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: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.2
Wind Code: N/A Wind Speed: 115 mph
Roof Load: 45.0 psf 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.

February 25, 2021

Sevier, Scott

RE: 2684908 - Summit/67 Woodside

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

Site Information:

Project Customer: Project Name: 2684908
Lot/Block: Subdivision:
Address:
City, County: State:

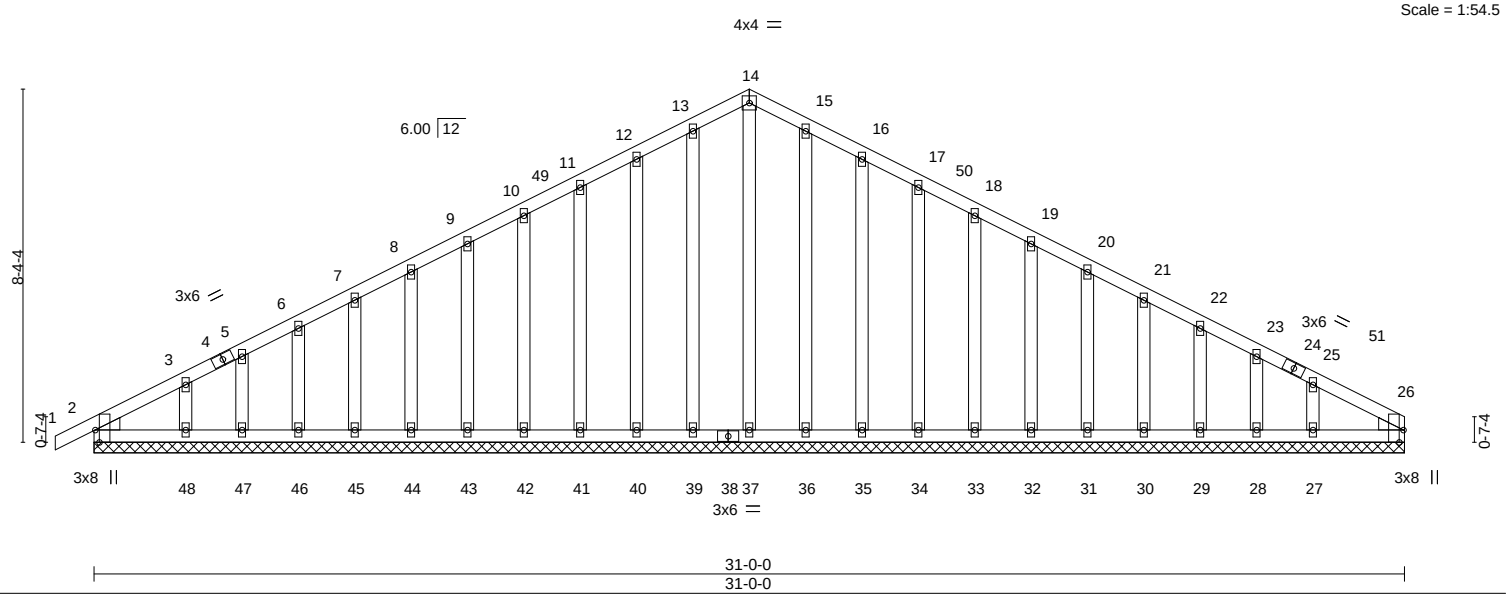
No.	Seal#	Truss Name	Date
41	I43520229	P3	2/25/2021

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A1	Common Supported Gable	1	1	I43520189
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:16 2020 Page 1
ID:4rXHhD3_rtBCgQSlY2gdJuzGwv6-RPZbeCax9w3m6YSI6ezjwh5HtENo9mpn0c5mqSyM8jn

-0-11-0 15-6-0 31-0-0
0-11-0 15-6-0 15-6-0

Scale = 1:54.5



31-0-0
31-0-0

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-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	26	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 181 lb	FT = 20%
BCDL	10.0											

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-
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=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
3) 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.
4) 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
5) Unbalanced snow loads have been considered for this design.
6) 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.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 1-4-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27.
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.

November 6,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A2A	Roof Special	1	1	I43520190
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:29 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-ZvsWMfk55wiwAYynNsinyQ7LdTbbiWQh?7lynCyM8ja

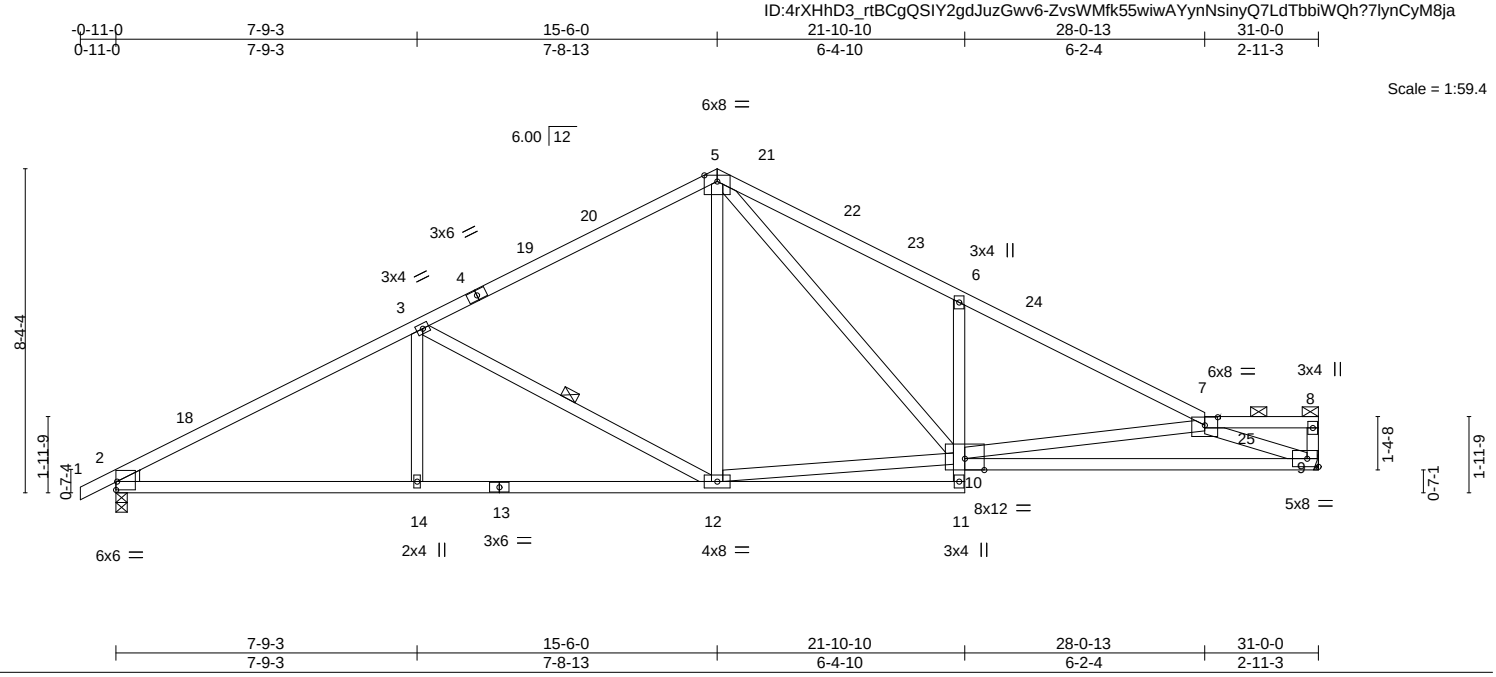


Plate Offsets (X,Y)-- [2:Edge,0-2-9], [2:0-5-0,0-0-3], [2:0-0-3,0-0-1], [7:0-4-0,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.20	9-10	>999	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-
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 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) 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=113, 2=141.
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

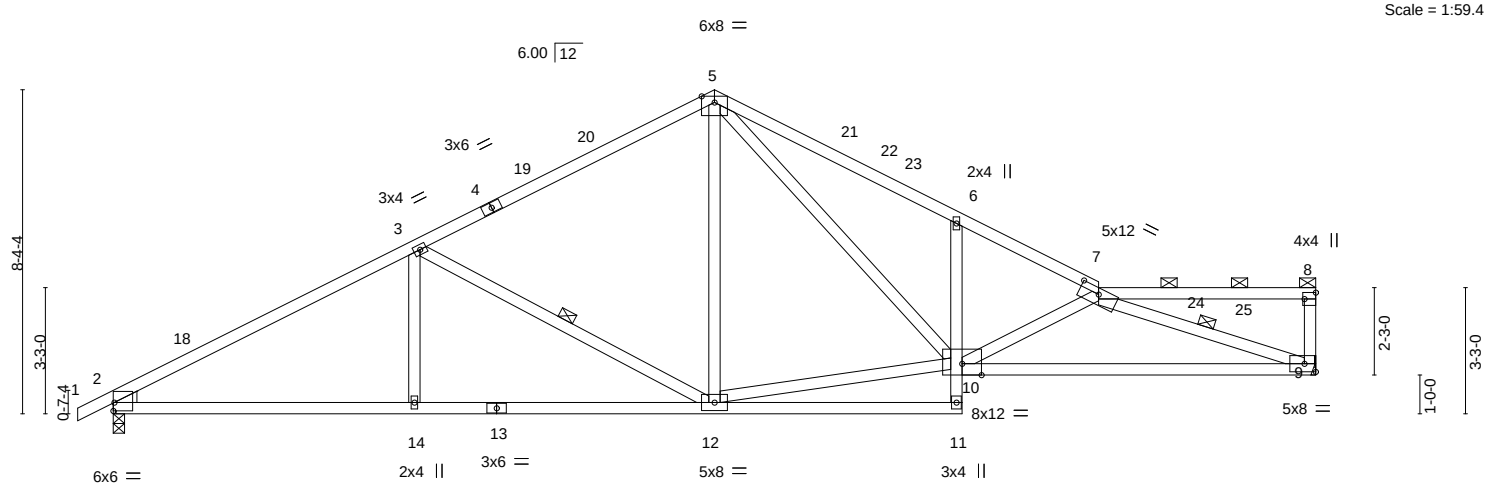
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A2B	Roof Special	1	1	I43520191
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:31 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-VHzGnKmLdXyePs6AUHlF1rChHHGVARi_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



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

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.**	in	(loc)	l/defl	L/d	**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-
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 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) 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=113, 2=140.
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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A2C	Roof Special	1	1	I43520192
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:33 2020 Page 1
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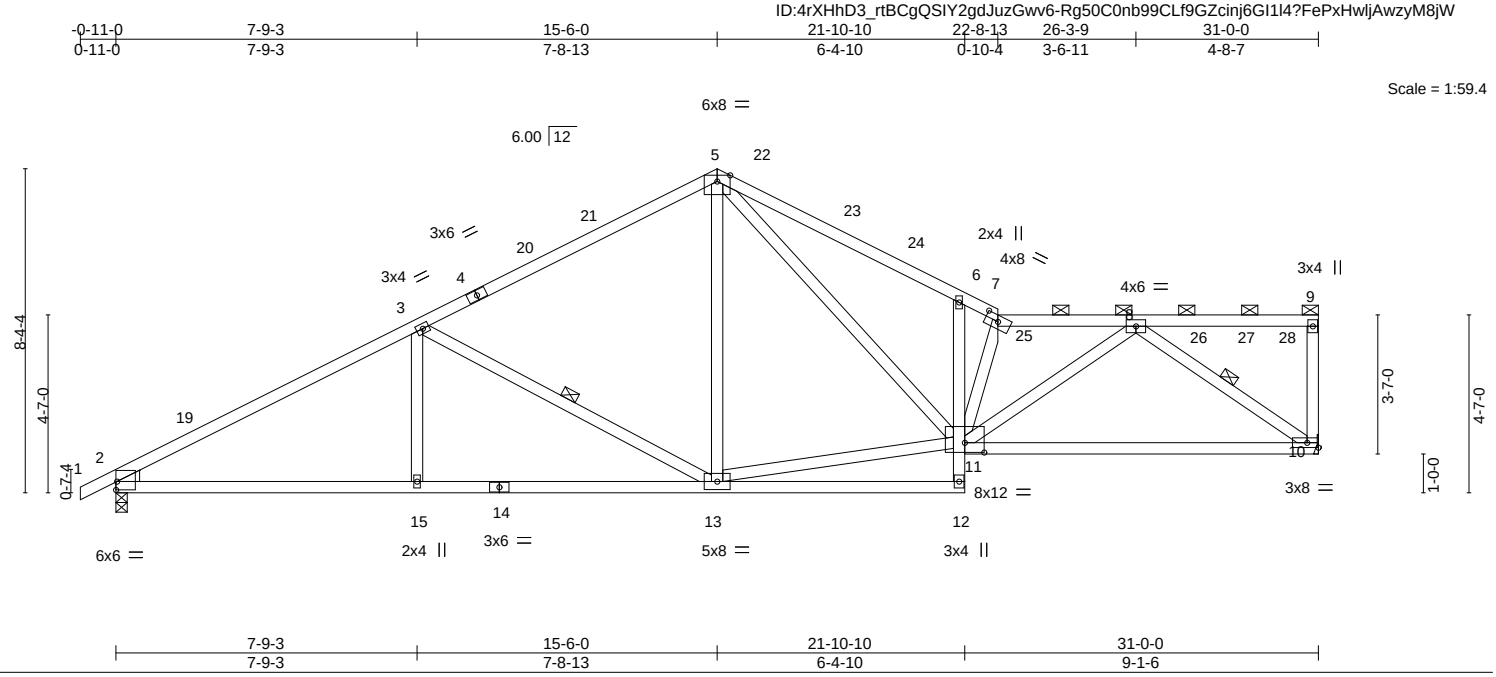


Plate Offsets (X,Y)-- [2:Edge,0-2-9], [2:0-5-0,0-0-3], [2:0-0-3,0-0-1], [7:0-4-0,0-1-14], [11:0-6-0,0-3-0]

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-
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 (3-4-10 max.): 7-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 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-
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 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) 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) 10=114, 2=139.
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

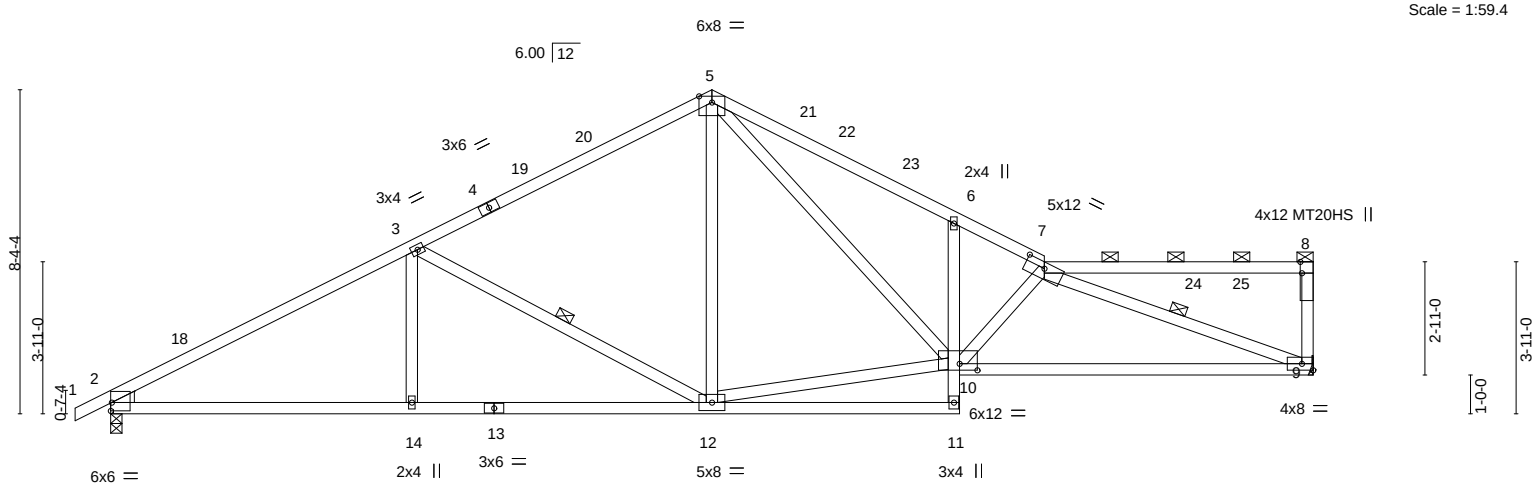
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A2D	Roof Special	1	1	I43520193
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:35 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-N3DndipshmS3uTPxj7pBBhNN0ufW6DEaO3CG?syM8jU

-0-11-0 7-9-3 15-6-0 21-10-10 24-0-13 31-0-0
0-11-0 7-9-3 7-8-13 6-4-10 2-2-4 6-11-3

Scale = 1:59.4



7-9-3 15-6-0 21-10-10 24-0-13 31-0-0
7-9-3 7-8-13 6-4-10 2-2-4 6-11-3

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], [8:0-3-8,Edge], [10:0-5-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.21	9-10	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.47	9-10	>784	180	MT20HS	148/108
TCDL	10.0	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.11	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 136 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=189(LC 15)
Max Uplift 9=-114(LC 16), 2=-139(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=-1668/277, 5-6=-2653/420, 6-7=-2658/325, 8-9=-306/71
BOT CHORD 2-14=-319/2020, 12-14=-319/2020, 6-10=-386/113, 9-10=-378/2749
WEBS 3-14=0/292, 3-12=-770/155, 5-12=-0/385, 10-12=-149/1302, 5-10=-206/1386, 7-10=-672/130, 7-9=-2817/376

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 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=114, 2=139.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 6,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:37 2020 Page 1
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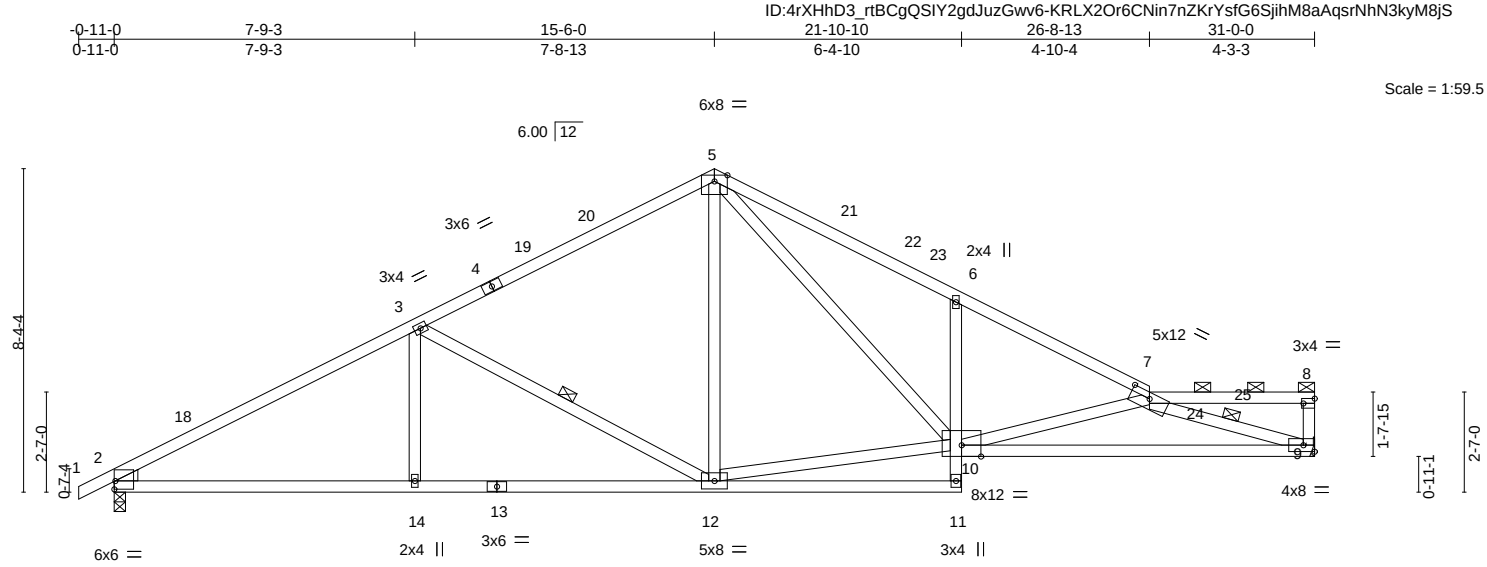

Plate Offsets (X,Y)-- [2:Edge,0-2-9], [2:0-5-0,0-0-3], [2:0-0-3,0-0-1], [7:0-6-0,0-1-14], [8:Edge,0-1-8]

LOADING (psf)		SPACING-	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)	-0.20	9-10	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.46	9-10	>805	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.12	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 *Except*
9-10: 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 (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=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-
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 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) 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=113, 2=140.
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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:39 2020 Page 1
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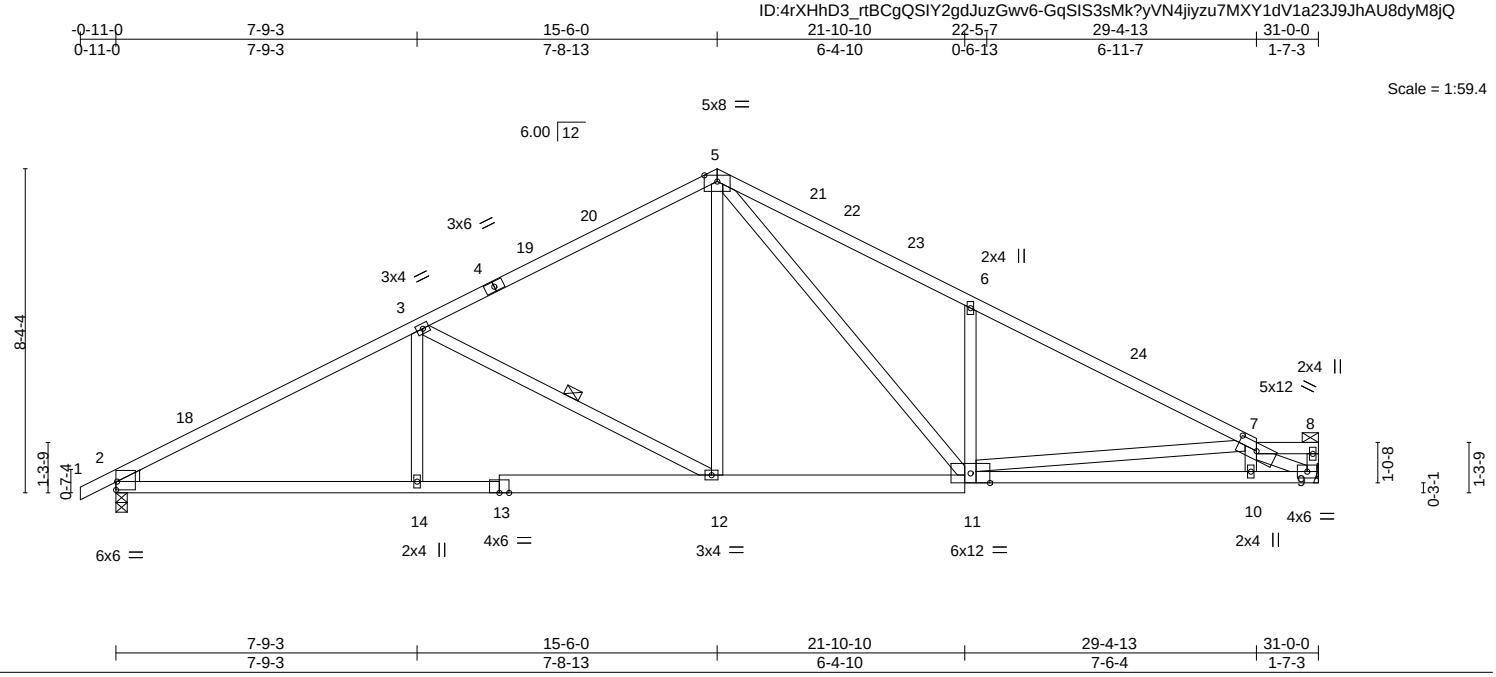


Plate Offsets (X,Y)-- [2:Edge,0-2-9], [2:0-5-0,0-0-3], [2:0-0-3,0-0-1], [7:0-6-0,0-2-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.14	10-11	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.30	10-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.09	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 *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-
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 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) 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=112, 2=141.
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

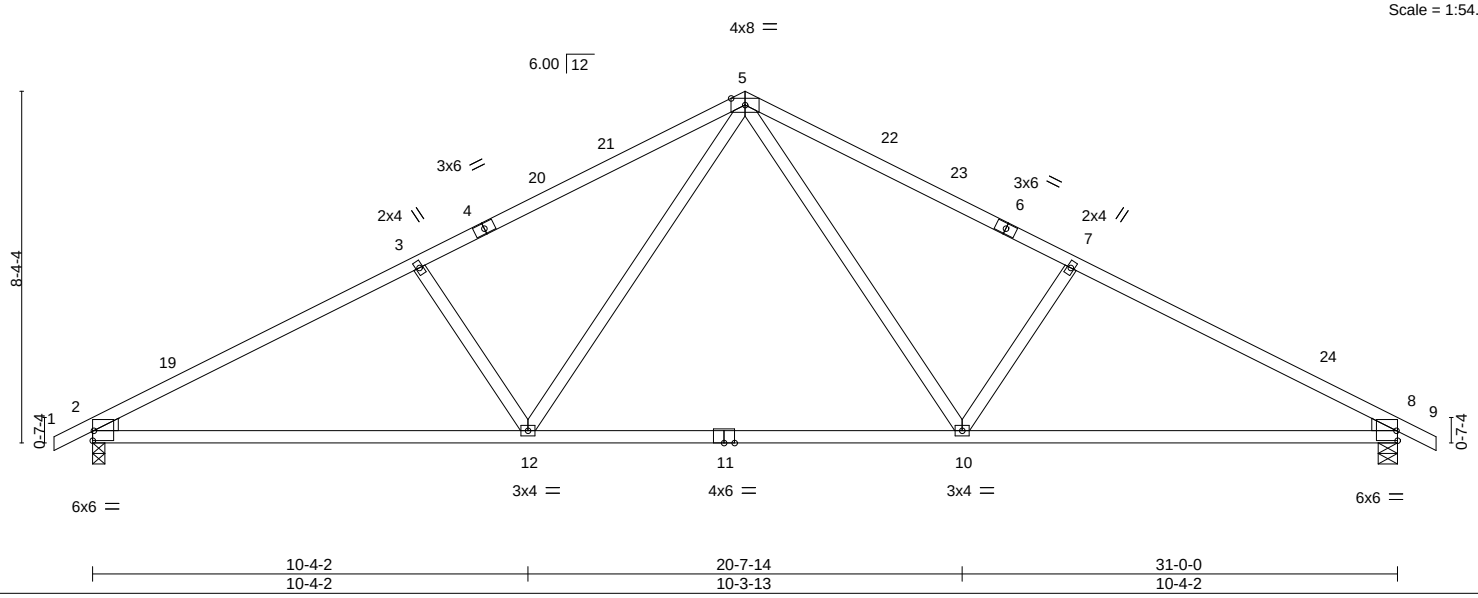
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:40 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-k00ggPt_VI4M_EIvWgPMul4DpvMlncsJXLv1g3yM8jP

-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



10-4-2 20-7-14 31-0-0
10-4-2 10-3-13 10-4-2

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	10-12	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.42	10-12	>891	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.08	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 111 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, 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-
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 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
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) 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) except (jt=lb) 2=141, 8=141.
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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A4	Common	1	1	I43520197
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:42 2020 Page 1
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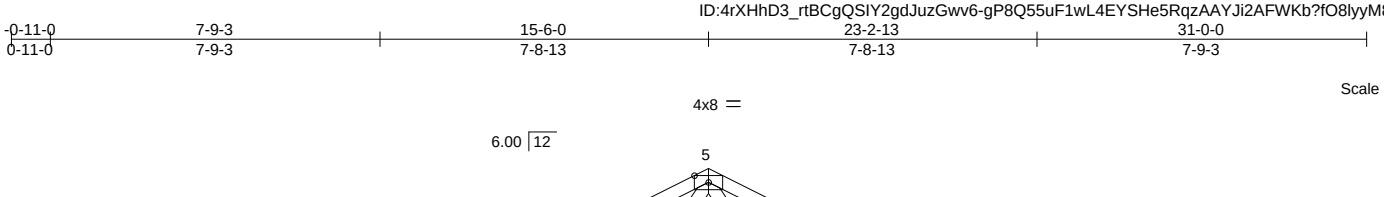

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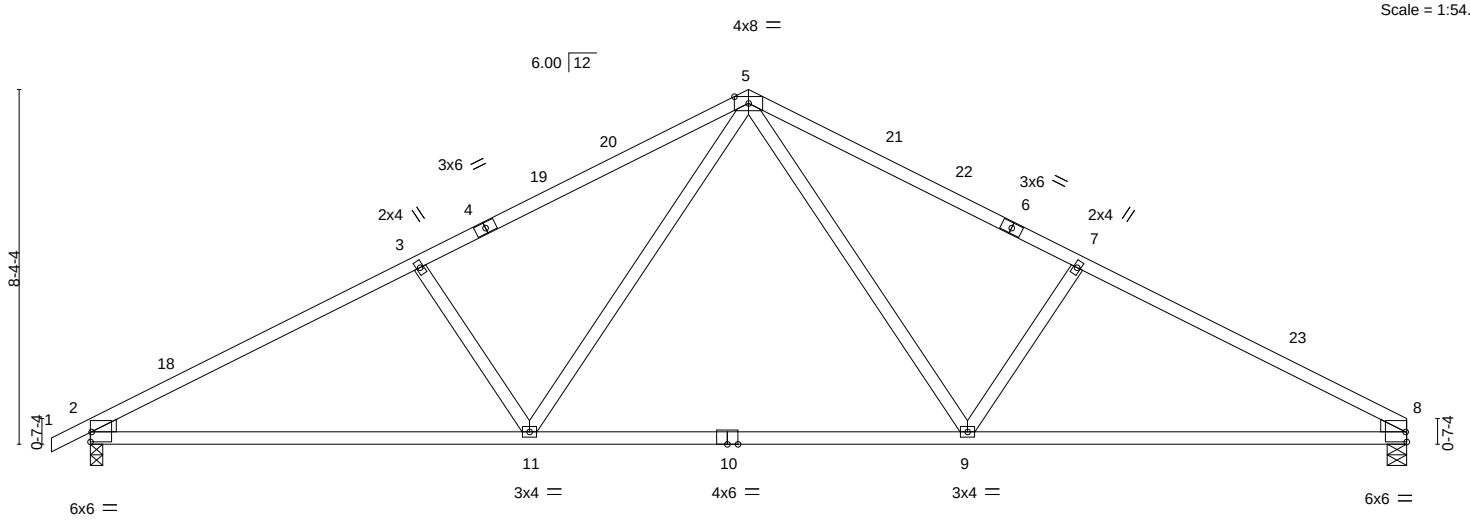

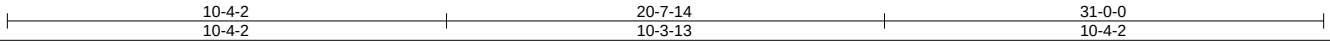

Plate Offsets (X,Y)-- [2:0-0-3,0-0-1], [2:0-5-0,0-0-3], [2:Edge,0-2-13], [8:0-0-3,0-0-1], [8:0-5-0,0-0-3], [8:Edge,0-2-13]

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-
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=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-
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 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
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) 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) except (jt=lb) 2=141, 8=113.
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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A5	Roof Special	2	1	I43520198
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:43 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-8bioIRvtoDTxri0UBpy3WNiiF6N0_qKlDJ8iHOyM8jM

-0-11-0	7-9-3	15-6-0	22-2-7	28-0-13	32-5-8
0-11-0	7-9-3	7-8-13	6-8-7	5-10-7	4-4-11

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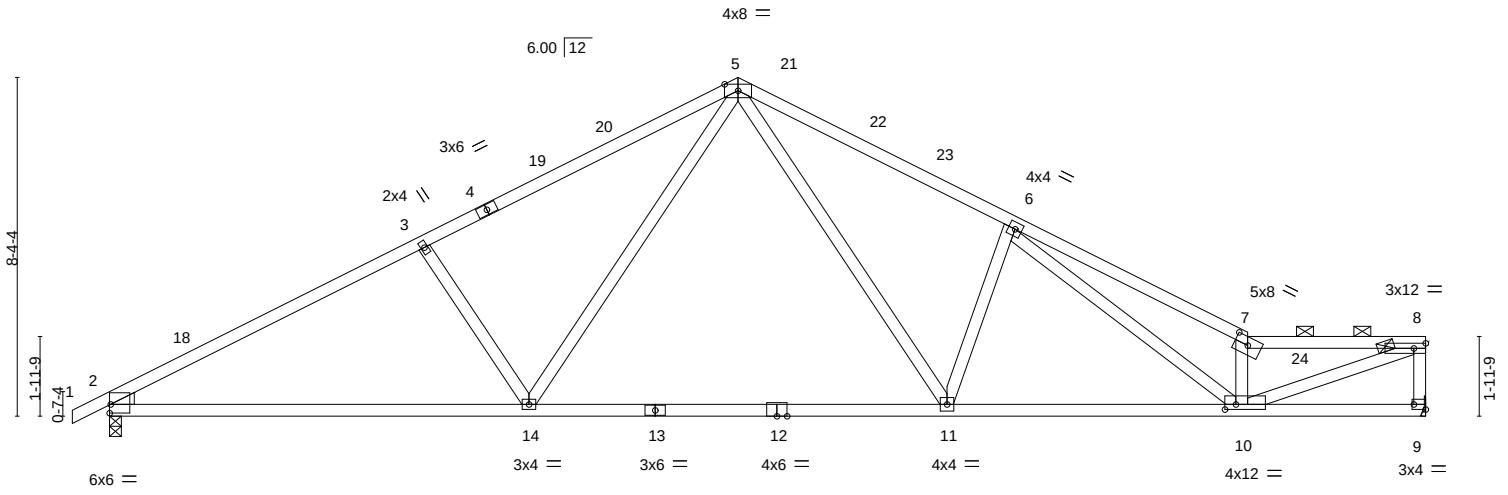

10-4-2	20-7-14	28-0-13	32-5-8
10-4-2	10-3-12	7-4-15	4-4-11

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.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.24	11-14	>999	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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) 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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A6	Roof Special	1	1	I43520199
					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
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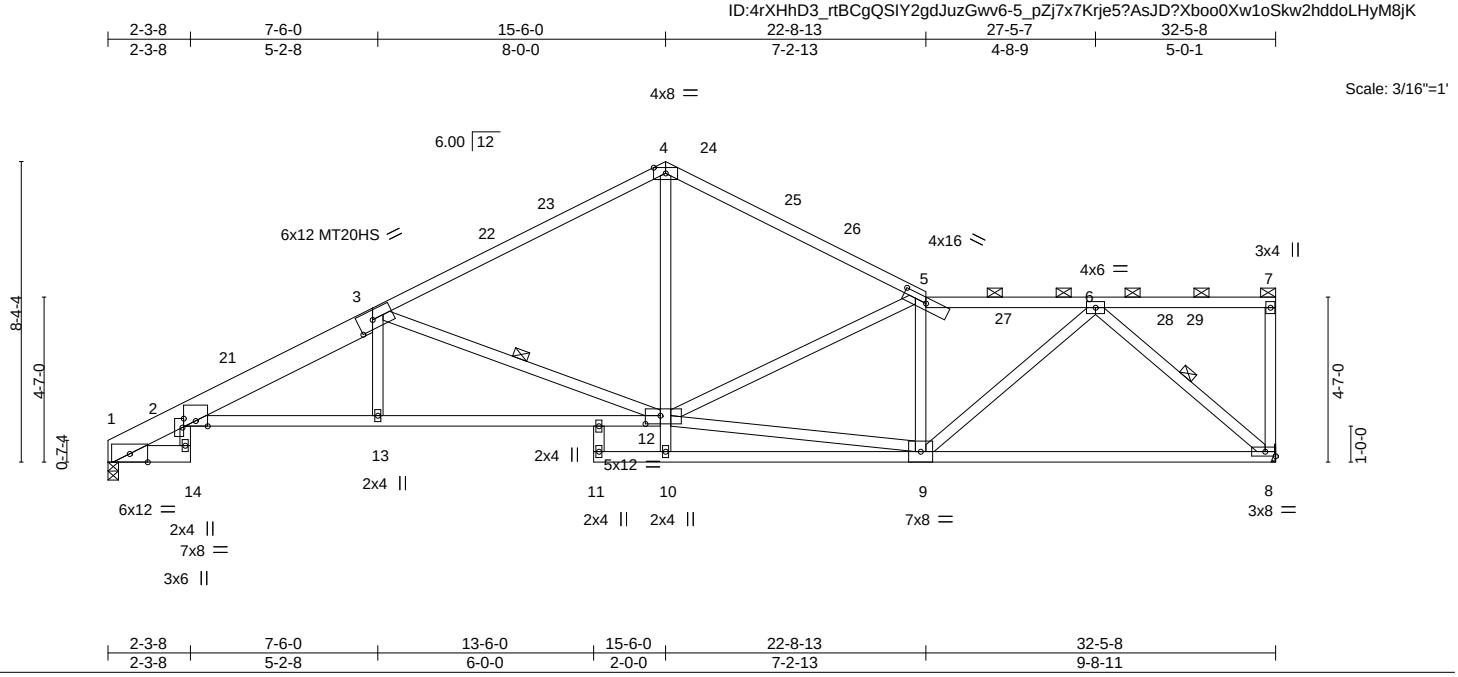

Plate Offsets (X,Y)-- [2:0-3-0,0-0-7], [3:0-5-0,0-3-0], [5:0-8-0,0-1-14], [12:0-5-0,0-2-12]

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

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-
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) 0-1-12 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Refer to girder(s) for truss to truss connections.
9) 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.
10) 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.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

November 6,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A7	Roof Special	1	1	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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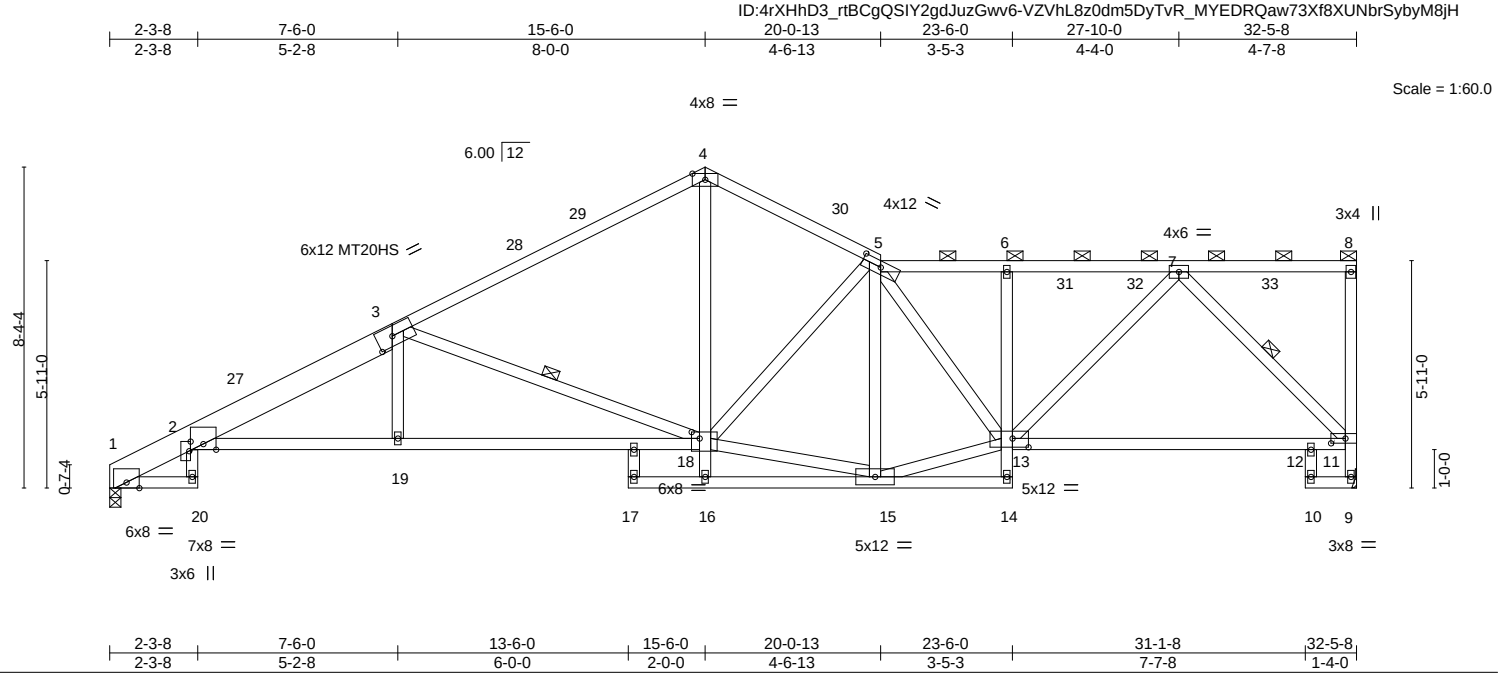

Plate Offsets (X,Y)-- [2:0-3-0,0-0-7], [3:0-5-0,0-3-0], [5:0-6-0,0-1-14], [11:0-4-8,0-1-8], [13:0-5-0,0-2-12], [18:0-2-8,0-2-0]

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

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-11-0 max.): 5-8.
BOT CHORD Rigid ceiling directly applied.
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-
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) 0-1-12 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Refer to girder(s) for truss to truss connections.
10) 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.
11) 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.
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.

November 6,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:50 2020 Page 1
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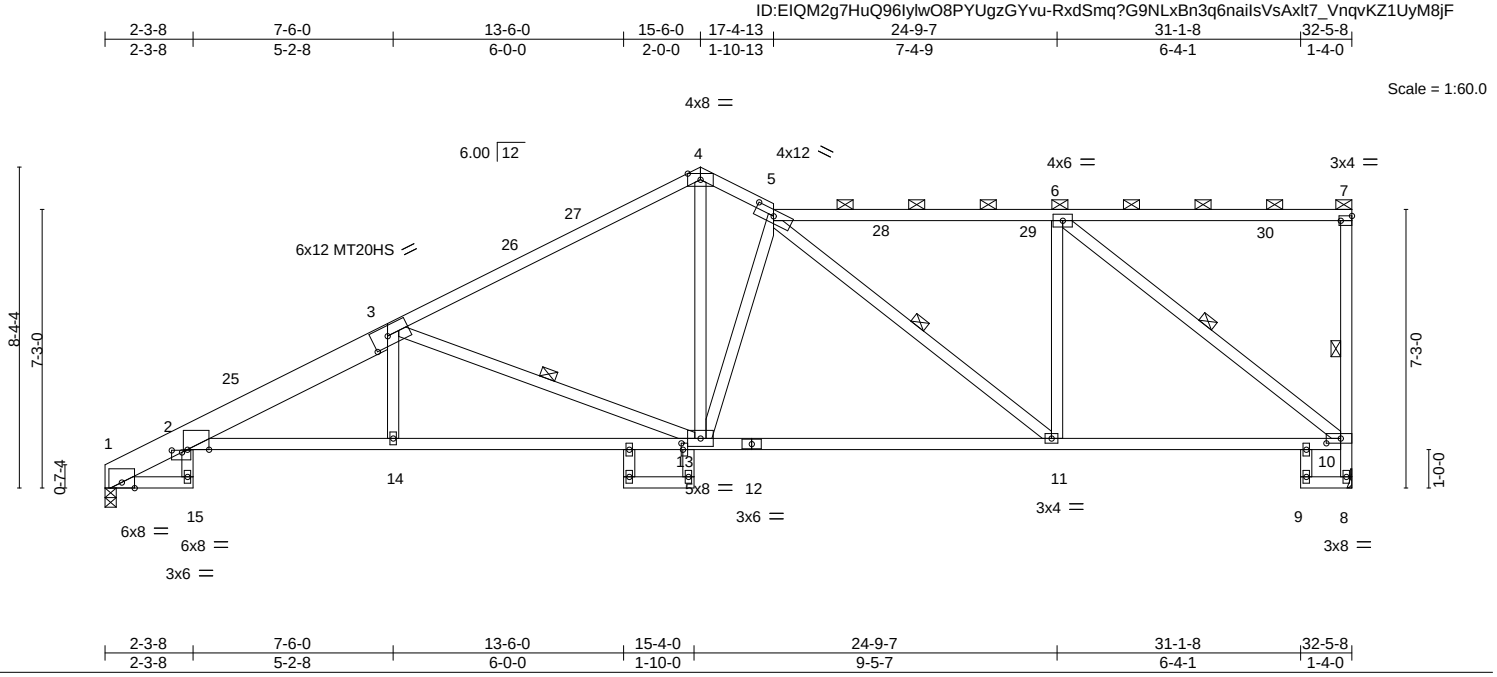

Plate Offsets (X,Y)-- [2:0-3-3,0-0-10], [2:0-6-12,0-0-0], [3:0-5-0,0-3-0], [5:0-6-0,0-1-14], [7:Edge,0-1-8], [10:0-4-8,0-1-8], [13:0-2-0,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.22	14-24	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.42	11-13	>915	180	MT20HS	148/108
TCDL	10.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.25	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 162 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	1-3: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 5-7.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 7-8, 3-13, 5-11, 6-10

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-

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) 0-1-12 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Refer to girder(s) for truss to truss connections.
10) 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.
11) 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.
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.

Continued on page 2

November 6,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A9	Roof Special	1	1	I43520202
					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
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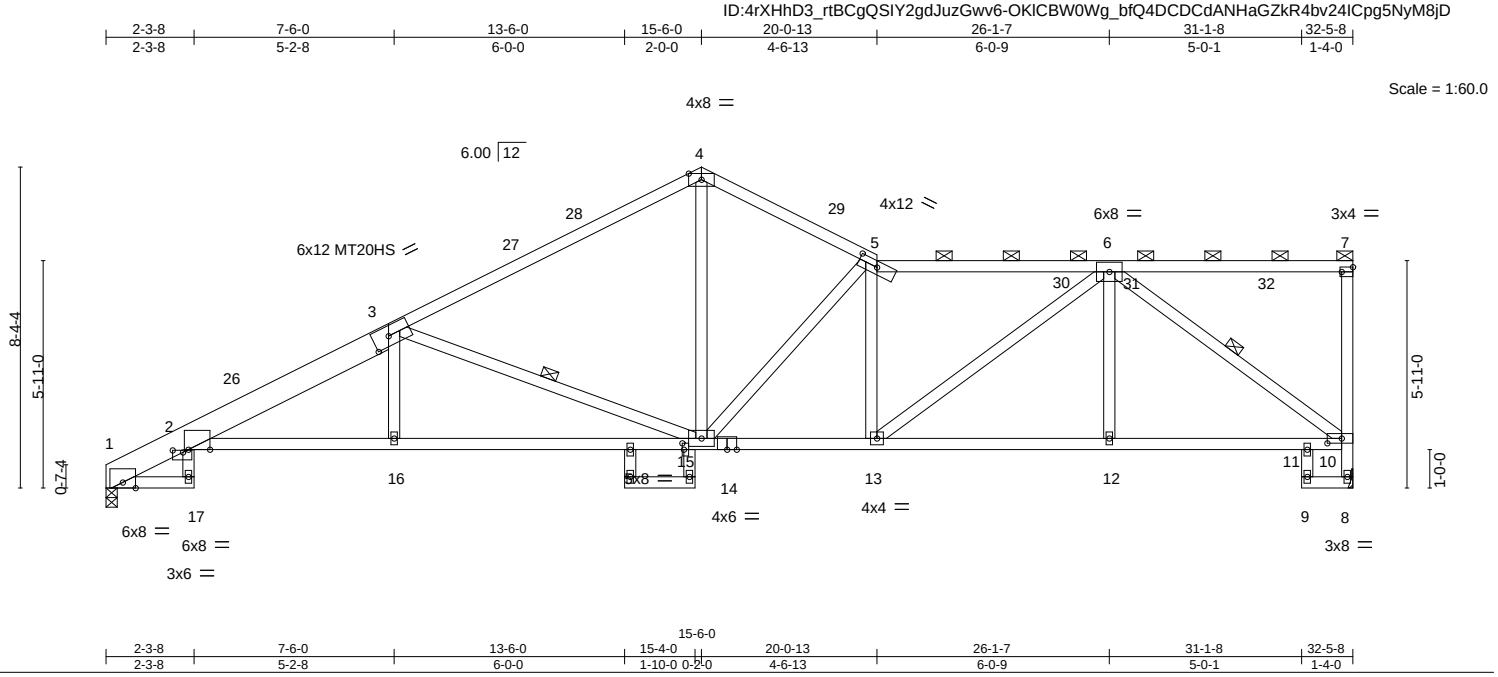

Plate Offsets (X,Y)-- [2:0-3-3,0-0-10], [2:0-6-12,0-0-0], [3:0-5-0,0-3-0], [5:0-6-0,0-1-14], [7:Edge,0-1-8], [10:0-4-8,0-1-8], [15:0-2-0,0-0-8]

LOADING (psf)		SPACING-	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)	-0.22	16-25	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.46	15-16	>835	180	MT20HS	148/108
TCDL	10.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.26	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 161 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 1-3: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-3-6 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.
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-
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) 0-1-12 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Refer to girder(s) for truss to truss connections.
10) 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.
11) 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.
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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside	I43520203
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
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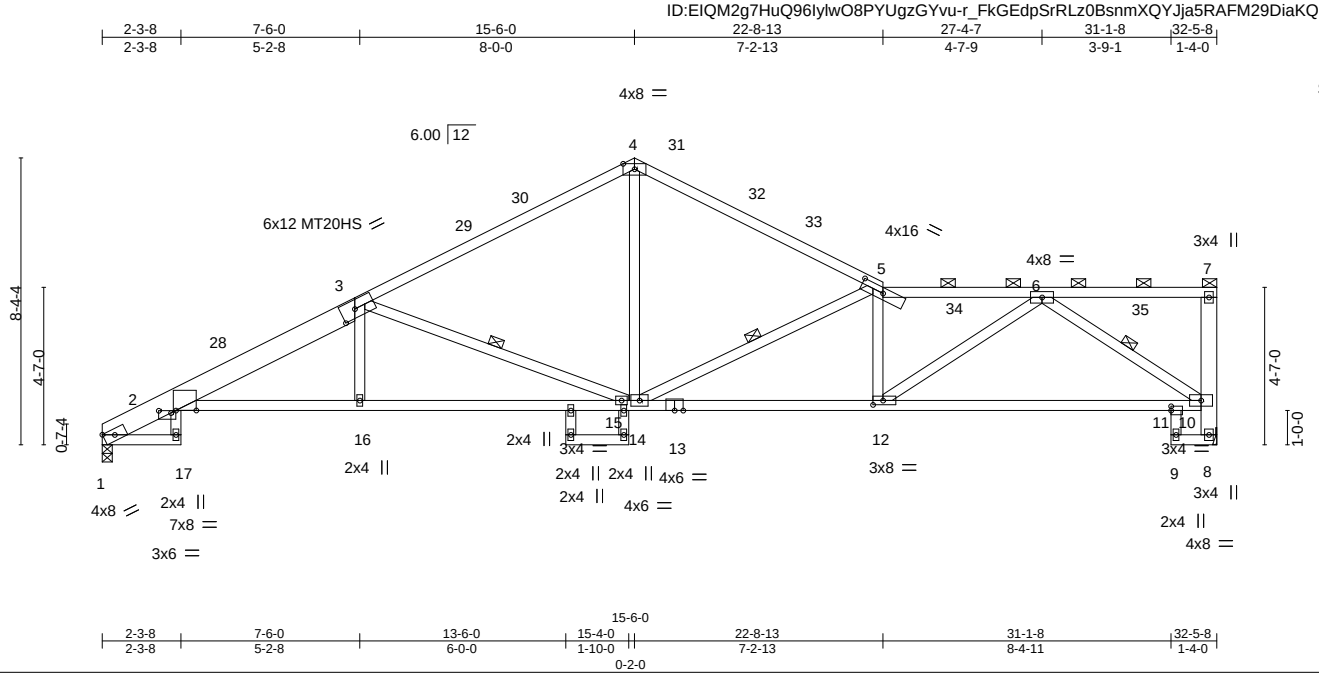

Plate Offsets (X,Y)-- [2:0-4-5,0-0-13], [2:0-7-2,0-0-1], [3:0-5-0,0-3-0], [5:0-8-0,0-1-14], [11:0-0-0,0-1-8], [12:0-3-8,0-1-8]

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

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except* 1-3: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except* 7-8: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-2-2 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-15, 5-14, 6-10

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-
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) 0-1-12 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) 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) 8=118, 1=113.
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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:22 2020 Page 1
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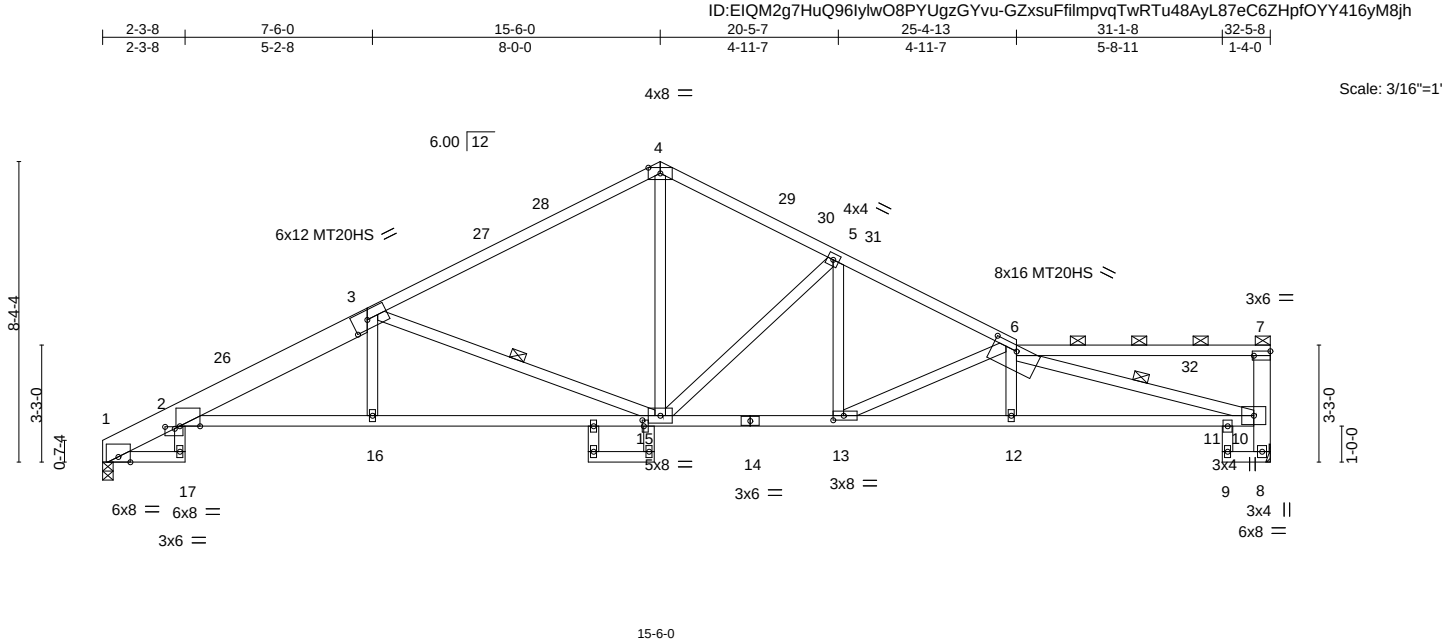

Plate Offsets (X,Y)-- [2:0-3-3,0-0-10], [2:0-6-12,0-0-0], [3:0-5-0,0-3-0], [6:0-8-0,0-1-14], [7:Edge,0-1-8], [13:0-3-8,0-1-8], [15:0-2-0,0-0-8]

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							Weight: 154 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	1-3: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except*
	10-14: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2 *Except*
	7-8: 2x6 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-15, 6-10

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-

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) 0-1-12 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Refer to girder(s) for truss to truss connections.
10) 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.
11) 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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A12	Roof Special	1	1	I43520205
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:24 2020 Page 1
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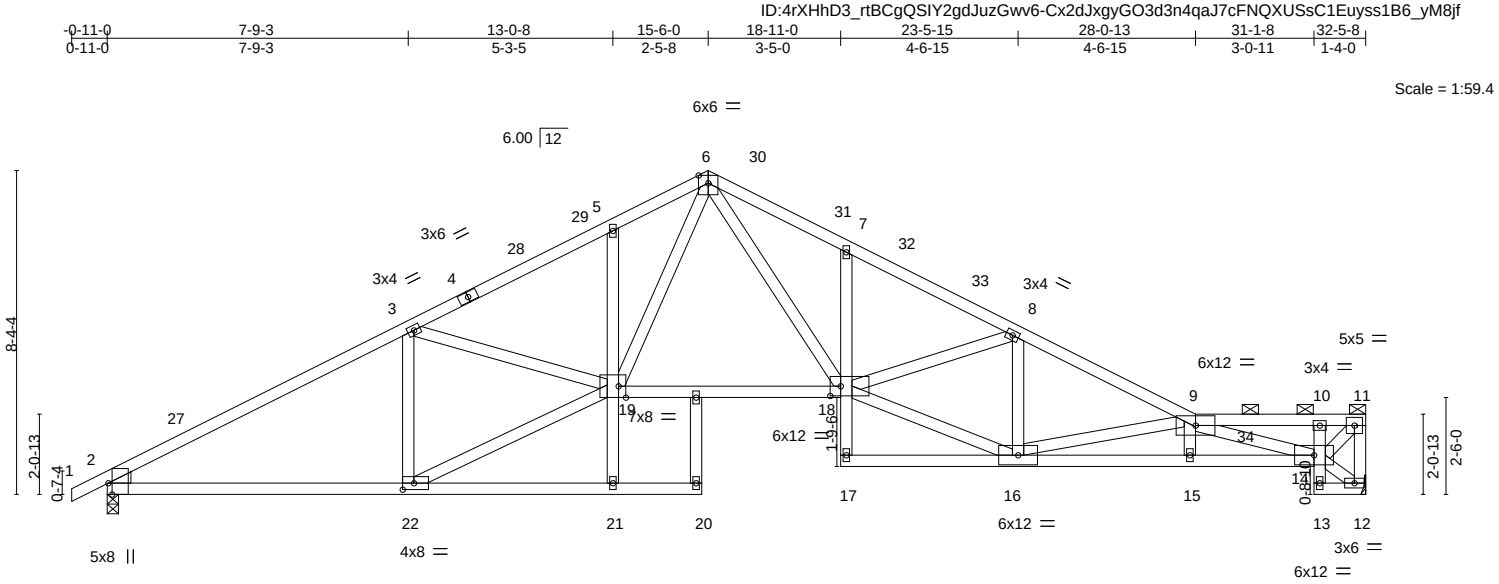

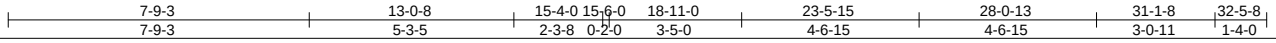

Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [18:0-3-4,0-3-0], [19:0-2-4,Edge], [22:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.33	18-19	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-0.63	18-19	>617	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.32	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 158 lb	FT = 20%
BCDL	10.0											

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-
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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Refer to girder(s) for truss to truss connections.
10) 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.
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.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	A13	Common Supported Gable	1	1	I43520206
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:27 2020 Page 1
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0-11-0 15-6-0 14-11-13

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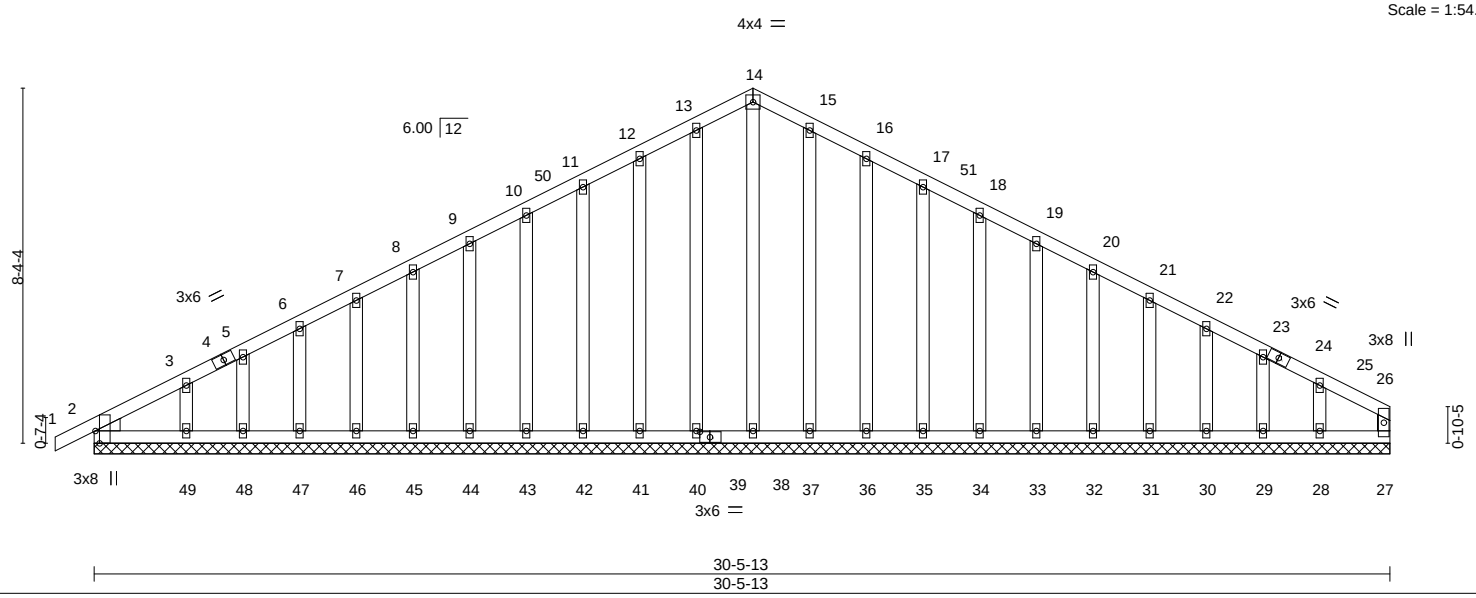


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [39:0-2-14,0-1-8]

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

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

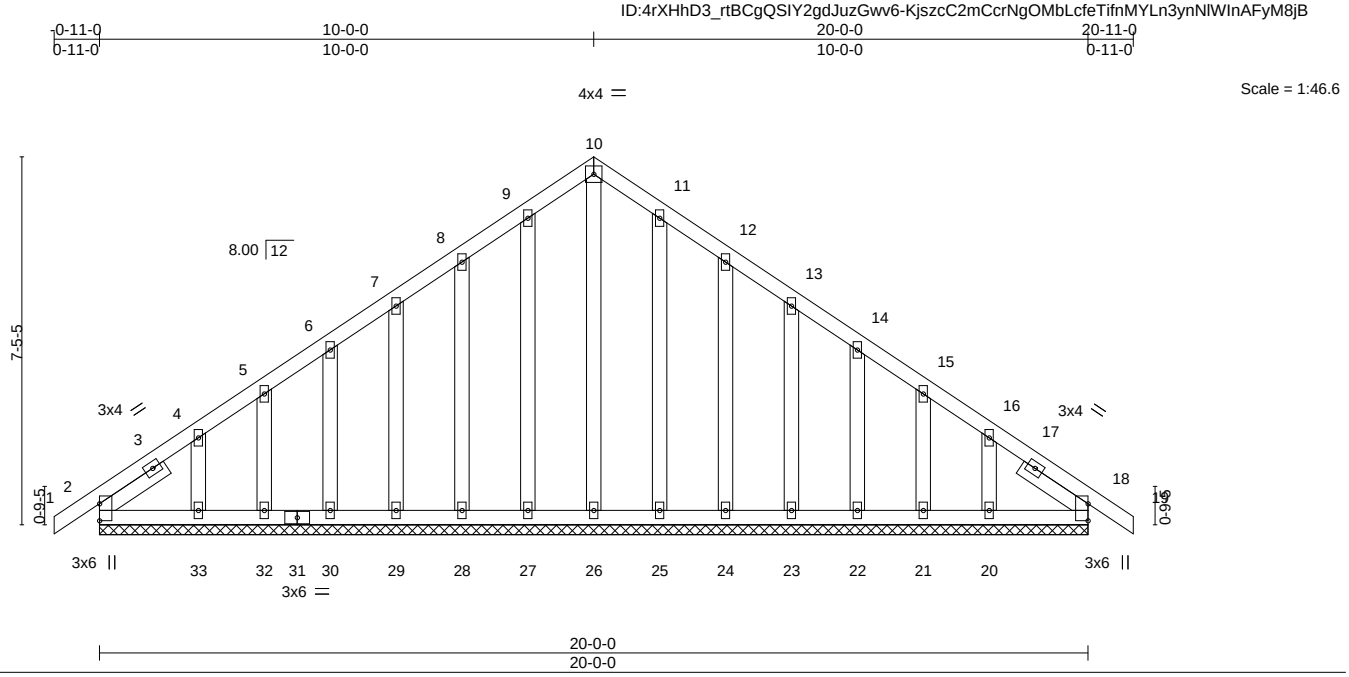
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-11-0 to 2-2-0, Exterior(2N) 2-2-0 to 15-6-0, 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
3) 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.
4) 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
5) Unbalanced snow loads have been considered for this design.
6) 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.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) 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.
11) N/A
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.

November 6,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	C1	Common Supported Gable	1	1	I43520207
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:54 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-KjszcC2mCcrNgOMbLcfeTifnMYLn3ynNlWInAFyM8jB



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	0.05	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							Weight: 116 lb	FT = 20%
BCDL	10.0											

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-

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=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
3) 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.
4) 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
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) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) 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.
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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	C2	Common	2	1	I43520208
					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_rtBCgQSIY2gdJuzGwv6-G5_j1t31kD55viW_S1h6Y7l40LsuXr1fDqnuE8yM8j9

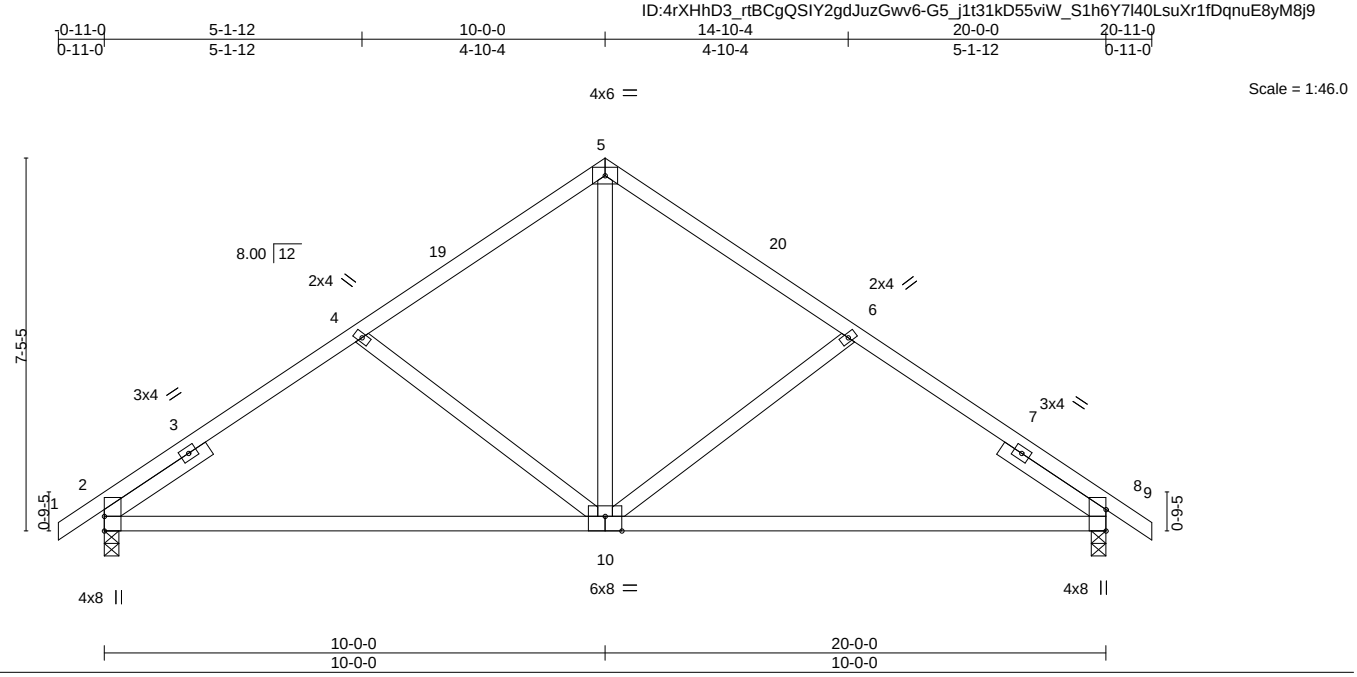


Plate Offsets (X,Y)-- [10:0-4-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.13	10-13	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.27	10-13	>893	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.02	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 80 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.
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-
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 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
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) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=101, 8=101.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

November 6,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:49:57 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-kIY5ED4fVXDxXr5A0lCL4KHGalK2GLbpSUXRnayM8j8

-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

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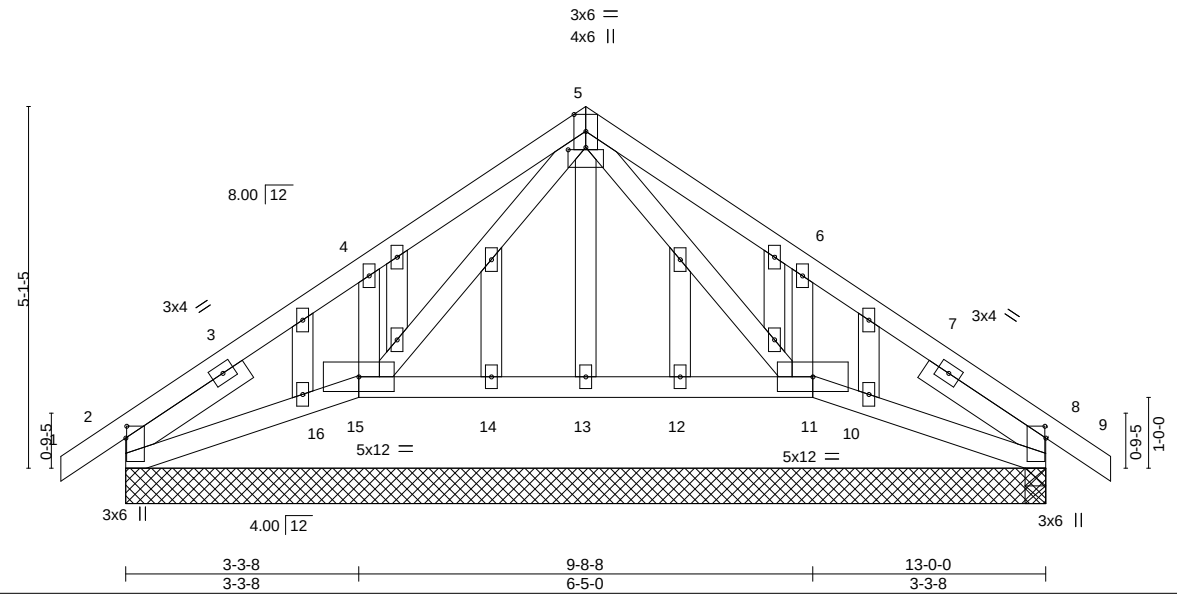

Plate Offsets (X,Y)-- [2:0-2-0,0-0-2], [5:0-3-0,0-0-6], [6:0-0-0,0-0-0], [8:0-0-0,0-0-0], [8:0-2-0,0-0-2], [21:0-0-0,0-0-0], [22:0-0-0,0-0-0]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.01	15	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.01	15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 69 lb	FT = 20%
BCDL	10.0											

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-

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 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
3) 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.
4) 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
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) All plates are 2x4 MT20 unless otherwise indicated.
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) 2, 11, 8, 13, 16.
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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	C4	Roof Special	1	1	I43520210
					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
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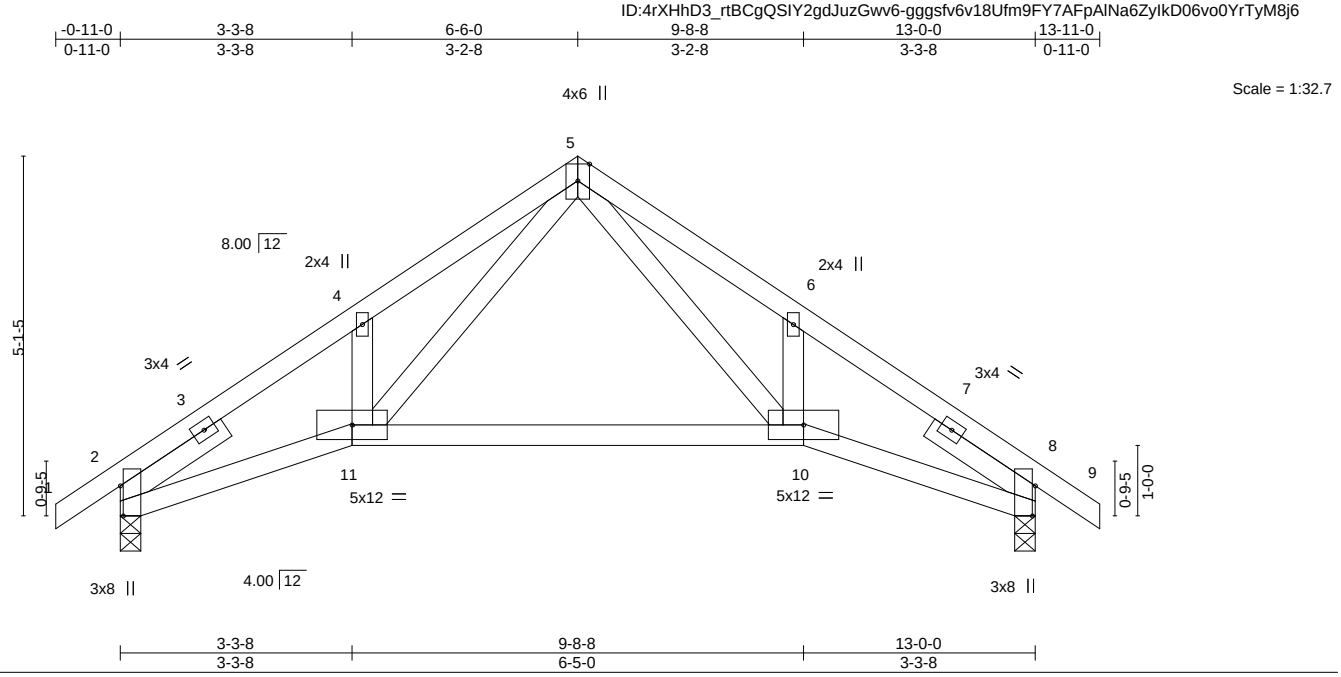


Plate Offsets (X,Y)-- [2:0-5-2,Edge], [6:0-0-0,0-0-0], [8:0-0-0,0-0-0], [8:0-5-2,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.07	10-11	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.17	10-11	>921	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.06	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 54 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-10-0, 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-
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 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
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) 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) 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

November 6,2020

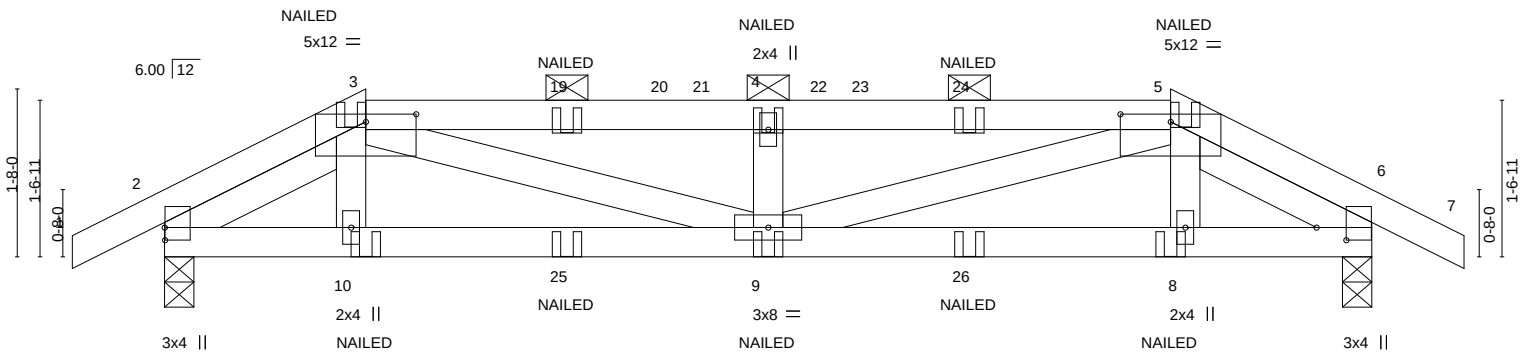
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:02 2020 Page 1
ID:2gjJ0LyjzZmYPRpPutoMbQzFwGX-5FL_Hx8oK3sEddz7pIoWnO?4bm0oxZpYbmECSoyM8j3

-0-11-0 2-0-0 6-0-0 10-0-0 12-0-0 12-11-0
0-11-0 2-0-0 4-0-0 4-0-0 2-0-0 0-11-0

Scale = 1:22.9



2-0-0 6-0-0 10-0-0 12-0-0
2-0-0 4-0-0 4-0-0 2-0-0

Plate Offsets (X,Y)-- [2:0-1-8,0-0-1], [3:0-6-0,0-0-15], [5:0-6-0,0-0-15], [6:0-1-8,0-3-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.05	9	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.08	9	>999	180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.01	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 48 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-11-3, Right 2x4 SPF No.2 1-11-3

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-27(LC 10)
Max Uplift 2=-75(LC 12), 6=-75(LC 12)
Max Grav 2=599(LC 2), 6=599(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-282/32, 3-4=-1511/126, 4-5=-1511/126, 5-6=-282/32
BOT CHORD 2-10=-33/769, 9-10=-36/764, 8-9=-35/764, 6-8=-32/769
WEBS 3-9=-68/783, 4-9=-419/80, 5-9=-68/783

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); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.
11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-51, 3-5=-61, 5-7=-51, 11-15=-20

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER
PE-2001018807
PROFESSIONAL ENGINEER

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MiTek
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Chesterfield, MO 63017

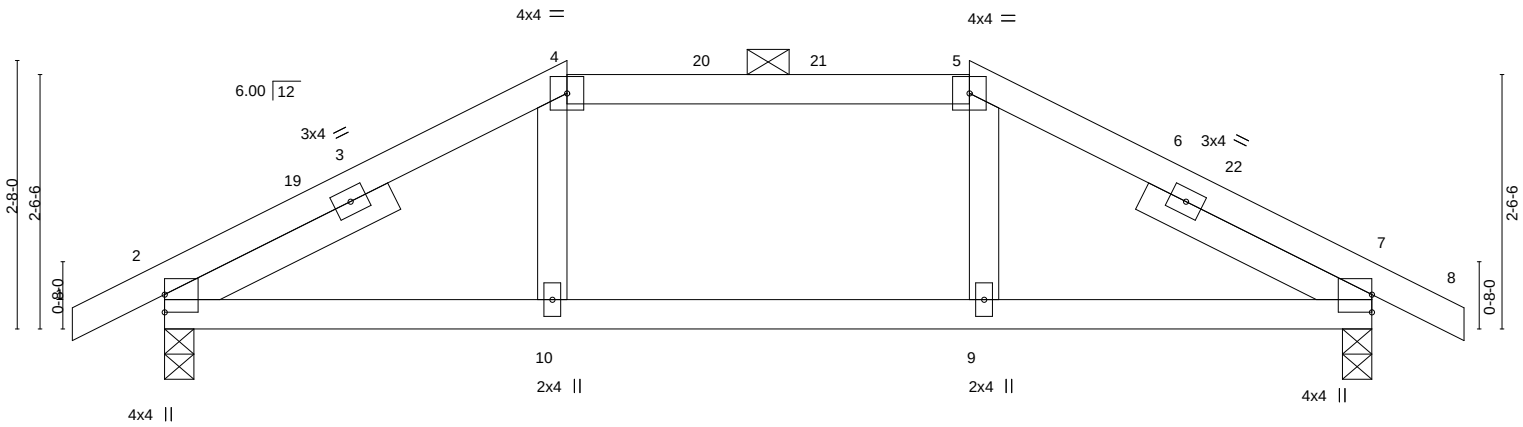
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 10=1(B) 9=0(B) 8=1(B) 25=0(B) 26=0(B)

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	D2	Hip	1	1	I43520212
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:04 2020 Page 1
ID:2gjJ0LyjzZmYPRpPutoMbQzFwGX-1eTkic92sg6ytw7Wwjr_to4Q6aizPWmr34jJWgyM8j1

-0-11-0 / 0-11-0 | 4-0-0 / 4-0-0 | 8-0-0 / 4-0-0 | 12-0-0 / 4-0-0 | 12-11-0 / 0-11-0

Scale = 1:22.9



LOADING (psf)

TCLL (roof)	25.0
Snow (Pf/Pg)	20.4/20.0
TCDL	10.0
BCLL	0.0
BCDL	10.0

SPACING-	2-0-0
Plate Grip DOL	1.15
Lumber DOL	1.15
Rep Stress Incr	YES
Code	IRC2018/TPI2014

CSI.	
TC	0.29
BC	0.23
WB	0.03
Matrix-AS	

DEFL.	in	(loc)	l/defl	L/d
Vert(LL)	-0.04	9	>999	240
Vert(CT)	-0.05	9	>999	180
Horz(CT)	0.02	7	n/a	n/a

PLATES	**GRIP**
MT20	197/144

Weight: 41 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied, 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-

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 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
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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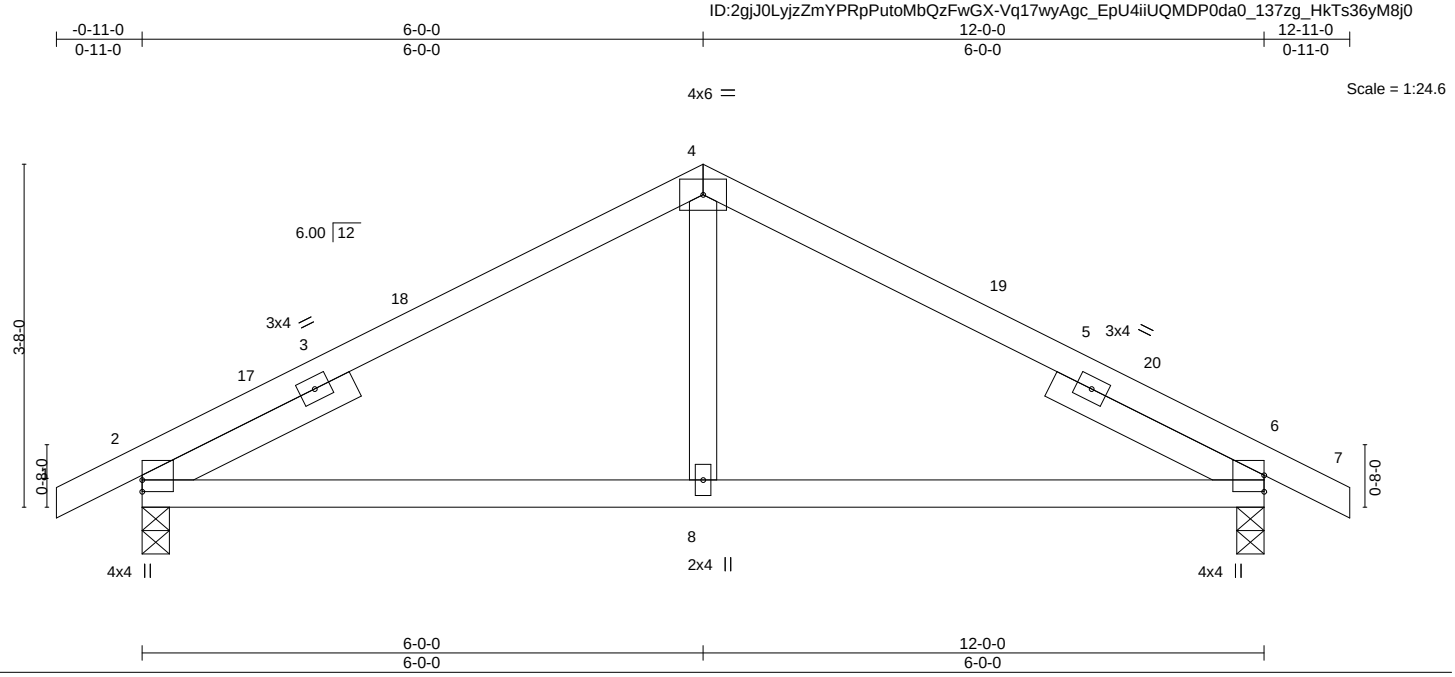
Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	D3	Common	4	1	I43520213
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:05 2020 Page 1
ID:2gjJ0LyjzZmYPRpPutoMbQzFwGX-Vq17wyAgc_EpU4iiUQMDP0da0_137zg_HkTs36yM8j0



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.04	8-15	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.07	8-15	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.02	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							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.
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-

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 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
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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
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.

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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 09:46:59 2020 Page 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-UIKJvPBfNAkJd_zCHIV5roRv2kcirAdxo7GTqzyLxaA

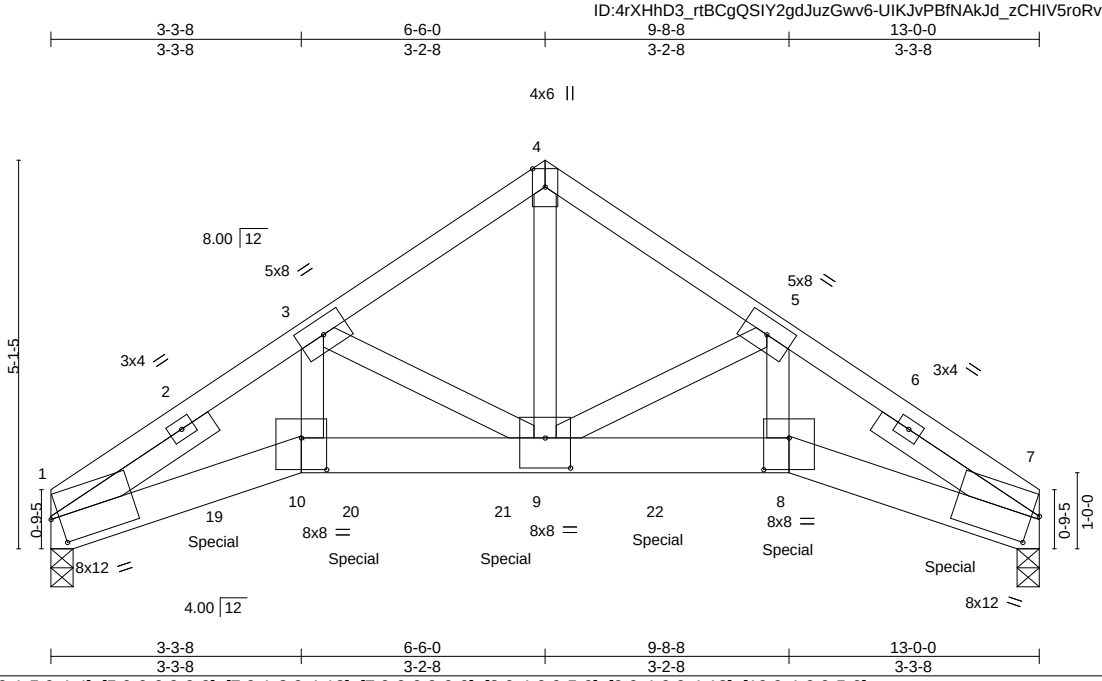

Plate Offsets (X,Y)-- [1:0-1-5,0-4-4], [5:0-0-0,0-0-0], [7:0-1-3,0-4-12], [7:0-0-0,0-0-0], [8:0-4-0,0-5-0], [9:0-4-0,0-4-12], [10:0-4-0,0-5-0]

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

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-
1) 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.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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
5) 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
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 386 lb uplift at joint 1 and 438 lb uplift at joint 7.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) 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.

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LOAD CASE(S)

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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

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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

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

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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)

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 1
ID:4rXHhD3_rtBCgQSIY2gdJuzGwv6-JjC0kHT5yEd2tWDd7dPUHfuxD?TbkaSK4CKA78yLxZp

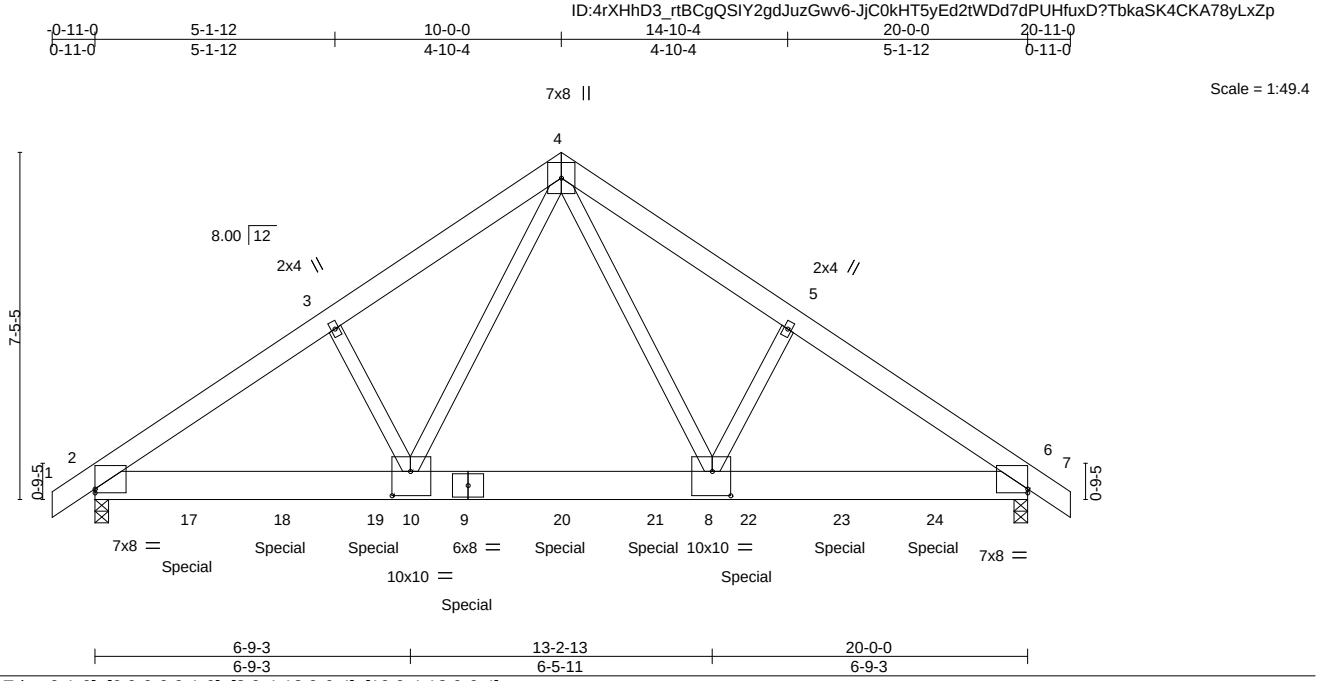

Plate Offsets (X,Y)-- [2:Edge,0-1-0], [6:0-0-0,0-1-0], [8:0-4-12,0-6-4], [10:0-4-12,0-6-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	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-
1) 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.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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
5) 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
6) 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.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 656 lb uplift at joint 2 and 658 lb uplift at joint 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) 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.

November 6,2020

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LOAD CASE(S)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

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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

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

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)

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	JD1	Jack-Open	2	1	I43520216
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:10 2020 Page 1
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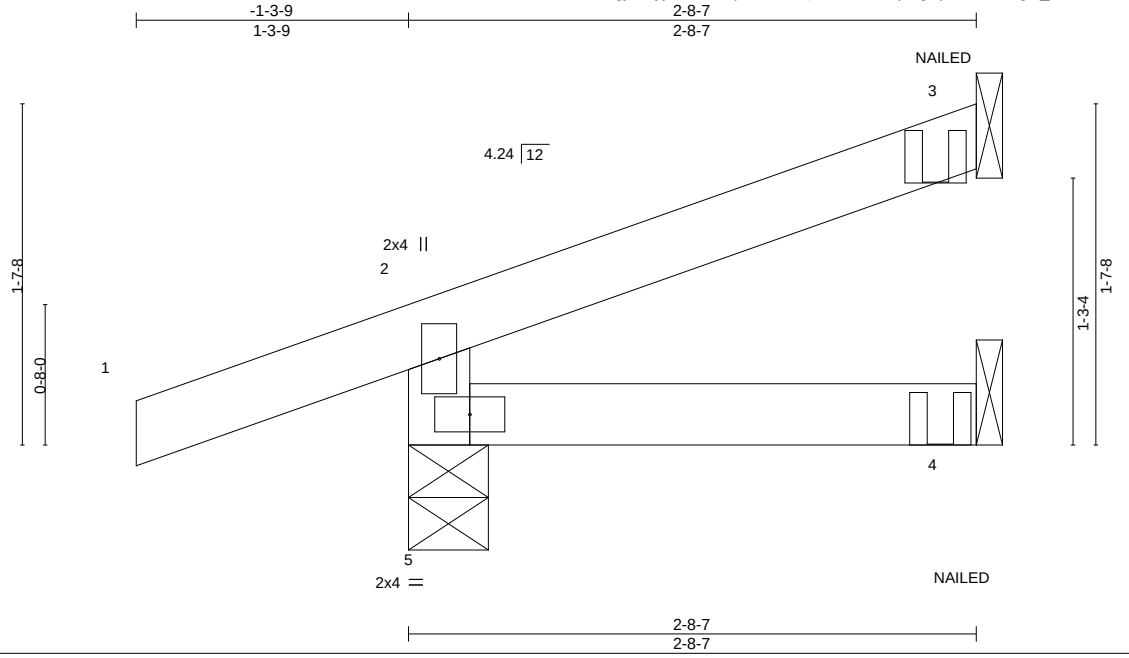

Scale = 1:11.0

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	0.14	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 8 lb	FT = 20%
BCDL	10.0											

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

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

LOAD CASE(S) Standard
1) Dead + 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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	JD2	Jack-Open	2	1	I43520217
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:11 2020 Page 1
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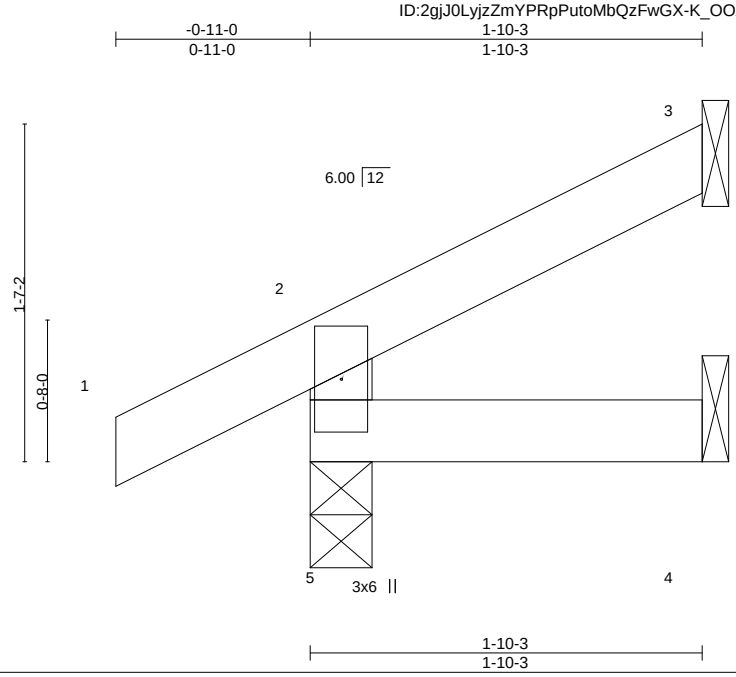

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	5	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-10-3 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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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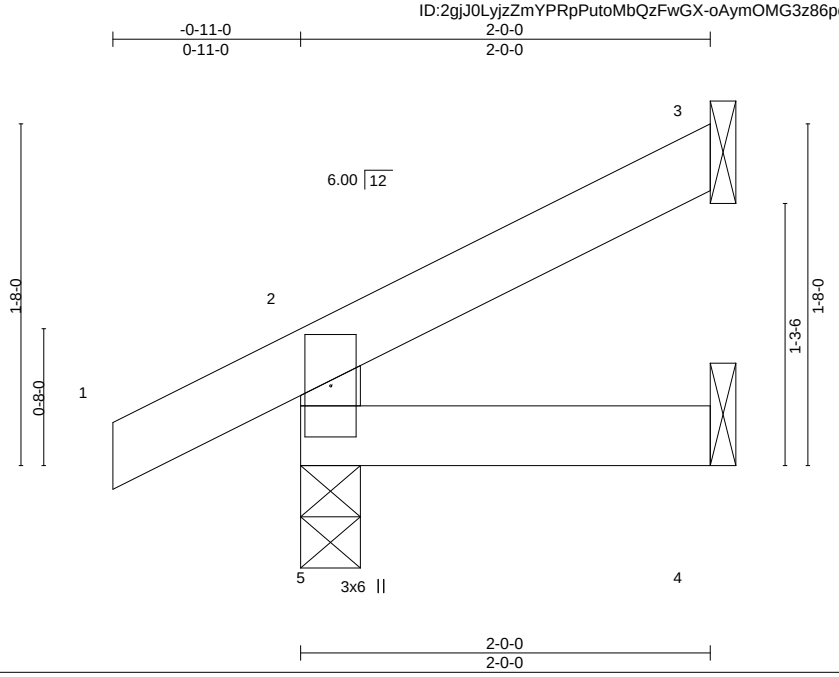

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	5	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:13 2020 Page 1
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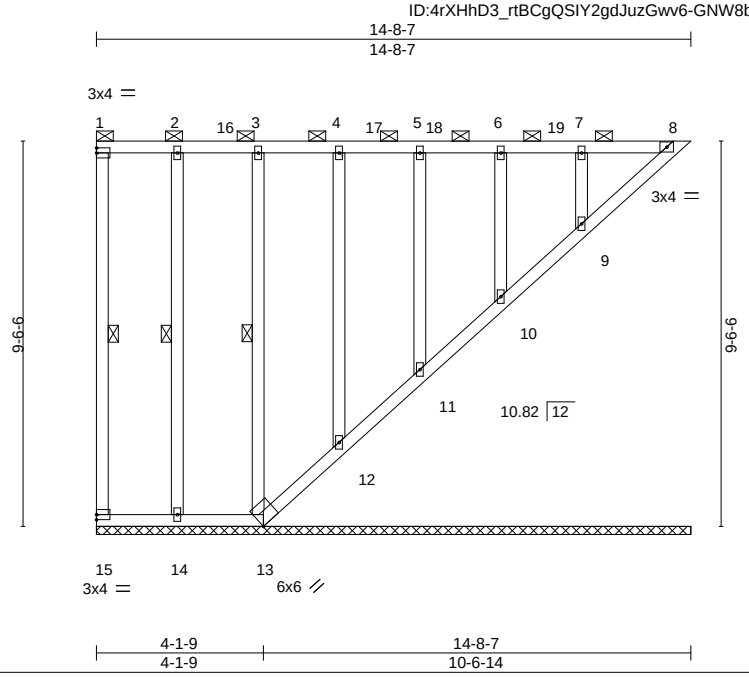

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 89 lb	FT = 20%
BCDL	10.0											

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	LG2	GABLE	1	1	I43520220
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:14 2020 Page 1
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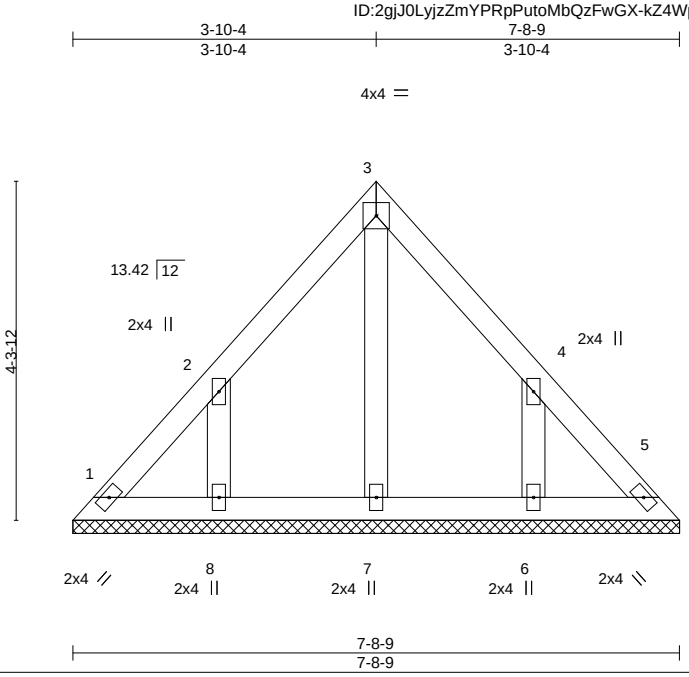

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code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

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

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

REACTIONS. All bearings 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-
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) 0-3-15 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
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) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

November 6,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	LG3	GABLE	1	1	I43520221
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:15 2020 Page 1
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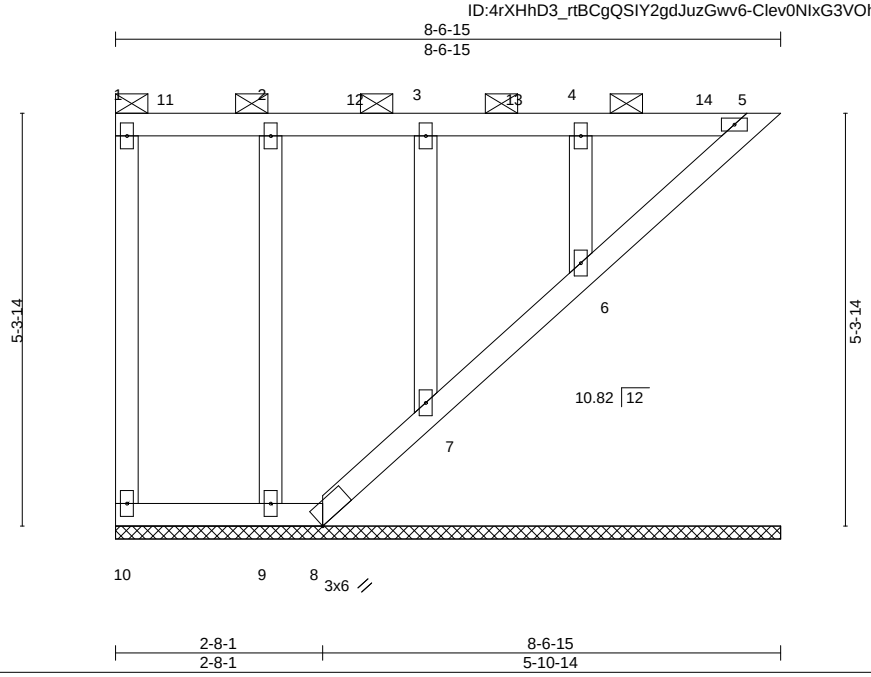

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 38 lb	FT = 20%
BCDL	10.0											

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	LG4	GABLE	1	1	I43520222
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:16 2020 Page 1
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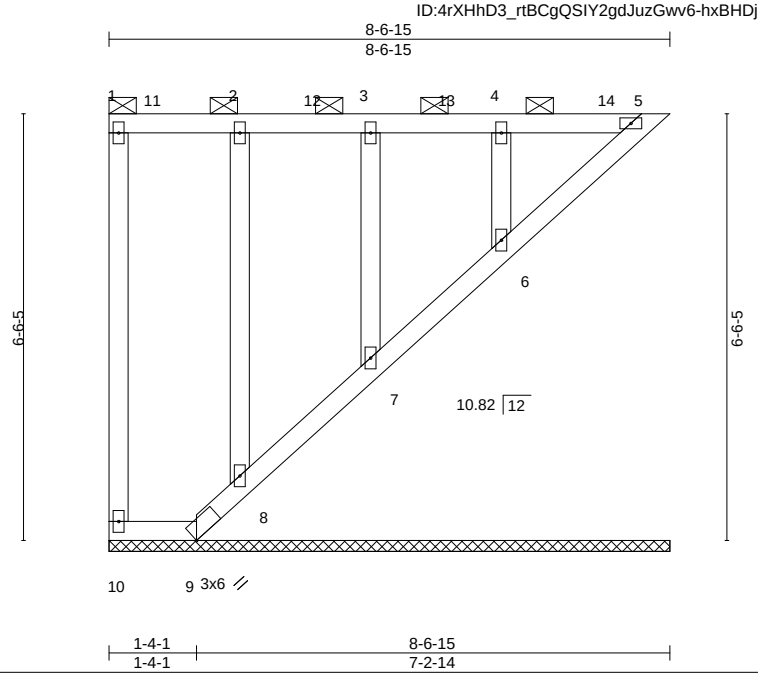

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							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
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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	M1	GABLE	1	1	I43520223
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:17 2020 Page 1
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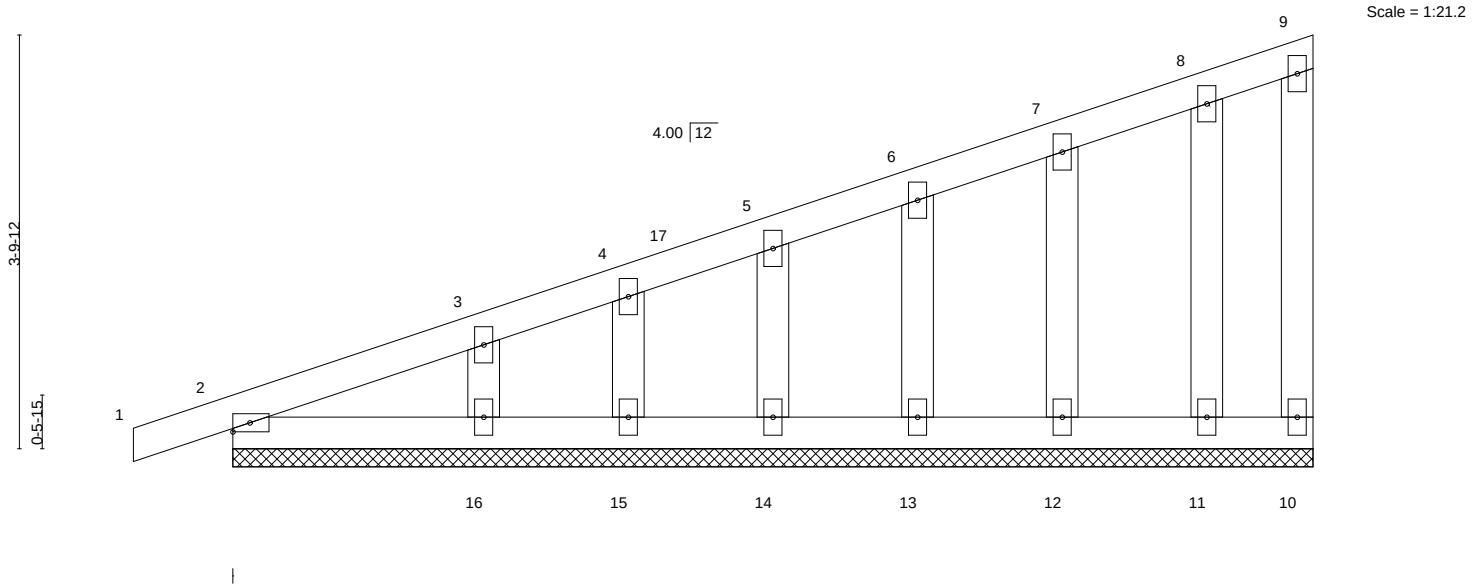

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	10	n/a	n/a		
BCLL	0.0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

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) -0-11-0 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
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) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 1-4-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) 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.
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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	M2	Monopitch	10	1	I43520224
					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
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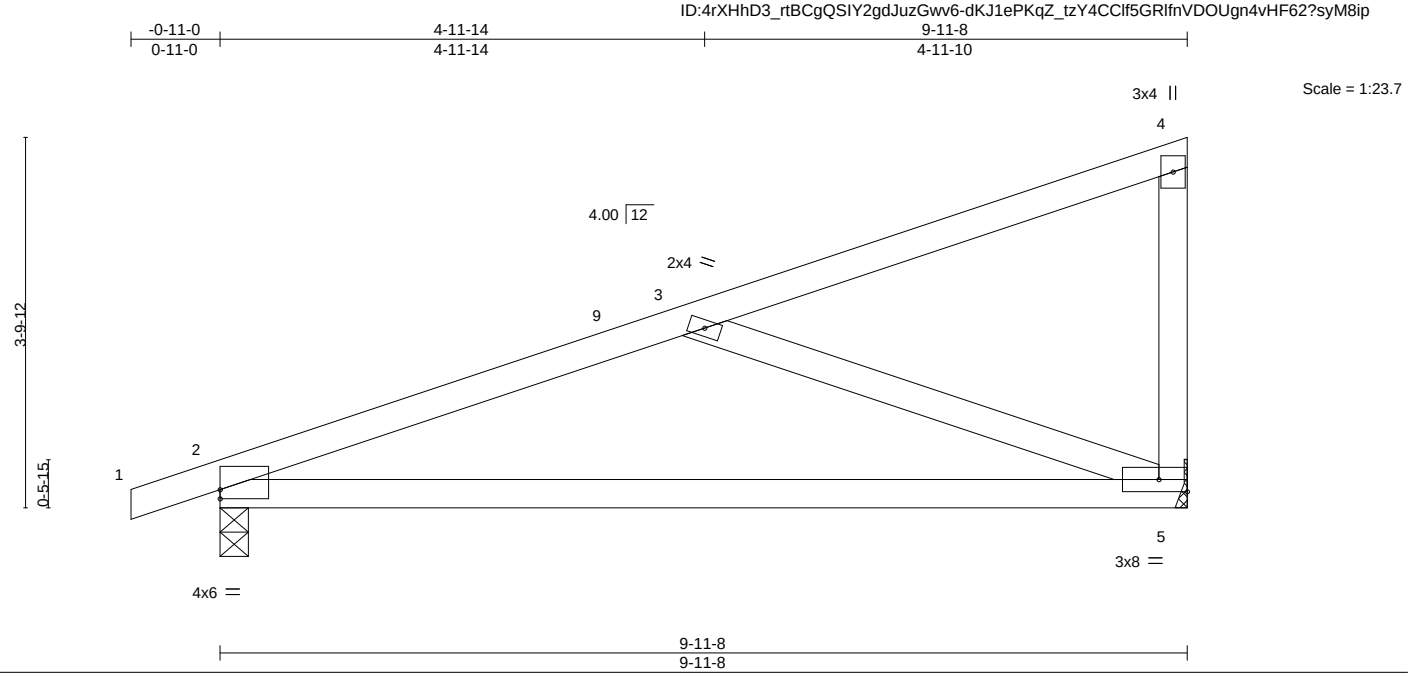


Plate Offsets (X,Y)-- [2:0-0-0,0-1-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.21	5-8	>572	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.41	5-8	>285	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 34 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 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

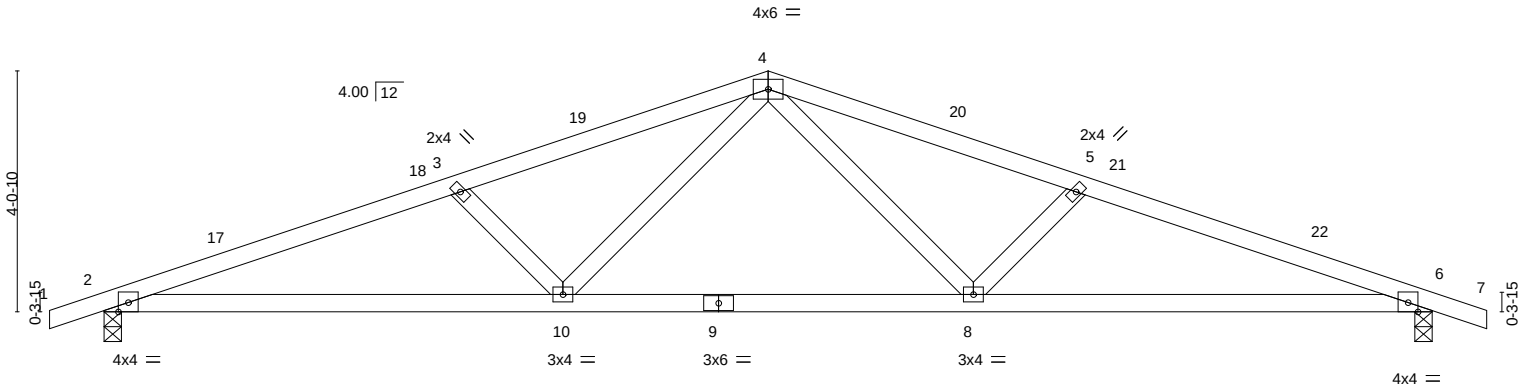
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	M3	Common	5	1	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_rtBCgQSIY2gdJuzGwv6-5WtPslLSJH?qAEnOIMcVzzCyhdi2PGS2VvsbXIyM8io

-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)

TCLL (roof)	25.0
Snow (Pf/Pg)	15.4/20.0
TCDL	10.0
BCLL	0.0
BCDL	10.0

SPACING- 2-0-0

Plate Grip DOL	1.15
Lumber DOL	1.15
Rep Stress Incr	YES
Code	IRC2018/TPI2014

CSI.

TC	0.40
BC	0.71
WB	0.16
Matrix-AS	

DEFL.

	in	(loc)	l/defl	L/d
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 MT20 **GRIP** 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-

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 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
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) 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) except (jt=lb) 2=109, 6=109.
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

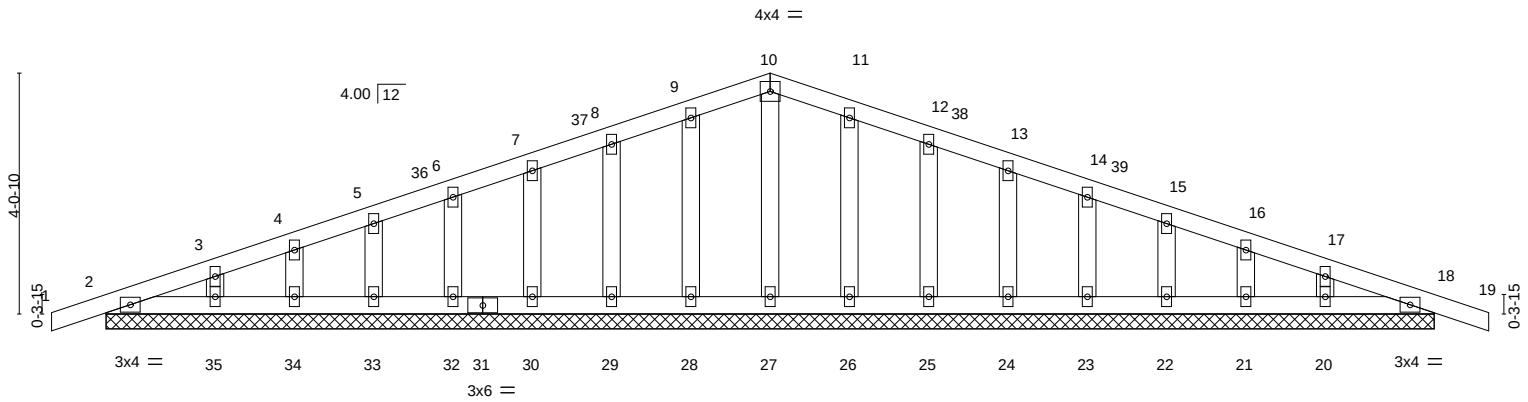
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	M4	GABLE	1	1	I43520226
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:21 2020 Page 1
ID:4rXHhD3_rtBCgQSlY2gdJuzGwv6-1v?AHQNirvFYPYwnQnez3OHOWQZFtCALzDLicByM8im

-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



22-4-0
22-4-0

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	0.06	Vert(LL)	-0.00	19	n/r	120	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	19	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	18	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 86 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. All bearings 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-
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=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
3) 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.
4) 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
5) Unbalanced snow loads have been considered for this design.
6) 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.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 1-4-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 28, 29, 30, 32, 33, 34, 35, 26, 25, 24, 23, 22, 21, 20, 18.
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.

November 6,2020

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	P1	Monopitch Supported Gable	1	1	I43520227
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:22 2020 Page 1
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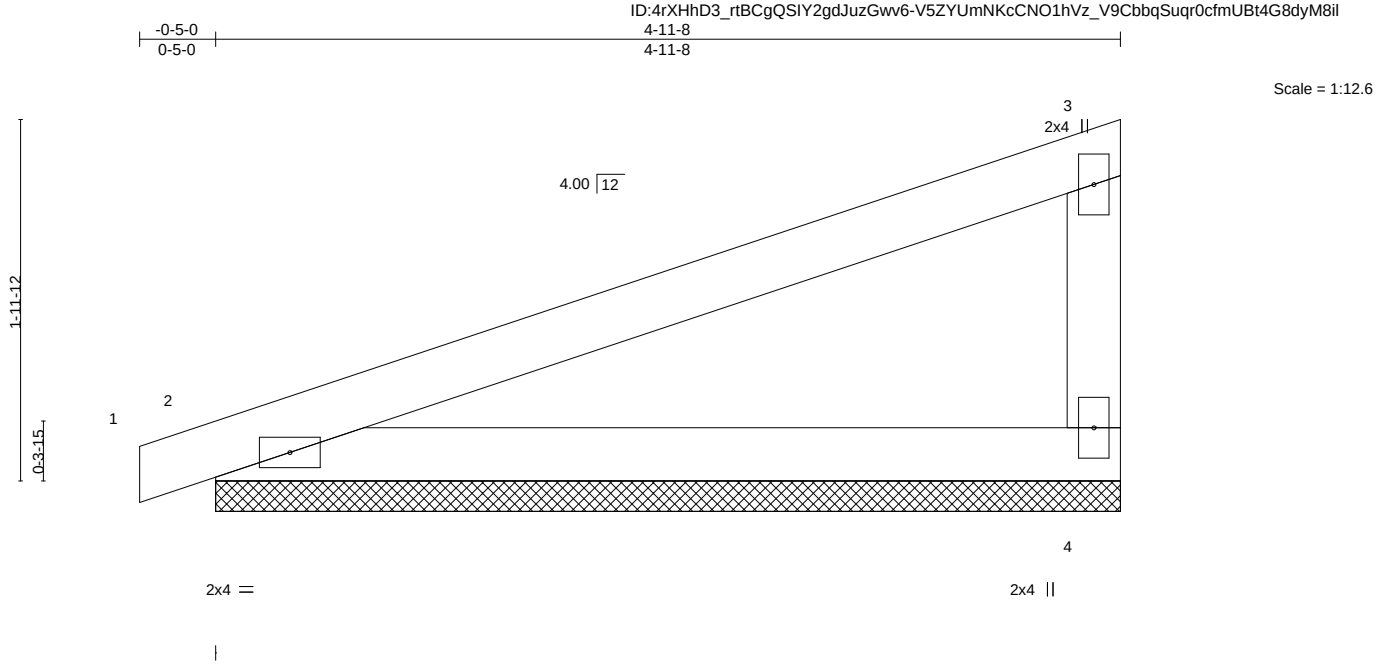

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	0.01	1	n/r	120		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	P2	Monopitch	6	1	I43520228
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:23 2020 Page 1
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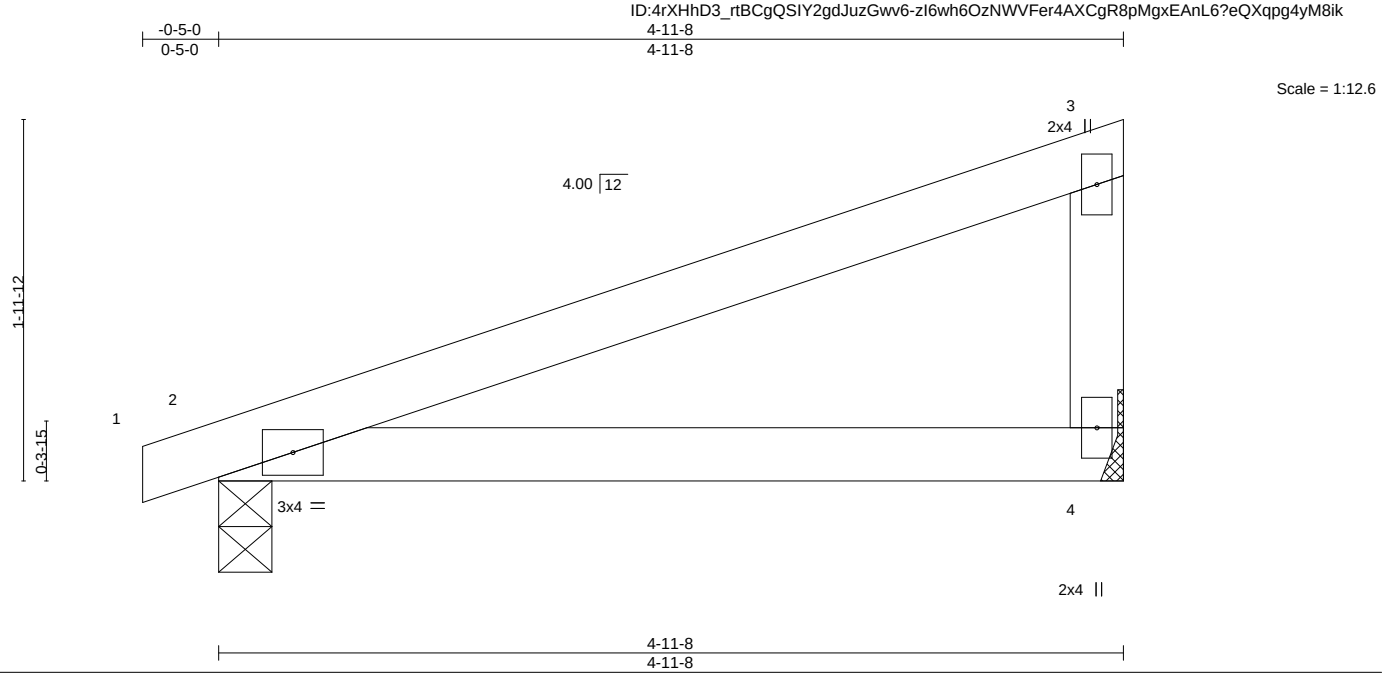

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.03	4-7	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.06	4-7	>897	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 14 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 4=Mechanical, 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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/67 Woodside
2684908	P3	Monopitch	4	1	I43520229
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Nov 5 18:50:24 2020 Page 1
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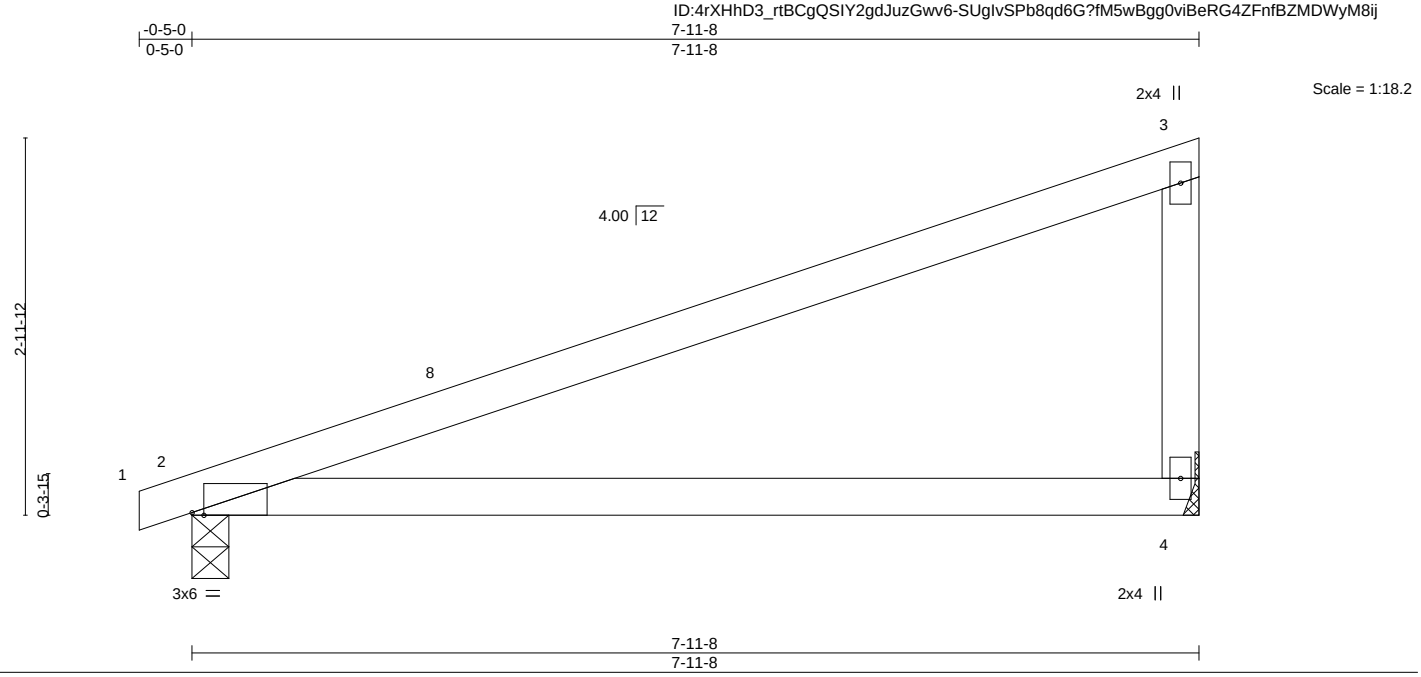


Plate Offsets (X,Y)-- [2:0-1-2,Edge]

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%
BCDL	10.0											

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

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

REACTIONS. (size) 4=Mechanical, 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

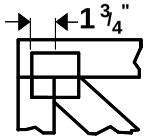
NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-5-0 to 2-7-0, Interior(1) 2-7-0 to 7-9-12 zone; cantilever left and right exposed ; end vertical left and 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

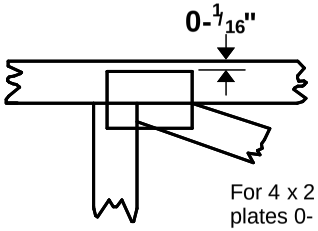
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

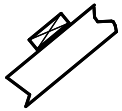
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

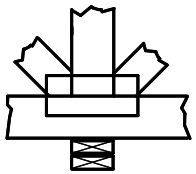
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

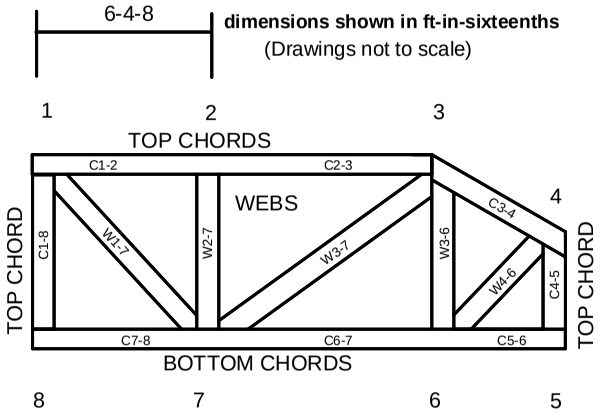


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.

21.The design does not take into account any dynamic or other loads other than those expressly stated.