 4-7=-9
- Concentrated Loads (lb)
Vert: 8=-1055(B) 17=-1067(B) 19=-1061(B) 20=-1053(B) 21=-1056(B) 22=-1054(B)
- 43) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-58, 4-7=-58, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
- Concentrated Loads (lb)
Vert: 8=-1055(B) 17=-1067(B) 19=-1061(B) 20=-1053(B) 21=-1056(B) 22=-1054(B)
- 44) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-58, 4-7=-58, 10-11=-20, 8-10=-20, 8-15=-20
Horz: 1-4=1, 4-7=-1
- Concentrated Loads (lb)
Vert: 8=-1055(B) 17=-1067(B) 19=-1061(B) 20=-1053(B) 21=-1056(B) 22=-1054(B)
- 45) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-17, 4-7=-12, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 1-4=5
- Concentrated Loads (lb)
Vert: 8=-560(B) 17=-576(B) 19=-568(B) 20=-558(B) 21=-561(B) 22=-558(B)
- 46) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-12, 4-7=-17, 10-11=-8, 8-10=-8, 8-15=-8
Horz: 4-7=-5
- Concentrated Loads (lb)
Vert: 8=-560(B) 17=-576(B) 19=-568(B) 20=-558(B) 21=-561(B) 22=-558(B)

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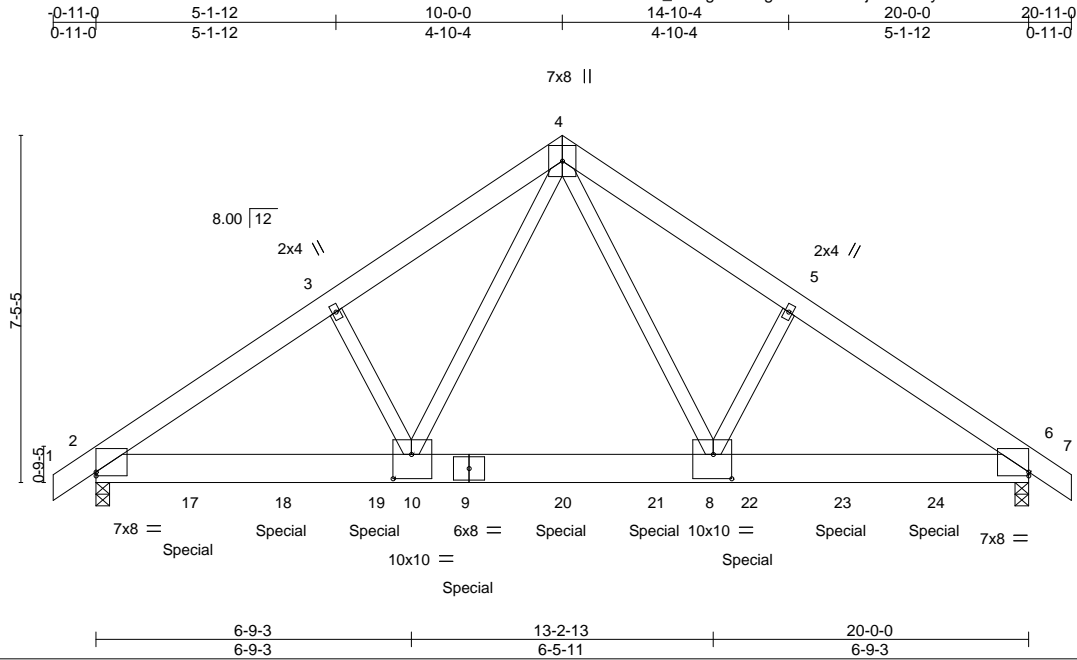
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss GR2	Truss Type Common Girder	Qty 1	Ply 2	Summit/67 Woodside Job Reference (optional) I43520215
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Builders First Source, Valley Center, KS 67147

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Nov 6 09:47:22 2020 Page 1

ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-JJC0kHT5yEd2tWDd7dPUHfuxD?TbkaSK4CKA78yLxZp



Scale = 1:49.4

Plate Offsets (X,Y)-- [2:Edge,0-1-0], [6:0-0-0,0-1-0], [8:0-4-12,0-6-4], [10:0-4-12,0-6-4]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.36	Vert(LL) -0.11	8-10	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.21	8-10	>999	180		
TCDL 10.0	Rep Stress Incr NO	WB 0.70	Horz(CT) 0.03	6	n/a	n/a		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 268 lb	FT = 20%
BCDL 10.0								

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=-155(LC 8)
Max Uplift 2=-656(LC 10), 6=-658(LC 10)
Max Grav 2=7430(LC 2), 6=7432(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/36, 2-3=-9907/878, 3-4=-9766/927, 4-5=-9783/923, 5-6=-9924/874, 6-7=0/36
BOT CHORD 2-17=-644/8197, 17-18=-644/8197, 18-19=-644/8197, 10-19=-644/8197, 9-10=-372/5658, 9-20=-372/5658,
20-21=-372/5658, 8-21=-372/5658, 8-22=-641/8210, 22-23=-641/8210, 23-24=-641/8210, 6-24=-641/8210
WEBS 4-8=-510/5743, 5-8=-297/139, 4-10=-518/5711, 3-10=-297/138

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 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 656 lb uplift at joint 2 and 658 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1452 lb down and 130 lb up at 2-0-0, 1424 lb down and 138 lb up at 4-0-0, 1424 lb down and 138 lb up at 6-0-0, 1428 lb down and 140 lb up at 8-0-0, 1462 lb down and 131 lb up at 10-0-0, 1444 lb down and 133 lb up at 12-0-0, 1444 lb down and 132 lb up at 14-0-0, and 1433 lb down and 138 lb up at 16-0-0, and 1433 lb down and 138 lb up at 18-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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Continued on page 2

LOAD CASE(S)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	GR2	Common Girder	1	2	143520215
					Job Reference (optional)

Builders First Source, Valley Center, KS 67147

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Nov 6 09:47:22 2020 Page 2
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-JJC0kHT5yEd2tWDd7dPUHfuxD?TbkaSK4CKA78yLxZp

LOAD CASE(S)

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 4-7=-51, 11-14=-20
Concentrated Loads (lb)
Vert: 9=-1349(F) 17=-1273(F) 18=-1177(F) 19=-1241(F) 20=-1462(F) 21=-1366(F) 22=-1263(F) 23=-1254(F) 24=-1254(F)
- 2) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-7=-70, 11-14=-20
Concentrated Loads (lb)
Vert: 9=-1428(F) 17=-1452(F) 18=-1424(F) 19=-1424(F) 20=-1451(F) 21=-1444(F) 22=-1444(F) 23=-1433(F) 24=-1433(F)
- 3) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-58, 4-7=-58, 11-14=-20
Concentrated Loads (lb)
Vert: 9=-1227(F) 17=-1250(F) 18=-1223(F) 19=-1223(F) 20=-1250(F) 21=-1243(F) 22=-1243(F) 23=-1231(F) 24=-1231(F)
- 4) Dead + 0.75 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-43, 4-7=-43, 11-14=-20
Concentrated Loads (lb)
Vert: 9=-1168(F) 17=-1116(F) 18=-1038(F) 19=-1086(F) 20=-1258(F) 21=-1184(F) 22=-1107(F) 23=-1097(F) 24=-1097(F)
- 5) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-20, 11-14=-40
Concentrated Loads (lb)
Vert: 9=-925(F) 17=-967(F) 18=-923(F) 19=-923(F) 20=-972(F) 21=-958(F) 22=-958(F) 23=-929(F) 24=-929(F)
- 6) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=13, 2-4=-2, 4-6=8, 6-7=3, 11-14=-8
Horz: 1-2=-25, 2-4=-10, 4-6=20, 6-7=15
Concentrated Loads (lb)
Vert: 9=128(F) 17=118(F) 18=126(F) 19=127(F) 20=120(F) 21=121(F) 22=120(F) 23=126(F) 24=126(F)
- 7) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=3, 2-4=8, 4-6=-2, 6-7=13, 11-14=-8
Horz: 1-2=-15, 2-4=-20, 4-6=10, 6-7=25
Concentrated Loads (lb)
Vert: 9=128(F) 17=118(F) 18=126(F) 19=127(F) 20=120(F) 21=121(F) 22=120(F) 23=126(F) 24=126(F)
- 8) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-26, 2-4=-32, 4-6=-10, 6-7=-5, 11-14=-20
Horz: 1-2=6, 2-4=12, 4-6=10, 6-7=15
Concentrated Loads (lb)
Vert: 9=140(F) 17=130(F) 18=138(F) 19=138(F) 20=131(F) 21=133(F) 22=132(F) 23=138(F) 24=138(F)
- 9) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-5, 2-4=-10, 4-6=-32, 6-7=-26, 11-14=-20
Horz: 1-2=-15, 2-4=-10, 4-6=-12, 6-7=-6
Concentrated Loads (lb)
Vert: 9=140(F) 17=130(F) 18=138(F) 19=138(F) 20=131(F) 21=133(F) 22=132(F) 23=138(F) 24=138(F)
- 10) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=30, 2-4=16, 4-6=16, 6-7=30, 11-14=-8
Horz: 1-2=-42, 2-4=-28, 4-6=28, 6-7=42
Concentrated Loads (lb)
Vert: 9=128(F) 17=118(F) 18=126(F) 19=127(F) 20=120(F) 21=121(F) 22=120(F) 23=126(F) 24=126(F)
- 11) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=15, 2-4=1, 4-6=1, 6-7=15, 11-14=-8
Horz: 1-2=-27, 2-4=-13, 4-6=13, 6-7=27
Concentrated Loads (lb)
Vert: 9=128(F) 17=118(F) 18=126(F) 19=127(F) 20=120(F) 21=121(F) 22=120(F) 23=126(F) 24=126(F)
- 12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-4=-21, 4-6=-21, 6-7=-16, 11-14=-20
Horz: 1-2=-4, 2-4=1, 4-6=-1, 6-7=4
Concentrated Loads (lb)
Vert: 9=140(F) 17=130(F) 18=138(F) 19=138(F) 20=131(F) 21=133(F) 22=132(F) 23=138(F) 24=138(F)
- 13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-4=-21, 4-6=-21, 6-7=-16, 11-14=-20
Horz: 1-2=-4, 2-4=1, 4-6=-1, 6-7=4
Concentrated Loads (lb)
Vert: 9=140(F) 17=130(F) 18=138(F) 19=138(F) 20=131(F) 21=133(F) 22=132(F) 23=138(F) 24=138(F)
- 14) Dead + Snow on Overhangs: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-51, 2-4=-20, 4-6=-20, 6-7=-51, 11-14=-20

Continued on page 3

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16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	GR2	Common Girder	1	2	143520215
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Builders First Source, Valley Center, KS 67147

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ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-JJC0kHT5yEd2tWDd7dPUHfuxD?TbkaSK4CKA78yLxZp

LOAD CASE(S)

- Concentrated Loads (lb)
Vert: 9=-624(F) 17=-645(F) 18=-622(F) 19=-622(F) 20=-647(F) 21=-640(F) 22=-640(F) 23=-626(F) 24=-626(F)
- 15) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-20, 11-14=-20
Concentrated Loads (lb)
Vert: 9=-624(F) 17=-645(F) 18=-622(F) 19=-622(F) 20=-647(F) 21=-640(F) 22=-640(F) 23=-626(F) 24=-626(F)
- 16) 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: 1-2=-48, 2-4=-52, 4-6=-36, 6-7=-32, 11-14=-20
Horz: 1-2=5, 2-4=9, 4-6=7, 6-7=11
Concentrated Loads (lb)
Vert: 9=28(F) 17=18(F) 18=26(F) 19=27(F) 20=19(F) 21=21(F) 22=20(F) 23=26(F) 24=26(F)
- 17) 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: 1-2=-32, 2-4=-36, 4-6=-52, 6-7=-48, 11-14=-20
Horz: 1-2=-11, 2-4=-7, 4-6=-9, 6-7=-5
Concentrated Loads (lb)
Vert: 9=28(F) 17=18(F) 18=26(F) 19=27(F) 20=19(F) 21=21(F) 22=20(F) 23=26(F) 24=26(F)
- 18) 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: 1-2=-40, 2-4=-44, 4-6=-44, 6-7=-40, 11-14=-20
Horz: 1-2=-3, 2-4=1, 4-6=-1, 6-7=3
Concentrated Loads (lb)
Vert: 9=28(F) 17=18(F) 18=26(F) 19=27(F) 20=19(F) 21=21(F) 22=20(F) 23=26(F) 24=26(F)
- 19) 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: 1-2=-40, 2-4=-44, 4-6=-44, 6-7=-40, 11-14=-20
Horz: 1-2=-3, 2-4=1, 4-6=-1, 6-7=3
Concentrated Loads (lb)
Vert: 9=28(F) 17=18(F) 18=26(F) 19=27(F) 20=19(F) 21=21(F) 22=20(F) 23=26(F) 24=26(F)
- 20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-62, 2-4=-66, 4-6=-50, 6-7=-46, 11-14=-20
Horz: 1-2=5, 2-4=9, 4-6=7, 6-7=11
Concentrated Loads (lb)
Vert: 9=28(F) 17=18(F) 18=26(F) 19=27(F) 20=19(F) 21=21(F) 22=20(F) 23=26(F) 24=26(F)
- 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-46, 2-4=-50, 4-6=-66, 6-7=-62, 11-14=-20
Horz: 1-2=-11, 2-4=-7, 4-6=-9, 6-7=-5
Concentrated Loads (lb)
Vert: 9=28(F) 17=18(F) 18=26(F) 19=27(F) 20=19(F) 21=21(F) 22=20(F) 23=26(F) 24=26(F)
- 22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-58, 4-6=-58, 6-7=-54, 11-14=-20
Horz: 1-2=-3, 2-4=1, 4-6=-1, 6-7=3
Concentrated Loads (lb)
Vert: 9=28(F) 17=18(F) 18=26(F) 19=27(F) 20=19(F) 21=21(F) 22=20(F) 23=26(F) 24=26(F)
- 23) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-58, 4-6=-58, 6-7=-54, 11-14=-20
Horz: 1-2=-3, 2-4=1, 4-6=-1, 6-7=3
Concentrated Loads (lb)
Vert: 9=28(F) 17=18(F) 18=26(F) 19=27(F) 20=19(F) 21=21(F) 22=20(F) 23=26(F) 24=26(F)
- 24) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-4=-17, 4-7=-12, 11-14=-8
Horz: 2-4=5
Concentrated Loads (lb)
Vert: 9=43(F) 17=33(F) 18=41(F) 19=42(F) 20=35(F) 21=36(F) 22=35(F) 23=41(F) 24=41(F)
- 25) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 4-6=-17, 6-7=-12, 11-14=-8
Horz: 4-6=-5
Concentrated Loads (lb)
Vert: 9=43(F) 17=33(F) 18=41(F) 19=42(F) 20=35(F) 21=36(F) 22=35(F) 23=41(F) 24=41(F)
- 26) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 4-7=-20, 11-14=-20
Concentrated Loads (lb)
Vert: 9=-1428(F) 17=-1452(F) 18=-1424(F) 19=-1424(F) 20=-1451(F) 21=-1444(F) 22=-1444(F) 23=-1433(F) 24=-1433(F)
- 27) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-70, 11-14=-20

Continued on page 4

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LOAD CASE(S)

- Concentrated Loads (lb)
Vert: 9=-1428(F) 17=-1452(F) 18=-1424(F) 19=-1424(F) 20=-1451(F) 21=-1444(F) 22=-1444(F) 23=-1433(F) 24=-1433(F)
- 28) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-58, 4-7=-20, 11-14=-20
Concentrated Loads (lb)
Vert: 9=-1227(F) 17=-1250(F) 18=-1223(F) 19=-1223(F) 20=-1250(F) 21=-1243(F) 22=-1243(F) 23=-1231(F) 24=-1231(F)
- 29) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-20, 4-7=-58, 11-14=-20
Concentrated Loads (lb)
Vert: 9=-1227(F) 17=-1250(F) 18=-1223(F) 19=-1223(F) 20=-1250(F) 21=-1243(F) 22=-1243(F) 23=-1231(F) 24=-1231(F)
- 30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=13, 2-4=-2, 4-6=8, 6-7=3, 11-14=-8
Horz: 1-2=-25, 2-4=-10, 4-6=20, 6-7=15
Concentrated Loads (lb)
Vert: 9=-683(F) 17=-698(F) 18=-665(F) 19=-668(F) 20=-718(F) 21=-699(F) 22=-686(F) 23=-679(F) 24=-679(F)
- 31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=3, 2-4=8, 4-6=-2, 6-7=13, 11-14=-8
Horz: 1-2=-15, 2-4=-20, 4-6=10, 6-7=25
Concentrated Loads (lb)
Vert: 9=-683(F) 17=-698(F) 18=-665(F) 19=-668(F) 20=-718(F) 21=-699(F) 22=-686(F) 23=-679(F) 24=-679(F)
- 32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-26, 2-4=-32, 4-6=-10, 6-7=-5, 11-14=-20
Horz: 1-2=6, 2-4=12, 4-6=10, 6-7=15
Concentrated Loads (lb)
Vert: 9=-671(F) 17=-687(F) 18=-654(F) 19=-657(F) 20=-706(F) 21=-688(F) 22=-674(F) 23=-668(F) 24=-668(F)
- 33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-5, 2-4=-10, 4-6=-32, 6-7=-26, 11-14=-20
Horz: 1-2=-15, 2-4=-10, 4-6=-12, 6-7=-6
Concentrated Loads (lb)
Vert: 9=-671(F) 17=-687(F) 18=-654(F) 19=-657(F) 20=-706(F) 21=-688(F) 22=-674(F) 23=-668(F) 24=-668(F)
- 34) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=30, 2-4=16, 4-6=16, 6-7=30, 11-14=-8
Horz: 1-2=-42, 2-4=-28, 4-6=28, 6-7=42
Concentrated Loads (lb)
Vert: 9=-683(F) 17=-698(F) 18=-665(F) 19=-668(F) 20=-718(F) 21=-699(F) 22=-686(F) 23=-679(F) 24=-679(F)
- 35) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=15, 2-4=1, 4-6=1, 6-7=15, 11-14=-8
Horz: 1-2=-27, 2-4=-13, 4-6=13, 6-7=27
Concentrated Loads (lb)
Vert: 9=-683(F) 17=-698(F) 18=-665(F) 19=-668(F) 20=-718(F) 21=-699(F) 22=-686(F) 23=-679(F) 24=-679(F)
- 36) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-4=-21, 4-6=-21, 6-7=-16, 11-14=-20
Horz: 1-2=-4, 2-4=1, 4-6=-1, 6-7=4
Concentrated Loads (lb)
Vert: 9=-671(F) 17=-687(F) 18=-654(F) 19=-657(F) 20=-706(F) 21=-688(F) 22=-674(F) 23=-668(F) 24=-668(F)
- 37) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-16, 2-4=-21, 4-6=-21, 6-7=-16, 11-14=-20
Horz: 1-2=-4, 2-4=1, 4-6=-1, 6-7=4
Concentrated Loads (lb)
Vert: 9=-671(F) 17=-687(F) 18=-654(F) 19=-657(F) 20=-706(F) 21=-688(F) 22=-674(F) 23=-668(F) 24=-668(F)
- 38) Reversal: 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: 1-2=-48, 2-4=-52, 4-6=-36, 6-7=-32, 11-14=-20
Horz: 1-2=5, 2-4=9, 4-6=7, 6-7=11
Concentrated Loads (lb)
Vert: 9=-1067(F) 17=-1029(F) 18=-958(F) 19=-996(F) 20=-1150(F) 21=-1084(F) 22=-1016(F) 23=-1011(F) 24=-1011(F)
- 39) Reversal: 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: 1-2=-32, 2-4=-36, 4-6=-52, 6-7=-48, 11-14=-20
Horz: 1-2=-11, 2-4=-7, 4-6=-9, 6-7=-5
Concentrated Loads (lb)
Vert: 9=-1067(F) 17=-1029(F) 18=-958(F) 19=-996(F) 20=-1150(F) 21=-1084(F) 22=-1016(F) 23=-1011(F) 24=-1011(F)
- 40) Reversal: Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 5

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

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

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component**



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	GR2	Common Girder	1	2	I43520215
					Job Reference (optional)

Builders First Source, Valley Center, KS 67147

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Nov 6 09:47:22 2020 Page 5
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-JJC0kHT5yEd2tWDd7dPUHfuxD?TbkaSK4CKA78yLxZp

LOAD CASE(S)

- Uniform Loads (plf)
Vert: 1-2=-40, 2-4=-44, 4-6=-44, 6-7=-40, 11-14=-20
Horz: 1-2=-3, 2-4=1, 4-6=-1, 6-7=3
- Concentrated Loads (lb)
Vert: 9=-1067(F) 17=-1029(F) 18=-958(F) 19=-996(F) 20=-1150(F) 21=-1084(F) 22=-1016(F) 23=-1011(F) 24=-1011(F)
- 41) Reversal: 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: 1-2=-40, 2-4=-44, 4-6=-44, 6-7=-40, 11-14=-20
Horz: 1-2=-3, 2-4=1, 4-6=-1, 6-7=3
- Concentrated Loads (lb)
Vert: 9=-1067(F) 17=-1029(F) 18=-958(F) 19=-996(F) 20=-1150(F) 21=-1084(F) 22=-1016(F) 23=-1011(F) 24=-1011(F)
- 42) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-2=-62, 2-4=-66, 4-6=-50, 6-7=-46, 11-14=-20
Horz: 1-2=5, 2-4=9, 4-6=7, 6-7=11
- Concentrated Loads (lb)
Vert: 9=-1112(F) 17=-1130(F) 18=-1097(F) 19=-1099(F) 20=-1144(F) 21=-1128(F) 22=-1118(F) 23=-1111(F) 24=-1111(F)
- 43) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-2=-46, 2-4=-50, 4-6=-66, 6-7=-62, 11-14=-20
Horz: 1-2=-11, 2-4=-7, 4-6=-9, 6-7=-5
- Concentrated Loads (lb)
Vert: 9=-1112(F) 17=-1130(F) 18=-1097(F) 19=-1099(F) 20=-1144(F) 21=-1128(F) 22=-1118(F) 23=-1111(F) 24=-1111(F)
- 44) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-58, 4-6=-58, 6-7=-54, 11-14=-20
Horz: 1-2=-3, 2-4=1, 4-6=-1, 6-7=3
- Concentrated Loads (lb)
Vert: 9=-1112(F) 17=-1130(F) 18=-1097(F) 19=-1099(F) 20=-1144(F) 21=-1128(F) 22=-1118(F) 23=-1111(F) 24=-1111(F)
- 45) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-58, 4-6=-58, 6-7=-54, 11-14=-20
Horz: 1-2=-3, 2-4=1, 4-6=-1, 6-7=3
- Concentrated Loads (lb)
Vert: 9=-1112(F) 17=-1130(F) 18=-1097(F) 19=-1099(F) 20=-1144(F) 21=-1128(F) 22=-1118(F) 23=-1111(F) 24=-1111(F)
- 46) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-2=-12, 2-4=-17, 4-7=-12, 11-14=-8
Horz: 2-4=5
- Concentrated Loads (lb)
Vert: 9=-598(F) 17=-613(F) 18=-581(F) 19=-583(F) 20=-633(F) 21=-614(F) 22=-601(F) 23=-594(F) 24=-594(F)
- 47) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-4=-12, 4-6=-17, 6-7=-12, 11-14=-8
Horz: 4-6=-5
- Concentrated Loads (lb)
Vert: 9=-598(F) 17=-613(F) 18=-581(F) 19=-583(F) 20=-633(F) 21=-614(F) 22=-601(F) 23=-594(F) 24=-594(F)

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

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

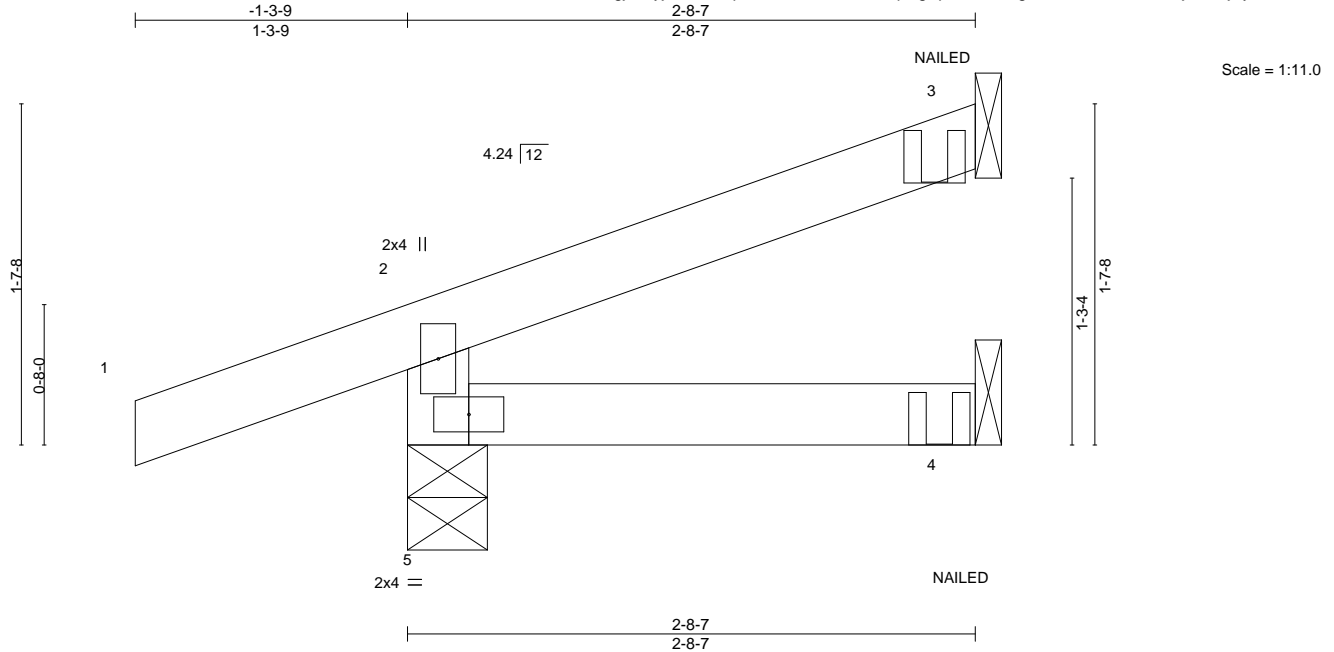
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss JD1	Truss Type Jack-Open	Qty 2	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520216
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:10 2020 Page 1
ID:2gjJ0LyjzZmYPRpPutoMbQzFwGX-soq0zgEpRWs5brbgH_xO63KUx?oGoDnjR0AdjKyM8ix



LOADING (psf)	SPACING-	CS.	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.14	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) -0.00 4-5 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 4-5 >999 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.00 3 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-4-9, 3=Mechanical, 4=Mechanical
Max Horz 5=56(LC 16)
Max Uplift 5=-55(LC 16), 3=-20(LC 13)
Max Grav 5=250(LC 21), 3=66(LC 21), 4=47(LC 7)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 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.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-51, 2-3=-51, 4-5=-20
Concentrated Loads (lb)
Vert: 3=-8(F) 4=-1(F)



November 6, 2020

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	JD2	Jack-Open	2	1	
Job Reference (optional)					

I43520217

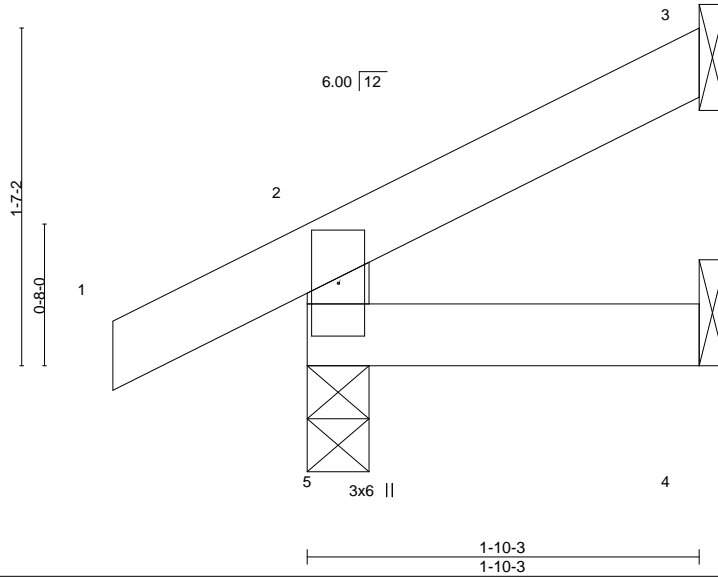
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:11 2020 Page 1

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Scale = 1:10.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00 5 >999 240	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00 5 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00 3 n/a n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-MR							
BCDL	10.0										
								Weight: 6 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
 Max Horz 5=56(LC 16)
 Max Uplift 5=33(LC 16), 3=14(LC 16)
 Max Grav 5=179(LC 21), 3=42(LC 21), 4=30(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 6, 2020

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

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520218
2684908	JD3	Jack-Open	3	1	Job Reference (optional)	

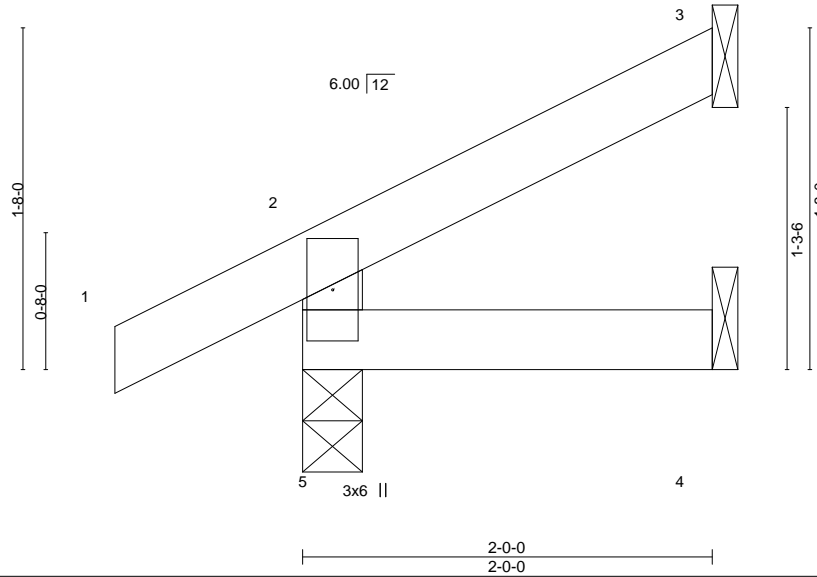
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:12 2020 Page 1

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Scale = 1:11.2



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	Plate Grip DOL 1.15	TC 0.08	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Lumber DOL 1.15	BC 0.03	Vert(LL) -0.00 5 >999 240		
TCDL 10.0	Rep Stress Incr YES	WB 0.00	Vert(CT) -0.00 4-5 >999 180		
BCLL 0.0	Code IRC2018/TPI2014	Matrix-MR	Horz(CT) -0.00 3 n/a n/a		
BCDL 10.0				Weight: 6 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=58(LC 16)
Max Uplift 5=-33(LC 16), 3=-16(LC 16)
Max Grav 5=185(LC 21), 3=49(LC 21), 4=33(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

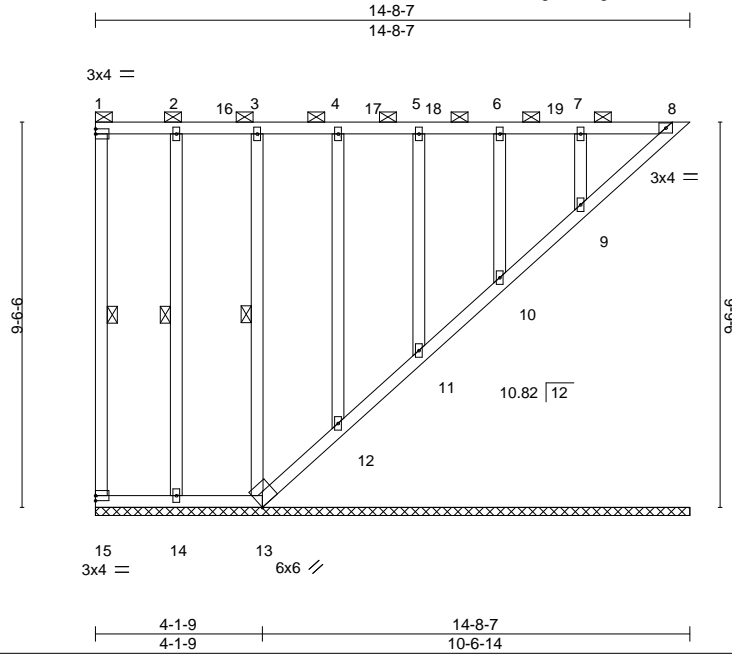
Job 2684908	Truss LG1	Truss Type GABLE	Qty 2	Ply 1	Summit/67 Woodside Job Reference (optional)
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I43520219

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:13 2020 Page 1

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Scale = 1:57.0

LOADING (psf)	SPACING-	CS.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.45	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.14	Horz(CT)	0.01	8	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 89 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-8, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 1-15, 2-14, 3-13

REACTIONS.

All bearings 14-8-7.

(lb) - Max Horz 15=233(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 15, 14, 13, 12, 11, 10, 9 except 8=101(LC 14)

Max Grav All reactions 250 lb or less at joint(s) 15, 8, 14, 13, 12, 11, 10, 9

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 Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 11-3-14, Corner(3) 11-3-14 to 14-3-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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) 15, 14, 13, 12, 11, 10, 9 except (jt=lb) 8=101.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 12, 11, 10, 9.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 6, 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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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 2060116023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	LG2	GABLE	1	1	Job Reference (optional)

I43520220

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

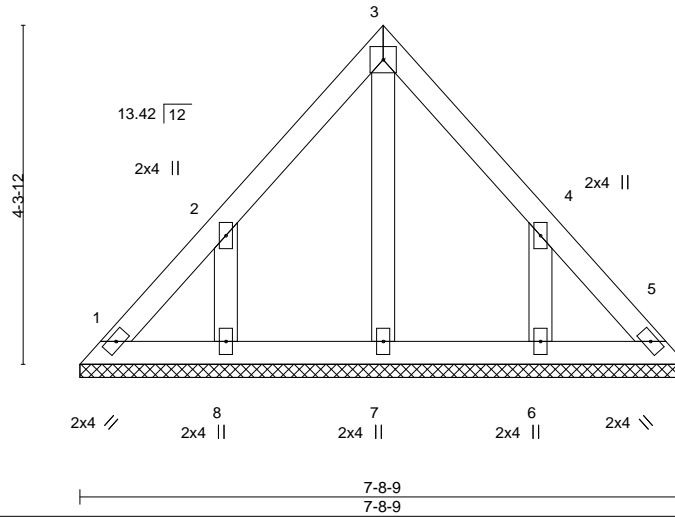
8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:14 2020 Page 1

ID:2gjJ0LyjzZmYPRpPutoMbQzFwGX-kZ4Wp1HJVINX3TuRWp0KGvUBGcAXk1NJMe8rs5yM8it

3-10-4 3-10-4 7-8-9 3-10-4

4x4 =

Scale = 1:29.3



LOADING (psf)	SPACING-	CS.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.06	Vert(LL) n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Horz(CT) 0.00	5	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 29 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 7-8-9.

(lb) - Max Horz 1=101(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 3-10-4, Exterior(2R) 3-10-4 to 6-10-4, Interior(1) 6-10-4 to 7-4-10 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 6, 2020

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

16023 Swingley Ridge Rd
Chesterfield, MO 63017

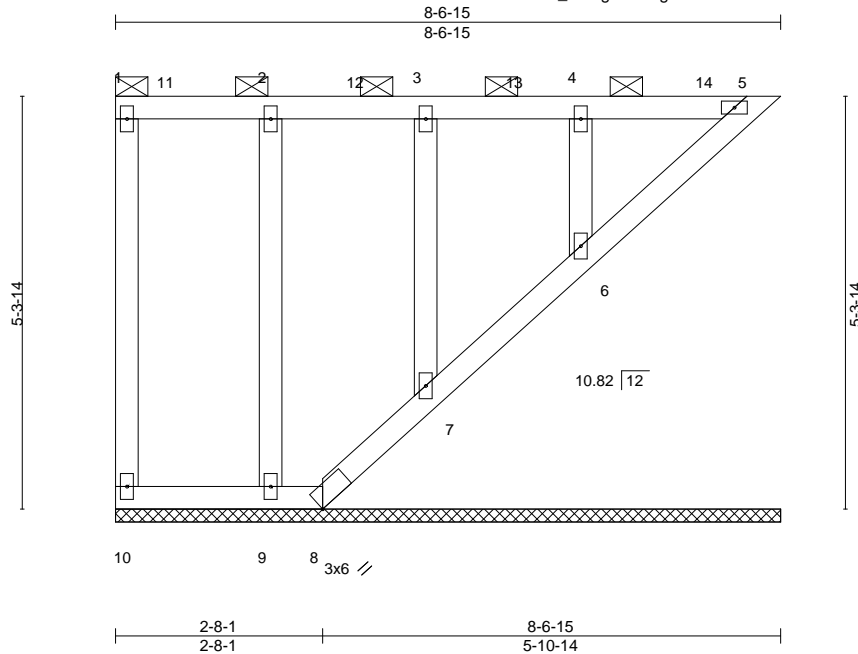
Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	LG3	GABLE	1	1	Job Reference (optional)

I43520221

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

8,240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:15 2020 Page 1

ID:4rXHhD3_rIBCgQSIY2gdJuzGwv6-Clev0NlxG3VOhdTd3XXZp71Jd0VWTT_SaHuOOXyM8is



Scale = 1:29.7

LOADING (psf)	SPACING-	CS.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.21	Vert(LL) n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.07	Horz(CT) 0.00	5	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 38 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 2-0-0 oc purlins: 1-5, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
 6-0-0 oc bracing: 5-6.

REACTIONS.

All bearings 8-6-15.

(lb) - Max Horz 10=127(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 10, 5, 8, 9, 7, 6

Max Grav All reactions 250 lb or less at joint(s) 10, 5, 8, 9, 7, 6

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 Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 5-2-6, Corner(3) 5-2-6 to 8-2-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10; Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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) 10, 5, 8, 9, 7, 6.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5, 7, 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 6, 2020

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

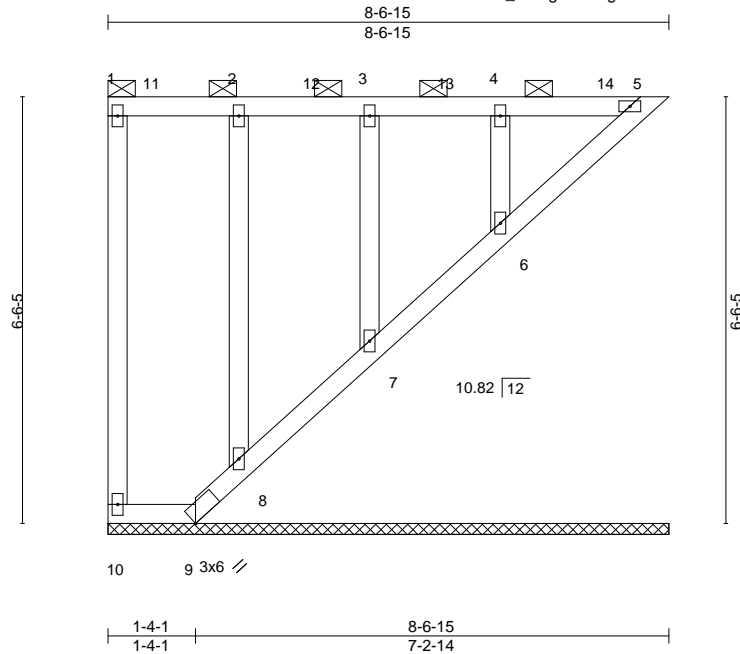
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 2060116023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	LG4	GABLE	1	1	Job Reference (optional)

I43520222

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:16 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-hxBHDJa1MdFJm2qdE2oMKaSSPrmCw0cpxdx_x_yM8ir

Scale = 1:35.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.33	Vert(LL) n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT) n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.08	Horz(CT) 0.00	5	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 41 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 2-0-0 oc purlins: 1-5, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
 6-0-0 oc bracing: 5-6.

REACTIONS.

All bearings 8-6-15.

(lb) - Max Horz 10=157(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 10, 5, 9, 8, 7, 6

Max Grav All reactions 250 lb or less at joint(s) 10, 5, 9, 8, 7, 6

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 Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 5-2-6, Corner(3) 5-2-6 to 8-2-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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) 10, 5, 9, 8, 7, 6.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 5, 8, 7, 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 6, 2020

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 2060116023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss M1	Truss Type GABLE	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520223
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:17 2020 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-98lfR3KCogI6wwd0ByZ1uY6hlpB_xO5I2bNVtQyM8iq

9-11-8

9-11-8



Scale = 1:21.2

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) 0.00 1 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.03	Vert(CT) 0.00 1 n/r 120		
BCLL 0.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 10 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 41 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 9-11-8.

(lb) - Max Horz 2=120(LC 15)

Max Uplift All uplift 100 lb or less at joint(s) 10, 2, 14, 15, 16, 13, 12, 11

Max Grav All reactions 250 lb or less at joint(s) 10, 2, 14, 15, 16, 13, 12, 11

FORCES.

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

TOP CHORD 2-3=-274/129

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=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-3-12, Exterior(2N) 2-3-12 to 9-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 2, 14, 15, 16, 13, 12, 11.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



November 6, 2020

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

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

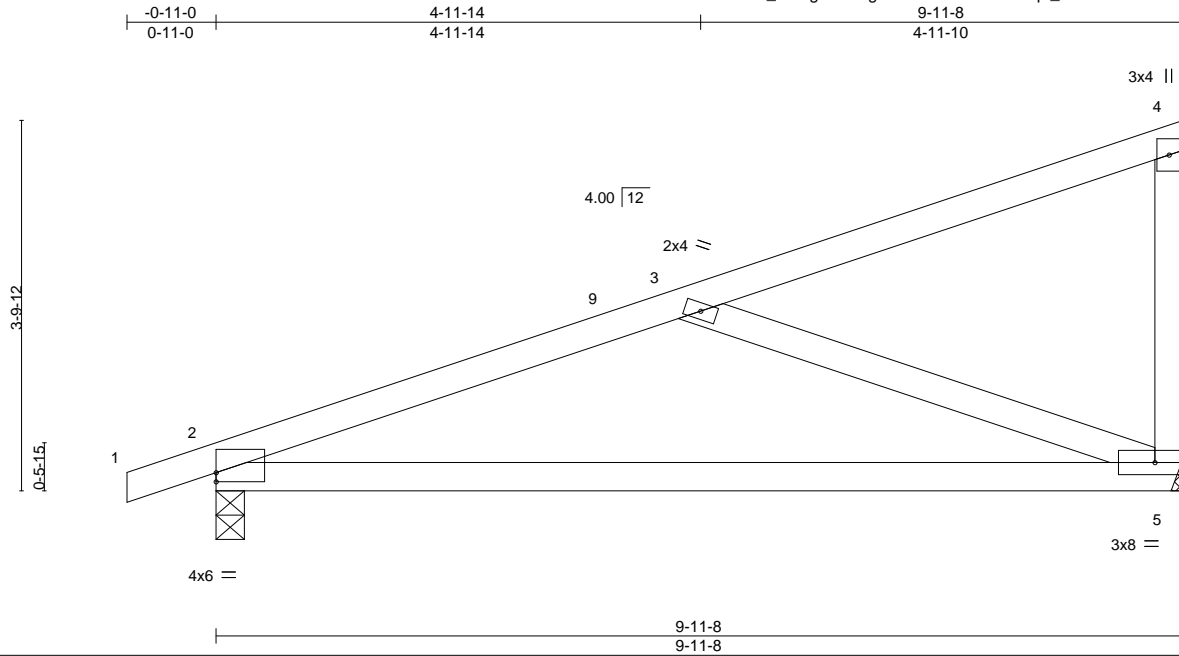


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520224
2684908	M2	Monopitch	10	1	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:18 2020 Page 1
ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-dKJ1ePKqZ_tzY4CCIf5GRInVDOUgn4vHF62?syM8ip



Scale = 1:23.7

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 25.0	2-0-0	TC 0.42	Vert(LL) -0.21	5-8	>572	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.60	Vert(CT) -0.41	5-8	>285	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.30	Horz(CT) 0.01	2	n/a	n/a		
BCLL 0.0	Rep Stress Incr YES	Matrix-AS						
BCDL 10.0	Code IRC2018/TPI2014						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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 5=Mechanical
Max Horz 2=121(LC 15)
Max Uplift 2=62(LC 16), 5=38(LC 16)
Max Grav 2=509(LC 2), 5=441(LC 21)

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

TOP CHORD 2-3=-694/266
BOT CHORD 2-5=-355/636
WEBS 3-5=-621/336

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 9-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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 6, 2020

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss M3	Truss Type Common	Qty 5	Ply 1	Summit/67 Woodside	I43520225
Job Reference (optional)						

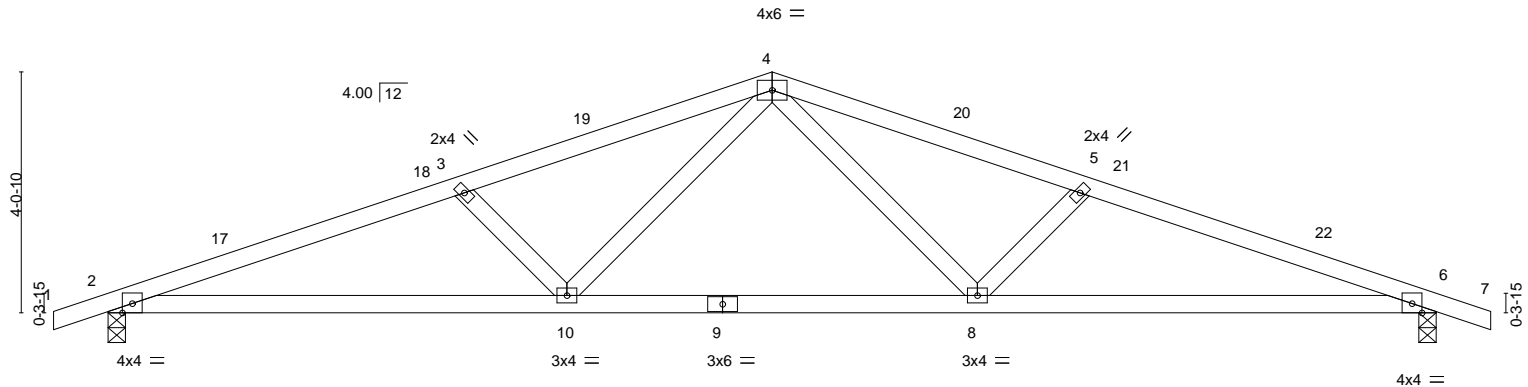
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:19 2020 Page 1

ID:4rXHhD3_rBCgQSIY2gdJuzGwv6-5WtPsiLSJH?qAEEnOIMcVzzCyhdi2PGS2VvsbXlyM8io

0-11-0	5-11-14	11-2-0	16-4-2	22-4-0	23-3-0
0-11-0	5-11-14	5-2-2	5-2-2	5-11-14	0-11-0

Scale = 1:38.7



7-8-9		14-7-7		22-4-0	
7-8-9		6-10-13		7-8-9	
LOADING (psf)		SPACING-	2-0-0	CSI.	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.40
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.71
TCDL	10.0	Rep Stress Incr	YES	WB	0.16
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS	
BCDL	10.0				
				DEFL.	
				in (loc)	l/defl
				Vert(LL)	-0.13 10-13 >999 240
				Vert(CT)	-0.26 10-13 >999 180
				Horz(CT)	0.07 6 n/a n/a
				PLATES	GRIP
				MT20	197/144
				Weight: 72 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=-49(LC 14)
Max Uplift 2=-109(LC 16), 6=-109(LC 16)
Max Grav 2=1069(LC 2), 6=1069(LC 2)

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

TOP CHORD 2-3=-2400/463, 3-4=-2118/415, 4-5=-2118/415, 5-6=-2400/463
BOT CHORD 2-10=-383/2248, 8-10=-214/1508, 6-8=-385/2248
WEBS 4-8=-87/672, 5-8=-456/165, 4-10=-87/672, 3-10=-456/165

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-11-0 to 2-1-0, Interior(1) 2-1-0 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 23-3-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); ls=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=109, 6=109.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



November 6, 2020

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2684908	Truss M4	Truss Type GABLE	Qty 1	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520226
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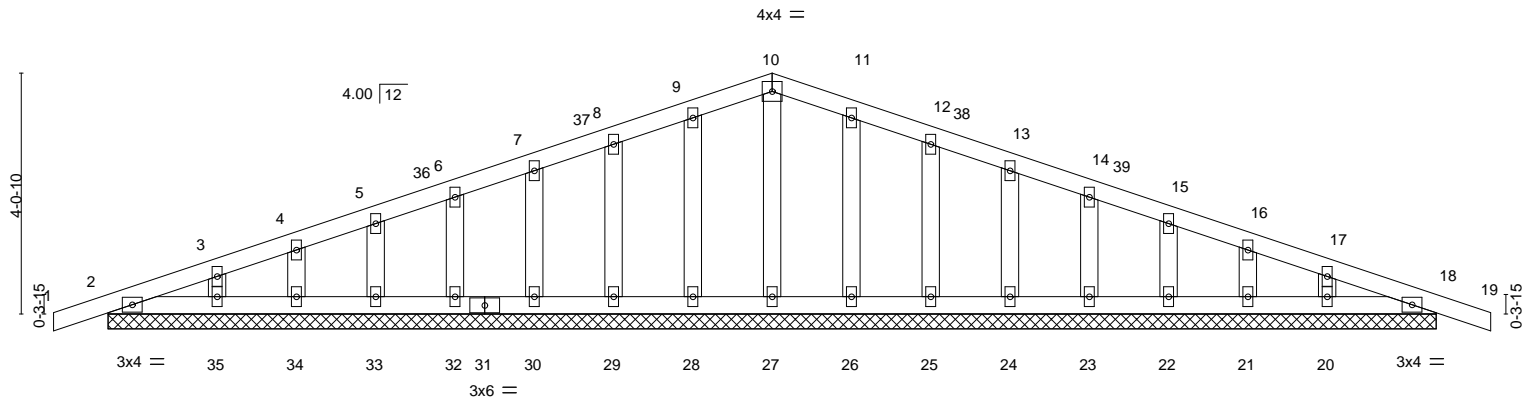
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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0-11-0 11-2-0 22-4-0 23-3-0
0-11-0 11-2-0 11-2-0 0-11-0

Scale = 1:38.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00 19 n/r	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00 19 n/r				
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00 18 n/a				
BCLL	0.0	Code IRC2018/TPI2014		Matrix-S							
BCDL	10.0										
								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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 22-4-0.
(lb) - Max Horz 2=49(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 2, 28, 29, 30, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20, 18
Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 29, 30, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20, 18

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-11-0 to 1-10-0, Exterior(2N) 1-10-0 to 11-2-0, Corner(3R) 11-2-0 to 14-2-0, Exterior(2N) 14-2-0 to 23-3-0 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; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 28, 29, 30, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20, 18.
- This truss 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 6, 2020

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

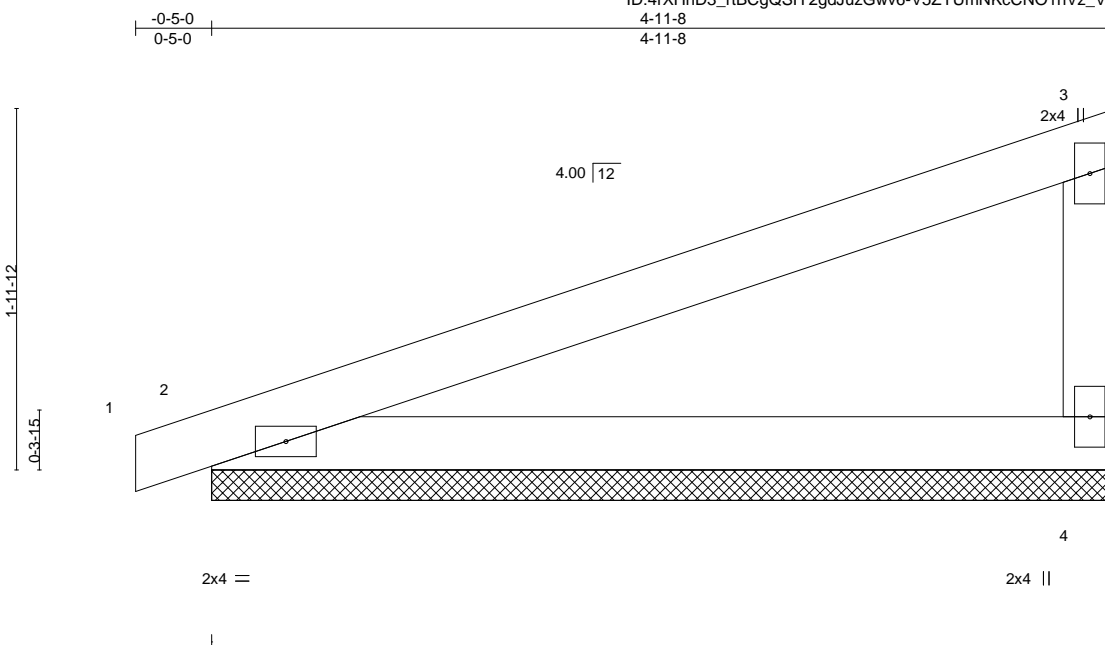
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

[illegible]

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-11-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=4-11-8, 2=4-11-8
Max Horz 2=58(LC 15)
Max Uplift 4=-18(LC 16), 2=-29(LC 16)
Max Grav 4=226(LC 21), 2=260(LC 21)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-5-0 to 2-7-0, Exterior(2N) 2-7-0 to 4-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 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 6, 2020

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

WARNING: Velly design parameters are listed below and included with the key reference to AISC M14-15 (16), 3/15/2020 by ONE USE. Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for the building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/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 2684908	Truss P2	Truss Type Monopitch	Qty 6	Ply 1	Summit/67 Woodside Job Reference (optional)	I43520228
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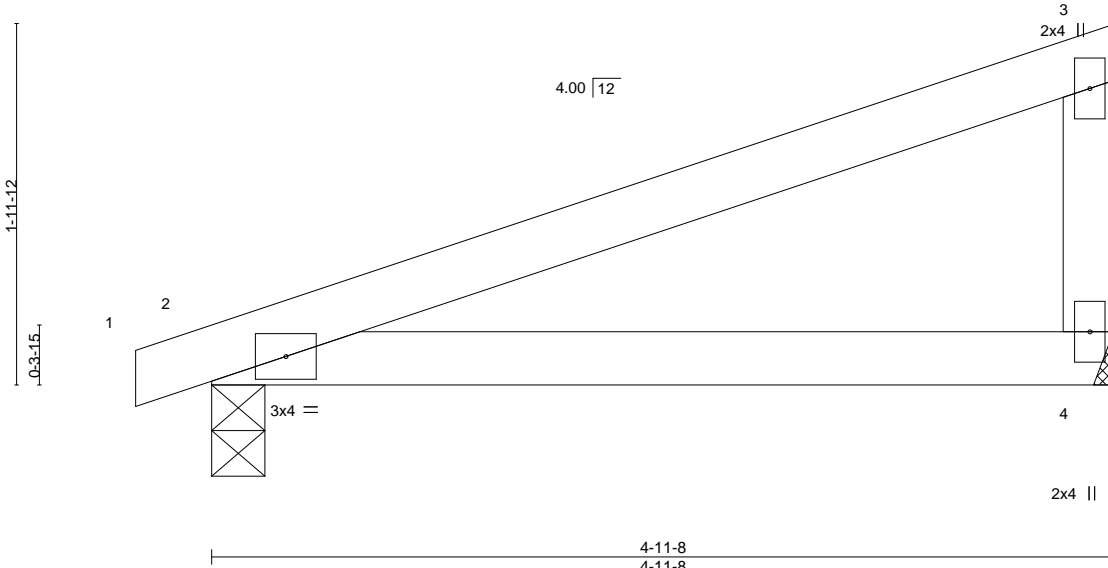
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:23 2020 Page 1
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-0-5-0
0-5-0

4-11-8
4-11-8

Scale = 1:12.6



LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL (roof)	25.0		2-0-0				in	(loc)	l/defl	L/d			
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.03	4-7	>999	240	MT20		197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	4-7	>897	180			
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a			
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 14 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, 2=0-3-8
Max Horz 2=58(LC 15)
Max Uplift 4=18(LC 16), 2=29(LC 16)
Max Grav 4=226(LC 21), 2=260(LC 21)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior(1) 2-7-0 to 4-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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 6, 2020

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

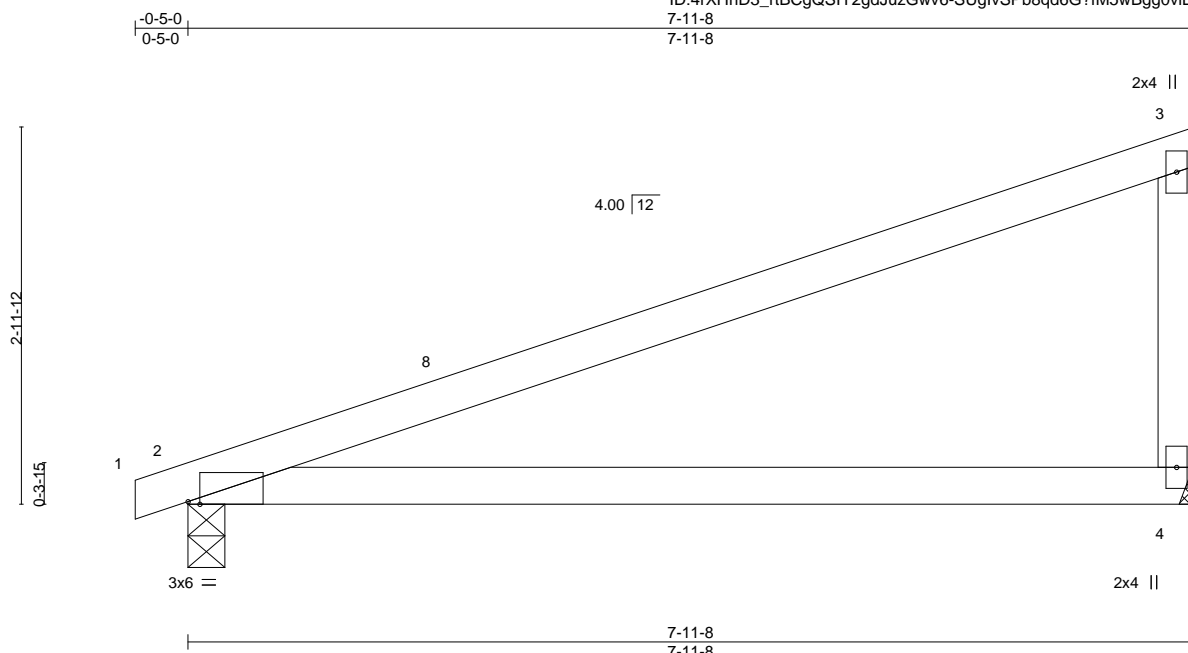


Plate Offsets (X,Y)-- [2:0-1-2,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.19 4-7 >498 240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.39 4-7 >241 180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01 2 n/a n/a		
BCLL	0.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 22 lb	FT = 20%
BCDI	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, 2=0-3-8
 Max Horz 2=92(LC 15)
 Max Uplift 4=30(LC 16), 2=39(LC 16)
 Max Grav 4=361(LC 21), 2=382(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-259/196

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) -0-5-0 to 2-7-0, Interior(1) 2-7-0 to 7-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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 6, 2020

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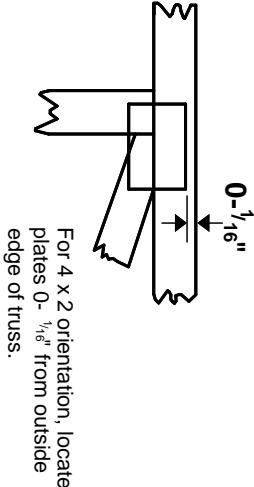
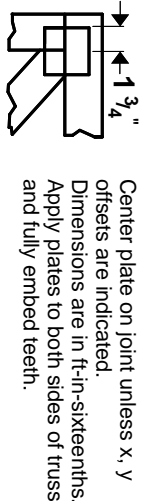
WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f,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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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

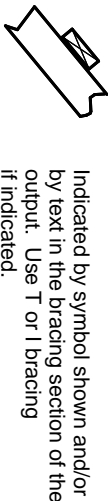
This symbol indicates the required direction of slots in connector plates.

PLATE SIZE

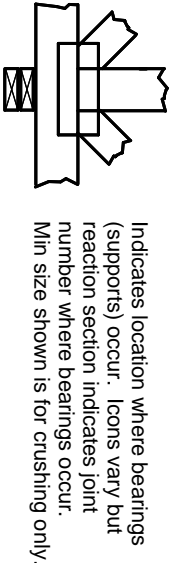
4 X 4

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

LATERAL BRACING LOCATION

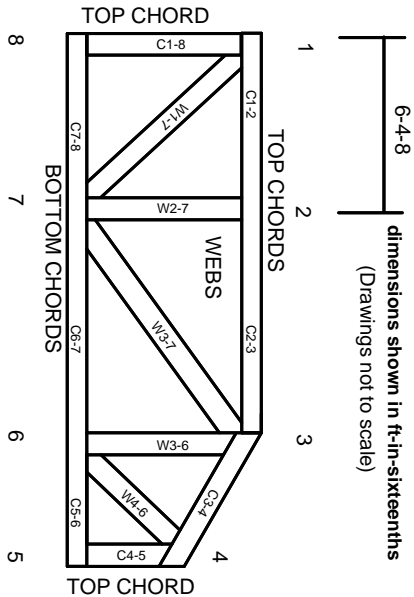


BEARING



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

Numbering System



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

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

PRODUCT CODE APPROVALS

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.