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

Re: 2592336
Summit/16 Woodside/MO

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

Pages or sheets covered by this seal: I44187958 thru I44188019

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

Missouri COA: Engineering 001193

January 4,2021

Sevier, Scott ,Engineer

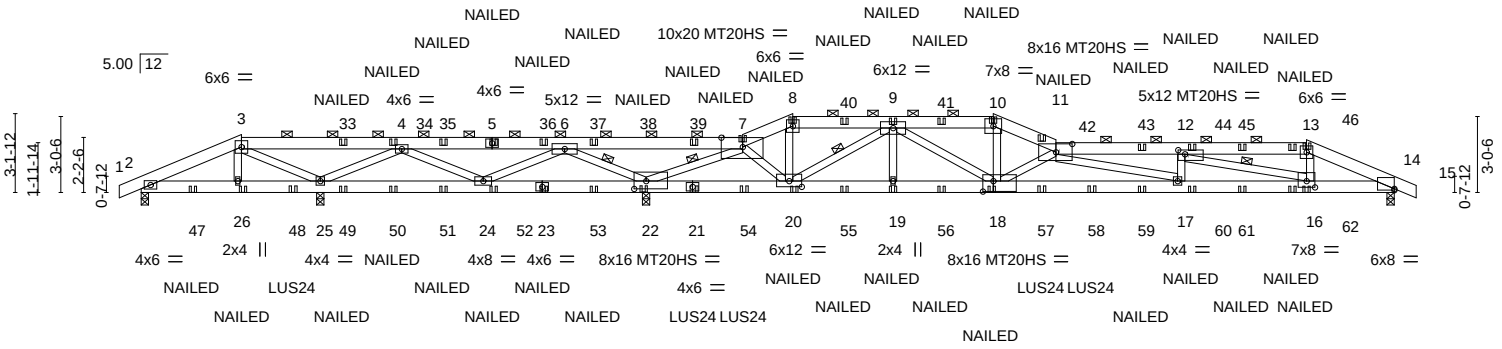
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A1	Roof Special Girder	1	1	I44187958
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:29:40 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-5aO3JPD21gl38rnQy3nt?ynTfLttB6W9FYGAQhy3UaP

-0-10-8	4-0-0	10-4-12	16-10-12	24-0-0	26-0-0	30-0-0	34-0-0	36-6-0	41-6-0	46-6-0	50-0-0 50-10-8
0-10-8	4-0-0	6-4-12	6-6-0	7-1-4	2-0-0	4-0-0	4-0-0	2-6-0	5-0-0	5-0-0	3-6-0 0-10-8

Scale = 1:91.9



4-0-0	7-1-12	13-7-12	20-1-12	24-0-0	26-0-0	30-0-0	34-0-0	36-6-0	41-6-0	46-6-0	50-0-0
4-0-0	3-1-12	6-6-0	6-6-0	3-10-4	2-0-0	4-0-0	4-0-0	2-6-0	5-0-0	5-0-0	3-6-0

Plate Offsets (X,Y)-- [7:0-10-4,0-4-8], [11:0-7-12,0-4-0], [12:0-3-4,0-2-0], [14:0-0-0,0-0-10], [16:0-4-0,0-3-0], [18:0-5-0,0-5-0], [20:0-6-0,0-2-12], [22:0-5-12,0-3-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.45	17-18	>797	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.96	Vert(CT)	-1.00	17-18	>359	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.08	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 266 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
3-5,11-13,5-7: 2x6 SPF 2100F 1.8E
BOT CHORD 2x6 SP 2400F 2.0E *Except*
18-21: 2x6 SPF 2100F 1.8E, 21-23: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
7-22: 2x4 SPF 1650F 1.5E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-7-8 oc purlins, except
2-0-0 oc purlins (2-8-5 max.): 3-7, 8-10, 11-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 24-25,20-22
2-11-8 oc bracing: 22-24.
WEBS 1 Row at midpt 7-22, 9-20, 12-16, 6-22

REACTIONS. All bearings 0-3-8 except (jt=length) 22=0-8-13 (input: 0-3-8).
(lb) - Max Horz 2=-26(LC 30)
Max Uplift All uplift 100 lb or less at joint(s) 25 except 22=-587(LC 4), 14=-210(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 2=669(LC 1), 25=801(LC 21), 22=5624(LC 1), 14=2322(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-825/26, 4-6=-328/2335, 6-7=-832/7692, 7-8=-1507/228, 8-9=-1330/210, 9-10=-5944/690, 10-11=-6439/737, 11-12=-8867/890, 12-13=-4467/447, 13-14=-5000/478
BOT CHORD 2-26=-13/742, 25-26=-14/714, 24-25=-687/43, 22-24=-4193/445, 20-22=-945/91, 19-20=-503/4265, 18-19=-503/4265, 17-18=-1044/9747, 16-17=-853/8865, 14-16=-410/4597
WEBS 3-26=0/349, 3-25=-1066/87, 7-22=-7481/879, 7-20=-317/3082, 9-20=-3495/412, 9-18=-169/2001, 10-18=-194/2028, 11-18=-4493/485, 11-17=-924/210, 12-17=0/682, 12-16=-4590/471, 13-16=-72/1417, 4-25=-176/735, 4-24=-1907/369, 6-24=-87/2117, 6-22=-4095/532

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) WARNING: Required bearing size at joint(s) 22 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25 except (jt=lb) 22=587, 14=210.
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.

Continued on page 2

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

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 16-0-0 oc max. starting at 6-0-12 from the left end to 37-11-4 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

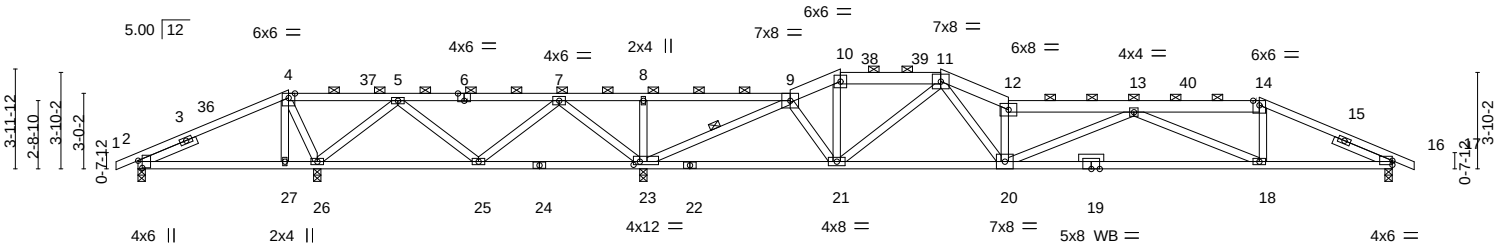
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-90, 3-7=-90, 7-8=-90, 8-10=-90, 10-11=-90, 11-13=-90, 13-15=-90, 27-30=-20
   Concentrated Loads (lb)
   Vert: 5=-60(B) 8=-90(B) 10=-90(B) 13=-0(B) 23=-27(B) 26=-207(B) 20=-111(B) 19=-111(B) 18=-111(B) 9=-90(B) 16=-126(B) 21=-259(B) 33=-60(B) 34=-60(B) 35=-60(B) 36=-60(B) 37=-60(B) 38=-107(B) 40=-90(B) 41=-90(B) 43=-45(B) 44=-57(B) 45=-57(B) 46=-57(B) 47=-135(B) 48=-215(B) 49=-27(B) 50=-27(B) 51=-27(B) 52=-27(B) 53=-27(B) 54=-214(B) 55=-111(B) 56=-111(B) 57=-214(B) 58=-266(B) 59=-61(B) 60=-41(B) 61=-41(B) 62=-41(B)

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO I44187959
2592336	A2	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 Dec 31 09:30:00 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-WQbdWETbJpGDYvJG7G8Zp9cwzPkJtAs5rf6E7Xy3Ua5

-0-10-8	6-0-0	10-4-5	16-9-7	20-1-12	26-0-0	28-0-0	32-0-0	34-8-6	39-8-6	44-8-6	50-0-0	50-10-8
0-10-8	6-0-0	4-4-5	6-5-2	3-4-5	5-10-4	2-0-0	4-0-0	2-8-6	5-0-0	5-0-0	5-3-10	0-10-8

Scale = 1:91.8



6-0-0	7-1-12	13-6-14	20-1-12	26-0-0	28-0-0	32-0-0	34-8-6	44-8-6	50-0-0
6-0-0	1-1-12	6-5-2	6-6-14	5-10-4	2-0-0	4-0-0	2-8-6	10-0-0	5-3-10

Plate Offsets (X,Y)-- [2:0-3-7,0-2-0], [6:0-3-0,Edge], [16:0-0-0,0-1-15], [23:0-3-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.30	18-20	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.75	18-20	>480	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.08	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 207 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* 1-4,4-6,14-17: 2x4 SPF No.2, 6-9: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF 1650F 1.5E *Except* 22-24: 2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	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 (3-8-3 max.): 4-9, 10-11, 12-14.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 9-23

REACTIONS. All bearings 0-3-8 except (jt=length) 23=0-5-3 (input: 0-3-8).
(lb) - Max Horz 2=33(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 26, 16
Max Grav All reactions 250 lb or less at joint(s) except 2=592(LC 1), 26=498(LC 25), 16=1447(LC 1), 23=3327(LC 1)

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

TOP CHORD	2-4=-525/133, 4-5=-322/129, 5-7=-7/739, 7-8=-174/2880, 8-9=-174/2880, 9-10=-1107/149, 10-11=-975/149, 11-12=-3579/302, 12-13=-3387/268, 13-14=-2293/200, 14-16=-2576/190
BOT CHORD	2-27=-65/477, 26-27=-65/469, 25-26=-102/338, 23-25=-1521/123, 21-23=-32/505, 20-21=-106/1950, 18-20=-264/3502, 16-18=-114/2327
WEBS	4-26=-427/57, 9-23=-3675/320, 9-21=0/1026, 11-21=-1304/103, 11-20=-120/2274, 12-20=-1605/177, 13-18=-1336/171, 14-18=0/701, 8-23=-441/78, 5-26=-113/470, 5-25=-971/161, 7-25=-42/1158, 7-23=-1867/174

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 28-0-0, Exterior(2R) 28-0-0 to 31-0-0, Interior(1) 31-0-0 to 32-0-0, Exterior(2E) 32-0-0 to 34-8-6, Interior(1) 34-8-6 to 44-8-6, Exterior(2R) 44-8-6 to 47-8-6, Interior(1) 47-8-6 to 50-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 3x6 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) WARNING: Required bearing size at joint(s) 23 greater than input bearing size.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 26, 16.
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.

January 4,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

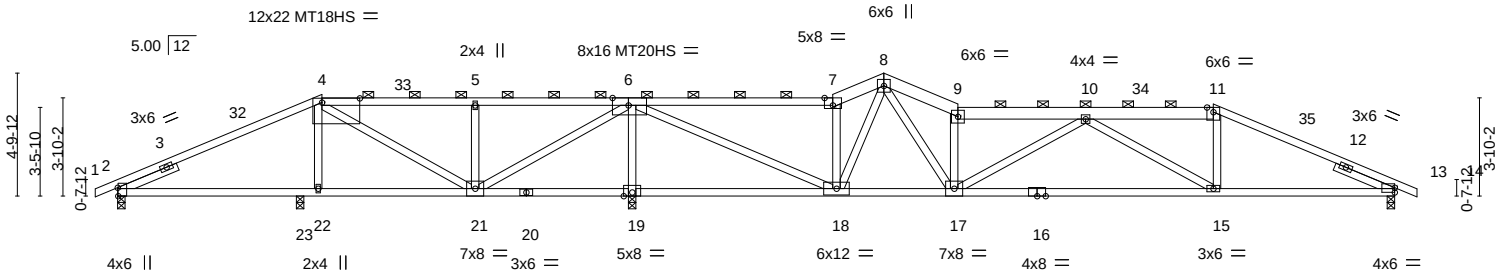
Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO	I44187960
2592336	A3	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:02 2020 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-SpjNxwUrrRWxnDTeFhA1uahCQCNmL3fOJzbLBQy3Ua3

-0-10-8	8-0-0	14-0-0	20-1-12	21-4-0	28-0-0	30-0-0	32-10-13	37-10-13	42-10-13	50-0-0	50-10-8
0-10-8	8-0-0	6-0-0	6-1-12	1-2-4	6-8-0	2-0-0	2-10-13	5-0-0	5-0-0	7-1-3	0-10-8

Scale = 1:90.2



7-0-0	8-0-0	14-0-0	20-1-12	28-0-0	32-10-13	42-10-13	50-0-0
7-0-0	1-0-0	6-0-0	6-1-12	7-10-4	4-10-13	10-0-0	7-1-3

Plate Offsets (X,Y)-- [2:0-3-15,Edge], [4:1-5-12,0-2-0], [6:0-7-8,Edge], [7:0-3-14,Edge], [13:0-0-0,0-2-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.31	15-17	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.75	15-17	>480	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.04	13	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 205 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except* 7-8,8-9,9-11: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-2-0 max.): 4-7, 9-11.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=-42(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 13
Max Grav All reactions 250 lb or less at joint(s) except 2=705(LC 25), 13=1490(LC 1), 23=368(LC 25), 19=3218(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-626/150, 4-5=-206/446, 5-6=-204/445, 6-7=-1387/173, 7-8=-1541/213, 8-9=-2775/261, 9-10=-2578/222, 10-11=-2295/210, 11-13=-2512/197
BOT CHORD 2-23=-82/580, 22-23=-82/580, 21-22=-84/586, 19-21=-1732/124, 18-19=-1858/135, 17-18=-40/1424, 15-17=-193/2907, 13-15=-103/2313
WEBS 4-21=-706/100, 5-21=-481/101, 6-21=-122/1847, 7-18=-1119/195, 8-18=-437/89, 8-17=-133/2057, 9-17=-1381/170, 10-17=-464/90, 10-15=-723/109, 11-15=0/573, 6-18=-213/3539, 6-19=-3058/274

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 30-0-0, Exterior(2E) 30-0-0 to 32-10-13, Interior(1) 32-10-13 to 42-10-13, Exterior(2R) 42-10-13 to 45-10-13, Interior(1) 45-10-13 to 50-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 19 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) 2, 13.
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.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A4	Roof Special	1	1	I44187961
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:03 2020 Page 1
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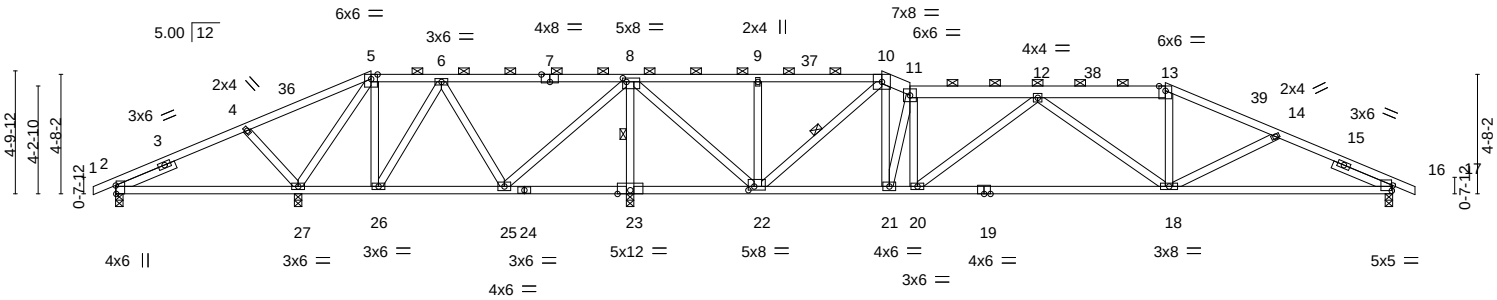
-0-10-8	5-1-12	10-0-0	12-9-1	17-8-3	20-1-12	25-1-12	30-0-0	31-1-3	36-1-3	41-1-3	45-4-14	50-0-0	50-10-8
0-10-8	5-1-12	4-10-4	2-9-1	4-11-2	2-5-9	5-0-0	4-10-4	1-1-3	5-0-0	5-0-0	4-3-10	4-7-2	0-10-8

Scale = 1:90.2



7-1-12	10-0-0	15-2-10	20-1-12	25-1-12	30-0-0	31-1-3	41-1-3	50-0-0
7-1-12	2-10-4	5-2-10	4-11-2	5-0-0	4-10-4	1-1-3	10-0-0	8-10-13

Plate Offsets (X,Y)-- [2:0-3-15,Edge], [7:0-4-0,Edge], [8:0-1-12,0-1-12], [16:0-0-8,0-2-7], [22:0-2-12,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.21	18-20	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.84	Vert(CT)	-0.52	18-20	>691	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.05	16	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 223 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 10-11,11-13: 2x6 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 (5-0-6 max.): 5-10, 11-13.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 8-23, 10-22

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=42(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 27, 16, 23
Max Grav All reactions 250 lb or less at joint(s) except 2=402(LC 25), 27=809(LC 25), 16=1460(LC 26), 23=3167(LC 1)

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

TOP CHORD	2-4=-502/88, 4-5=-21/300, 6-8=-4/722, 10-11=-1446/178, 11-12=-1711/164, 12-13=-2052/190, 13-14=-2271/185, 14-16=-2526/217
BOT CHORD	25-26=-298/92, 23-25=-1685/177, 22-23=-1685/177, 21-22=-33/1316, 20-21=-39/1684, 18-20=-119/2237, 16-18=-141/2278
WEBS	4-27=-523/121, 5-27=-338/49, 10-21=-69/1280, 11-21=-1367/29, 11-20=0/687, 12-20=-675/106, 13-18=0/460, 6-26=0/259, 6-25=-885/111, 8-25=-46/1309, 8-23=-3057/242, 8-22=-155/2387, 9-22=-395/85, 10-22=-1623/127

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 12-9-1, Interior(1) 12-9-1 to 30-0-0, Exterior(2E) 30-0-0 to 31-1-3, Interior(1) 31-1-3 to 41-1-3, Exterior(2R) 41-1-3 to 44-1-3, Interior(1) 44-1-3 to 50-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 23 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, 27, 16, 23.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 4,2021

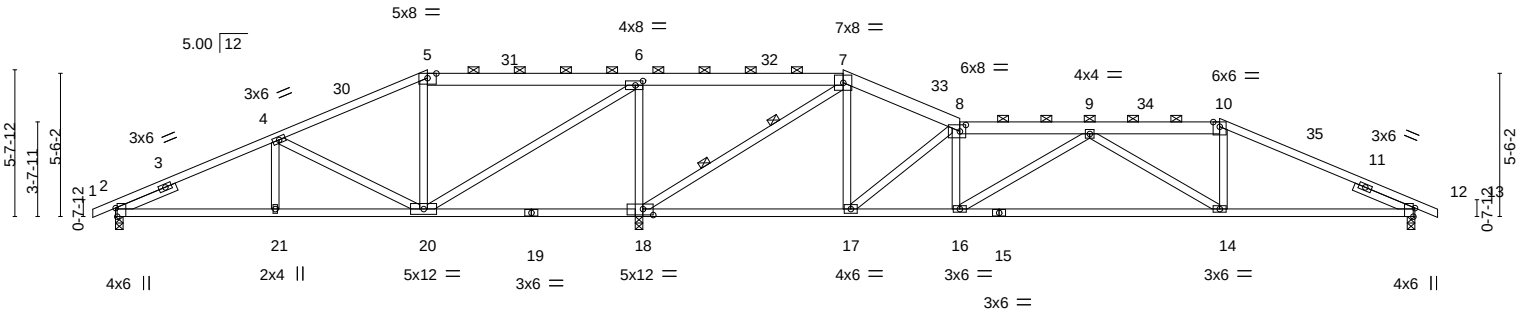
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A5	Roof Special	1	1	I44187962
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:05 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-sNOWZyXk8MuWegCDwpjkWDJlAQRoYPCq?xp?oly3Ua0

-0-10-8	6-1-12	12-0-0	20-0-0	20-1-12	28-0-0	32-5-14	37-5-14	42-5-14	50-0-0	50-10-8
0-10-8	6-1-12	5-10-4	8-0-0	0-1-12	7-10-4	4-5-14	5-0-0	5-0-0	7-6-2	0-10-8

Scale = 1:88.7



6-1-12	12-0-0	20-1-12	28-0-0	32-5-14	42-5-14	50-0-0
6-1-12	5-10-4	8-1-12	7-10-4	4-5-14	10-0-0	7-6-2

Plate Offsets (X,Y)-- [2:0-3-15,Edge], [5:0-4-2,Edge], [6:0-3-8,0-2-0], [8:0-2-12,0-3-0], [12:0-3-15,Edge], [18:0-4-12,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.28	14-16	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.65	14-16	>550	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.05	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 218 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* 1-5,10-13: 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 (5-0-3 max.): 5-7, 8-10.
BOT CHORD	Rigid ceiling directly applied.
WEBS	2 Rows at 1/3 pts 7-18

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 18=0-3-8
Max Horz 2=50(LC 12)
Max Uplift 2=-42(LC 12), 12=-33(LC 13)
Max Grav 2=830(LC 25), 12=1390(LC 26), 18=3616(LC 1)

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

TOP CHORD	2-4=-970/106, 4-5=-392/399, 5-6=-288/320, 6-7=0/1878, 7-8=-611/150, 8-9=-1872/210, 9-10=-2063/217, 10-12=-2240/192
BOT CHORD	2-21=-88/971, 20-21=-88/971, 18-20=-1876/153, 17-18=0/469, 16-17=-100/1891, 14-16=-164/2377, 12-14=-105/2073
WEBS	4-20=-833/101, 5-20=-597/106, 6-20=-115/2112, 6-18=-1942/217, 7-18=-2720/167, 7-17=-24/1159, 8-17=-1748/138, 8-16=0/512, 9-16=-632/96, 9-14=-380/88, 10-14=0/445

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-0-0, Exterior(2R) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 28-0-0, Exterior(2R) 28-0-0 to 31-0-0, Interior(1) 31-0-0 to 42-5-14, Exterior(2R) 42-5-14 to 45-5-14, Interior(1) 45-5-14 to 50-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 18 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, 12.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 4,2021

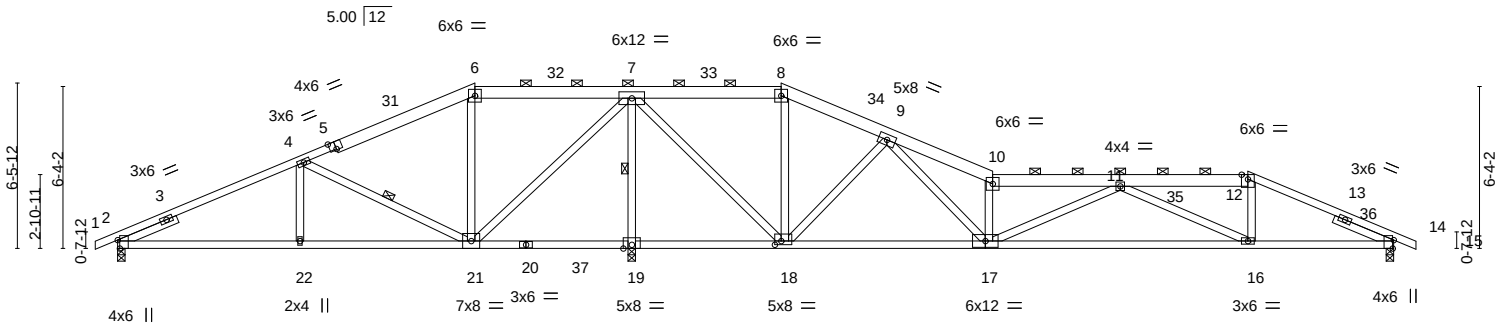
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO	I44187963
2592336	A6	Roof Special	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:07 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-omWG_eY_gz8Et_Lc1EmCbeP8FD6B0J67SFI6tdy3Ua_

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

Scale = 1:90.3



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

Plate Offsets (X,Y)-- [2:0-3-15,Edge], [5:0-3-0,Edge], [14:0-3-15,Edge], [18:0-3-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	-0.32	16-17	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-0.71	16-17	>506	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 229 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* 12-15,1-5: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 2-20,14-17: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
SLIDER	Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-7-13 max.): 6-8, 10-12.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 4-21, 7-19

REACTIONS. (size) 2=0-3-8, 14=0-3-8, 19=0-3-8
Max Horz 2=-57(LC 13)
Max Uplift 2=-57(LC 12), 14=-32(LC 13)
Max Grav 2=788(LC 25), 14=1312(LC 28), 19=3951(LC 2)

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

TOP CHORD	2-4=-880/377, 4-6=-28/973, 6-7=0/850, 7-8=0/422, 8-9=0/510, 9-10=-2357/239, 10-11=-2266/204, 11-12=-2043/189, 12-14=-2293/170
BOT CHORD	2-22=-286/812, 21-22=-286/812, 19-21=-2151/172, 18-19=-2151/172, 17-18=-31/635, 16-17=-203/2703, 14-16=-98/2069
WEBS	4-22=0/304, 4-21=-1104/108, 6-21=-775/112, 7-21=-110/2053, 7-19=-3705/287, 7-18=-132/2464, 8-18=-523/70, 9-18=-1428/157, 9-17=-111/2317, 10-17=-1244/160, 11-17=-546/109, 11-16=-799/129, 12-16=0/610

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 14-0-0, Exterior(2R) 14-0-0 to 17-0-0, Interior(1) 17-0-0 to 26-0-0, Exterior(2R) 26-0-0 to 29-0-0, Interior(1) 29-0-0 to 44-3-7, Exterior(2R) 44-3-7 to 47-3-7, Interior(1) 47-3-7 to 50-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Bearing at joint(s) 19 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, 14.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 4,2021

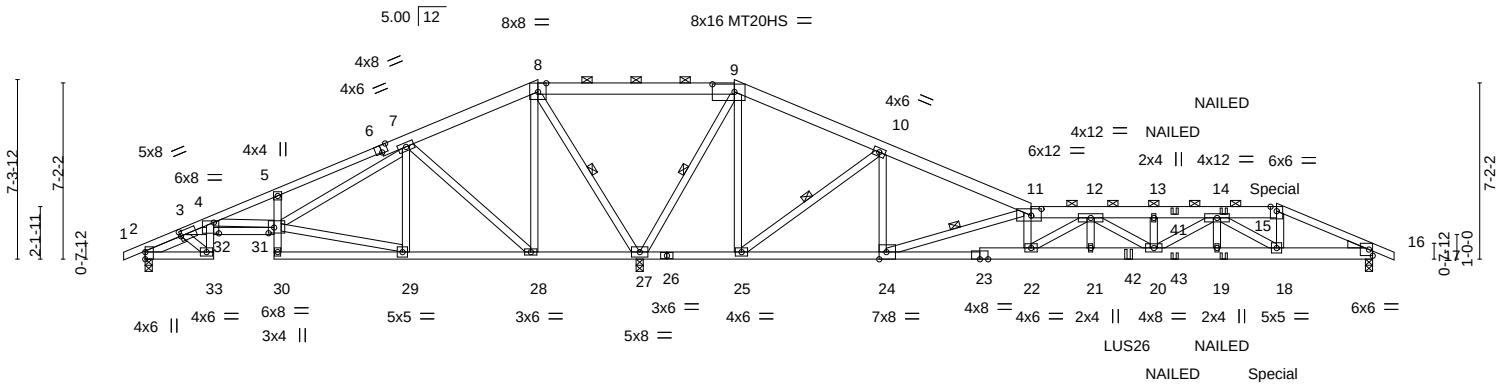
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO	I44187964
2592336	A7	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 Dec 31 09:30:09 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-l9e1PJaECaOy7IV_9fogg3US51qzUCMQwZnDwWy3UZy

-0-10-8 2-9-8 | 5-3-0 | 10-7-8 | 16-0-0 | 24-0-0 | 30-0-8 | 36-1-1 | 38-6-3 | 41-1-1 | 43-7-15 | 46-1-1 | 50-0-0 50-10-8
0-10-8 2-9-8 | 2-5-8 | 5-4-8 | 5-4-8 | 8-0-0 | 6-0-8 | 6-0-8 | 2-5-2 | 2-6-14 | 2-6-14 | 2-5-2 | 3-10-15 0-10-8

Scale = 1:93.9



2-9-8 | 5-3-0 | 10-7-8 | 16-0-0 | 20-1-12 | 24-0-0 | 30-0-8 | 36-1-1 | 38-6-3 | 41-1-1 | 43-7-15 | 46-1-1 | 50-0-0
2-9-8 | 2-5-8 | 5-4-8 | 5-4-8 | 4-1-12 | 3-10-4 | 6-0-8 | 6-0-8 | 2-5-2 | 2-6-14 | 2-6-14 | 2-5-2 | 3-10-15

Plate Offsets (X,Y)-- [3:0-0-4,0-2-4], [4:0-2-8,0-5-4], [6:0-3-0,Edge], [8:0-4-0,0-4-4], [9:0-10-12,0-3-12], [11:0-5-0,0-3-4], [24:0-3-8,Edge], [31:0-2-12,0-2-12], [32:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.33	21-22	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.59	21-22	>606	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.93	Horz(CT)	-0.15	27	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 263 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except*
8-9: 2x6 SPF 2100F 1.8E, 15-17: 2x4 SPF No.2
1-6: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
16-23: 2x6 SPF 2100F 1.8E, 23-26: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SP No.3
SLIDER Left 2x4 SPF No.2 1-9-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-1 oc purlins, except
2-0-0 oc purlins (2-10-15 max.): 8-9, 11-15.
BOT CHORD Rigid ceiling directly applied or 3-1-13 oc bracing.
WEBS 1 Row at midpt 8-27, 9-27, 10-25, 11-24

REACTIONS. (size) 2=0-3-8, 27=0-3-8 (req. 0-8-3), 16=0-3-8
Max Horz 2=-64(LC 9)
Max Uplift 2=-491(LC 22), 27=-74(LC 5), 16=-187(LC 9)
Max Grav 2=264(LC 18), 27=5204(LC 1), 16=1810(LC 22)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-145/409, 3-4=-656/2819, 4-5=-394/2492, 5-7=-337/2324, 7-8=-104/2678, 8-9=-63/3821, 9-10=-79/2506, 10-11=-109/1009, 11-12=-3405/430, 12-13=-5371/683, 13-14=-5371/683, 14-15=-2976/366, 15-16=-3364/392
BOT CHORD 2-33=-948/294, 32-33=-950/330, 4-32=-527/249, 31-32=-2935/760, 5-31=-396/73, 28-29=-1862/266, 27-28=-2421/241, 25-27=-2260/165, 24-25=-875/134, 22-24=-390/3483, 21-22=-597/4950, 20-21=-597/4950, 19-20=-528/4681, 18-19=-528/4681, 16-18=-325/3052
WEBS 4-31=-478/635, 29-31=-1677/221, 7-31=-338/661, 7-29=0/444, 7-28=-1037/62, 8-28=0/759, 8-27=-2703/53, 9-27=-3185/128, 9-25=-53/1301, 10-25=-2056/193, 10-24=-52/1272, 11-24=-3904/417, 11-22=-64/1020, 15-18=-73/1046, 3-32=-2250/571, 3-33=-365/1146, 12-22=-1934/274, 12-21=-78/475, 12-20=-129/853, 13-20=-274/59, 14-20=-133/824, 14-18=-2047/250

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) WARNING: Required bearing size at joint(s) 27 greater than input bearing size.

Continued on page 2

STATE OF MISSOURI
SCOTT M. SEVIER
NUMBER PE-2001018807
PROFESSIONAL ENGINEER
January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27 except (jt=lb) 2=491, 16=187.
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) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 40-0-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 209 lb down and 121 lb up at 46-1-1 on top chord, and 187 lb down and 29 lb up at 45-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

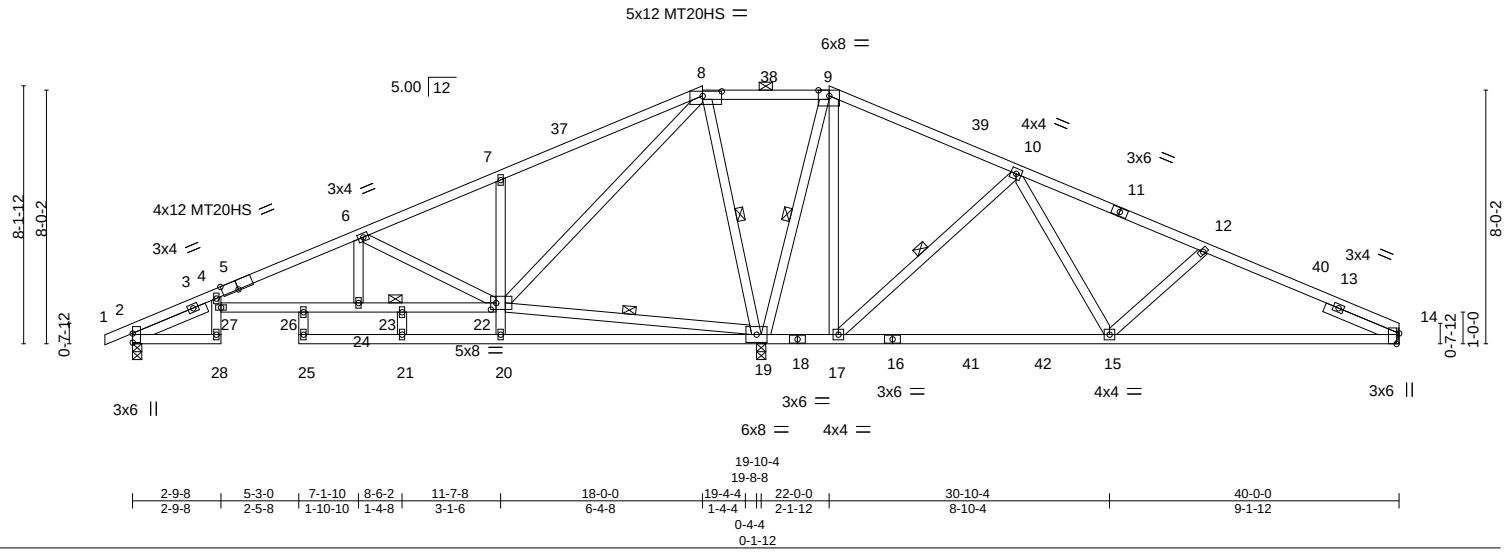
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-8=-90, 8-9=-90, 9-11=-90, 11-15=-90, 15-17=-90, 33-34=-20, 31-32=-20, 30-38=-20
   Concentrated Loads (lb)
   Vert: 15=-91(F) 18=-187(F) 19=-48(F) 14=-76(F) 41=-76(F) 42=-653(F) 43=-48(F)

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A8	Hip	1	1	I44187965
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:11 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-hXmnq?bUjCefMcfNG4q8lUZlnqXqyB_jNsGJ?Oy3UZw

0-10-8	2-9-8	5-3-0	7-1-10	11-7-8	18-0-0	22-0-0	27-10-13	33-9-11	40-0-0
0-10-8	2-9-8	2-5-8	1-10-10	4-5-14	6-4-8	4-0-0	5-10-13	5-10-13	6-2-5

Scale = 1:72.8



2-9-8	5-3-0	7-1-10	8-6-2	11-7-8	18-0-0	19-4-4	22-0-0	30-10-4	40-0-0
2-9-8	2-5-8	1-10-10	1-4-8	3-1-6	6-4-8	1-4-4	2-1-12	8-10-4	9-1-12

19-10-4
19-8-8
0-4-4
0-1-12

Plate Offsets (X,Y)-- [5:0-6-0,Edge], [8:0-7-4,0-1-12], [9:0-4-2,Edge], [14:0-3-15,Edge], [22:0-2-0,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.28	28	>863	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.53	28	>446	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.61	Horz(CT)	0.20	19	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 190 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

REACTIONS. (size) 2=0-3-8, 19=0-3-8 (req. 0-6-3), 14=Mechanical
Max Horz 2=129(LC 12)
Max Uplift 2=-23(LC 13), 19=-341(LC 12), 14=-154(LC 13)
Max Grav 2=435(LC 27), 19=3956(LC 2), 14=654(LC 26)

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (10-0-0 max.): 8-9.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 19-22, 10-17, 9-19, 8-19
JOINTS	1 Brace at Jt(s): 23

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

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

TOP CHORD	2-4=-553/101, 6-7=-179/985, 7-8=-86/1016, 8-9=-210/2095, 9-10=-240/1756, 10-12=-475/934, 12-14=-831/702
BOT CHORD	17-19=-1590/341, 15-17=-1068/311, 14-15=-579/757
WEBS	20-22=0/263, 7-22=-488/174, 19-22=-1706/281, 9-17=-76/904, 10-17=-1082/205, 10-15=-5/862, 12-15=-614/166, 8-22=-178/1271, 6-22=-991/174, 6-24=0/278, 9-19=-1958/134, 8-19=-1700/289

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 26-2-15, Interior(1) 26-2-15 to 40-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) WARNING: Required bearing size at joint(s) 19 greater than input bearing size.
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) 2 except (jt=lb) 19=341, 14=154.
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.

January 4,2021

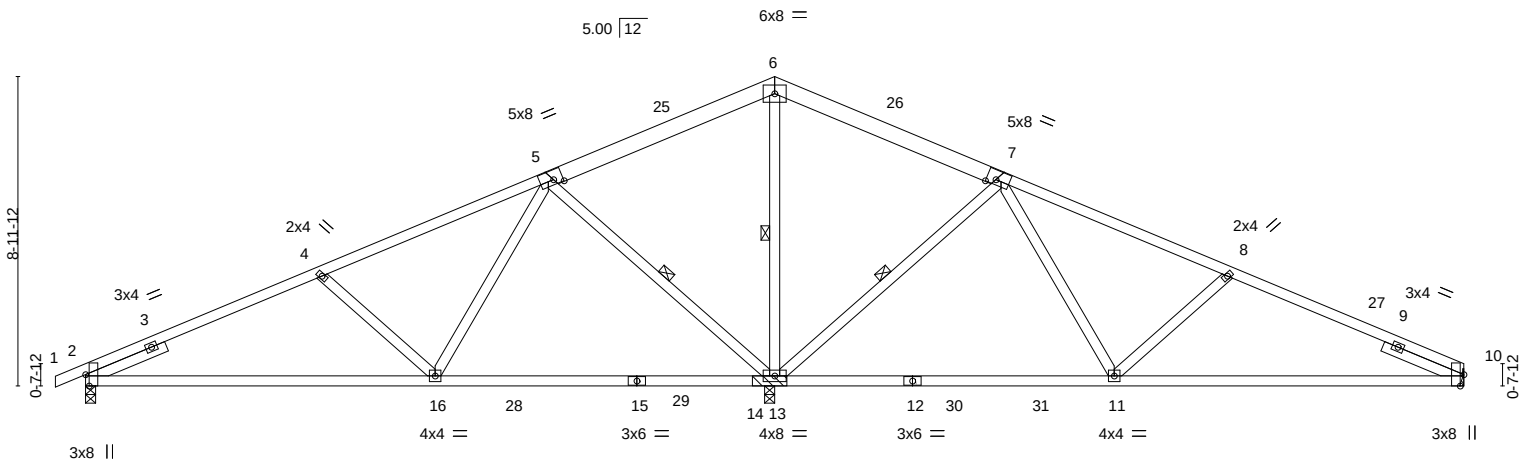
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO I44187966
2592336	A9	Common	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:13 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-dwtXFhdlFpvNbvplOVscqvfC9e9FQ8F?rAlQ3Hy3UZu

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

Scale = 1:66.9



10-1-12	19-8-8	20-0-0	29-10-4	40-0-0
10-1-12	9-6-12	0-3-8	9-10-4	10-1-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.21	13-16	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.34	11-23	>714	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 167 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* 1-5,7-10: 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.
WEBS	1 Row at midpt 6-13, 7-13, 5-13

REACTIONS. (size) 2=0-3-8, 13=(0-3-8 + bearing block) (req. 0-4-11), 10=Mechanical
Max Horz 2=142(LC 12)
Max Uplift 2=-97(LC 12), 13=-159(LC 12), 10=-102(LC 13)
Max Grav 2=933(LC 25), 13=2989(LC 2), 10=864(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1201/156, 4-5=-848/103, 5-6=-17/873, 6-7=0/873, 7-8=-855/159, 8-10=-1223/210
BOT CHORD 2-16=-205/1108, 13-16=-99/302, 11-13=-102/307, 10-11=-124/1120
WEBS 6-13=-1133/99, 7-13=-1150/237, 7-11=-20/892, 8-11=-639/198, 5-13=-1148/239, 5-16=-23/887, 4-16=-633/200

NOTES-
1) 2x4 SPF No.2 bearing block 12" long at jt. 13 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF No.2.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
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 except (jt=lb) 13=159, 10=102.
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.

January 4,2021

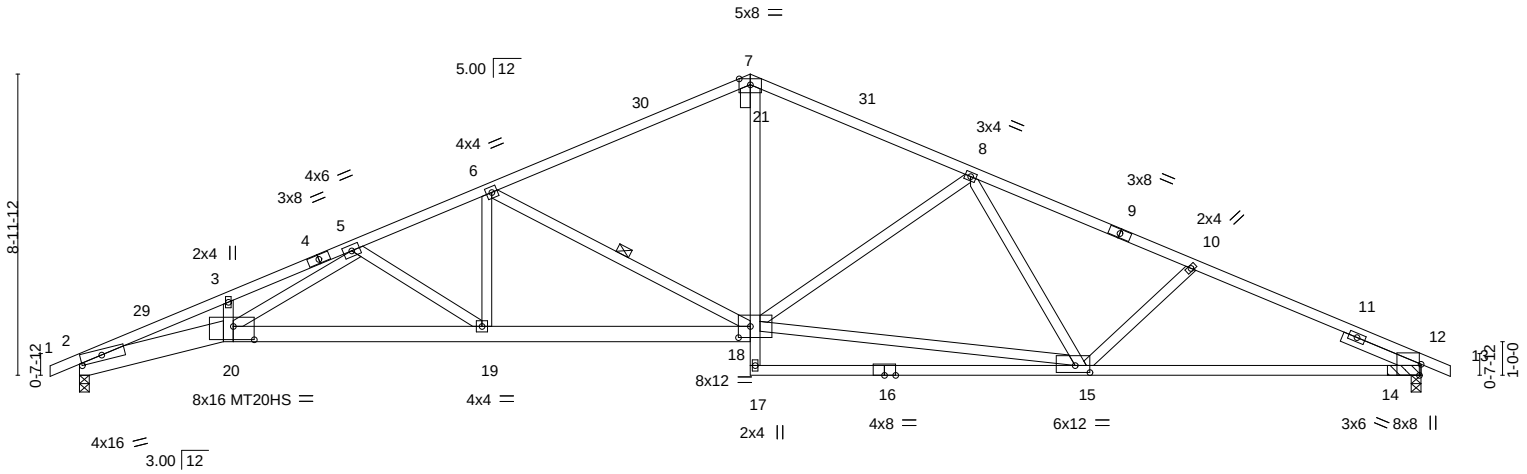
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A10	Roof Special	5	1	I44187967
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:29:42 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-1yWpk4FIYH?nN8xo4UpL4Nsn88aXf_ARislHUay3UaN

-0-10-8	4-3-8	8-3-6	12-1-12	20-0-0	26-6-13	33-1-11	40-0-0	40-10-8
0-10-8	4-3-8	3-11-14	3-10-6	7-10-4	6-6-13	6-6-13	6-10-5	0-10-8

Scale = 1:68.7



4-3-8	12-1-12	20-0-0	29-10-4	40-0-0
4-3-8	7-10-4	7-10-4	9-10-4	10-1-12

Plate Offsets (X,Y)-- [2:0-7-11,0-2-0], [12:0-3-15,Edge], [15:0-5-4,0-2-8], [18:0-4-4,0-4-0], [20:0-7-8,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.41	15-17	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-1.10	15-17	>435	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.35	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 189 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except*
	7-9: 2x4 SPF No.2
BOT CHORD	2x4 SPF 1650F 1.5E *Except*
	2-20: 2x8 SP 2400F 2.0E, 18-20: 2x6 SPF 2100F 1.8E
	16-17: 2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except*
	7-17: 2x4 SPF 1650F 1.5E
SLIDER	Right 2x4 SPF No.2 2-6-0

BRACING-

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

REACTIONS. (size) 2=0-3-8, 12=(0-3-8 + bearing block) (req. 0-3-9)
Max Horz 2=-138(LC 17)
Max Uplift 2=-177(LC 12), 12=-177(LC 13)
Max Grav 2=2277(LC 1), 12=2277(LC 1)

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

TOP CHORD	2-3=-7705/608, 3-5=-7621/665, 5-6=-4842/348, 6-7=-3311/285, 7-8=-3293/289,
	8-10=-4021/290, 10-12=-4355/336
BOT CHORD	2-20=-648/7112, 19-20=-431/5241, 18-19=-295/4428, 12-15=-228/3930
WEBS	7-18=-59/1809, 6-19=0/849, 6-18=-1712/253, 15-18=-135/3587, 8-18=-872/227,
	8-15=0/310, 10-15=-459/190, 5-20=-252/2177, 5-19=-981/165

NOTES-

1) 2x4 SPF 1650F 1.5E bearing block 12" long at jt. 12 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=177, 12=177.
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.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A11	Roof Special	2	1	I44187968
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:29:44 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-_Lda9mGZ4vFVdS5BBvrp9oy7ayEZ7v8kAAEOZSy3UaL

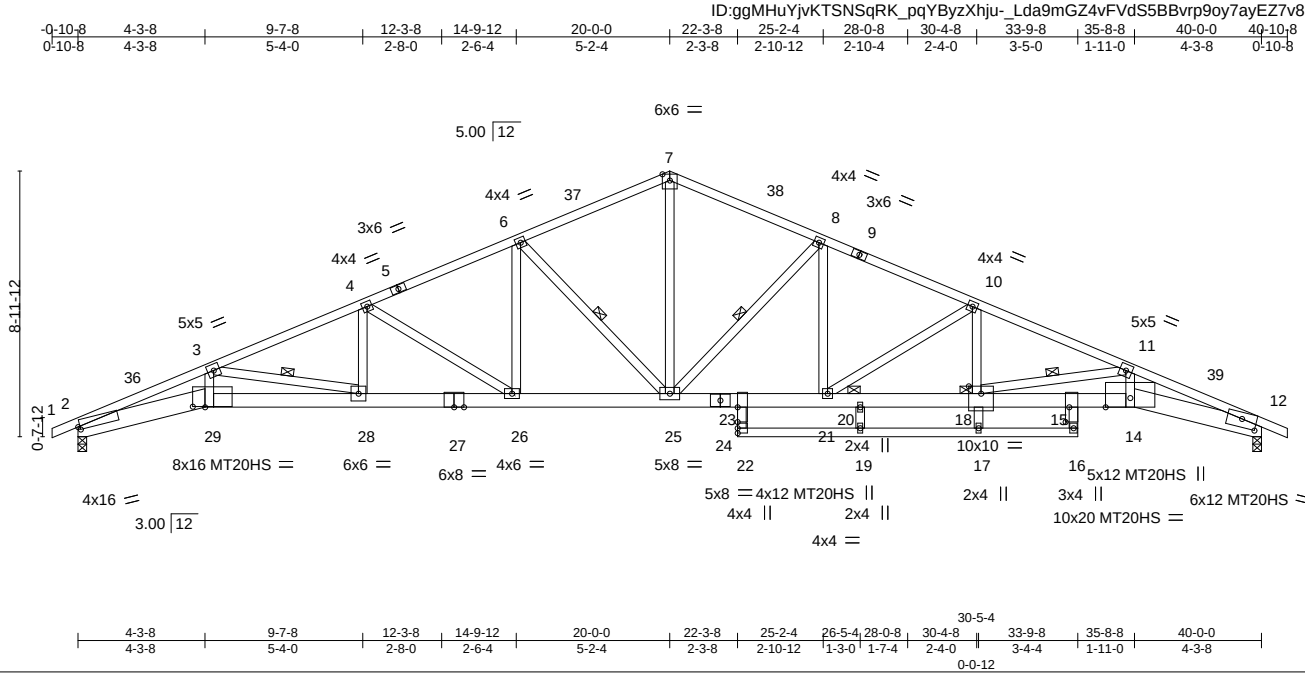


Plate Offsets (X,Y)-- [2:0-0-13,0-1-4], [12:0-6-0,0-3-6], [15:0-6-0,0-1-8], [18:0-5-0,0-3-0], [23:0-6-0,0-0-0], [29:0-5-0,0-0-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.42	25-26	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.98	Vert(CT)	-0.93	25-26	>514	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.44	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 221 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	1-5: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except*
	2-29,12-14: 2x8 SP 2400F 2.0E, 27-29,14-24: 2x6 SPF 2100F 1.8E
	24-27: 2x6 SPF No.2
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-25, 3-28, 11-18, 8-25
JOINTS	1 Brace at Jt(s): 20, 18

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=-138(LC 17)
Max Uplift 2=-176(LC 12), 12=-176(LC 13)
Max Grav 2=2279(LC 1), 12=2279(LC 1)

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

TOP CHORD	2-3=-7992/650, 3-4=-5504/400, 4-6=-4204/301, 6-7=-3265/285, 7-8=-3265/284,
	8-10=-4121/290, 10-11=-5351/349, 11-12=-7784/515
BOT CHORD	2-29=-691/7397, 28-29=-677/7296, 26-28=-380/5037, 25-26=-206/3793, 23-25=-99/3717,
	21-23=-89/3351, 20-21=-183/4521, 18-20=-183/4521, 15-18=-407/6744, 14-15=-416/7107,
	19-22=-11/366, 17-19=-11/366, 16-17=-10/367, 12-14=-424/7194
WEBS	3-29=-62/1199, 11-14=-10/1152, 7-25=-97/1981, 6-25=-1249/208, 6-26=-42/806,
	4-26=-1471/206, 4-28=-13/759, 3-28=-2312/303, 11-18=-2268/227, 10-18=0/692,
	10-21=-1383/180, 8-21=-29/694, 8-25=-1141/196

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0, Interior(1) 23-0-0 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=176, 12=176.
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.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A12	Hip	1	1	I44187969
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:29:46 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-wkIKaSIpcWVCsmFZJKtHED1Wglwmbs_1dUjVdLy3UaJ

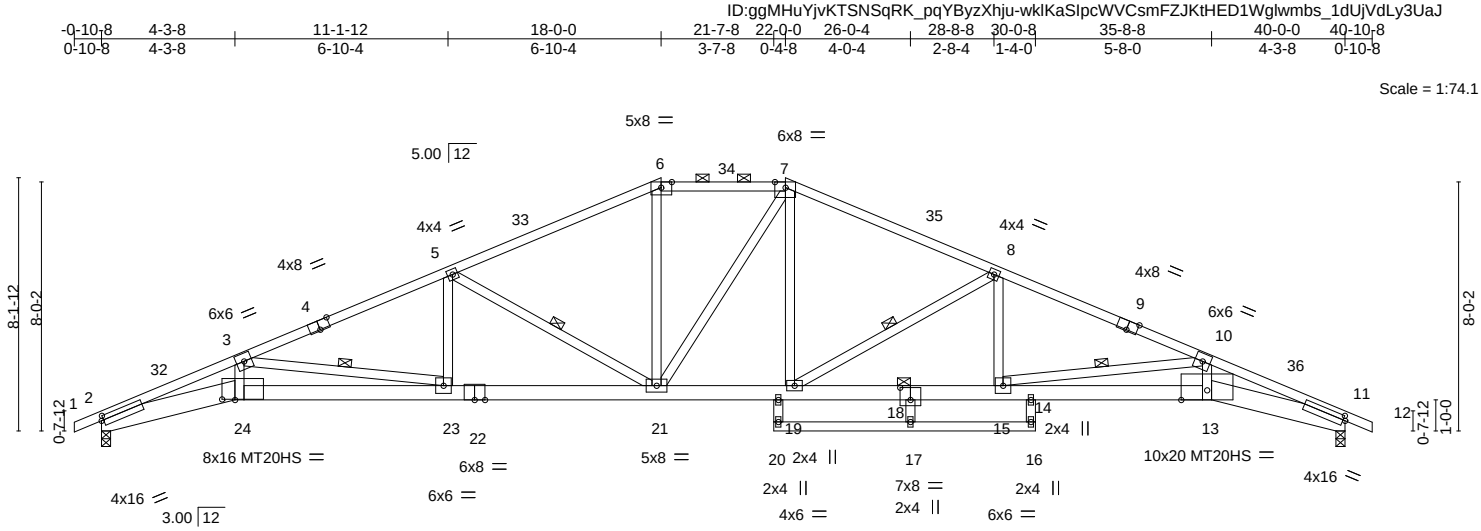


Plate Offsets (X,Y)-- [2:0-0-13,0-1-12], [4:0-4-0,Edge], [6:0-4-2,Edge], [7:0-4-2,Edge], [9:0-4-0,Edge], [11:0-0-13,0-1-12], [18:0-4-0,0-4-12], [24:0-5-0,0-0-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.68	20	>707	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-1.69	20	>284	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.50	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 212 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except*
	6-7: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-24,11-13: 2x8 SP 2400F 2.0E, 22-24,13-18: 2x6 SPF 2100F 1.8E
	18-22: 2x6 SPF No.2
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except
	2-0-0 oc purlins (2-10-14 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied. Except:
	2-2-0 oc bracing: 18-19
WEBS	1 Row at midpt 3-23, 5-21, 8-19, 10-15
JOINTS	1 Brace at Jt(s): 18

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=-123(LC 13)
Max Uplift 2=-158(LC 12), 11=-148(LC 13)
Max Grav 2=2314(LC 1), 11=2331(LC 1)

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

TOP CHORD	2-3=-8245/572, 3-5=-5262/305, 5-6=-3789/235, 6-7=-3366/248, 7-8=-3826/213,
	8-10=-5336/225, 10-11=-8251/432
BOT CHORD	2-24=-607/7642, 23-24=-596/7539, 21-23=-265/4797, 19-21=0/3399, 18-19=-88/4865,
	15-18=-88/4865, 14-15=-344/7545, 13-14=-344/7545, 11-13=-351/7644
WEBS	3-24=-37/1286, 3-23=-2780/335, 5-23=0/721, 5-21=-1632/244, 6-21=-4/931,
	10-13=-2/1247, 17-18=0/359, 7-19=0/1002, 7-21=-320/194, 8-19=-1671/204, 8-15=0/787,
	10-15=-2716/280

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2E) 18-0-0 to 22-0-0, Exterior(2R) 22-0-0 to 26-2-15, Interior(1) 26-2-15 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=158, 11=148.
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.

January 4,2021

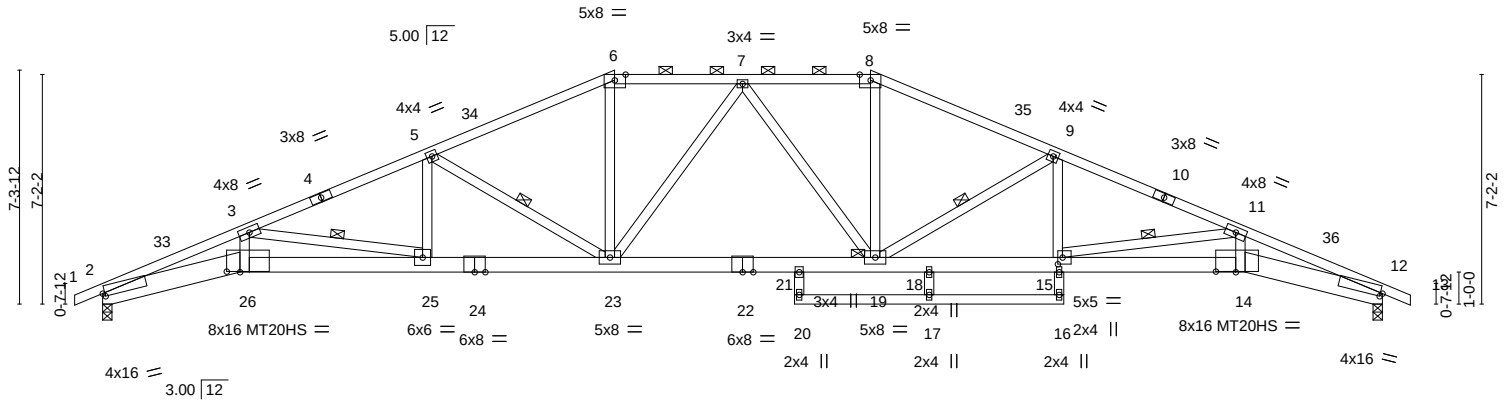
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A13	Hip	1	1	I44187970
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:29:48 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-s6t5?8J387Iw63OyQlwlJe6u8ZcY3pNK5nCciEy3UaH

-0-10-8	4-3-8	10-1-12	16-0-0	20-0-0	21-7-8	24-0-0	29-8-8	30-0-8	35-8-8	40-0-0	40-10-8
0-10-8	4-3-8	5-10-4	5-10-4	4-0-0	1-7-8	2-4-8	5-8-8	0-4-0	5-8-0	4-3-8	0-10-8

Scale = 1:72.0



4-3-8	10-1-12	16-0-0	21-7-8	24-0-0	25-10-0	29-8-8	30-0-8	35-8-8	40-0-0
4-3-8	5-10-4	5-10-4	5-7-8	2-4-8	1-10-0	3-10-8	0-4-0	5-8-0	4-3-8

Plate Offsets (X,Y)-- [2:0-0-13,0-1-4], [6:0-4-2,Edge], [8:0-4-2,Edge], [12:0-0-13,0-1-4], [14:0-7-8,0-0-4], [15:0-1-12,0-2-8], [26:0-5-0,0-0-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.43	21-23	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.98	21-23	>491	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.46	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 211 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except*
	6-8: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except*
	2-26,12-14: 2x8 SP 2400F 2.0E, 24-26,14-22: 2x6 SPF 2100F 1.8E
	22-24: 2x6 SPF No.2
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except
	2-0-0 oc purlins (2-10-3 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-25, 5-23, 9-19, 11-15
JOINTS	1 Brace at Jt(s): 19

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=-109(LC 13)
Max Uplift 2=-182(LC 12), 12=-182(LC 13)
Max Grav 2=2279(LC 1), 12=2279(LC 1)

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

TOP CHORD	2-3=-8036/647, 3-5=-5368/400, 5-6=-4054/297, 6-7=-3630/300, 7-8=-3610/298,
	8-9=-4033/294, 9-11=-5370/365, 11-12=-8038/552
BOT CHORD	2-26=-660/7441, 25-26=-647/7339, 23-25=-348/4907, 21-23=-120/3774, 19-21=-109/3688,
	18-19=-195/4813, 15-18=-195/4813, 14-15=-451/7341, 12-14=-459/7443
WEBS	3-26=-51/1237, 3-25=-2478/305, 5-25=-5/706, 5-23=-1467/231, 6-23=-22/1110,
	11-14=-15/1242, 8-19=-29/1102, 9-19=-1482/219, 11-15=-2480/249, 7-23=-460/129,
	7-19=-487/136, 9-15=0/722

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 16-0-0, Exterior(2R) 16-0-0 to 20-0-0, Interior(1) 20-0-0 to 24-0-0, Exterior(2R) 24-0-0 to 28-2-15, Interior(1) 28-2-15 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=182, 12=182.
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.

January 4,2021

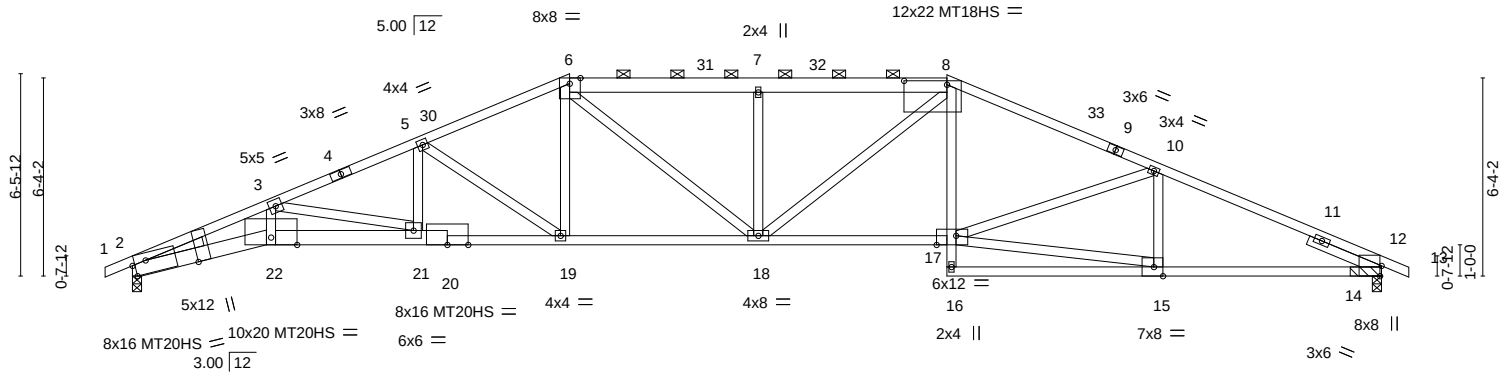
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A14	Hip	1	1	I44187971
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:29:49 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-KIRTCUKhvRtnjDz8_SR_srf?4zz5o9CTJRx9Egy3UaG

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

Scale = 1:73.8



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

Plate Offsets (X,Y)-- [2:0-4-7,Edge], [2:0-4-11,Edge], [2:1-2-10,0-0-13], [2:0-2-11,0-0-6], [6:0-4-2,Edge], [8:1-4-8,0-1-8], [12:0-3-15,Edge], [15:0-3-8,Edge], [17:0-7-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.39	18-19	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.89	Vert(CT)	-0.88	18-19	>544	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.42	12	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 185 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E *Except*
4-6: 2x4 SPF No.2, 6-8: 2x6 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.5E *Except*
2-22,20-22: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-1-7 max.): 6-8.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 12=(0-3-8 + bearing block) (req. 0-3-9)
Max Horz 2=97(LC 16)
Max Uplift 2=-129(LC 12), 12=-128(LC 13)
Max Grav 2=2279(LC 1), 12=2279(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7946/435, 3-5=-5501/341, 5-6=-4357/313, 6-7=-4492/357, 7-8=-4490/356,
8-10=-4406/313, 10-12=-4353/276
BOT CHORD 2-22=-441/7368, 21-22=-431/7257, 19-21=-219/5042, 18-19=-159/3939, 17-18=-154/3977,
12-15=-186/3927
WEBS 8-17=-11/694, 3-22=-42/1319, 6-19=-36/779, 6-18=-87/899, 7-18=-756/179,
15-17=-183/3862, 10-17=-33/325, 10-15=-493/119, 3-21=-2276/238, 5-21=-1/716,
5-19=-1301/180, 8-18=-75/872

NOTES-
1) 2x4 SPF 1650F 1.5E bearing block 12" long at jt. 12 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-2-11, Interior(1) 2-2-11 to 14-0-0, Exterior(2R) 14-0-0 to 18-2-15, Interior(1) 18-2-15 to 26-1-0, Exterior(2R) 26-1-0 to 30-3-15, Interior(1) 30-3-15 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=129, 12=128.

January 4,2021

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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.

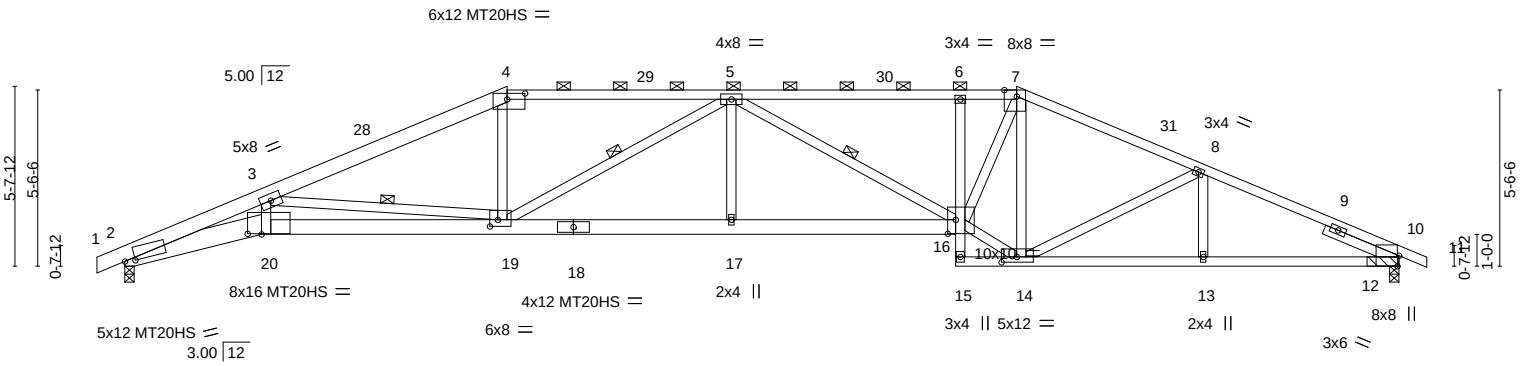
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A15	HIP	1	1	I44187972
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:29:51 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-GhYDd9MyR27VzX7X5tTSxGkLJmenG3vmnlQGJYy3UaE

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

Scale = 1:72.3



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

Plate Offsets (X,Y)-- [2:0-3-15,0-0-8], [4:0-6-12,0-2-4], [7:0-4-11,Edge], [10:0-3-15,Edge], [14:0-5-12,0-2-0], [16:0-3-0,0-5-4], [19:0-3-0,0-2-8], [20:0-5-4,0-0-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.42	16-17	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.93	16-17	>517	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.42	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 196 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except*
	1-4: 2x6 SPF No.2
BOT CHORD	2x4 SPF 1650F 1.5E *Except*
	2-20: 2x8 SP 2400F 2.0E, 18-20,16-18: 2x6 SPF 2100F 1.8E
	6-15: 2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except
	2-0-0 oc purlins (2-2-0 max.): 4-7.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-19, 5-19, 5-16

REACTIONS. (size) 2=0-3-8, 10=(0-3-8 + bearing block) (req. 0-3-9)
Max Horz 2=87(LC 12)
Max Uplift 2=-149(LC 8), 10=-149(LC 9)
Max Grav 2=2279(LC 1), 10=2279(LC 1)

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

TOP CHORD	2-3=-8618/523, 3-4=-5037/381, 4-5=-4590/379, 5-6=-4815/416, 6-7=-4748/409,
	7-8=-3928/327, 8-10=-4348/293
BOT CHORD	2-20=-460/8040, 19-20=-455/7873, 17-19=-349/5365, 16-17=-349/5365, 6-16=-521/133,
	14-15=-51/279, 13-14=-206/3929, 10-13=-206/3929
WEBS	3-20=-5/1633, 3-19=-3315/363, 4-19=-0/1164, 5-19=-1117/129, 5-17=0/270,
	5-16=-805/77, 14-16=-152/3810, 7-16=-232/2958, 7-14=-1558/128, 8-14=-446/156

NOTES-

1) 2x4 SPF 1650F 1.5E bearing block 12" long at jt. 10 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-4-13, Interior(1) 2-4-13 to 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 28-0-0, Exterior(2R) 28-0-0 to 32-2-15, Interior(1) 32-2-15 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=149, 10=149.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	A16	Hip	1	1	I44187973
					Job Reference (optional)

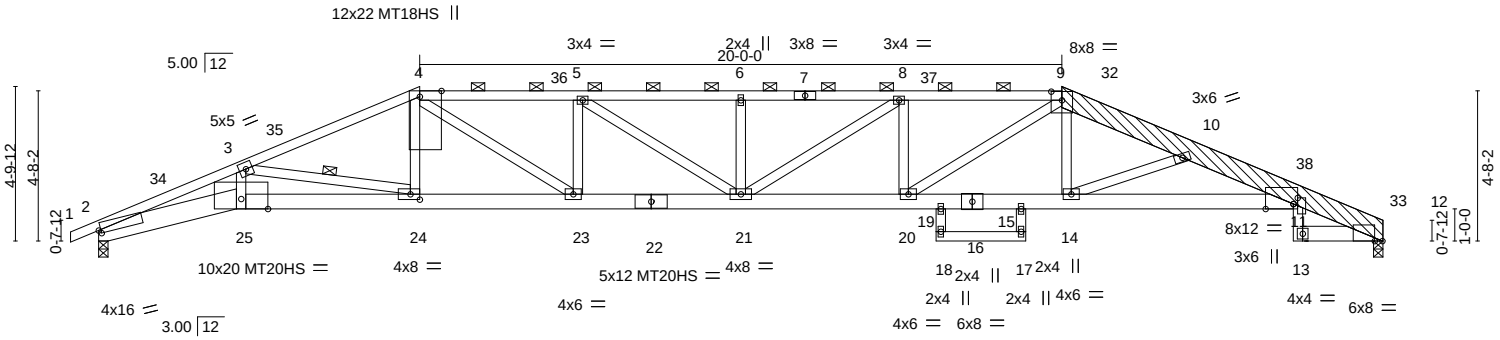
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:29:53 2020 Page 1

ID:ggMHuYjvKTSNSqRK_pqYByzXhju-D4g_2rNCzgNDCqHvDlVw0hqhGaKQk463E3vNNRy3uAC

-0-10-8 4-3-8 10-0-0 14-11-2 15-4-5 20-0-0 20-8-11 25-0-14 26-1-0 28-10-8 30-0-0 33-9-0 37-2-8 40-0-0 40-10-8

0-10-8 4-3-8 5-8-8 4-11-2 0-5-3 4-7-11 0-8-11 4-4-3 1-0-2 2-9-8 1-1-8 3-9-0 3-5-8 2-9-8 0-10-8

Scale = 1:71.8



4-3-8 10-0-0 14-11-2 18-0-8 20-0-0 25-0-14 26-1-0 28-10-8 30-0-0 33-9-0 37-2-8 40-0-0

4-3-8 5-8-8 4-11-2 3-1-6 1-11-8 5-0-14 1-0-2 2-9-8 1-1-8 3-9-0 3-5-8 2-9-8

Plate Offsets (X,Y)-- [2:0-0-13,0-1-4], [4:0-2-3,Edge], [9:0-4-0,0-3-4], [11:0-10-6,Edge], [11:0-2-4,0-1-10], [12:0-2-14,0-0-0], [24:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.60	21	>804	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.93	Vert(CT)	-1.31	21	>366	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.55	12	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 241 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except*
	9-12: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except*
	2-25: 2x8 SP 2400F 2.0E, 22-25,11-16,16-22: 2x6 SPF 2100F 1.8E
	12-13: 2x6 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x8 SP 2400F 2.0E
LBR SCAB	9-12 2x8 SP 2400F 2.0E one side

BRACING-

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

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=75(LC 16)
Max Uplift 2=-171(LC 8), 12=-147(LC 9)
Max Grav 2=2278(LC 1), 12=2198(LC 1)

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

TOP CHORD	2-3=-8016/576, 3-4=-5530/467, 4-5=-6234/593, 5-6=-6666/633, 6-8=-6666/633,
	8-9=-6234/592, 9-10=-5544/466, 10-11=-6928/548, 11-12=-1095/98
BOT CHORD	2-25=-507/7423, 24-25=-499/7325, 23-24=-349/5037, 21-23=-489/6231, 20-21=-482/6234,
	19-20=-342/5082, 15-19=-343/5025, 14-15=-342/5082, 11-14=-475/6766, 11-13=-29/556
WEBS	3-25=-16/1178, 3-24=-2302/235, 4-24=0/784, 9-14=0/779, 6-21=-456/124, 5-21=-61/622,
	5-23=-863/167, 4-23=-183/1594, 8-21=-58/627, 8-20=-798/159, 9-20=-179/1513,
	10-14=-1774/169

NOTES-

1) Attached 11-1-0 scab 9 to 12, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 3-4-15 from end at joint 9, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 6-6-12 from end at joint 9, nail 2 row(s) at 2" o.c. for 4-3-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 30-0-0, Exterior(2R) 30-0-0 to 34-0-14, Interior(1) 34-0-14 to 39-11-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=171, 12=147.

Continued on page 2

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

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

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.

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO I44187974
2592336	A17	Hip	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:29:54 2020 Page 1
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-0-10-8 4-3-8 8-0-0 14-0-5 19-7-12 20-0-11 25-3-4 26-1-0 28-10-8 32-0-0 34-6-15 37-2-8 40-0-0 40-10-8
0-10-8 4-3-8 3-8-8 6-0-5 5-7-7 0-4-14 5-2-9 0-9-12 2-9-8 3-1-8 2-6-15 2-7-9 2-9-8 0-10-8

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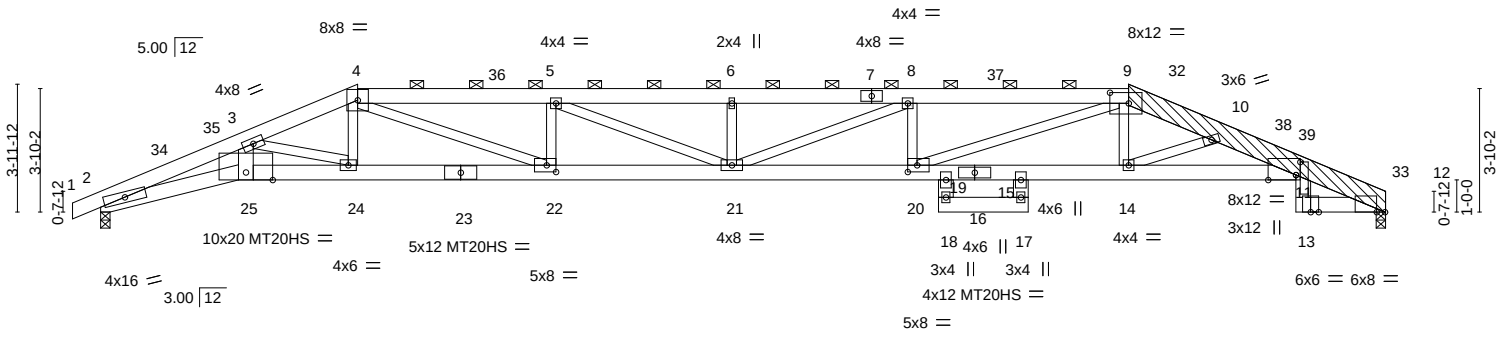

4-3-8 8-0-0 14-0-5 19-7-12 20-0-11 25-3-4 26-1-0 28-10-8 32-0-0 37-2-8 40-0-0
4-3-8 3-8-8 6-0-5 5-7-7 0-4-14 5-2-9 0-9-12 2-9-8 3-1-8 5-2-8 2-9-8

Plate Offsets (X,Y)-- [9:0-7-0,0-4-0], [11:0-10-6,Edge], [11:0-4-14,0-1-10], [12:0-3-2,0-0-0], [20:0-3-8,0-2-8], [22:0-3-8,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.71	20-21	>680	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.83	Vert(CT)	-1.55	20-21	>309	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.58	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 242 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
4-7: 2x6 SPF 2100F 1.8E, 9-12: 2x8 SP 2400F 2.0E
BOT CHORD 2x6 SPF No.2 *Except*
2-25,23-25,11-16,16-23: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
3-25: 2x6 SPF No.2
OTHERS 2x8 SP 2400F 2.0E
LBR SCAB 9-12 2x8 SP 2400F 2.0E one side

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins: 4-9.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=62(LC 16)
Max Uplift 2=-192(LC 8), 12=-169(LC 9)
Max Grav 2=2278(LC 1), 12=2198(LC 1)

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

TOP CHORD 2-3=-8136/673, 3-4=-6423/588, 4-5=-8344/843, 5-6=-9198/931, 6-8=-9198/931, 8-9=-8486/861, 9-10=-6381/592, 10-11=-7159/625, 11-12=-1275/122
BOT CHORD 2-25=-594/7513, 24-25=-579/7364, 22-24=-486/5957, 21-22=-762/8342, 20-21=-774/8486, 19-20=-493/6118, 15-19=-484/5829, 14-15=-493/6118, 11-14=-558/6990, 17-18=-10/289, 11-13=-45/701
WEBS 3-25=-69/1349, 3-24=-1429/159, 4-24=0/770, 4-22=-309/2694, 5-22=-961/197, 9-14=0/538, 8-20=-868/188, 9-20=-309/2645, 10-14=-973/108, 5-21=-106/1024, 6-21=-496/130, 8-21=-84/869

NOTES-

1) Attached 8-11-0 scab 9 to 12, front face(s) 2x8 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-3 from end at joint 9, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 2-1-12 from end at joint 9, nail 2 row(s) at 2" o.c. for 6-6-0.
2) Unbalanced roof live loads have been considered for this design.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 32-0-0, Exterior(2R) 32-0-0 to 36-2-15, Interior(1) 36-2-15 to 39-11-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

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

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=192, 12=169.
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.

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO	I44187975
2592336	A18	HIP GIRDER	1	2	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:29:58 2020 Page 1
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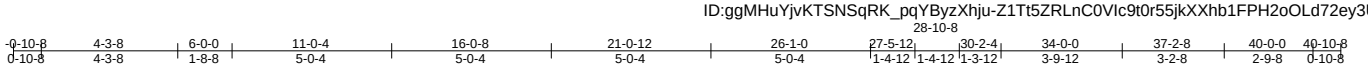

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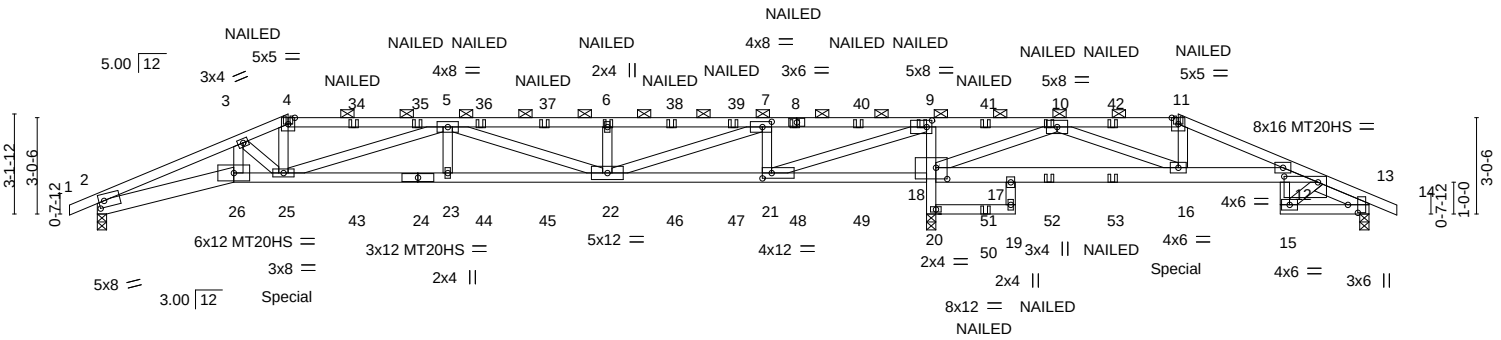

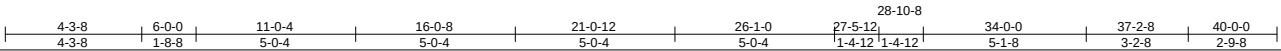

Plate Offsets (X,Y)-- [2:0-1-15,0-2-8], [7:0-3-8,0-2-0], [9:0-2-0,0-2-8], [12:1-0-12,0-2-3], [13:0-3-0,0-3-12], [18:0-4-4,0-4-4], [21:0-3-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.31	22-23	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.66	22-23	>473	180	MT20HS	148/108
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.15	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 322 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
8-11: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
2-26: 2x6 SPF 2100F 1.8E, 24-26,18-24: 2x4 SPF 1650F 1.5E
12-18: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
5-25,9-21: 2x4 SPF 1650F 1.5E
SLIDER Right 2x4 SPF No.2 1-9-0

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins, except 2-0-0 oc purlins (4-2-9 max.): 4-11.
BOT CHORD Rigid ceiling directly applied or 4-11-5 oc bracing. Except: 10-0-0 oc bracing: 12-16

REACTIONS. (size) 2=0-3-8, 13=0-3-8, 20=0-3-8
Max Horz 2=44(LC 8)
Max Uplift 2=-375(LC 8), 13=-96(LC 9), 20=-977(LC 4)
Max Grav 2=2256(LC 21), 13=480(LC 22), 20=5870(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7324/1267, 3-4=-6760/1203, 4-5=-6244/1120, 5-6=-5851/1061, 6-7=-5851/1061, 7-9=-974/233, 9-10=-1176/7435, 10-11=-421/173, 11-12=-475/193
BOT CHORD 2-26=-1163/6702, 25-26=-1133/6542, 23-25=-1317/7662, 22-23=-1317/7662, 21-22=-164/974, 18-21=-7572/1240, 18-20=-5782/982, 9-18=-3544/634, 17-18=-2779/469, 16-17=-2924/491, 12-16=-80/407
WEBS 3-26=-94/690, 3-25=-315/185, 4-25=-307/1790, 5-25=-1560/308, 5-23=-29/370, 5-22=-1961/330, 6-22=-664/152, 7-22=-897/5207, 7-21=-2327/426, 9-21=-1481/8824, 11-16=-368/124, 10-18=-4890/856, 10-16=-459/3563

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

January 4,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

9) Bearing at joint(s) 2, 20 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) 13 except (jt=lb) 2=375, 20=977.
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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 473 lb down and 105 lb up at 6-0-0, 116 lb down and 45 lb up at 6-0-12, 116 lb down and 45 lb up at 8-0-12, 116 lb down and 45 lb up at 10-0-12, 116 lb down and 45 lb up at 12-0-12, 116 lb down and 45 lb up at 14-0-12, 116 lb down and 45 lb up at 16-0-12, 116 lb down and 45 lb up at 18-0-12, 116 lb down and 45 lb up at 20-0-0, 116 lb down and 45 lb up at 21-11-4, 116 lb down and 45 lb up at 23-11-4, and 116 lb down and 45 lb up at 26-2-12, and 611 lb down and 148 lb up at 33-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-11=-90, 11-12=-90, 12-14=-90, 26-27=-20, 18-26=-20, 19-20=-20, 12-17=-20, 15-30=-20
Concentrated Loads (lb)
Vert: 4=-84(F) 8=-84(F) 24=-116 9=-84(F) 18=-116 25=-589(F=-473) 22=-116 6=-84(F) 11=-116(F) 16=-611(F) 10=-116(F) 34=-84(F) 35=-84(F) 36=-84(F) 37=-84(F) 38=-84(F) 39=-84(F) 40=-84(F) 41=-90(F) 42=-116(F) 43=-116 44=-116 45=-116 46=-116 47=-116 48=-116 49=-116 50=-111(F) 52=-85(F) 53=-85(F)

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	B1	Common	3	1	I44187976
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:13 2020 Page 1
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0-10-8 6-0-0 6-0-0 0-10-8

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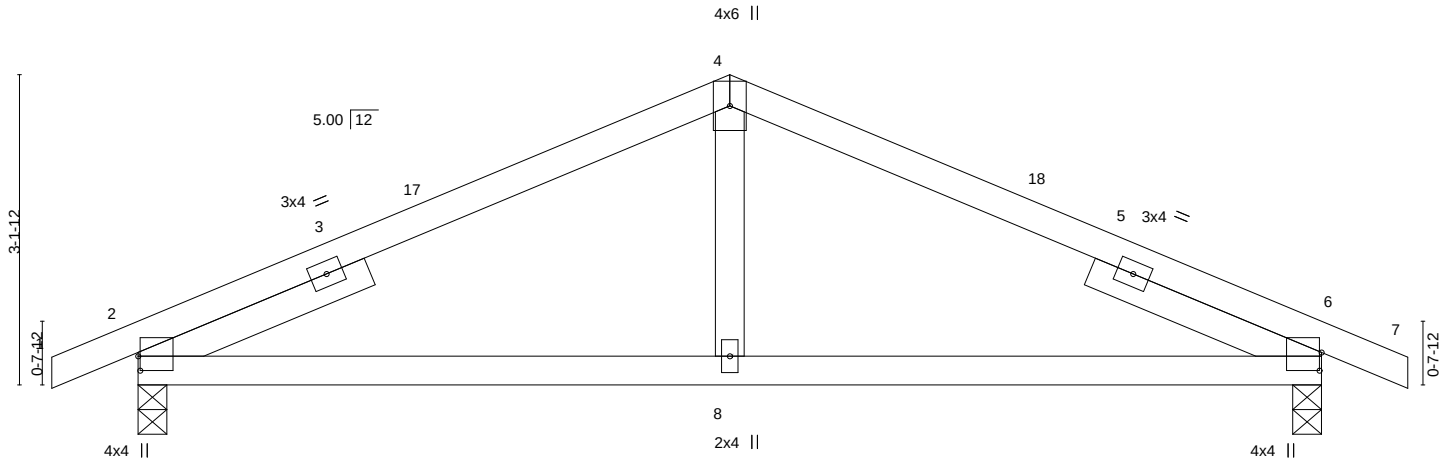

6-0-0 12-0-0
6-0-0 6-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.04	8-15	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.07	8-15	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.02	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 40 lb	FT = 20%

LUMBER-

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=45(LC 12)
Max Uplift 2=-64(LC 12), 6=-64(LC 13)
Max Grav 2=739(LC 1), 6=739(LC 1)

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

TOP CHORD	2-4=-863/228, 4-6=-863/228
BOT CHORD	2-8=-112/786, 6-8=-112/786
WEBS	4-8=0/257

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	B2	Hip Girder	1	1	I44187977

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:15 2020 Page 1

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0-10-8 4-0-0 4-0-0 4-0-0 0-10-8

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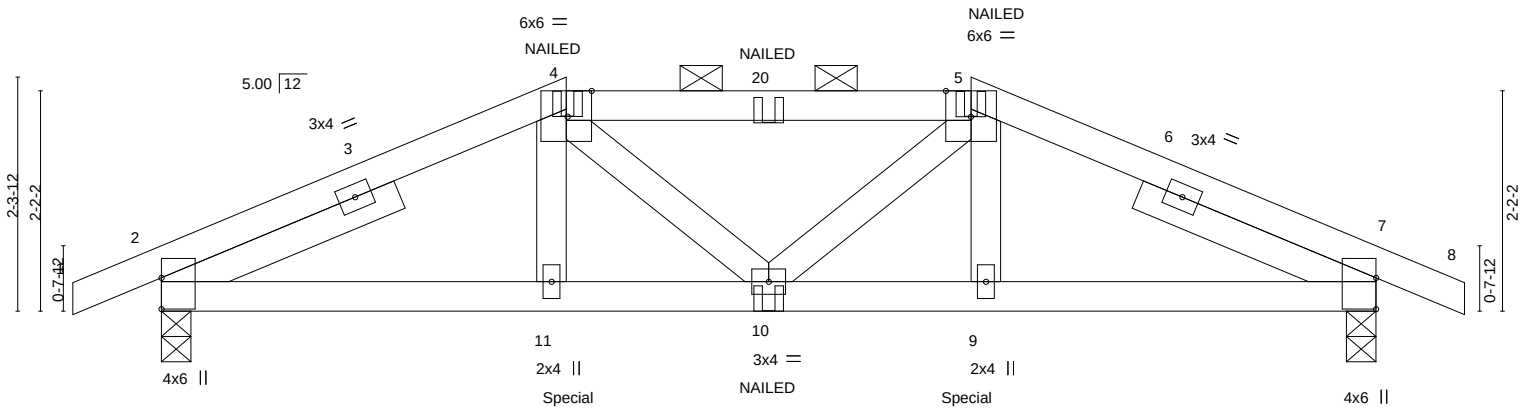

4-0-0 6-0-0 8-0-0 12-0-0

4-0-0 2-0-0 2-0-0 4-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.04	9-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.08	9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 46 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-0-6 oc purlins, except 2-0-0 oc purlins (3-7-7 max.): 4-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=-31(LC 9)
Max Uplift 2=-159(LC 8), 7=-159(LC 9)
Max Grav 2=1131(LC 1), 7=1131(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1842/278, 4-5=-1743/248, 5-7=-1842/278
BOT CHORD 2-11=-233/1681, 10-11=-233/1663, 9-10=-208/1663, 7-9=-207/1681

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=159, 7=159.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 290 lb down and 66 lb up at 4-0-0, and 290 lb down and 66 lb up at 7-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-5=-90, 5-8=-90, 12-16=-20
Concentrated Loads (lb)
Vert: 4=-60(F) 5=-60(F) 11=-290(F) 9=-290(F) 10=-27(F) 20=-60(F)

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	CJ1	Jack-Open	1	1	I44187978
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:16 2020 Page 1
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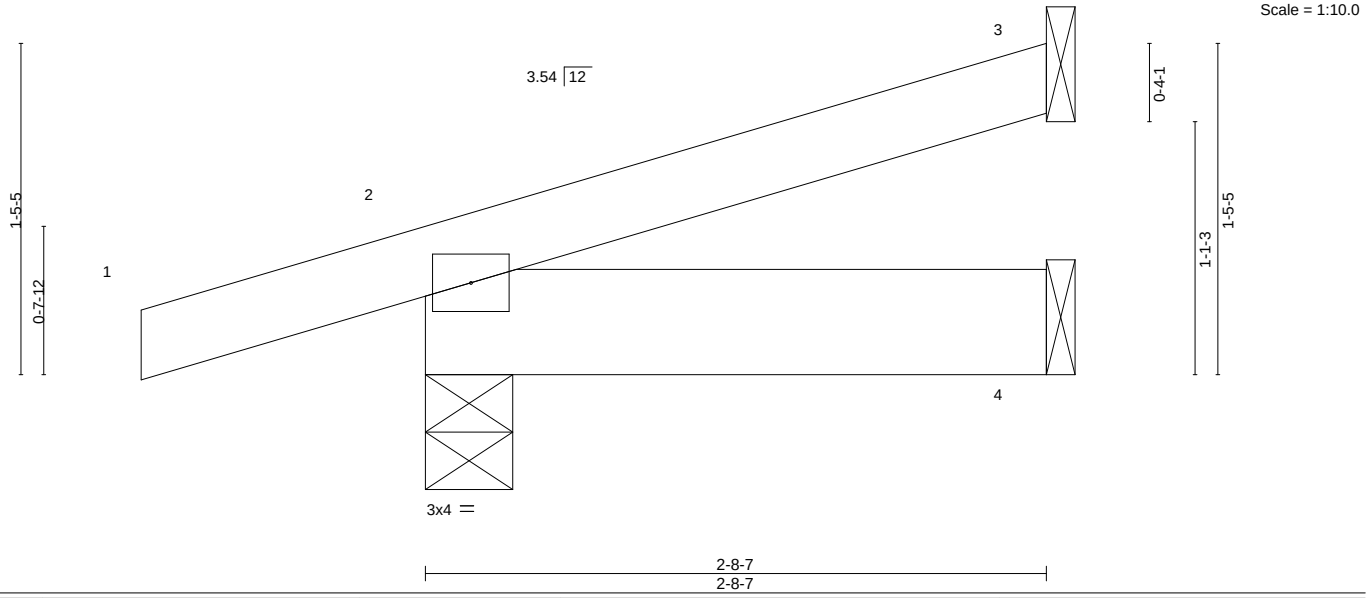

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 10 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=46(LC 8)
Max Uplift 3=-25(LC 12), 2=-65(LC 8)
Max Grav 3=83(LC 1), 2=283(LC 1), 4=54(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	CJ2	Jack-Open	1	1	I44187979
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:16 2020 Page 1
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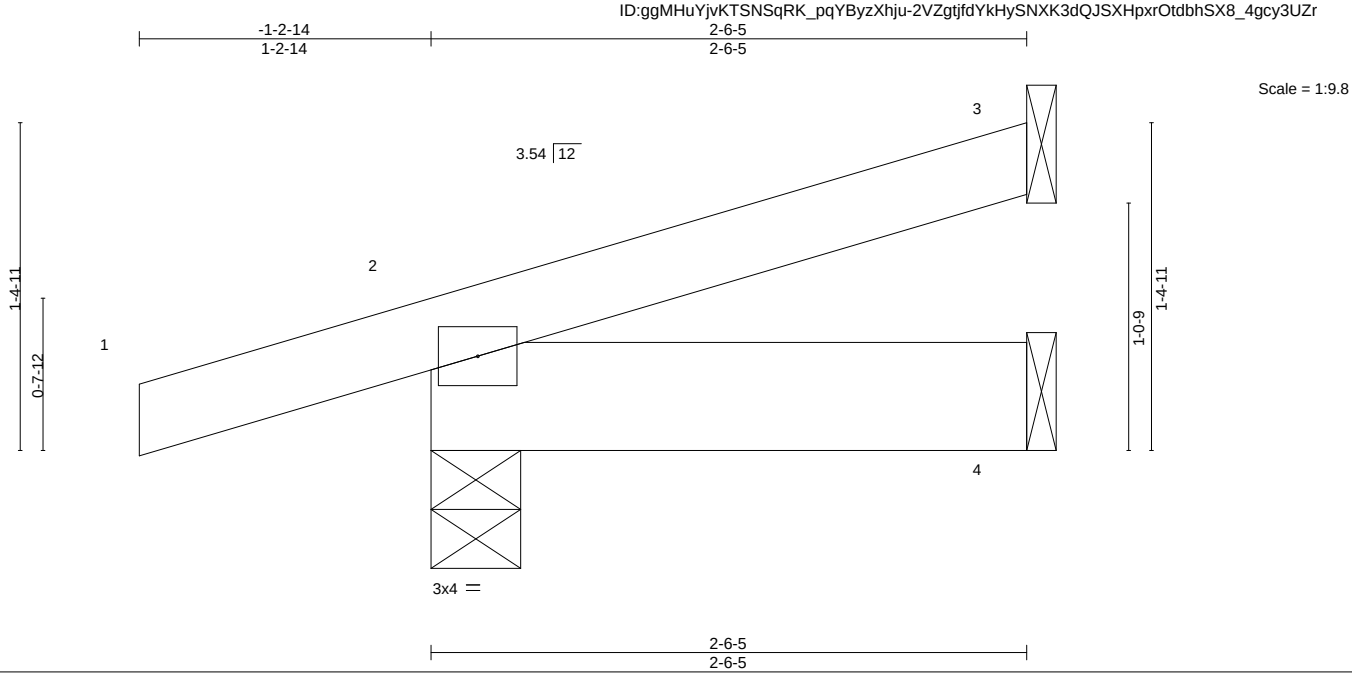

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 9 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-9, 4=Mechanical
Max Horz 2=44(LC 8)
Max Uplift 3=-23(LC 12), 2=-65(LC 8)
Max Grav 3=76(LC 1), 2=275(LC 1), 4=50(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	CJ3	Diagonal Hip Girder	2	1	I44187980
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:17 2020 Page 1
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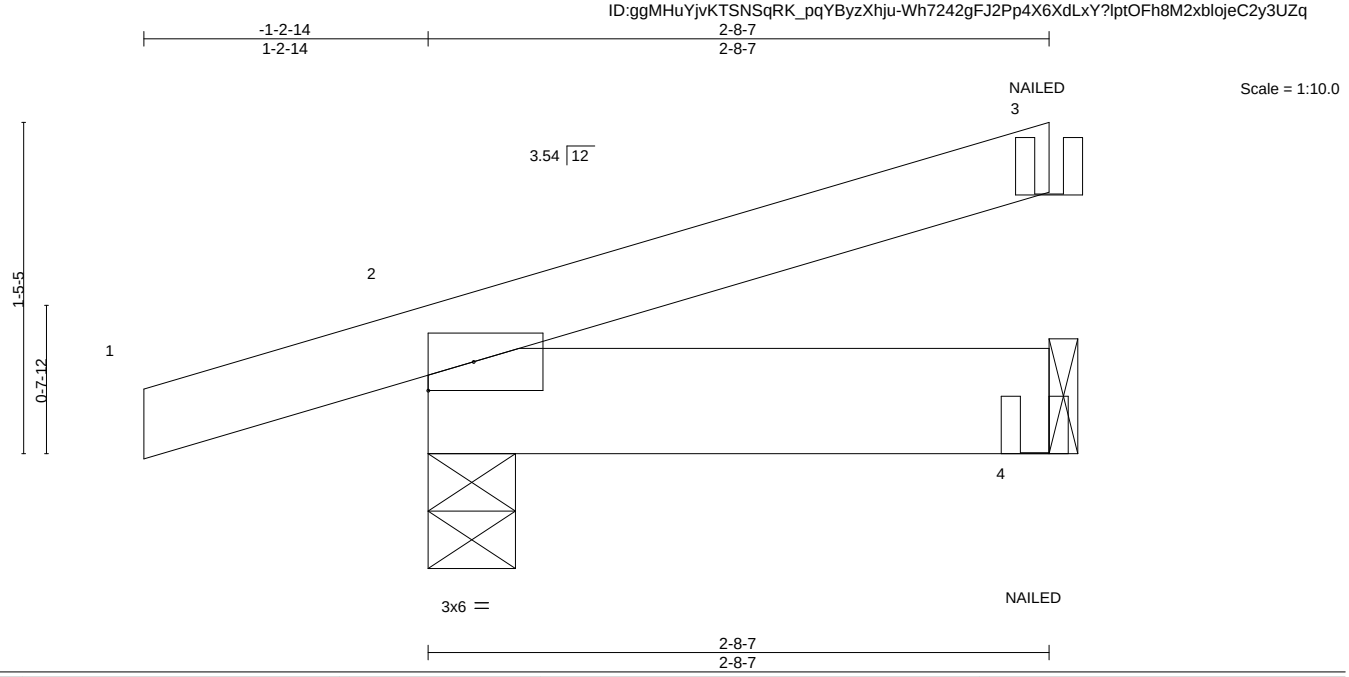

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.00	4-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 10 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-9, 4=Mechanical
Max Horz 2=43(LC 4)
Max Uplift 2=-61(LC 21), 4=-37(LC 5)
Max Grav 2=283(LC 1), 4=150(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 4-5=-20
Concentrated Loads (lb)
Vert: 4=-25(B)

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	CJ4	Diagonal Hip Girder	1	1	I44187981

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:18 2020 Page 1
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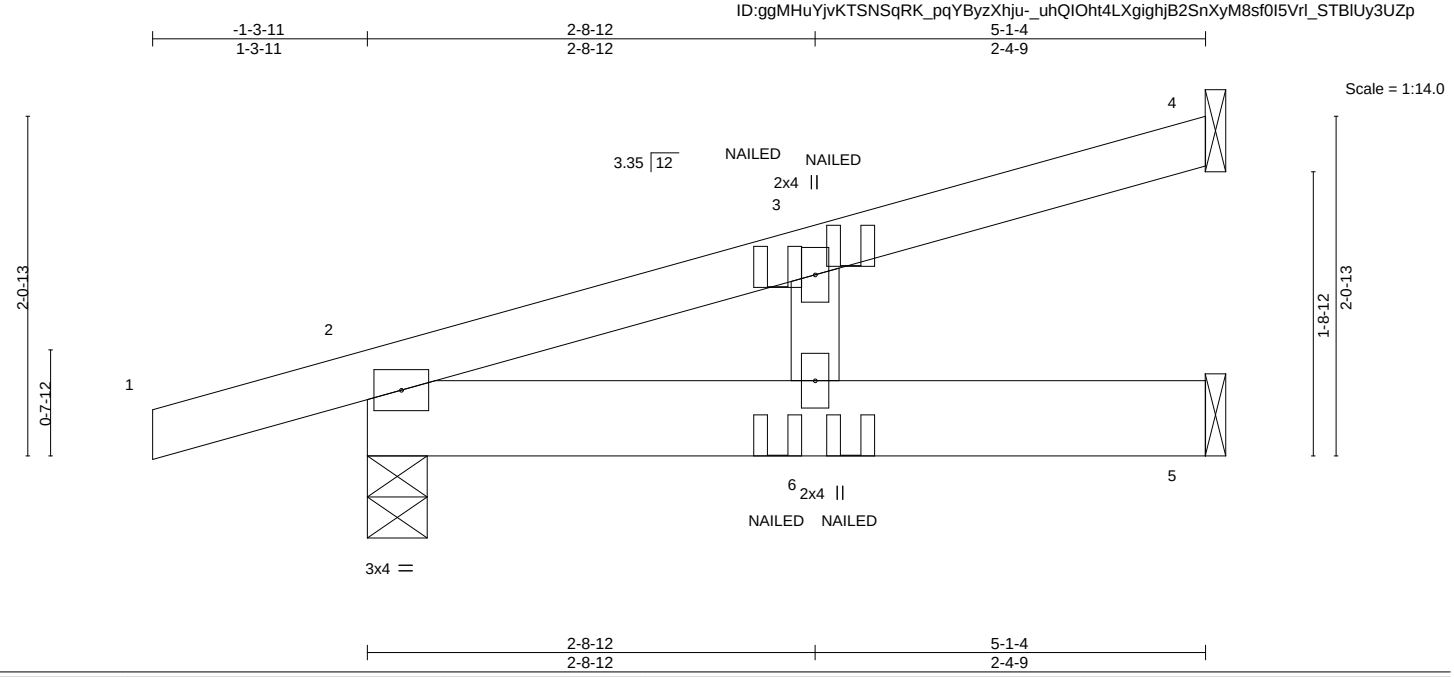

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.02	6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.04	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.02	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 18 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-4-6, 5=Mechanical
Max Horz 2=69(LC 21)
Max Uplift 4=-30(LC 8), 2=-76(LC 4), 5=-9(LC 8)
Max Grav 4=115(LC 1), 2=416(LC 1), 5=153(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	CJ5	Diagonal Hip Girder	1	1	I44187982
					Job Reference (optional)

8.240 s Aug 6 2020 MiTek Industries, Inc. Thu Dec 31 15:12:34 2020 Page 1
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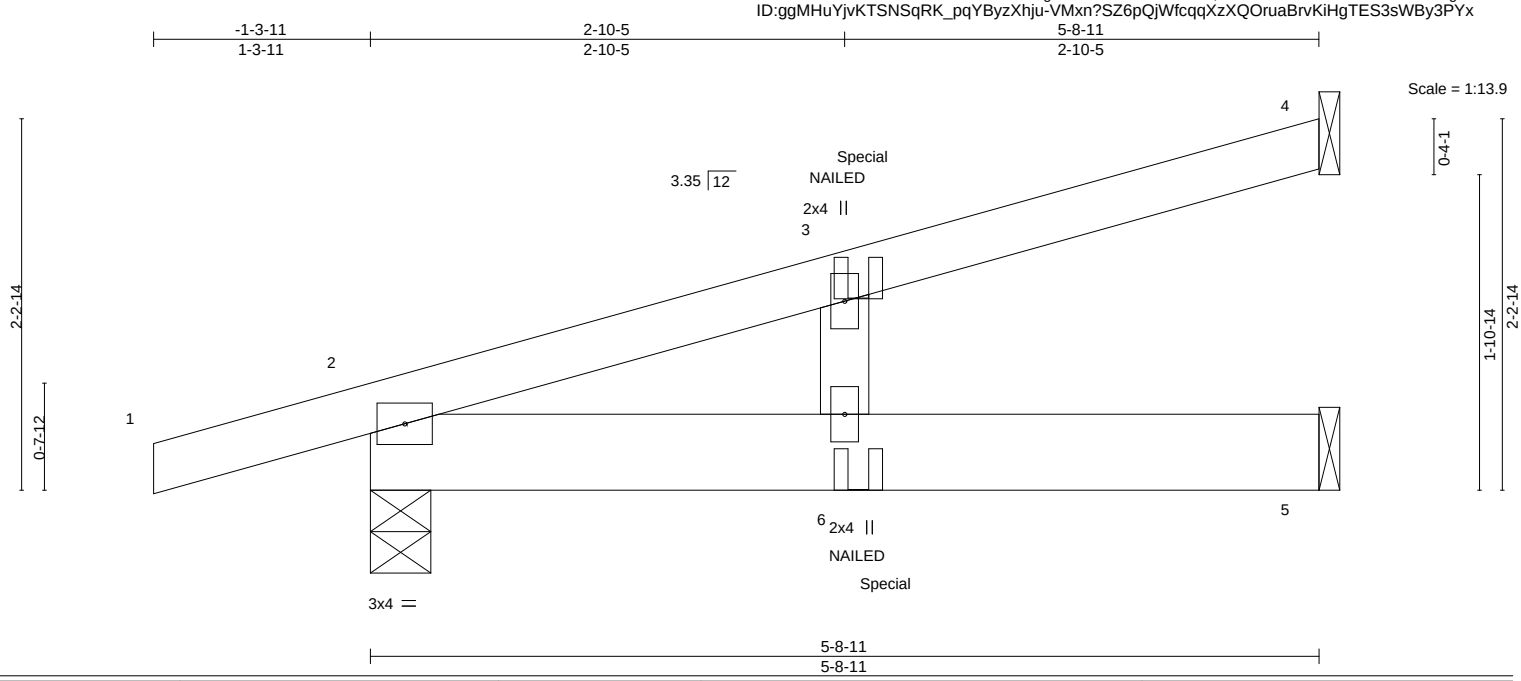

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.03	6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.06	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.03	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014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

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

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

REACTIONS. (lb/size) 4=136/Mechanical, 2=447/0-4-6, 5=166/Mechanical
Max Horz 2=76(LC 21)
Max Uplift 4=-36(LC 8), 2=-78(LC 4), 5=-8(LC 8)

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 4, 78 lb uplift at joint 2 and 8 lb uplift at joint 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 24 lb down and 30 lb up at 3-1-6 on top chord, and 1 lb down and 1 lb up at 3-1-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	CJ6	Diagonal Hip Girder	1	1	I44187983

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:20 2020 Page 1
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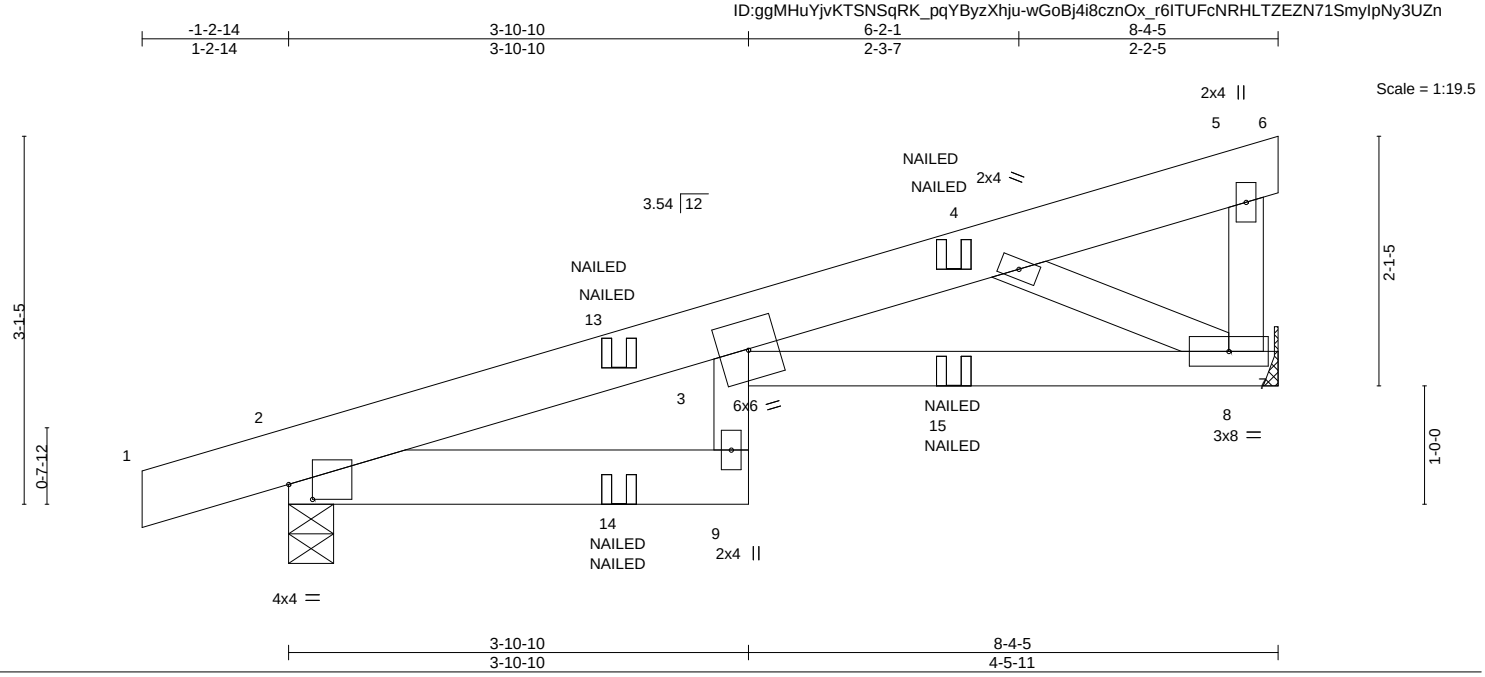

Plate Offsets (X,Y)-- [2:0-2-7,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.12	9	>823	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.25	9	>386	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 35 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-9: 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-9.

REACTIONS. (size) 8=Mechanical, 2=0-4-9
Max Horz 2=91(LC 5)
Max Uplift 8=-99(LC 8), 2=-108(LC 4)
Max Grav 8=555(LC 1), 2=609(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-954/175
BOT CHORD 3-8=-201/1037
WEBS 4-8=-1124/233

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=108.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 3-5=-90, 5-6=-40, 9-10=-20, 3-7=-20
Concentrated Loads (lb)
Vert: 14=2(F=1, B=1) 15=-147(F=-74, B=-74)

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO	I44187984
2592336	CJ7	Diagonal Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:21 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-OSMZwQjmNGvFZ8QIsA0U9b_bls1zIqoBgQhrLpy3UZm

-1-2-14 | 3-1-7 | 5-11-5 | 8-4-5
1-2-14 | 3-1-7 | 2-9-15 | 2-5-0

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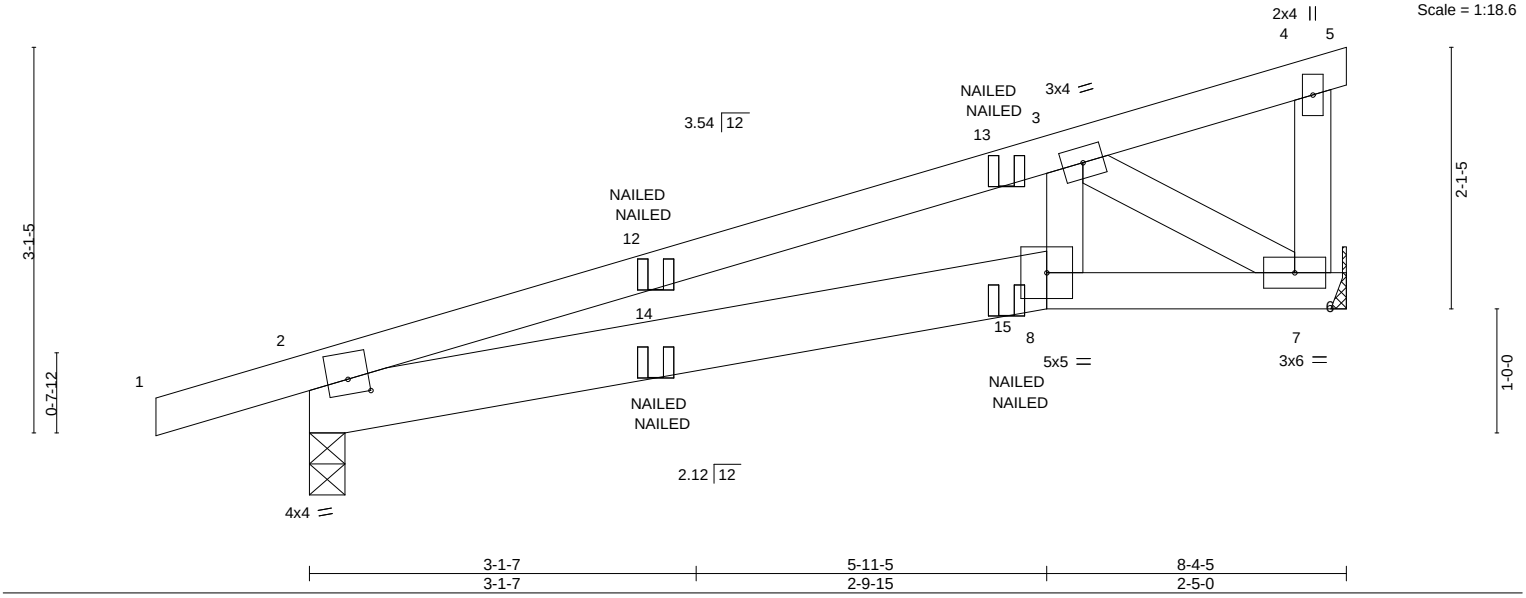

3-1-7 | 5-11-5 | 8-4-5
3-1-7 | 2-9-15 | 2-5-0

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

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

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-8: 2x6 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-3-7
Max Horz 2=92(LC 5)
Max Uplift 7=-77(LC 8), 2=-97(LC 4)
Max Grav 7=501(LC 1), 2=585(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-945/137
BOT CHORD 2-8=-154/863, 7-8=-148/805
WEBS 3-8=0/278, 3-7=-927/188

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	CJ8	DIAGONAL HIP GIRDER	2	1	I44187985

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:22 2020 Page 1
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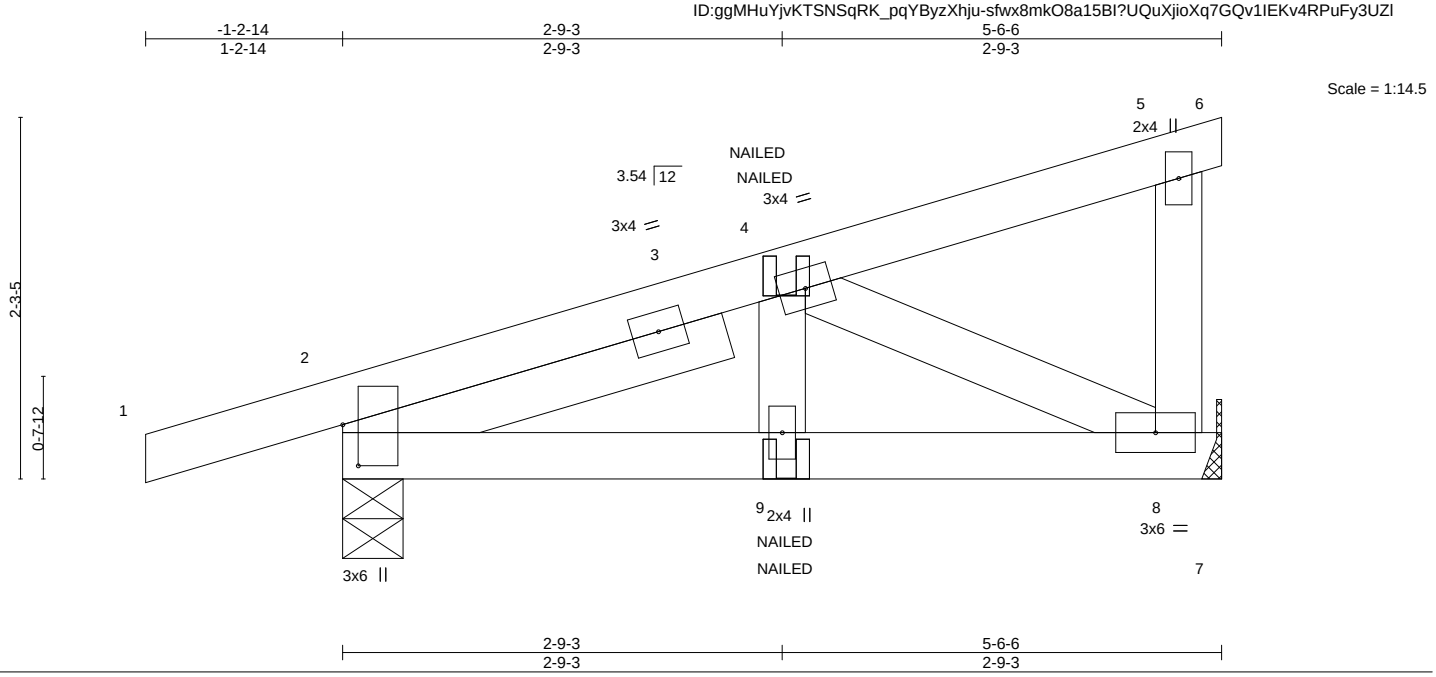

Plate Offsets (X,Y)-- [2:0-3-2,0-1-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.00	9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01	9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 23 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-4-9, 8=Mechanical
Max Horz 2=78(LC 7)
Max Uplift 2=-77(LC 4), 8=-40(LC 8)
Max Grav 2=413(LC 1), 8=292(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-324/34
BOT CHORD 2-9=-37/329, 8-9=-37/329
WEBS 4-8=-363/59

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J1	Jack-Open	3	1	I44187986
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:23 2020 Page 1
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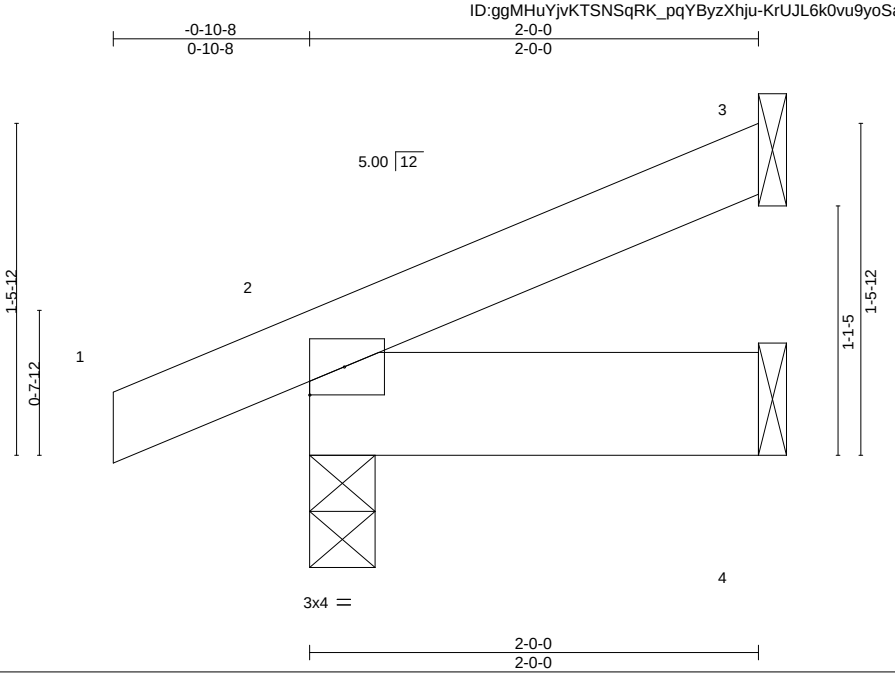

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 7 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=42(LC 12)
Max Uplift 3=-22(LC 12), 2=-23(LC 8)
Max Grav 3=63(LC 1), 2=205(LC 1), 4=42(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J2	Half Hip Girder	1	1	I44187987

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:32 2020 Page 1
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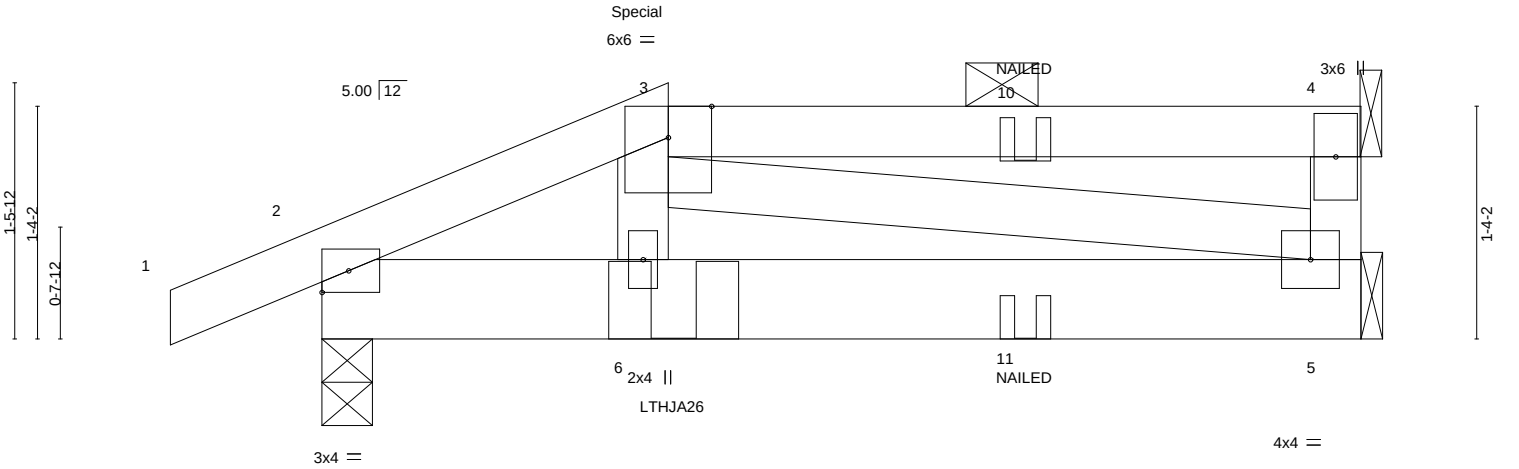
Scale = 1:13.3



2-0-0 / 2-0-0 | 5-11-15 / 3-11-15 | 6-0-0 / 0-0-1

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	5-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 25 lb	FT = 20%

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

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

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=41(LC 7)
Max Uplift 2=-44(LC 4), 4=-48(LC 4)
Max Grav 5=160(LC 3), 2=421(LC 1), 4=173(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-446/15
BOT CHORD 2-6=-27/385, 5-6=-34/383
WEBS 3-5=-396/27

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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, 4.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
11) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 1 ply, Left Hand Hip) or equivalent at 2-0-6 from the left end to connect truss(es) to front face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.
13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 61 lb up at 2-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-90, 3-4=-90, 5-7=-20

Concentrated Loads (lb)

Vert: 6=-18(F) 11=-9(F)

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J3	Half Hip	1	1	I44187988

Job Reference (optional)

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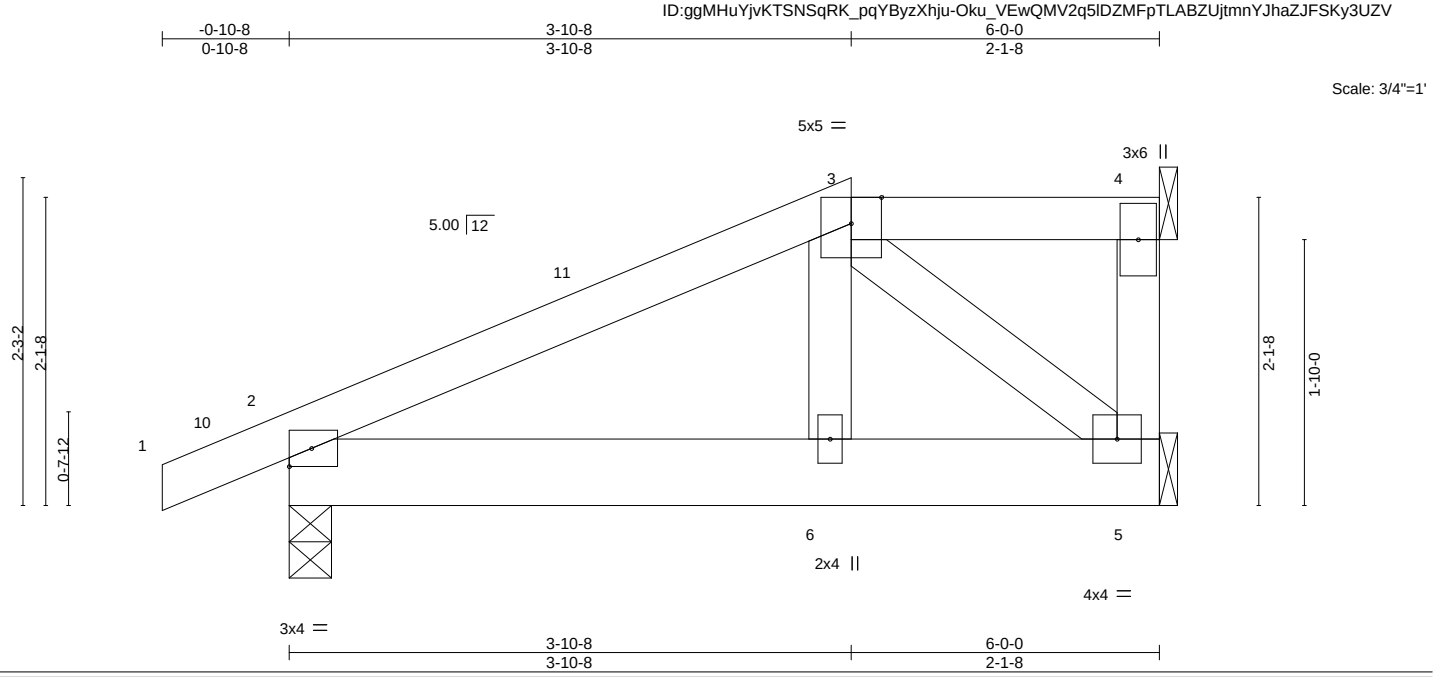

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.00	6-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	6-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 2=0-3-8, 5=Mechanical, 4=Mechanical
Max Horz 2=71(LC 11)
Max Uplift 2=-45(LC 12), 5=-7(LC 9), 4=-25(LC 8)
Max Grav 2=407(LC 1), 5=227(LC 1), 4=89(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-340/86
WEBS 3-5=-327/151

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-8, Exterior(2E) 3-10-8 to 5-10-4 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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, 4.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J4	Roof Special Girder	1	1	I44187989

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:39 2020 Page 1

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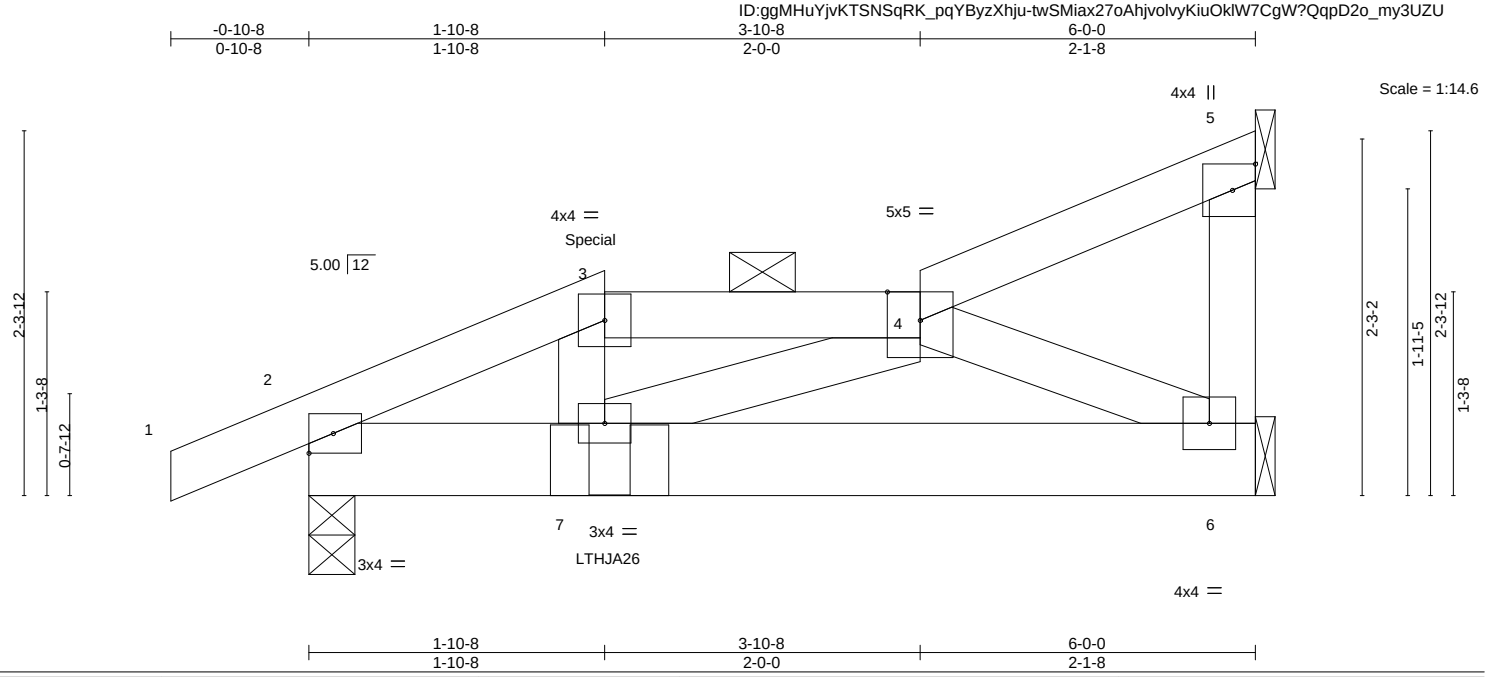

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	6-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.01	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 26 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 6=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=77(LC 7)
Max Uplift 6=-21(LC 8), 2=-59(LC 8), 5=-24(LC 8)
Max Grav 6=235(LC 1), 2=425(LC 1), 5=89(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-458/36, 3-4=-397/45
BOT CHORD 2-7=-44/399, 6-7=-65/380
WEBS 4-6=-424/91

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
10) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 1 ply, Right Hand Hip) or equivalent at 1-10-14 from the left end to connect truss(es) to back face of bottom chord.
11) Fill all nail holes where hanger is in contact with lumber.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 56 lb down and 58 lb up at 1-10-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 3-4=-90, 4-5=-90, 6-8=-20

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 7=-25(B)

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J5	Jack-Open	1	1	I44187990
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:40 2020 Page 1
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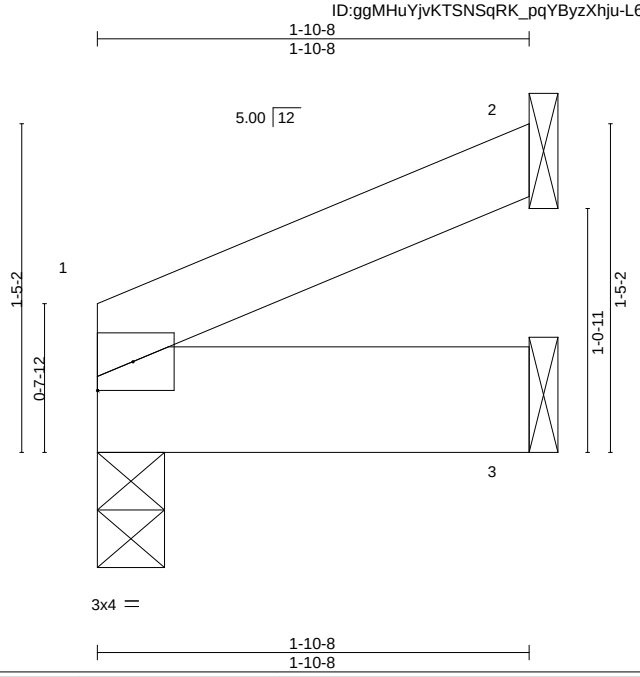

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=28(LC 12)
Max Uplift 1=-2(LC 12), 2=-21(LC 12), 3=-1(LC 12)
Max Grav 1=102(LC 1), 2=62(LC 1), 3=45(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 2, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J6	Jack-Open	9	1	I44187991

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:40 2020 Page 1
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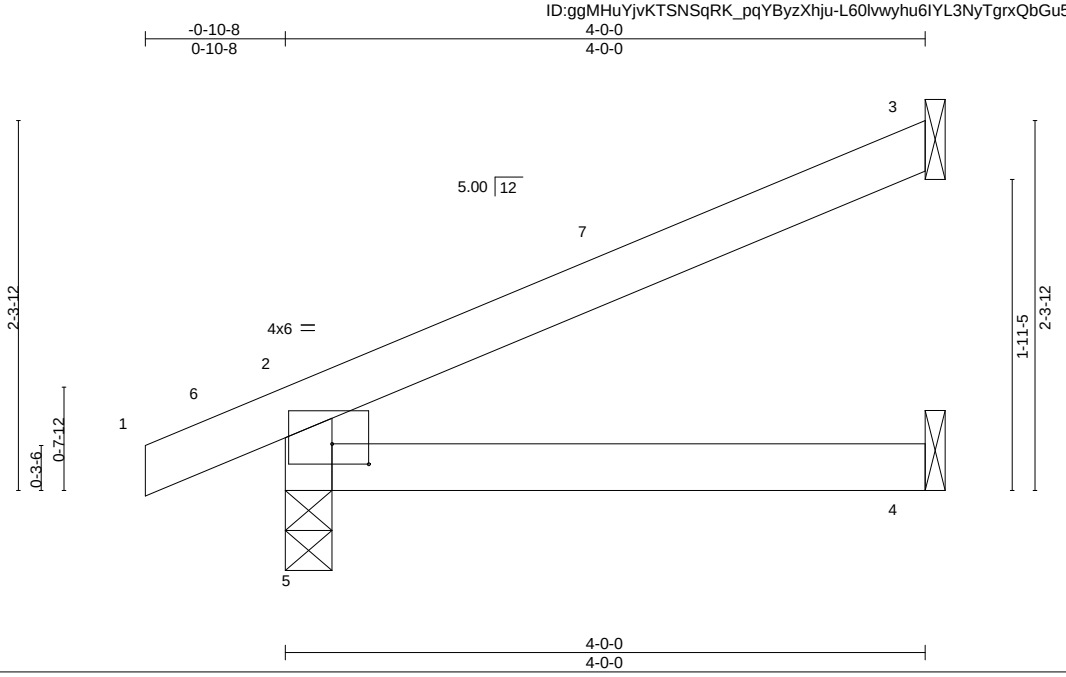

Plate Offsets (X,Y)-- [2:0-1-12,0-0-12], [2:0-2-12,0-1-8], [5:0-0-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 11 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=66(LC 12)
Max Uplift 3=-52(LC 12), 5=-28(LC 12)
Max Grav 3=150(LC 1), 4=73(LC 3), 5=313(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-284/150

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.

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Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J7	Jack-Open	1	1	I44187992
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:41 2020 Page 1
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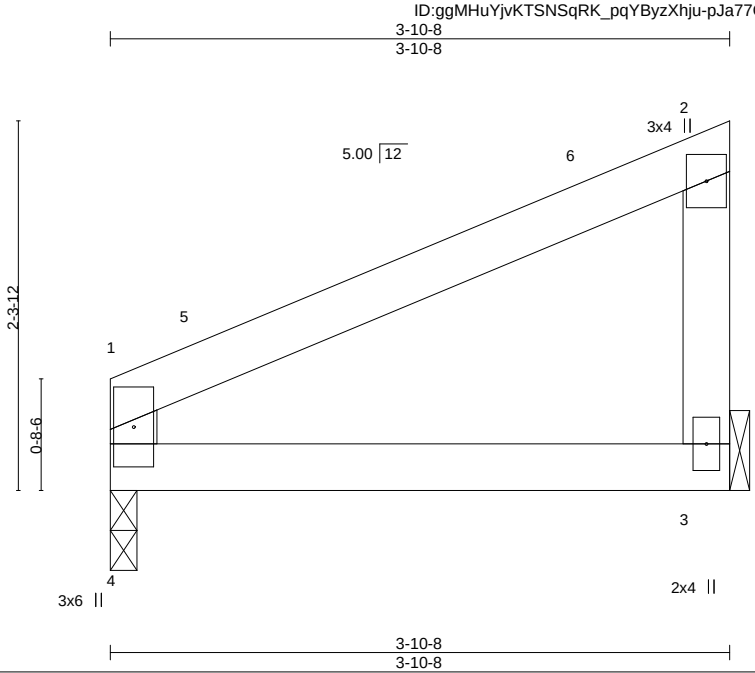

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	3-4	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.01	3-4	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 12 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=0-2-0, 3=Mechanical
Max Horz 4=74(LC 9)
Max Uplift 4=-14(LC 12), 3=-31(LC 12)
Max Grav 4=197(LC 1), 3=197(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 3-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 3.
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.

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Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J8	Roof Special Girder	1	1	I44187993
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:42 2020 Page 1
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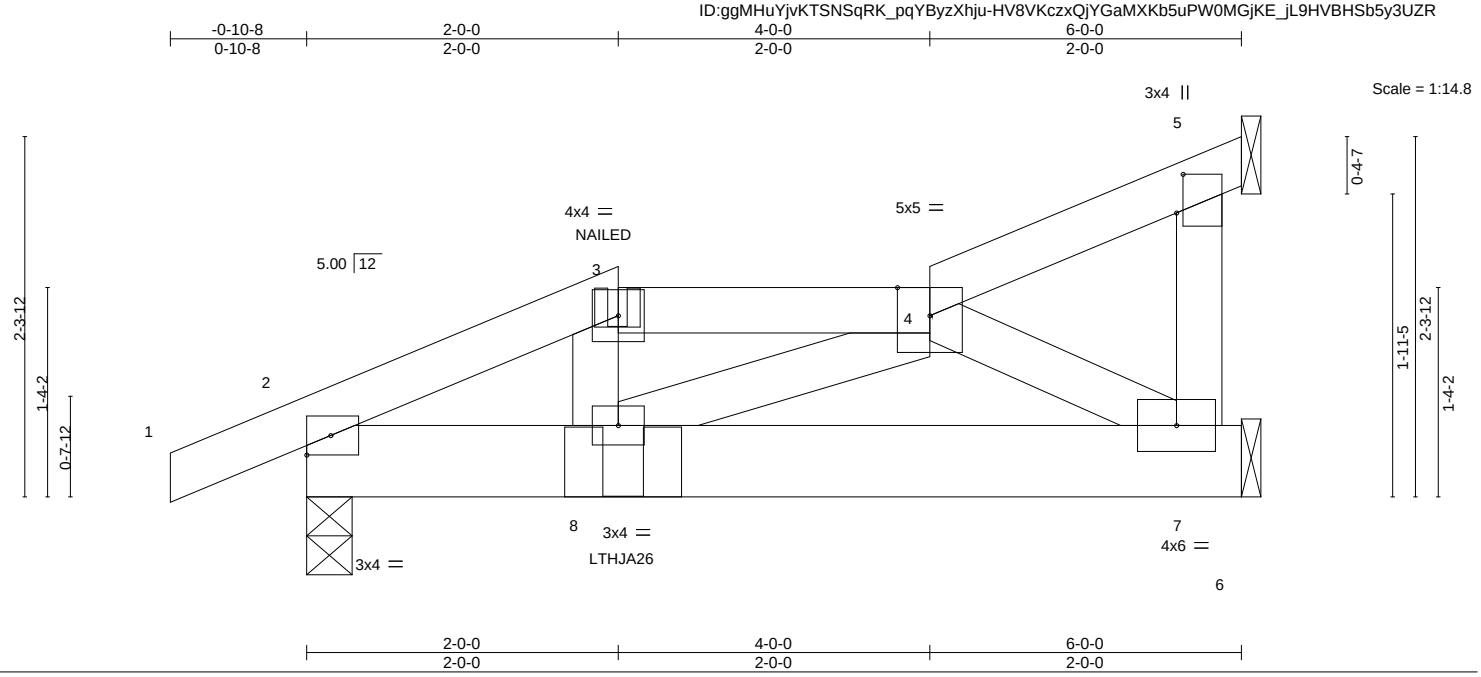

Plate Offsets (X,Y)-- [5:0-3-0,0-0-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 26 lb	FT = 20%

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

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

REACTIONS. (size) 5=Mechanical, 7=Mechanical, 2=0-3-8
Max Horz 2=74(LC 7)
Max Uplift 5=-21(LC 5), 7=-34(LC 8), 2=-85(LC 8)
Max Grav 5=78(LC 1), 7=279(LC 1), 2=488(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-569/88, 3-4=-493/91
BOT CHORD 2-8=-86/500, 7-8=-74/377
WEBS 4-7=-438/105

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7, 2.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
10) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 1 ply, Left Hand Hip) or equivalent at 2-0-6 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
11) Fill all nail holes where hanger is in contact with lumber.
12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 3-4=-90, 4-5=-90, 6-9=-20

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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 8=-131(F)

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J9	Jack-Open	2	1	I44187994
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:43 2020 Page 1
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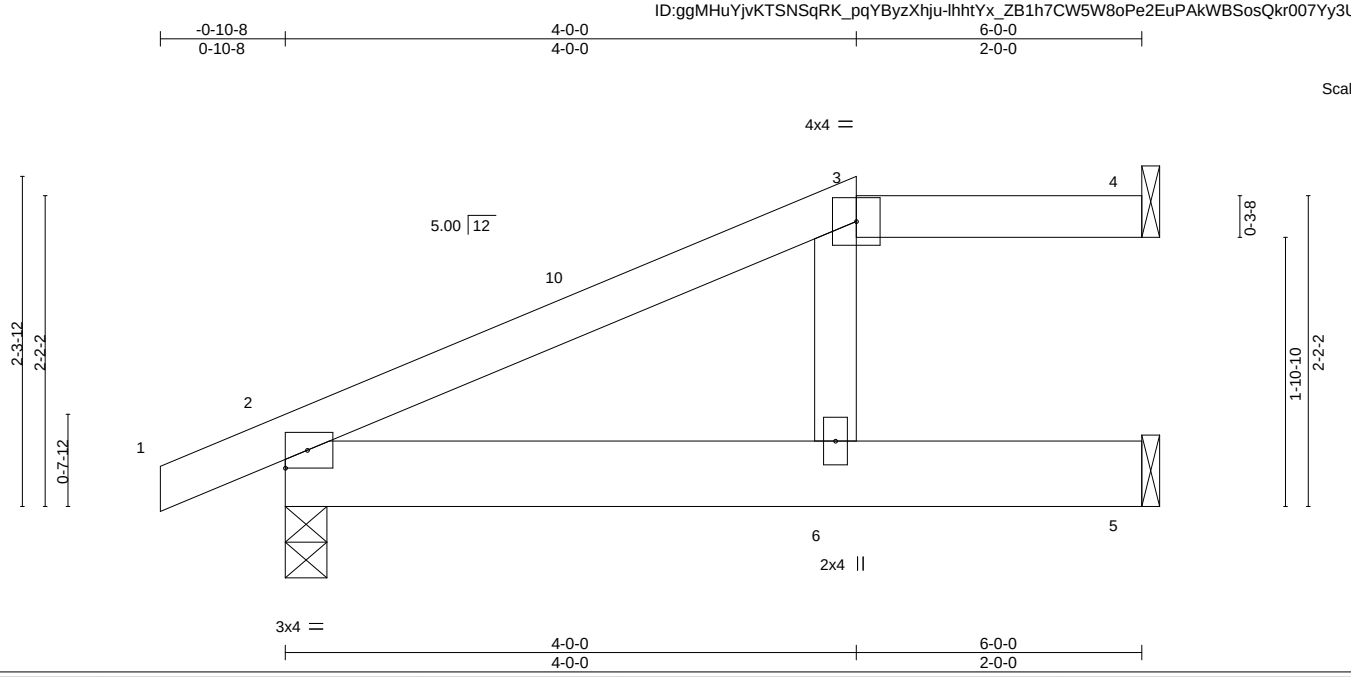

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.04	6-9	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.09	6-9	>825	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.05	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 21 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=69(LC 12)
Max Uplift 4=-24(LC 8), 2=-40(LC 12), 5=-12(LC 12)
Max Grav 4=87(LC 1), 2=411(LC 1), 5=234(LC 1)

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-0, Exterior(2E) 4-0-0 to 5-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
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, 5.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J10	Jack-Open	6	1	I44187995

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:24 2020 Page 1
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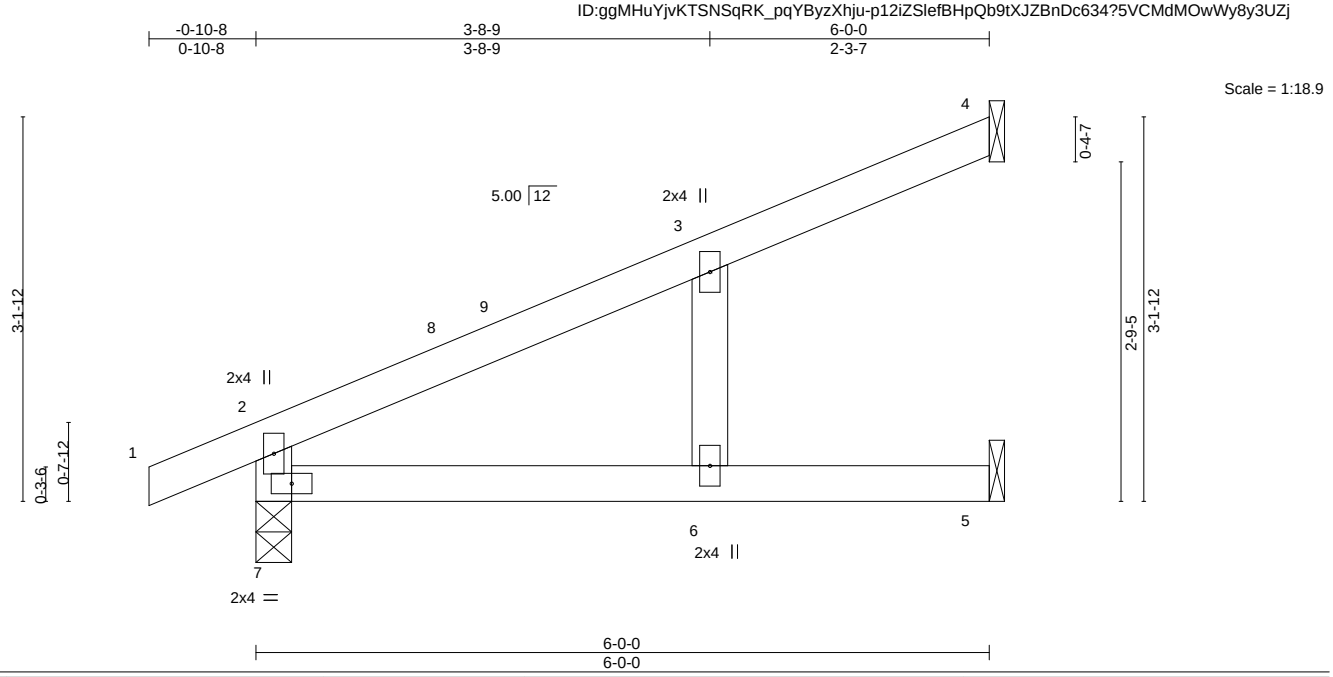

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	0.09	6-7	>790	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.17	6-7	>402	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.04	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 18 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=97(LC 12)
Max Uplift 4=-45(LC 12), 5=-15(LC 12), 7=-33(LC 12)
Max Grav 4=180(LC 1), 5=131(LC 1), 7=419(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-319/131

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
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.

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Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO	I44187996
2592336	J11	Roof Special Girder	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:25 2020 Page 1
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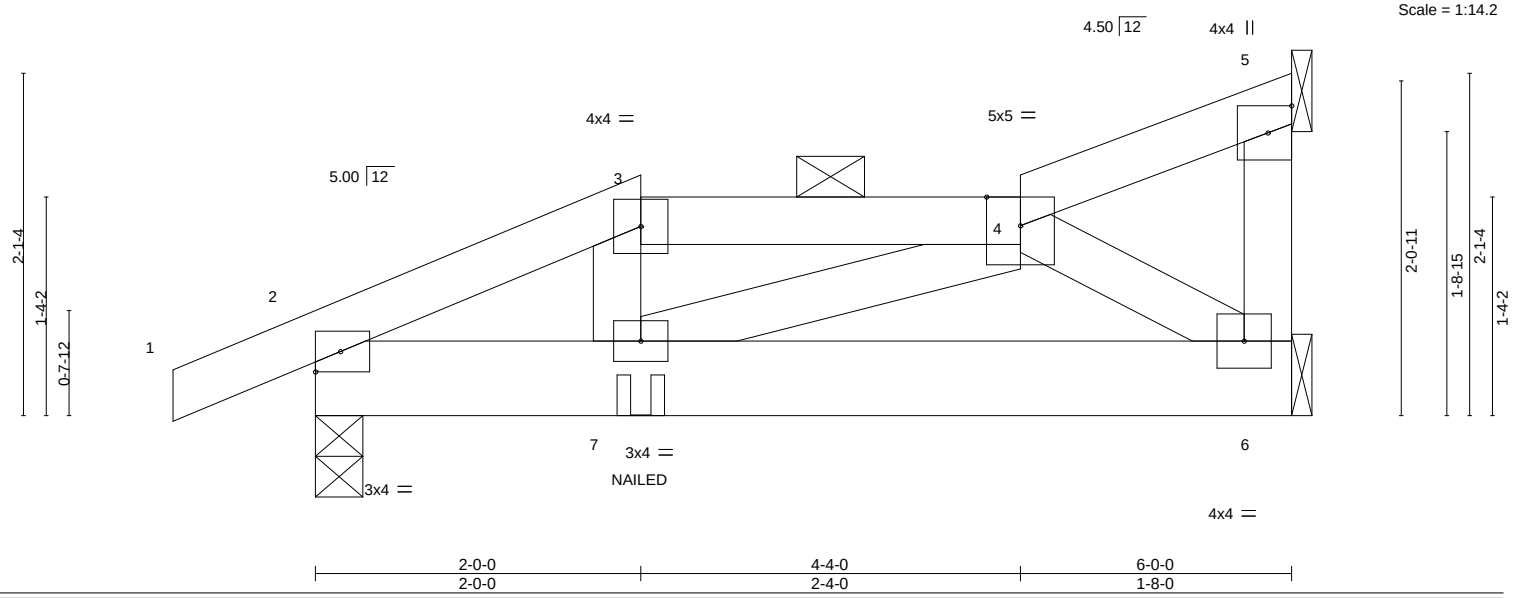
0-10-8 2-0-0 2-4-0 1-8-0

Scale = 1:14.2



2-0-0 4-4-0 6-0-0
2-0-0 2-4-0 1-8-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.01	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 26 lb	FT = 20%

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

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

REACTIONS. (size) 6=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=69(LC 7)
Max Uplift 6=-40(LC 8), 2=-88(LC 8), 5=-19(LC 5)
Max Grav 6=286(LC 1), 2=490(LC 1), 5=68(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-574/91, 3-4=-500/95
BOT CHORD 2-7=-86/504, 6-7=-69/349
WEBS 4-6=-421/101

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 3-4=-90, 4-5=-90, 6-8=-20
Concentrated Loads (lb)
Vert: 7=-121(B)

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J12	Jack-Open	1	1	I44187997
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:26 2020 Page 1
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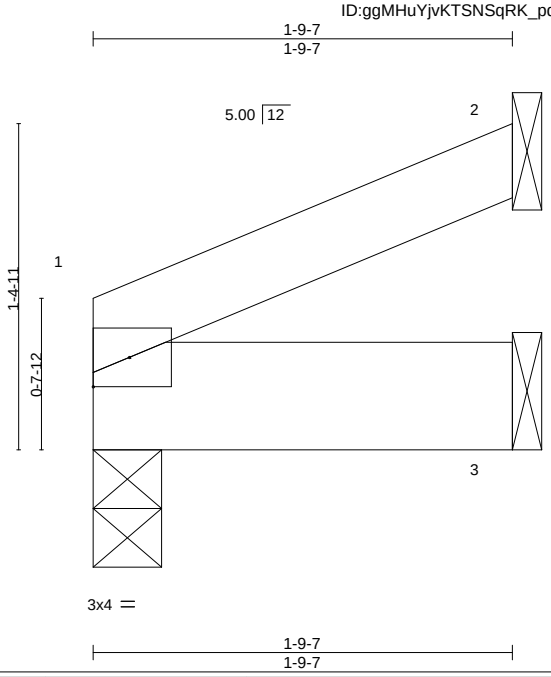

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	1	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-9-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=27(LC 33)
Max Uplift 2=-20(LC 33), 3=-1(LC 12)
Max Grav 1=266(LC 1), 2=58(LC 1), 3=43(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 169 lb down and 47 lb up at 0-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-90, 3-4=-20
Concentrated Loads (lb)
Vert: 1=-169

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J13	Jack-Open	1	1	I44187998
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:27 2020 Page 1
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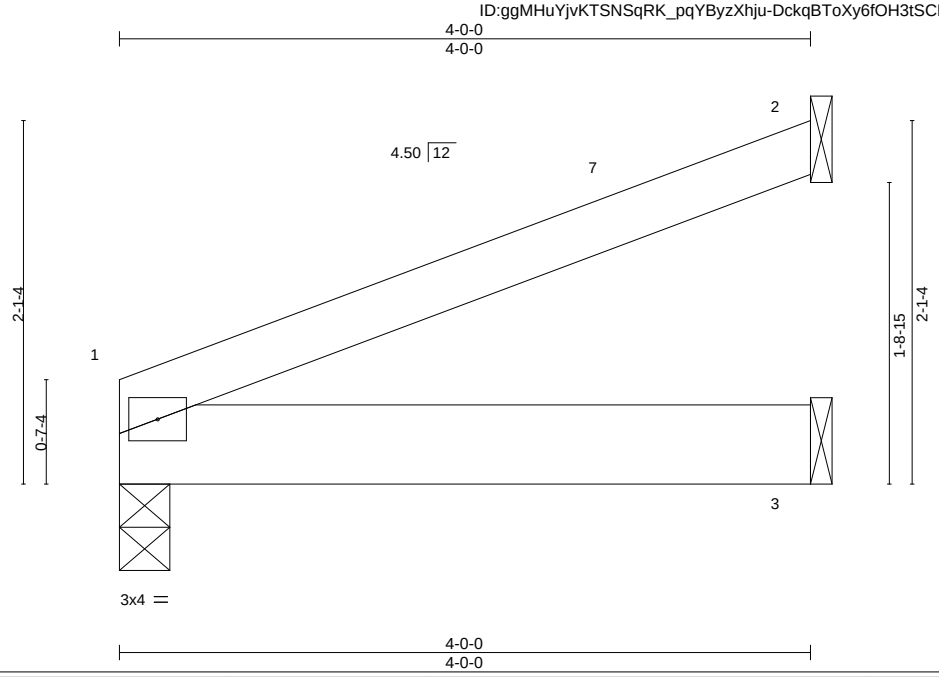

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	3-6	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	3-6	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	1	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=54(LC 12)
Max Uplift 1=-12(LC 12), 2=-43(LC 12)
Max Grav 1=217(LC 1), 2=135(LC 1), 3=93(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J14	Jack-Open	3	1	I44187999

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:27 2020 Page 1
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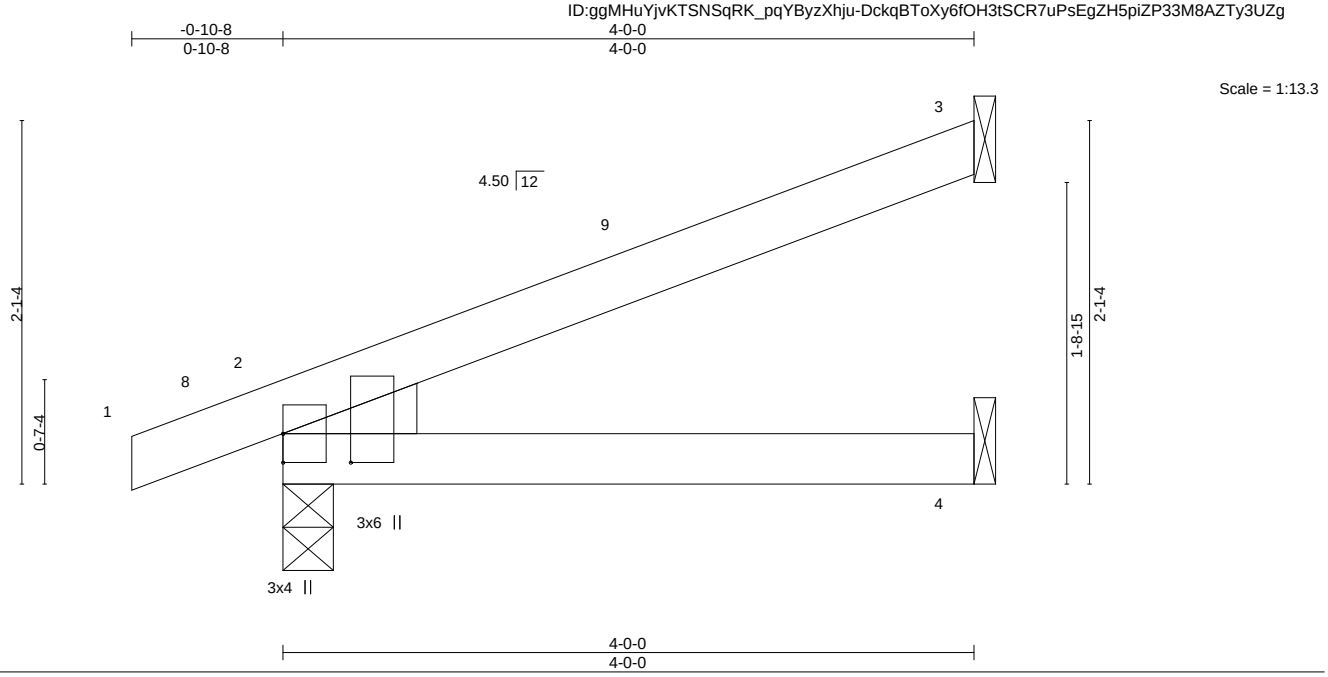

Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.03	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=66(LC 8)
Max Uplift 3=-44(LC 12), 2=-40(LC 8)
Max Grav 3=147(LC 1), 2=304(LC 1), 4=77(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J15	Jack-Open	2	1	I44188000
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:28 2020 Page 1
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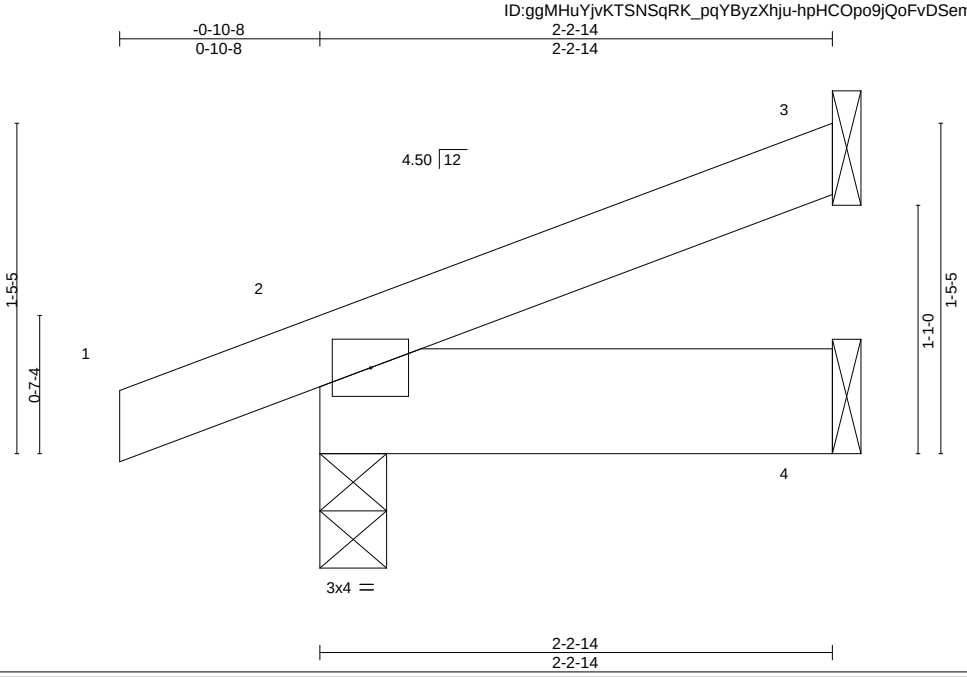

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 8 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=43(LC 8)
Max Uplift 3=-22(LC 12), 2=-39(LC 8)
Max Grav 3=67(LC 1), 2=214(LC 1), 4=48(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J16	Jack-Open	1	1	I44188001

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:29 2020 Page 1
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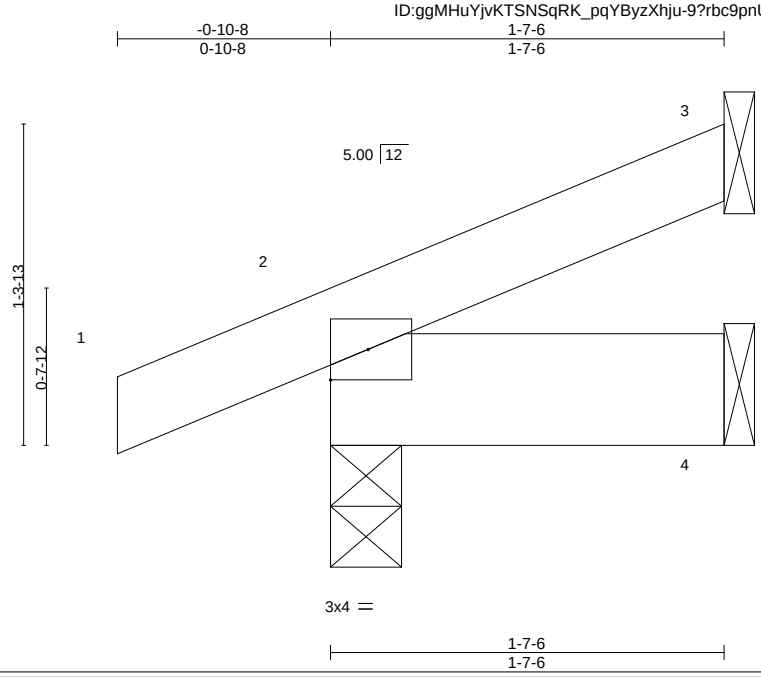

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-7-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=36(LC 12)
Max Uplift 3=-17(LC 12), 2=-24(LC 8)
Max Grav 3=48(LC 1), 2=188(LC 1), 4=32(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J17	Jack-Open	3	1	I44188002
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:30 2020 Page 1
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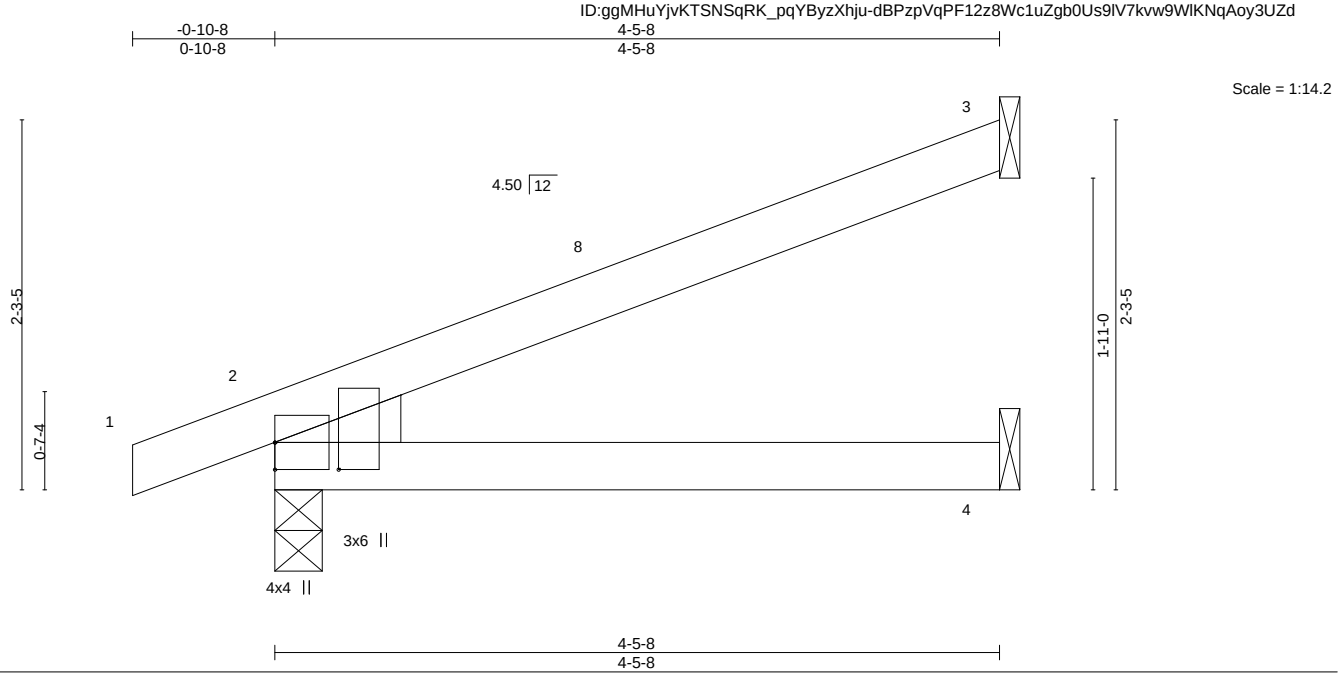

Plate Offsets (X,Y)-- [2:0-2-0,0-4-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.02	4-7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=72(LC 8)
Max Uplift 3=-50(LC 12), 2=-41(LC 8)
Max Grav 3=166(LC 1), 2=328(LC 1), 4=86(LC 3)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) 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.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J18	Jack-Closed Girder	1	1	I44188003

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:31 2020 Page 1
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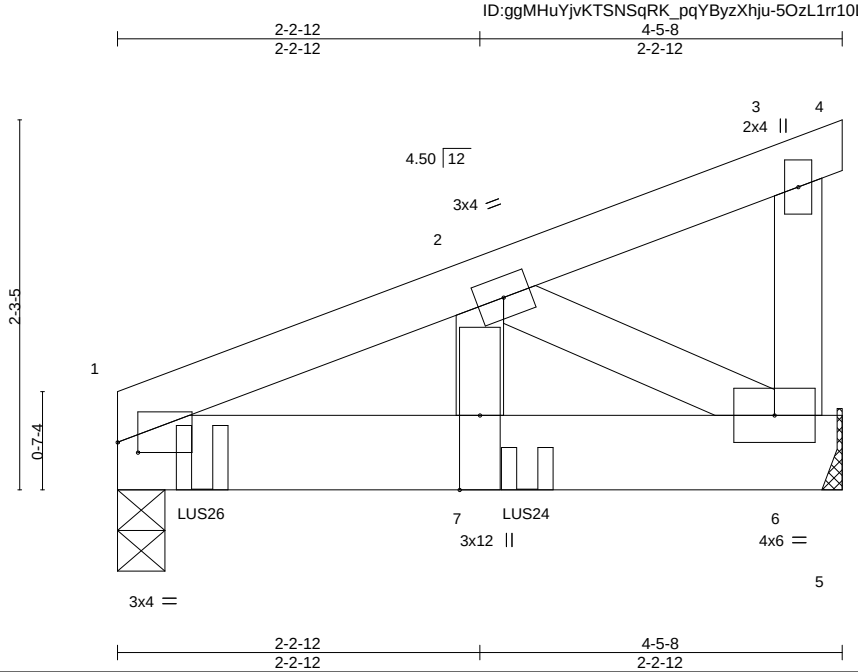

Plate Offsets (X,Y)-- [1:0-1-8,0-0-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.01	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.16	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MP							Weight: 21 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-3-8, 6=Mechanical
Max Horz 1=71(LC 7)
Max Uplift 1=-195(LC 8), 6=-137(LC 8)
Max Grav 1=1276(LC 1), 6=673(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1004/189
BOT CHORD 1-7=-189/927, 6-7=-189/927
WEBS 2-7=-125/645, 2-6=-1053/229

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=195, 6=137.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 0-6-4 from the left end to connect truss(es) to back face of bottom chord.
8) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 2-6-4 from the left end to connect truss(es) to back face of bottom chord.
9) Fill all nail holes where hanger is in contact with lumber.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 3-4=-40, 5-8=-20
Concentrated Loads (lb)
Vert: 7=-634(B) 10=-839(B)

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J19	Jack-Open	2	1	I44188004
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:31 2020 Page 1
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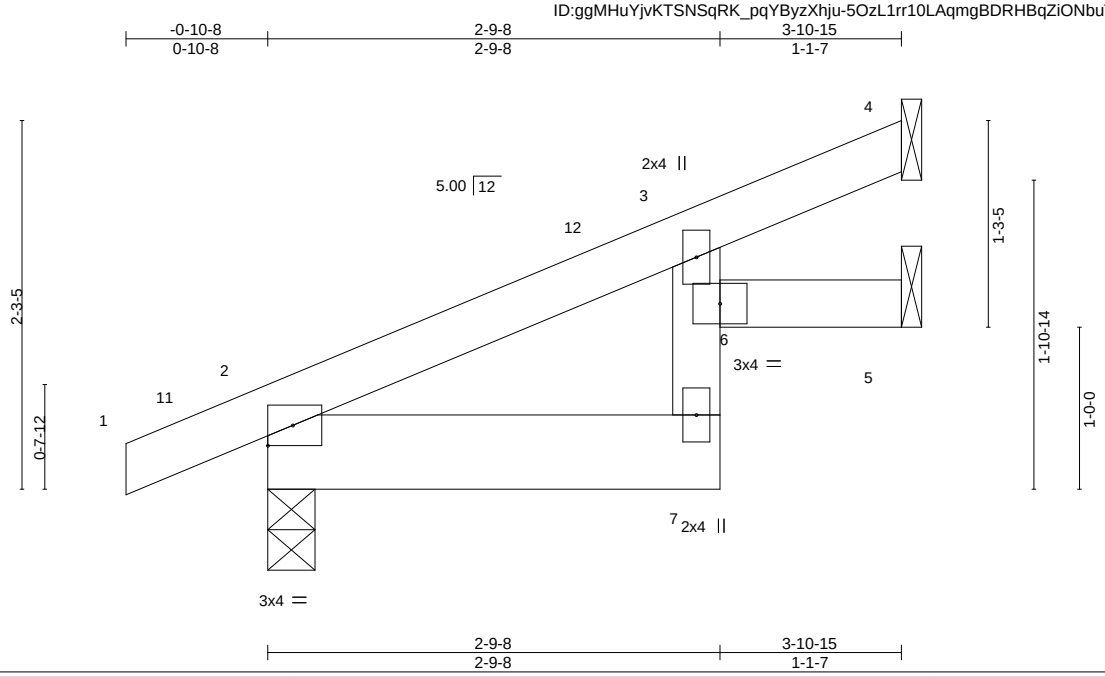

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.01	7	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.01	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 14 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=70(LC 12)
Max Uplift 4=-25(LC 12), 2=-27(LC 12), 5=-13(LC 12)
Max Grav 4=101(LC 1), 2=299(LC 1), 5=102(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J20	Jack-Open	6	1	I44188005
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:33 2020 Page 1
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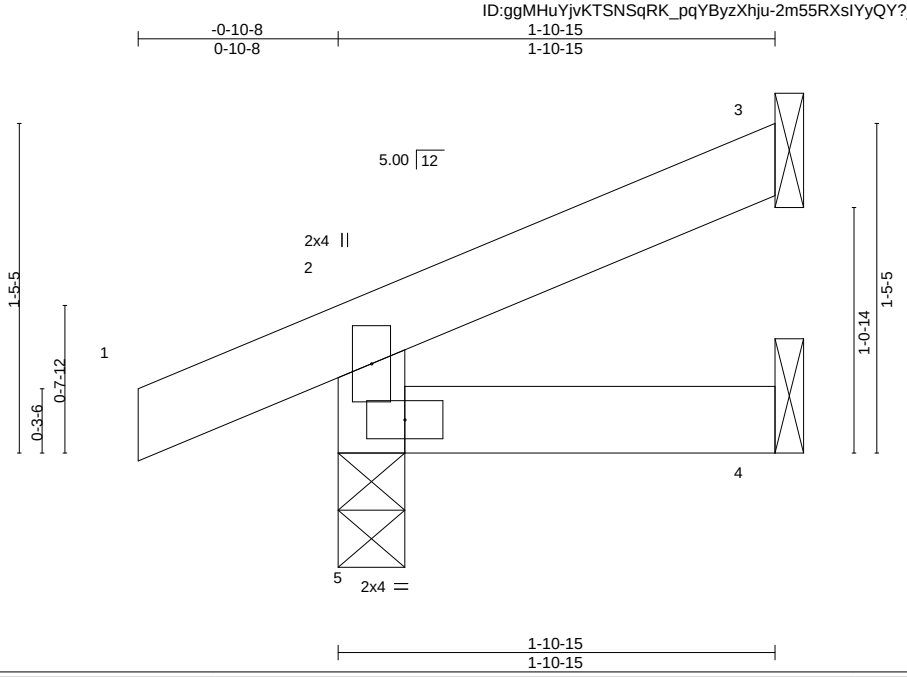

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR							Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=35(LC 12)
Max Uplift 3=-23(LC 12), 5=-28(LC 8)
Max Grav 3=57(LC 1), 4=31(LC 3), 5=215(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J21	Jack-Open	3	1	I44188006

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:34 2020 Page 1
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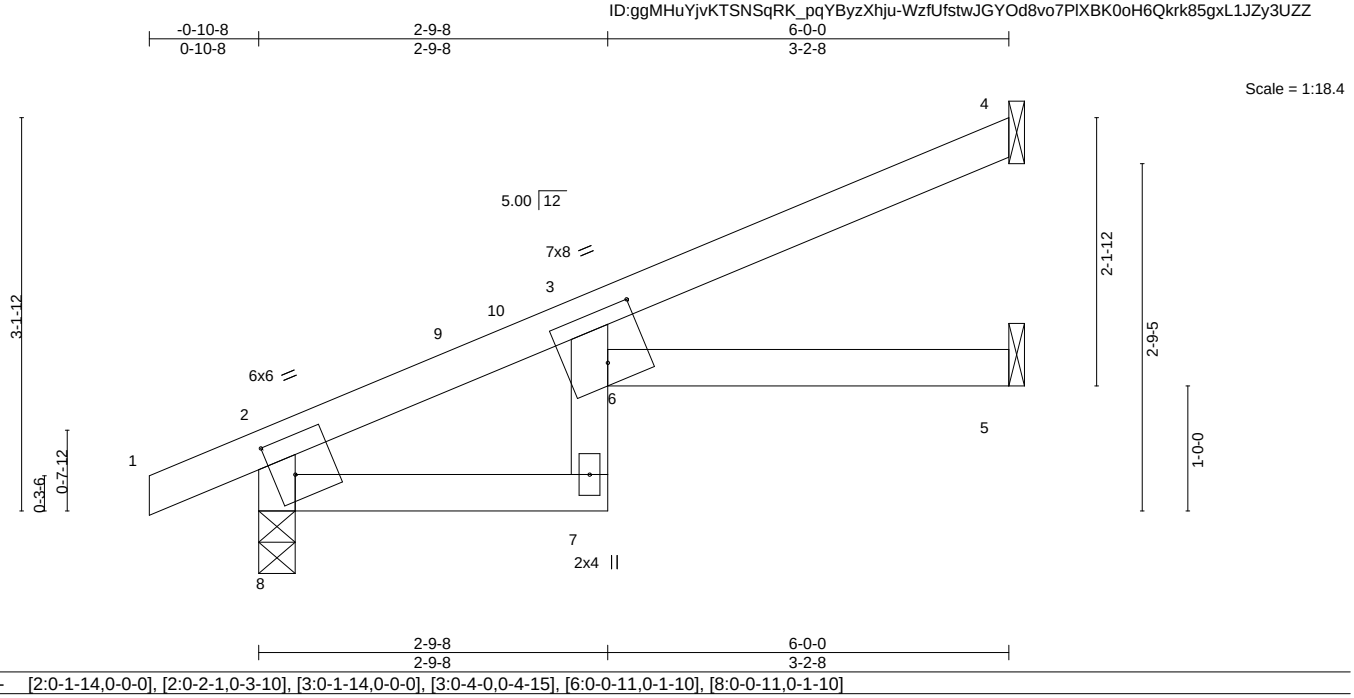

Plate Offsets (X,Y)-- [2:0-1-14,0-0-0], [2:0-2-1,0-3-10], [3:0-1-14,0-0-0], [3:0-4-0,0-4-15], [6:0-0-11,0-1-10], [8:0-0-11,0-1-10]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	0.07	5-6	>962	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.15	5-6	>474	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.06	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 17 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 8=0-3-8
Max Horz 8=97(LC 12)
Max Uplift 4=-59(LC 12), 5=-1(LC 12), 8=-33(LC 12)
Max Grav 4=206(LC 1), 5=111(LC 3), 8=419(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-397/151, 2-3=-351/50
BOT CHORD 7-8=-149/253

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 8.
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.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J22	Jack-Open	11	1	I44188007

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:35 2020 Page 1
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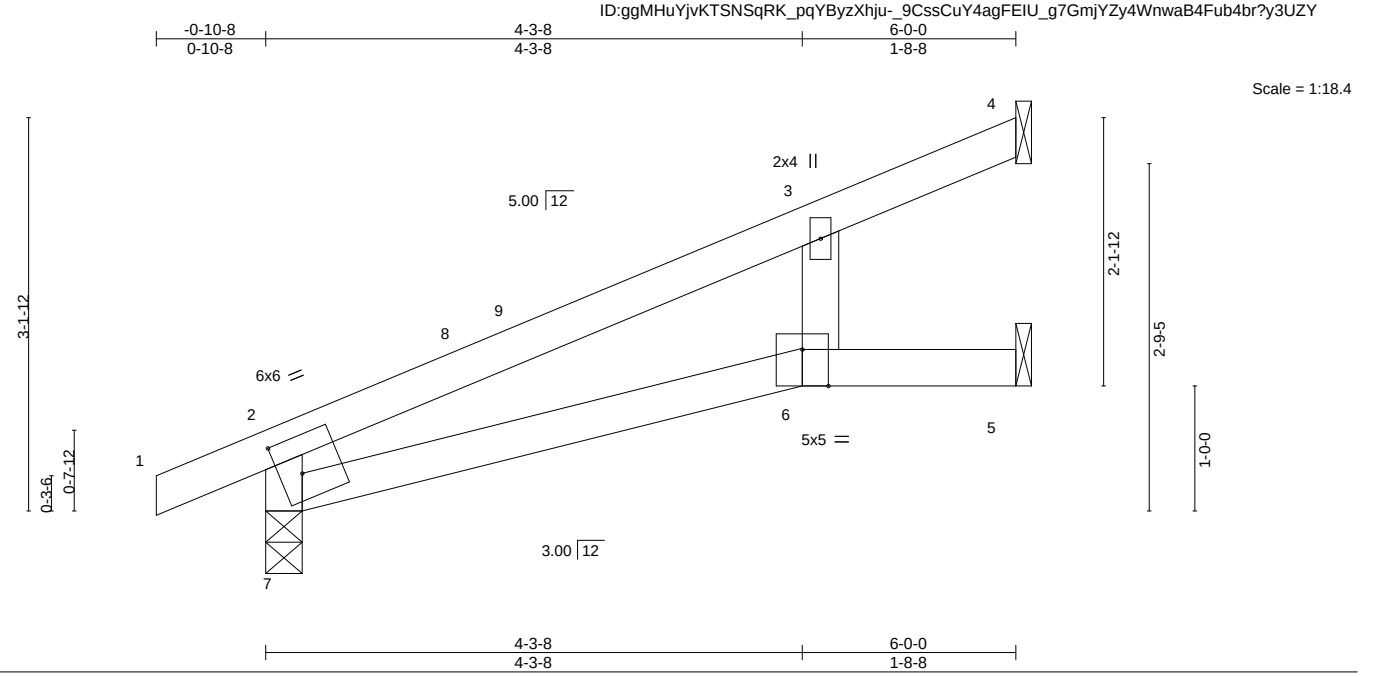

Plate Offsets (X,Y)-- [2:0-1-14,0-0-0], [2:0-2-2,0-3-8], [6:0-2-8,Edge], [7:0-0-11,0-1-11]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	0.08	6-7	>832	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.16	6-7	>427	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.04	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 17 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 7=0-3-8
Max Horz 7=96(LC 12)
Max Uplift 4=-35(LC 12), 5=-25(LC 12), 7=-33(LC 12)
Max Grav 4=174(LC 1), 5=136(LC 1), 7=419(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-7=-337/141

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 7.
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.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J23	Jack-Open	2	1	I44188008
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:35 2020 Page 1
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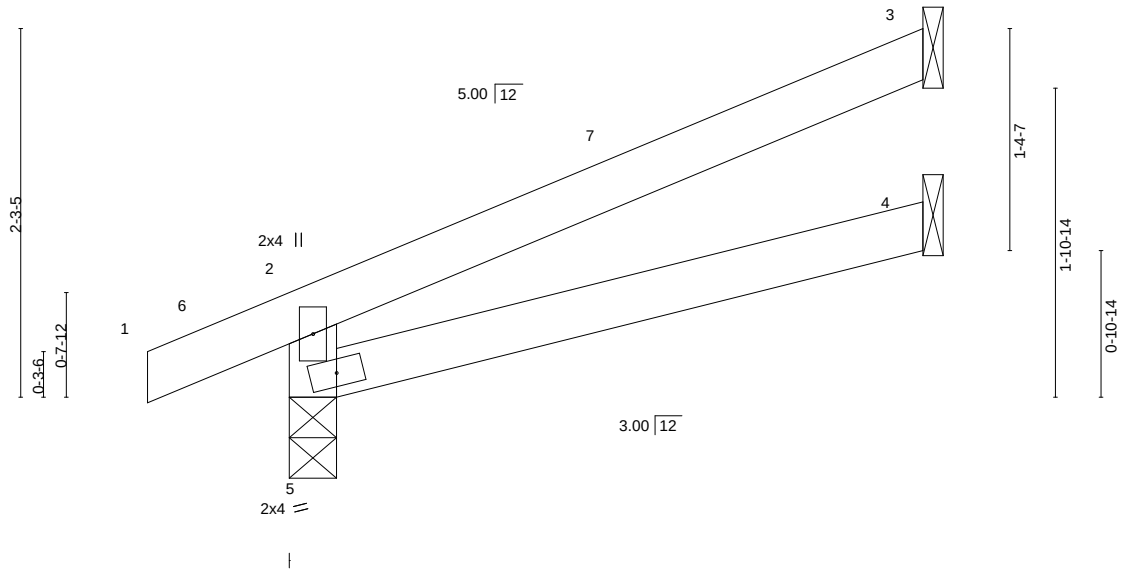

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 11 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=64(LC 12)
Max Uplift 3=-51(LC 12), 5=-27(LC 12)
Max Grav 3=145(LC 1), 4=72(LC 3), 5=308(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-280/148

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-3 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J24	Jack-Open	2	1	I44188009
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:36 2020 Page 1
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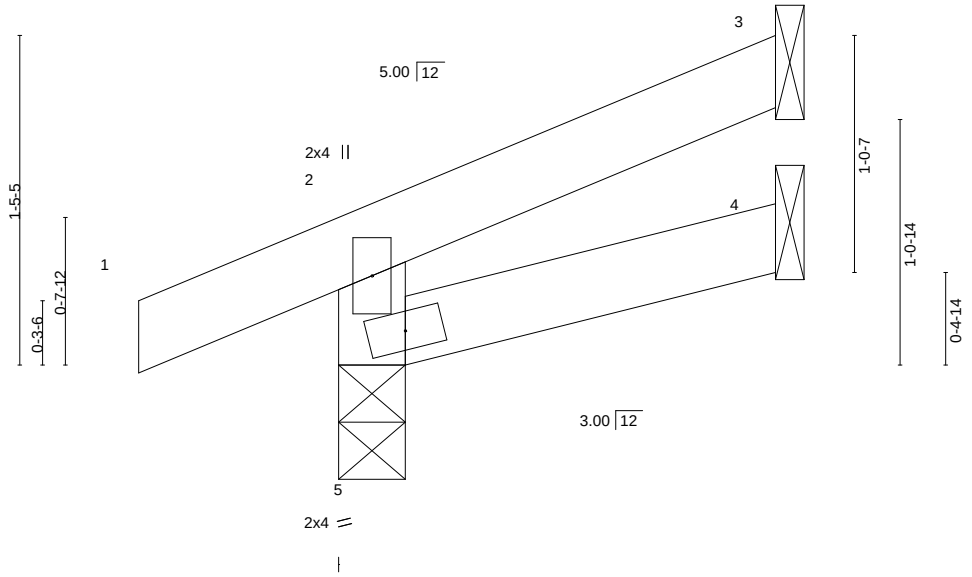

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=35(LC 12)
Max Uplift 3=-24(LC 12), 5=-27(LC 8)
Max Grav 3=57(LC 1), 4=31(LC 3), 5=215(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	J25	Jack-Open	1	1	I44188010
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:37 2020 Page 1
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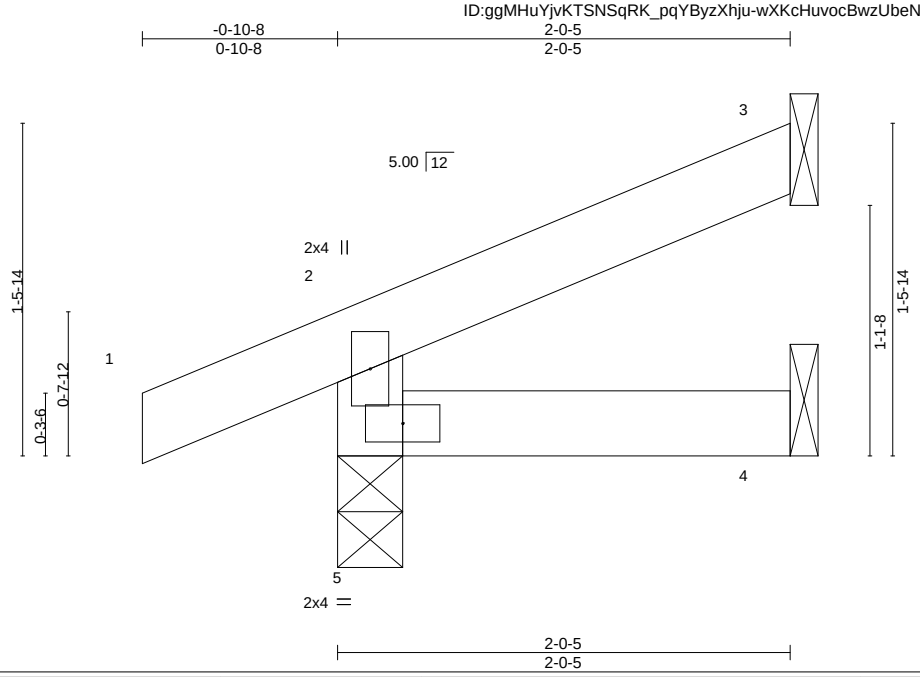

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-MR							Weight: 6 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-0-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=36(LC 12)
Max Uplift 3=-24(LC 12), 5=-27(LC 8)
Max Grav 3=60(LC 1), 4=32(LC 3), 5=218(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO	I44188011
2592336	LG1	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:44 2020 Page 1
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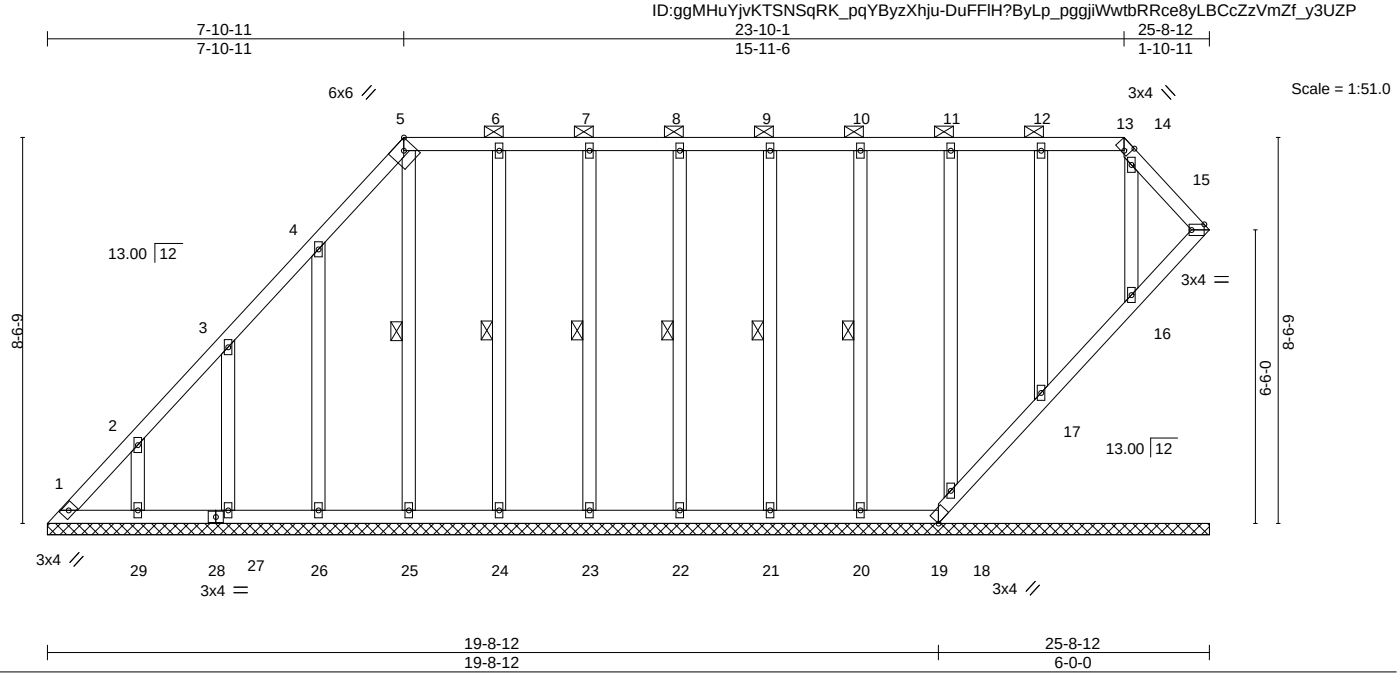

Plate Offsets (X,Y)-- [5:0-2-9,Edge], [13:0-1-7,Edge], [15:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	-0.00	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 153 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-20, 9-21, 8-22, 5-25, 6-24, 7-23

REACTIONS. All bearings 25-8-12.
(lb) - Max Horz 1=262(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 19, 16, 17, 18, 20, 21, 22, 25, 24, 23 except 29=-113(LC 12), 27=-111(LC 12), 26=-115(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 15, 19, 16, 17, 18, 20, 21, 22, 29, 27, 26, 25, 24, 23

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-323/233

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-11, Exterior(2R) 7-10-11 to 12-0-0, Interior(1) 12-0-0 to 23-10-1, Exterior(2E) 23-10-1 to 25-6-5 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 19, 16, 17, 18, 20, 21, 22, 25, 24, 23 except (jt=lb) 29=113, 27=111, 26=115.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 15, 16, 17, 18.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	LG2	GABLE	1	1	I44188012
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:46 2020 Page 1
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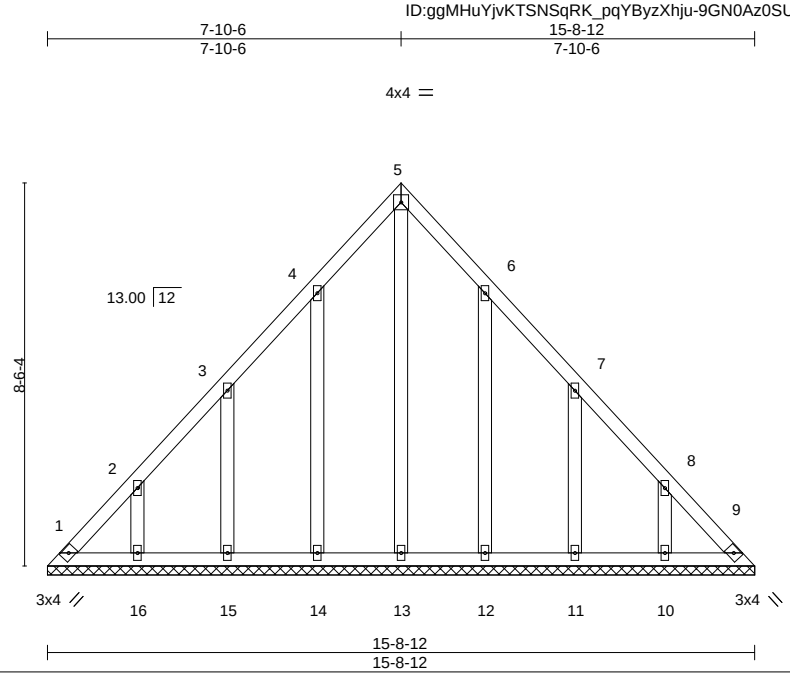

Plate Offsets (X,Y)-- [2:0-0-0,0-0-0], [3:0-0-0,0-0-0], [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 78 lb	FT = 20%

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

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

REACTIONS. All bearings 15-8-12.
(lb) - Max Horz 1=-196(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 10=-112(LC 13), 11=-115(LC 13), 12=-106(LC 13), 16=-113(LC 12), 15=-114(LC 12), 14=-108(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 10, 11, 12, 16, 15, 14

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-262/174

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-6, Exterior(2R) 7-10-6 to 10-10-6, Interior(1) 10-10-6 to 15-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 10=112, 11=115, 12=106, 16=113, 15=114, 14=108.
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.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	LG3	GABLE	1	1	I44188013
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:47 2020 Page 1
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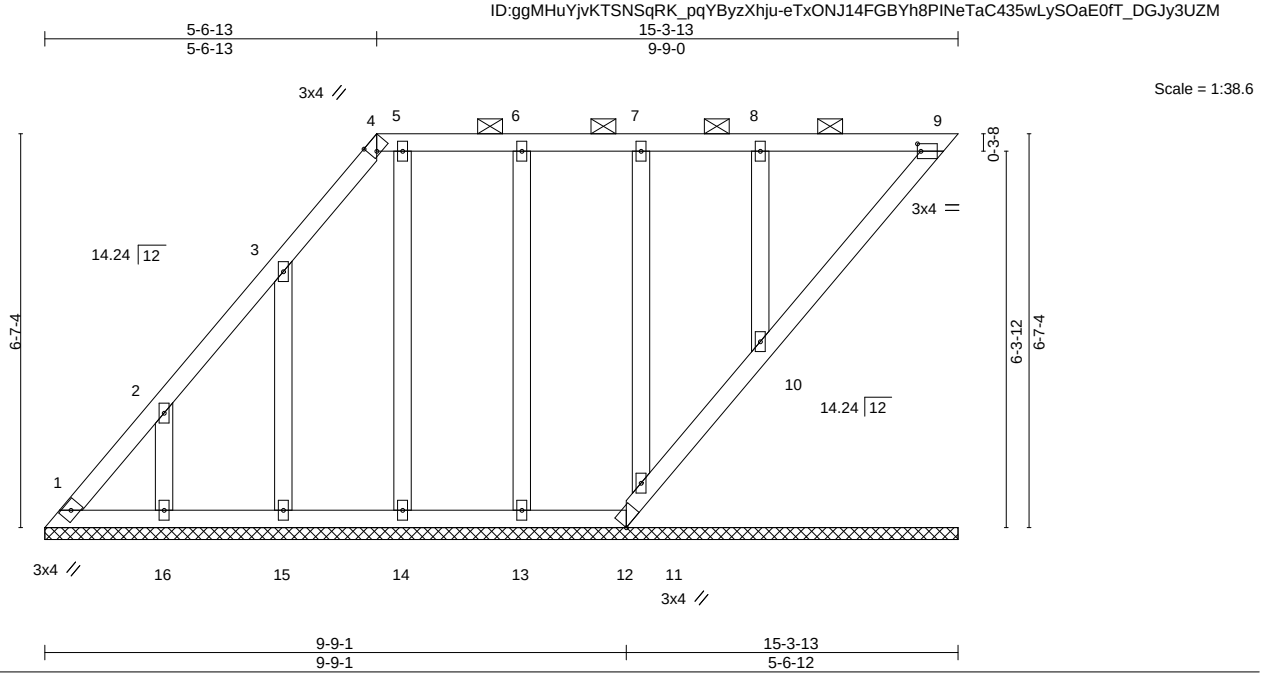

Plate Offsets (X,Y)-- [4:0-1-5,Edge], [9:0-0-11,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 72 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 15-3-13.
(lb) - Max Horz 1=233(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 12, 14, 13, 11, 10 except 16=-134(LC 12), 15=-122(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 12, 15, 14, 13, 11 except 16=256(LC 19), 10=349(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-251/213
WEBS 8-10=-275/73

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-12 to 3-3-12, Interior(1) 3-3-12 to 5-6-13, Exterior(2R) 5-6-13 to 8-6-13 , Interior(1) 8-6-13 to 15-0-14 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 12, 14, 13, 11, 10 except (jt=lb) 16=134, 15=122.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	LG4	GABLE	1	1	I44188014
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:48 2020 Page 1
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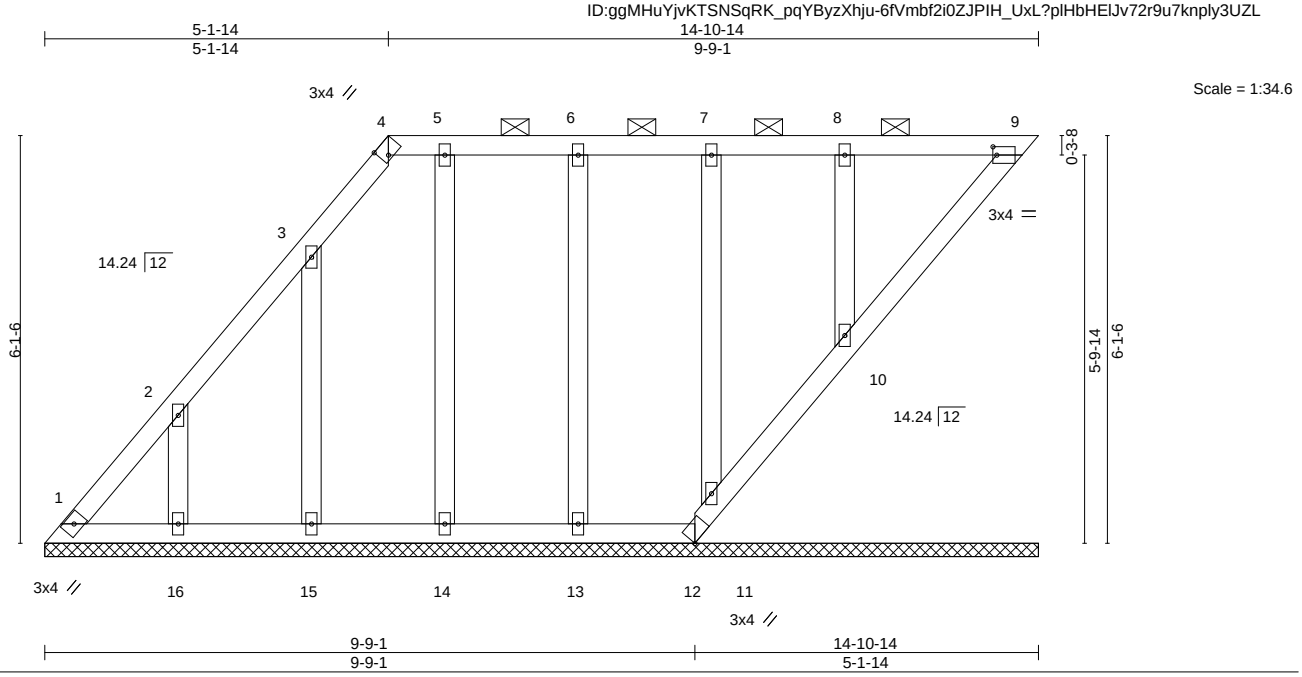

Plate Offsets (X,Y)-- [4:0-1-5,Edge], [9:0-0-11,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 68 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-10-14.
(lb) - Max Horz 1=215(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 12, 14, 13, 11, 10 except 16=-138(LC 12), 15=-104(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 12, 15, 14, 13, 11 except 16=260(LC 19), 10=309(LC 1)

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-12 to 3-3-12, Interior(1) 3-3-12 to 5-1-14, Exterior(2R) 5-1-14 to 8-0-0, Interior(1) 8-0-0 to 14-7-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 12, 14, 13, 11, 10 except (jt=lb) 16=138, 15=104.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 10.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	LG5	GABLE	1	1	I44188015
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:49 2020 Page 1
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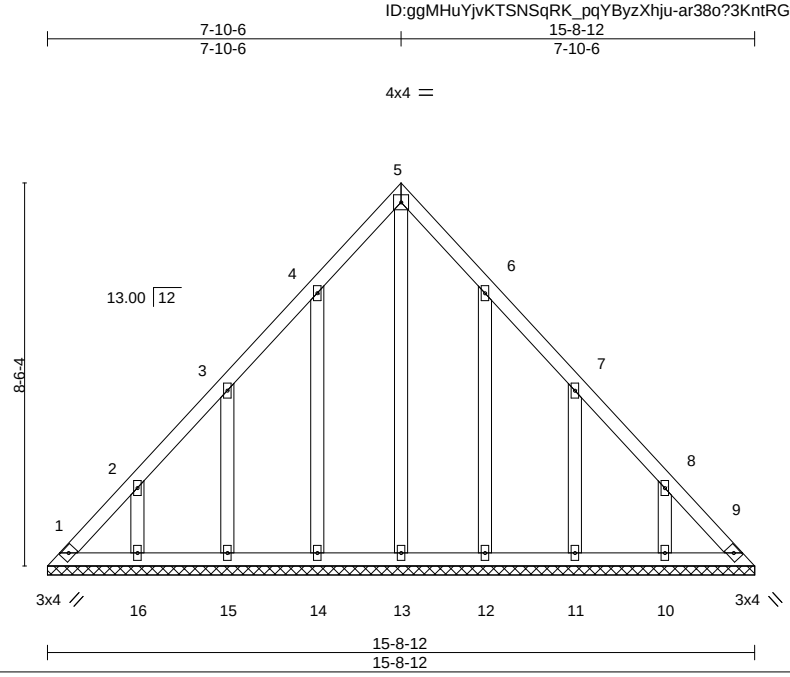

Plate Offsets (X,Y)-- [2:0-0-0,0-0-0], [3:0-0-0,0-0-0], [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 78 lb	FT = 20%

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

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

REACTIONS. All bearings 15-8-12.
(lb) - Max Horz 1=-196(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 10=-112(LC 13), 11=-115(LC 13), 12=-106(LC 13), 16=-113(LC 12), 15=-114(LC 12), 14=-108(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 10, 11, 12, 16, 15, 14

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-262/174

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 7-10-6, Exterior(2R) 7-10-6 to 10-10-6, Interior(1) 10-10-6 to 15-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 10=112, 11=115, 12=106, 16=113, 15=114, 14=108.
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.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	LG6	GABLE	1	1	I44188016
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:51 2020 Page 1

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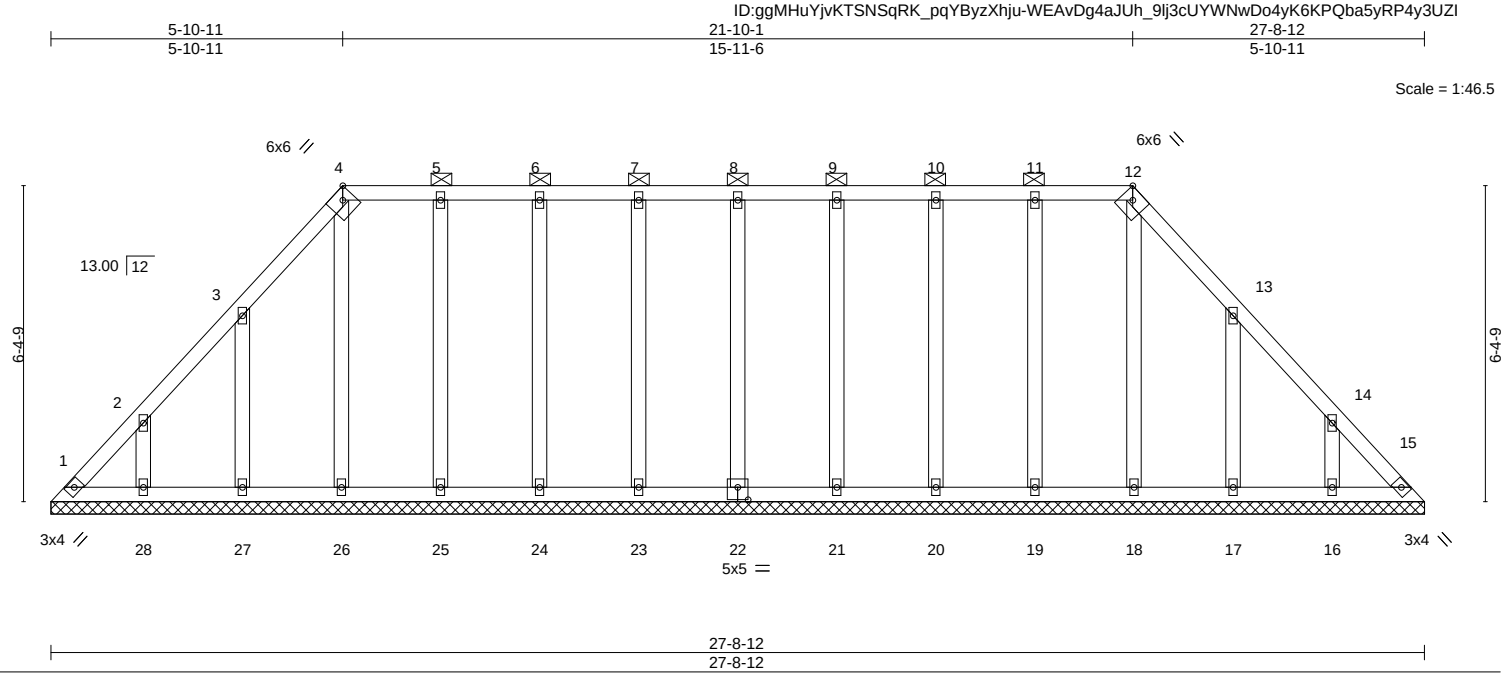

Plate Offsets (X,Y)-- [4:0-2-9,Edge], [12:0-2-9,Edge], [22:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	15	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 140 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-12.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 27-8-12.

(lb) - Max Horz 1=-145(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 21, 20, 19 except 27=-122(LC 12), 28=-107(LC 12), 17=-122(LC 13), 16=-108(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 15, 22, 23, 24, 25, 26, 28, 21, 20, 19, 18, 16 except 27=257(LC 19), 17=257(LC 20)

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 5-10-11, Exterior(2R) 5-10-11 to 9-10-6, Interior(1) 9-10-6 to 21-10-1, Exterior(2R) 21-10-1 to 25-10-6, Interior(1) 25-10-6 to 27-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 15, 22, 23, 24, 25, 26, 21, 20, 19 except (jt=lb) 27=122, 28=107, 17=122, 16=108.
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.

January 4,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	LG7	GABLE	1	1	I44188017

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:52 2020 Page 1
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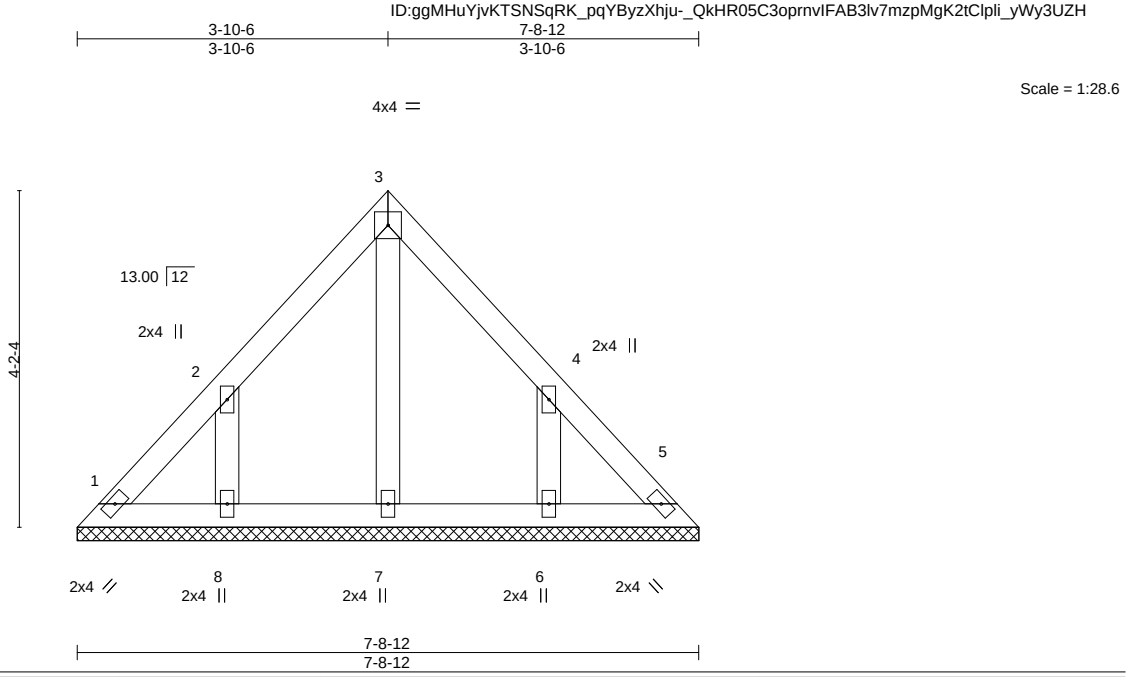

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 28 lb	FT = 20%

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

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

REACTIONS. All bearings 7-8-12.
(lb) - Max Horz 1=-92(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-126(LC 12), 6=-126(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=261(LC 19), 6=261(LC 20)

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 3-10-6, Exterior(2R) 3-10-6 to 6-10-6, Interior(1) 6-10-6 to 7-4-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=126, 6=126.
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.

January 4,2021

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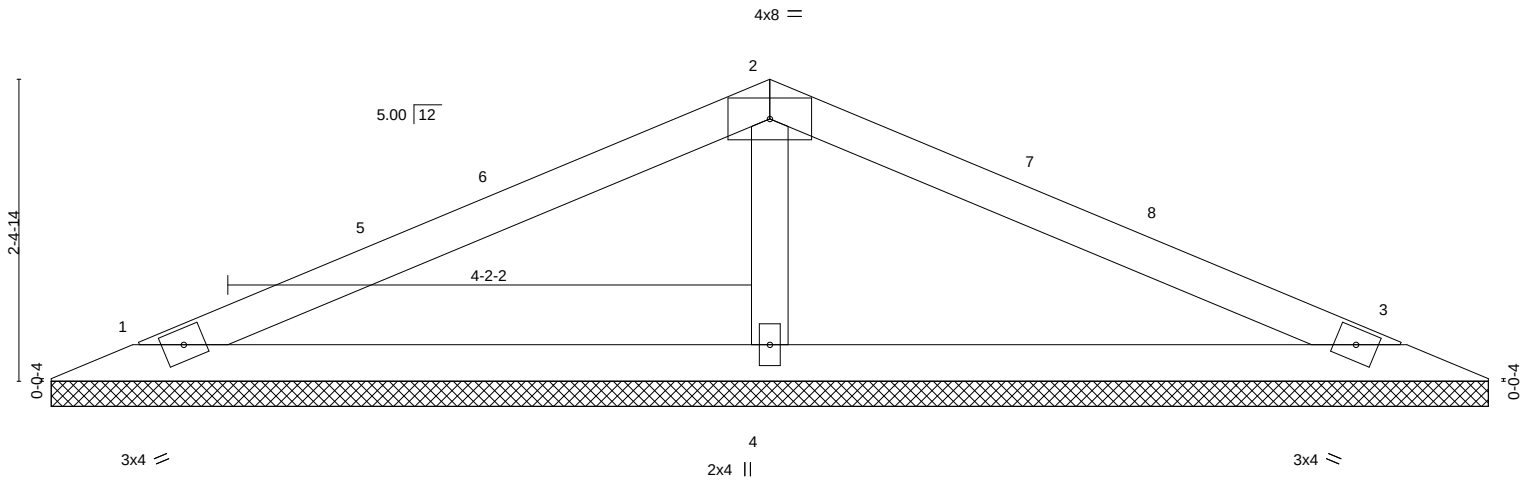
Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	V1	Valley	1	1	I44188018
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:53 2020 Page 1
ID:ggMHuYjvKTSNSqRK_pqYByzXhju-ScIfeM6rq6xiP3sRkva_SLJ3hmzTnJqu1PRYUyy3UZG

5-9-6 11-6-12
5-9-6 5-9-6

Scale = 1:18.4



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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 28 lb	FT = 20%

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

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

REACTIONS. (size) 1=11-5-8, 3=11-5-8, 4=11-5-8
Max Horz 1=33(LC 16)
Max Uplift 1=-32(LC 12), 3=-38(LC 13), 4=-16(LC 12)
Max Grav 1=251(LC 25), 3=251(LC 26), 4=615(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-455/177

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 5-9-6, Exterior(2R) 5-9-6 to 8-9-6, Interior(1) 8-9-6 to 10-9-11 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

January 4,2021

MiTek
16023 Swingley Ridge Rd
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Job	Truss	Truss Type	Qty	Ply	Summit/16 Woodside/MO
2592336	V2	Valley	1	1	I44188019

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Dec 31 09:30:54 2020 Page 1
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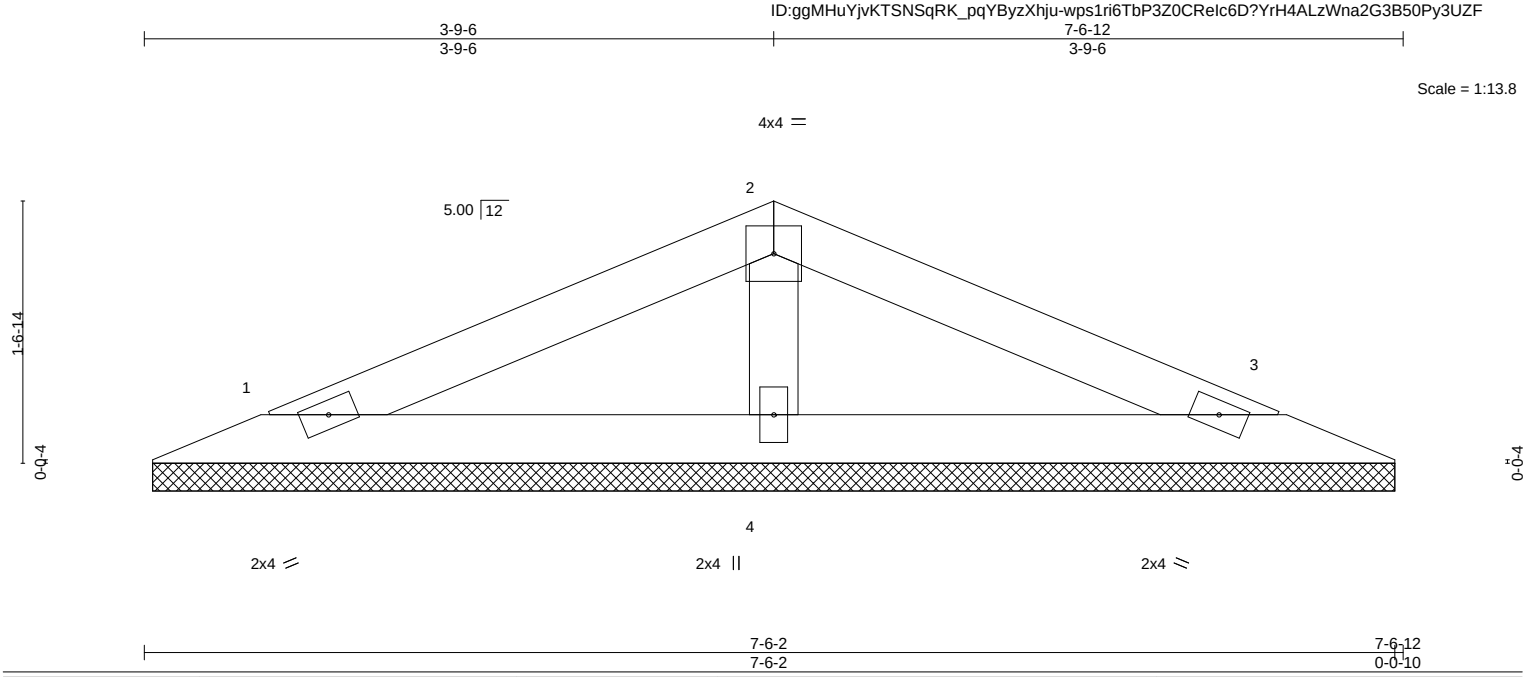

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014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

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

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

REACTIONS. (size) 1=7-5-8, 3=7-5-8, 4=7-5-8
Max Horz 1=-20(LC 17)
Max Uplift 1=-25(LC 12), 3=-28(LC 13)
Max Grav 1=167(LC 1), 3=167(LC 1), 4=331(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-256/136

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=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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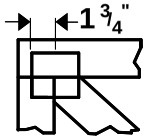
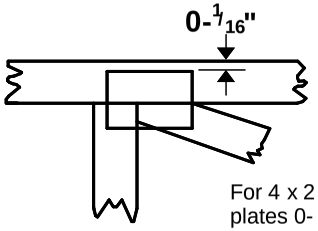
Symbols

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.

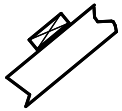
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

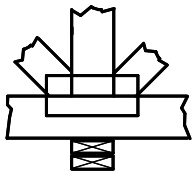
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

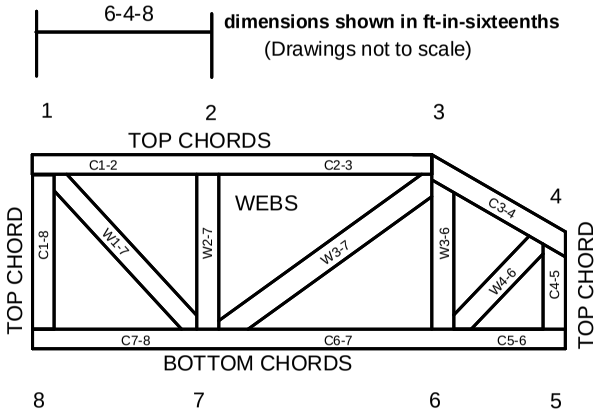


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.