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

02/16/2021

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

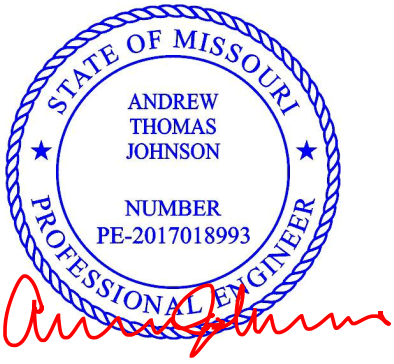
Re: 2630568
Summit/woodside ridge #42/mo

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: I44692848 thru I44692897

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

Missouri COA: Engineering 001193



February 5,2021

Johnson, Andrew ,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/woodside ridge #42/mo
2630568	A1	HIP GIRDER	1	2	Job Reference (optional)

I44692848

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
EFFECTIVE 02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:47:49 2021 Page 1
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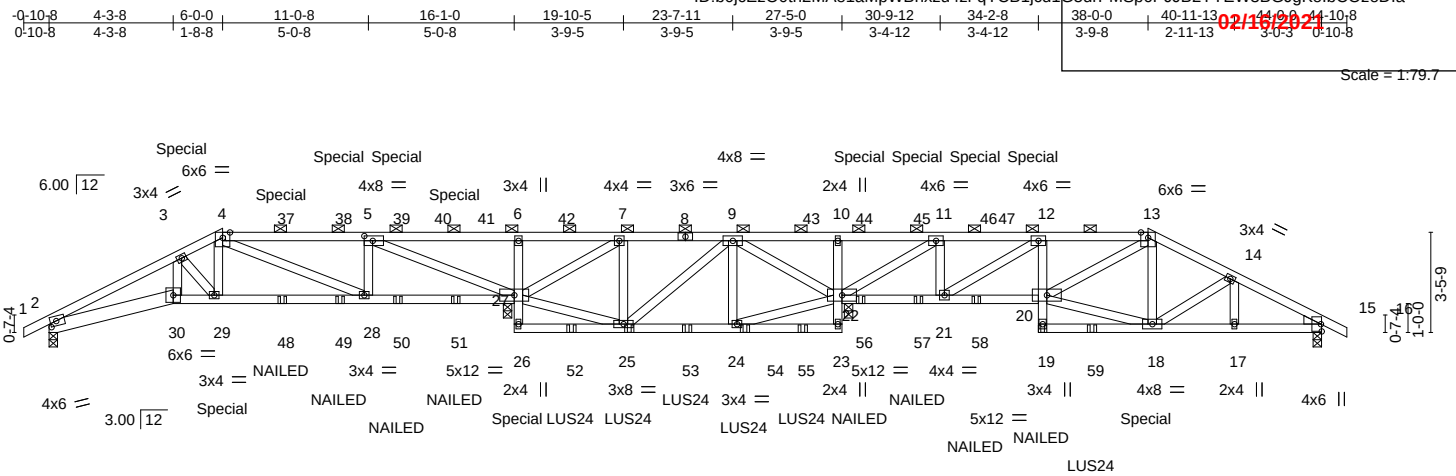

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.06	29	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.13	28-29	>999	180		
TCDL	20.0	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.08	15	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 389 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-30: 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 25-26,24-25,23-24.

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=58(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-351(LC 12), 27=-952(LC 12), 22=-947(LC 13), 15=-399(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 2=1509(LC 37), 27=3868(LC 36), 22=3949(LC 36), 15=1684(LC 37)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3713/942, 3-4=-3137/859, 4-5=-1935/518, 5-6=-499/2049, 6-7=-513/2111, 7-9=-85/411, 9-10=-495/2267, 10-11=-492/2251, 11-12=-1003/296, 12-13=-2884/764, 13-14=-2588/712, 14-15=-2586/652
BOT CHORD 2-30=-836/3261, 29-30=-808/3153, 28-29=-712/2801, 27-28=-441/1929, 6-27=-672/194, 24-25=-420/162, 22-23=-48/268, 10-22=-624/188, 21-22=-203/1003, 20-21=-643/2937, 12-20=-88/576, 18-19=-62/268, 17-18=-517/2223, 15-17=-517/2223
WEBS 3-30=-115/511, 3-29=-424/157, 4-29=-249/1043, 4-28=-1125/296, 5-28=-63/536, 5-27=-4313/1100, 25-27=-417/171, 7-27=-2068/525, 7-25=-187/872, 9-24=-186/869, 22-24=-437/164, 9-22=-2187/542, 11-22=-3818/924, 11-21=-251/1225, 12-21=-2268/563, 18-20=-480/2107, 13-20=-168/677, 13-18=-177/614, 14-18=-301/281

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 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
6) Unbalanced snow loads have been considered for this design.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER
February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A1	HIP GIRDER	1	2	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:12:57 2021 Page 2
ID:b0jcEzO0th2MAe1aMpWBnxzu4zI-IkmZF3dFoZDUTZxeNpwYrPbjIesIwjZpZS19kqzoDIZ

NOTES-

7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
8) Provide adequate drainage to prevent water ponding.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 351 lb uplift at joint 2, 952 lb uplift at joint 27, 947 lb uplift at joint 22 and 399 lb uplift at joint 15.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 10-0-0 oc max. starting at 18-0-12 from the left end to 36-0-12 to connect truss(es) to front face of bottom chord.
15) Fill all nail holes where hanger is in contact with lumber.
16) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 281 lb down and 131 lb up at 6-0-0, 281 lb down and 131 lb up at 8-0-12, 281 lb down and 131 lb up at 10-0-12, 281 lb down and 131 lb up at 12-0-12, 281 lb down and 131 lb up at 14-0-12, 281 lb down and 131 lb up at 28-0-12, 281 lb down and 131 lb up at 30-0-12, and 281 lb down and 131 lb up at 32-0-12, and 281 lb down and 131 lb up at 34-0-12 on top chord, and 534 lb down and 185 lb up at 6-0-0, and 347 lb down and 102 lb up at 16-2-12, and 880 lb down and 284 lb up at 37-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-71, 4-13=-81, 13-16=-71, 30-31=-20, 27-30=-20, 23-26=-20, 20-22=-20, 19-34=-20
   Concentrated Loads (lb)
   Vert: 4=-254(F) 27=-347(F) 12=-250(F) 29=-534(F) 25=-347(F) 18=-880(F) 37=-250(F) 38=-250(F) 39=-250(F) 41=-250(F) 44=-250(F) 45=-250(F) 47=-250(F) 52=-347(F) 53=-347(F) 54=-347(F) 55=-347(F) 59=-347(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A2	HIP	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:17:12 2021 Page 1
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-2-0-0 2-0-0 | 4-3-8 4-3-8 | 8-0-0 3-8-8 | 12-0-8 4-0-8 | 16-1-0 4-0-8 | 21-9-0 5-8-0 | 27-5-0 5-8-0 | 34-2-8 6-9-8 | 36-0-0 1-9-8 | 38-10-12 2-10-12 | 44-0-8 5-1-4 | 44-10-8 0-10-8

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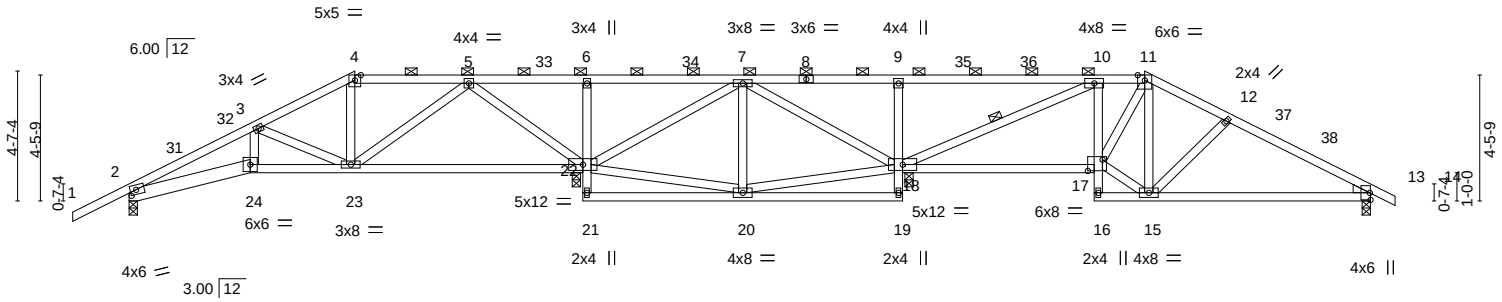

4-3-8 4-3-8 | 8-0-0 3-8-8 | 15-8-8 7-8-8 | 16-1-0 0-4-8 | 21-9-0 5-8-0 | 27-5-0 5-8-0 | 27-9-8 0-4-8 | 34-2-8 6-5-0 | 36-0-0 1-9-8 | 44-0-0 8-0-0

Plate Offsets (X,Y)-- [2:0-2-8,0-2-0], [13:0-0-1,0-0-3], [13:0-0-3,0-5-0], [17:0-6-4,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.11	22-23	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.23	22-23	>858	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.06	13	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 197 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-24: 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-4-3 max.): 4-11.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 10-18

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 2=96(LC 20)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-174(LC 16), 22=-331(LC 16), 18=-305(LC 17), 13=-174(LC 17)
Max Grav All reactions 250 lb or less at joint(s) except 2=979(LC 41), 22=1777(LC 56), 18=1631(LC 40), 13=935(LC 41)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1565/297, 3-4=-865/169, 4-5=-722/179, 5-6=-121/841, 6-7=-108/829, 7-9=-35/523, 9-10=-28/481, 10-11=-960/244, 11-12=-869/222, 12-13=-1170/257
BOT CHORD 2-24=-273/1331, 23-24=-261/1281, 22-23=-35/261, 6-22=-533/150, 9-18=-694/194, 17-18=-80/1015, 10-17=-12/277, 13-15=-146/966
WEBS 3-24=-34/251, 3-23=-705/200, 5-23=-90/714, 5-22=-1284/285, 7-22=-840/154, 7-18=-533/136, 10-18=-1625/279, 15-17=-6/846, 11-17=-85/574, 12-15=-427/145

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 12-0-8, Interior(1) 12-0-8 to 36-0-0, Exterior(2R) 36-0-0 to 40-2-15, Interior(1) 40-2-15 to 44-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Bearing at joint(s) 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 174 lb uplift at joint 2, 331 lb uplift at joint 22, 305 lb uplift at joint 18 and 174 lb uplift at joint 13.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A2	HIP	1	1	J44692849

Job Reference (optional)

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/woodside ridge #42/mo
2630568	A3	HIP	1	1	Job Reference (optional)

I44692850

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMIT, MISSOURI
02/18/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:13:13 2021 Page 1
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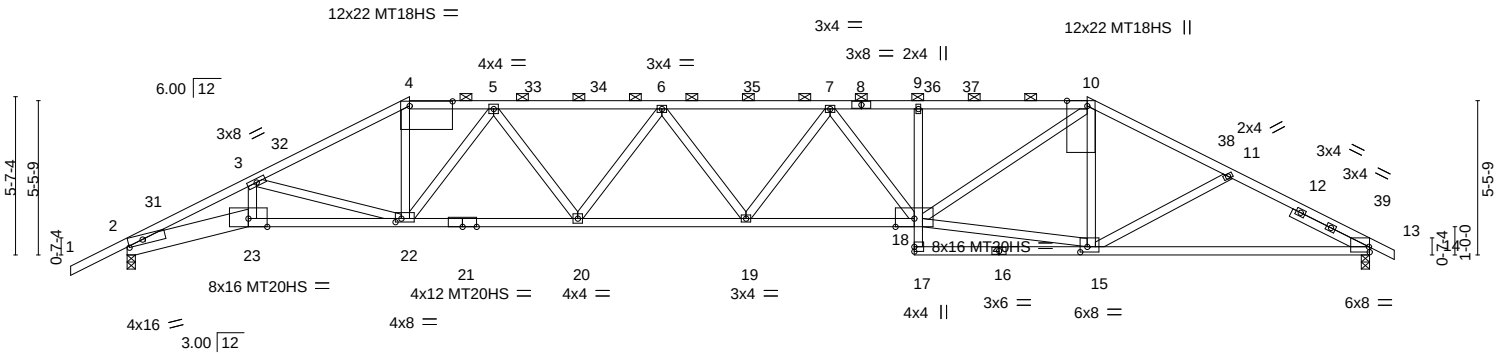
-2-0-0	4-3-8	10-0-0	12-11-12	18-11-4	24-10-12	27-10-8	34-0-0	38-11-13	44-0-0	44-10-8
2-0-0	4-3-8	5-8-8	2-11-12	5-11-8	5-11-8	2-11-12	6-1-8	4-11-13	5-0-3	0-10-8

Scale = 1:81.6



4-3-8	10-0-0	15-11-8	21-11-0	27-10-8	34-0-0	44-0-0
4-3-8	5-8-8	5-11-8	5-11-8	5-11-8	6-1-8	10-0-0

Plate Offsets (X,Y)-- [2:0-6-4,0-2-0], [4:1-6-4,0-2-0], [10:0-2-4,Edge], [13:Edge,0-2-4], [15:0-3-0,0-2-4], [22:0-2-8,0-1-8]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.52	19	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-1.12	18-19	>470	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.41	13	n/a	n/a	MT18HS	197/144
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 213 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except*
	10-14: 2x4 SPF No.2, 8-10: 2x4 SP 2400F 2.0E
BOT CHORD	2x4 SP 2400F 2.0E *Except*
	2-23: 2x8 SP 2400F 2.0E, 9-17,16-17: 2x4 SPF No.2
WEBS	2x4 SPF No.2
SLIDER	Right 2x4 SPF No.2 3-0-0

BRACING-

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

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=114(LC 16)
Max Uplift 2=-393(LC 16), 13=-368(LC 17)
Max Grav 2=2595(LC 2), 13=2501(LC 2)

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

TOP CHORD	2-3=-7070/1023, 3-4=-5034/710, 4-5=-4404/672, 5-6=-6043/869, 6-7=-6605/932, 7-9=-6105/877, 9-10=-6085/881, 10-11=-4029/587, 11-13=-4208/642
BOT CHORD	2-23=-949/6342, 22-23=-924/6149, 20-22=-739/5445, 19-20=-897/6573, 18-19=-862/6529, 9-18=-542/143, 15-17=-36/301, 13-15=-480/3669
WEBS	3-23=-111/1080, 3-22=-1760/381, 4-22=-240/1959, 15-18=-377/3350, 10-18=-483/3028, 10-15=-469/162, 11-15=-309/166, 5-22=-1743/337, 5-20=-149/1030, 6-20=-911/213, 7-18=-708/162

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-1-1, Interior(1) 1-1-1 to 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 34-0-0, Exterior(2R) 34-0-0 to 38-2-15, Interior(1) 38-2-15 to 44-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) The Fabrication Tolerance at joint 10 = 12%
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) 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.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A3	HIP	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:43:13 2021 Page 2
ID:b0jcEzO0th2MAe1aMpWBnxzu4zl-yJ0XKzzRzTtNR1fDaPyMWWIfuKjvDkC5ETZBFezoDI6

NOTES-

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 393 lb uplift at joint 2 and 368 lb uplift at joint 13.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A4	Hip	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:13:27 2021 Page 1
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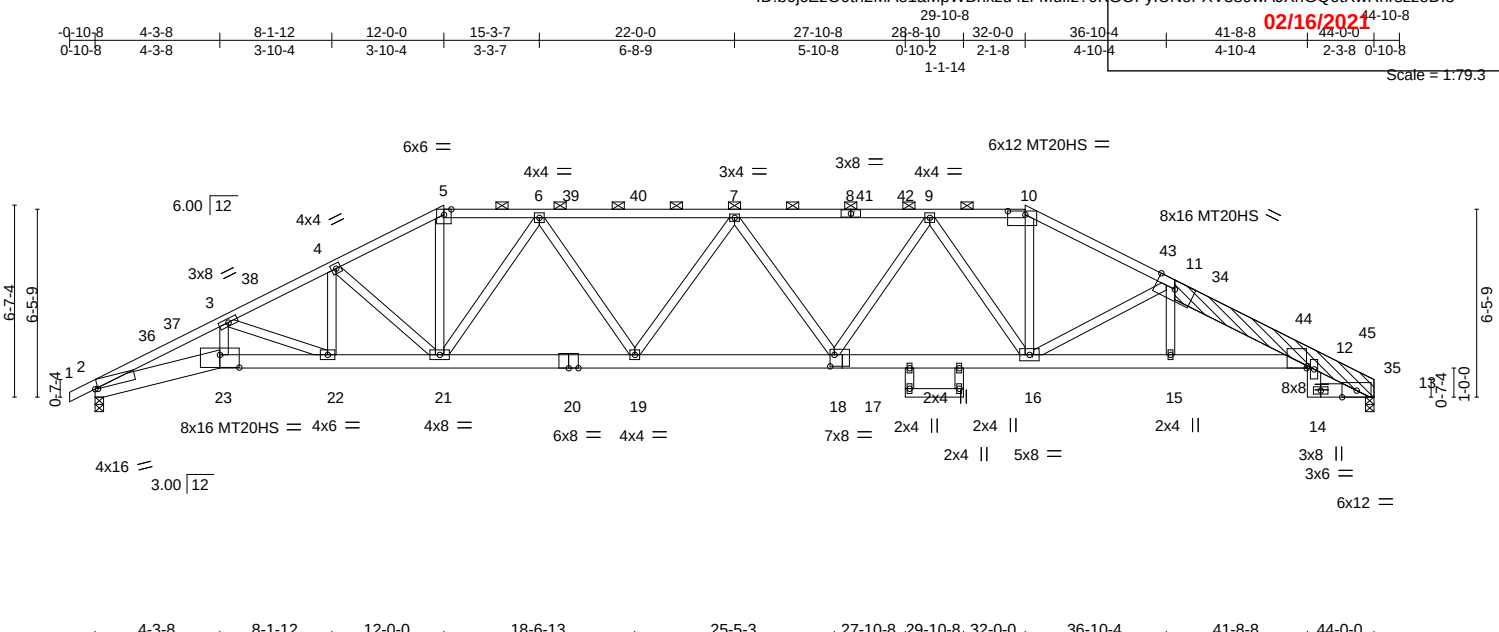

4-3-8	8-1-12	12-0-0	18-6-13	25-5-3	27-10-8	29-10-8	32-0-0	36-10-4	41-8-8	44-0-0
4-3-8	3-10-4	3-10-4	6-6-13	6-10-6	2-5-5	2-0-0	2-1-8	4-10-4	4-10-4	2-3-8

Plate Offsets (X,Y)-- [2:0-1-2,0-0-3], [10:0-7-4,0-1-8], [12:0-0-6,Edge], [17:0-1-12,0-4-12], [17:0-0-0,0-2-12], [23:0-8-0,0-5-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.41	18-19	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.92	18-19	>573	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.43	13	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 258 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-8,8-10: 2x4 SPF 1650F 1.5E, 11-13: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
2-23: 2x8 SP 2400F 2.0E, 20-23,12-17: 2x6 SPF 2100F 1.8E
13-14,17-20: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
12-14: 2x6 SPF No.2
OTHERS 2x8 SP 2400F 2.0E
LBR SCAB 11-13 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.): 5-10.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=118(LC 20)
Max Uplift 2=-364(LC 16), 13=-343(LC 17)
Max Grav 2=2492(LC 2), 13=2411(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7138/1052, 3-4=-5531/806, 4-5=-4655/682, 5-6=-4072/633, 6-7=-5034/679,
7-9=-5024/670, 9-10=-4049/610, 10-11=-4669/649, 11-12=-5730/784, 12-13=-1294/207
BOT CHORD 2-23=-994/6395, 22-23=-962/6200, 21-22=-689/4912, 19-21=-597/4740, 18-19=-660/5275,
16-18=-526/4720, 15-16=-637/5311, 12-15=-638/5299
WEBS 12-14=-80/612, 3-23=-127/985, 5-21=-228/1796, 10-16=-196/1752, 11-16=-1437/301,
6-21=-1401/286, 6-19=-110/638, 7-19=-481/182, 7-18=-497/184, 9-18=-112/653,
9-16=-1411/287, 11-15=0/260, 4-21=-1117/254, 4-22=-108/769, 3-22=-1386/293

NOTES-

1) Attached 7-11-3 scab 11 to 13, 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 0-0-15 from end at joint 11, nail 2 row(s) at 4" o.c. for 2-0-0; starting at 3-1-9 from end at joint 11, nail 2 row(s) at 2" o.c. for 4-4-7.
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=4.2psf; h=25ft; 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 12-0-0, Exterior(2R) 12-0-0 to 16-2-15, Interior(1) 16-2-15 to 32-0-0, Exterior(2R) 32-0-0 to 36-2-15, Interior(1) 36-2-15 to 43-10-5 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
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A4	Hip	1	1	Job Reference (optional)

NOTES-

9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Bearing at joint(s) 2, 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 364 lb uplift at joint 2 and 343 lb uplift at joint 13.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A5	Hip	1	1	Job Reference (optional)

I44692852

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
ISSUED: 02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:33:25 2021 Page 1
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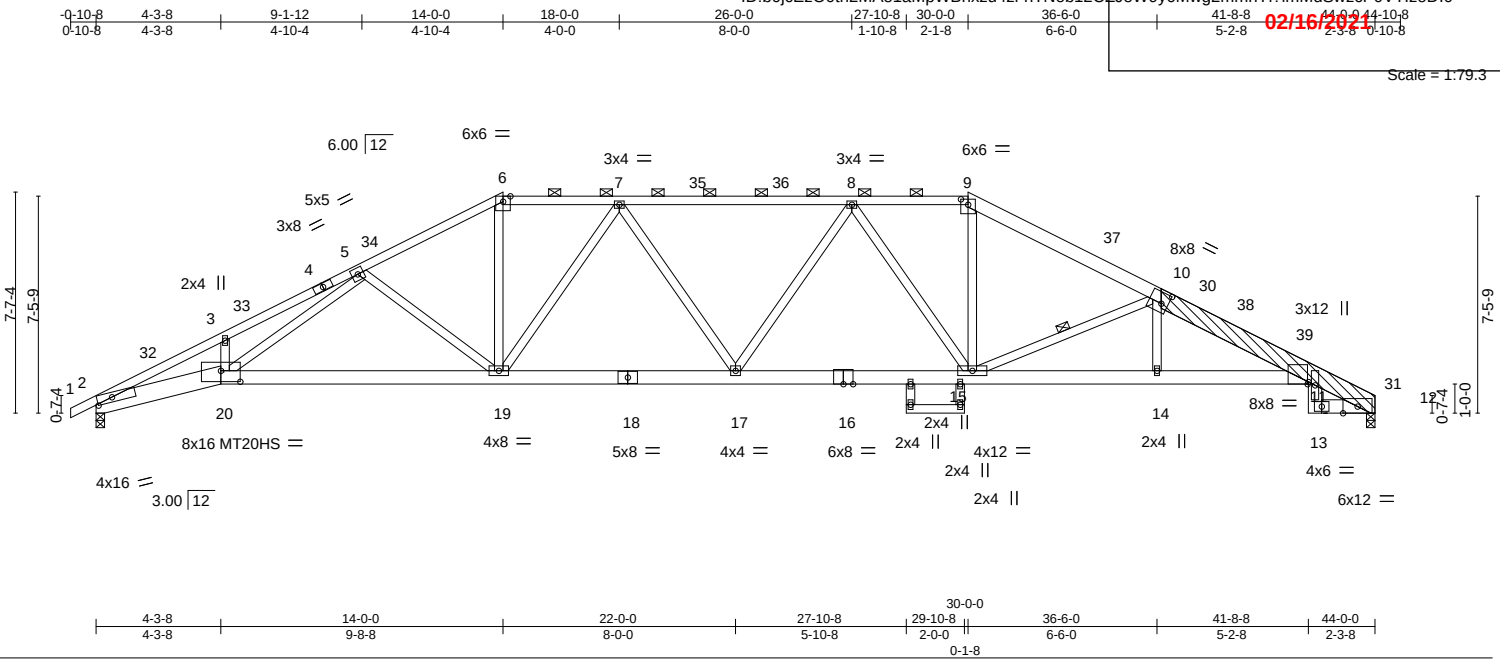

Plate Offsets (X,Y)-- [2:0-6-4,0-2-0], [9:0-3-0,0-2-4], [10:0-2-12,0-4-8], [11:0-0-6,Edge], [20:0-8-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.35	19-20	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.81	19-20	>651	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.43	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 268 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
6-9: 2x4 SP 2400F 2.0E, 9-10: 2x6 SPF No.2
10-12: 2x8 SP 2400F 2.0E
BOT CHORD 2x6 SPF No.2 *Except*
2-20: 2x8 SP 2400F 2.0E, 18-20,11-16: 2x6 SPF 2100F 1.8E
21-22,22-23,15-23: 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x8 SP 2400F 2.0E
LBR SCAB 10-12 2x8 SP 2400F 2.0E one side

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (2-8-6 max.): 6-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 10-15

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=136(LC 20)
Max Uplift 2=-278(LC 16), 12=-256(LC 17)
Max Grav 2=2492(LC 2), 12=2411(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7257/819, 3-5=-7201/894, 5-6=-4357/585, 6-7=-3781/553, 7-8=-4288/601, 8-9=-3764/553, 9-10=-4396/582, 10-11=-5774/711, 11-12=-1574/215
BOT CHORD 2-20=-754/6502, 19-20=-496/4612, 17-19=-449/4260, 15-17=-403/4235, 14-15=-584/5362, 11-14=-587/5351, 11-13=-95/835
WEBS 3-20=-261/144, 5-20=-360/2303, 5-19=-1107/288, 6-19=-175/1618, 9-15=-157/1525, 7-19=-1021/256, 8-15=-1001/248, 10-15=-1805/355, 10-14=0/277

NOTES-

1) Attached 8-5-15 scab 10 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 0-0-7 from end at joint 10, nail 2 row(s) at 7" o.c. for 3-5-9; starting at 3-8-7 from end at joint 10, nail 2 row(s) at 2" o.c. for 4-4-5.
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=4.2psf; h=25ft; 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 14-0-0, Exterior(2R) 14-0-0 to 18-0-0, Interior(1) 18-0-0 to 30-0-0, Exterior(2R) 30-0-0 to 34-2-15, Interior(1) 34-2-15 to 43-10-5 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
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A5	Hip	1	1	Job Reference (optional)

J44692852

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEES SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:43:23 2021 Page 2
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NOTES-

10) 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 278 lb uplift at joint 2 and 256 lb uplift at joint 12.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo	I44692853
2630568	A6	Hip	1	1	Job Reference (optional)	

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
EFFECTIVE 02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:13:28 2021 Page 1
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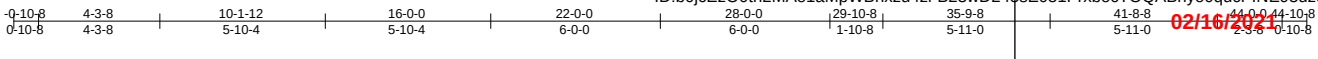

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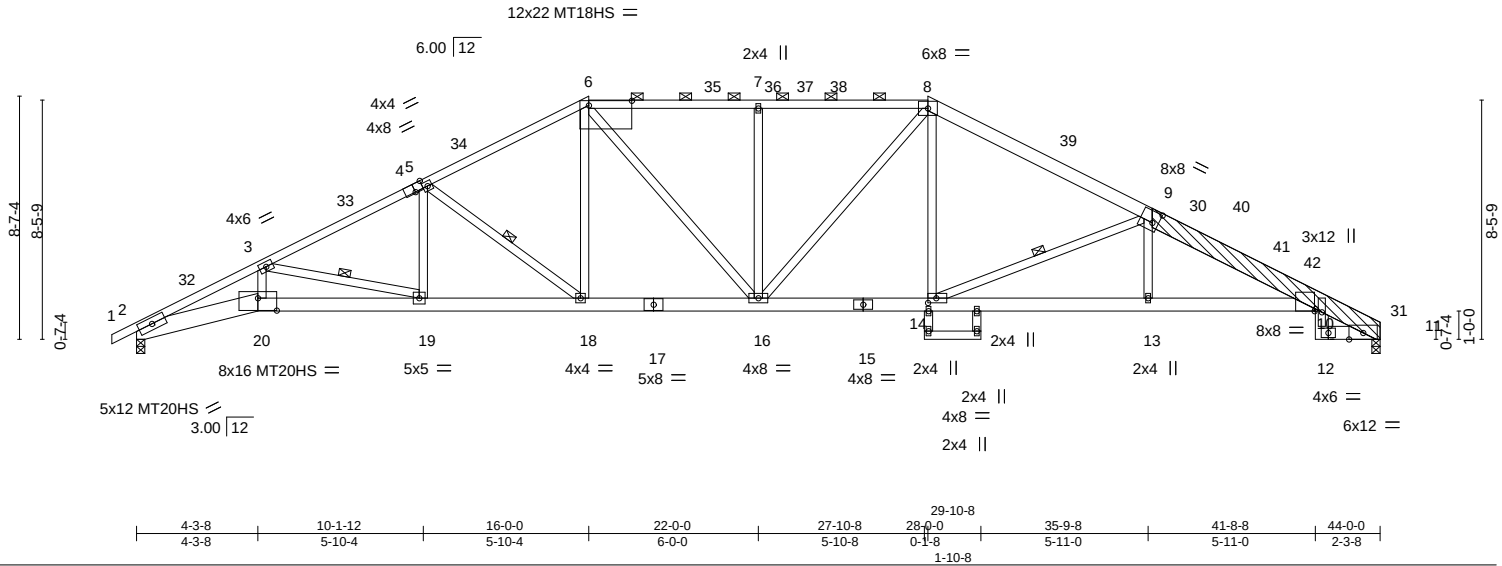

Plate Offsets (X,Y)-- [4:0-3-11,Edge], [6:1-6-4,0-2-0], [9:0-2-8,0-4-12], [10:0-0-6,Edge], [14:0-3-8,0-2-0], [20:0-8-0,0-5-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.33	16-18	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.73	16-18	>717	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.41	11	n/a	n/a	MT18HS	197/144
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 274 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	8-9: 2x6 SPF No.2, 9-11: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except*
	2-20: 2x8 SP 2400F 2.0E, 17-20,10-15: 2x6 SPF 2100F 1.8E
	10-12,11-12,15-17: 2x6 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x8 SP 2400F 2.0E
LBR SCAB	9-11 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.): 6-8.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-19, 5-18, 9-14

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=154(LC 20)
Max Uplift 2=-298(LC 16), 11=-277(LC 17)
Max Grav 2=2492(LC 2), 11=2411(LC 2)

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

TOP CHORD	2-3=-7261/880, 3-5=-5081/648, 5-6=-3990/569, 6-7=-3775/581, 7-8=-3772/580,
	8-9=-4085/563, 9-10=-5616/695, 10-11=-1574/216
BOT CHORD	2-20=-881/6521, 19-20=-853/6311, 18-19=-486/4481, 16-18=-280/3457, 14-16=-277/3483,
	13-14=-561/5185, 10-13=-564/5174, 10-12=-96/835
WEBS	3-20=-109/1102, 3-19=-1887/379, 5-19=-60/714, 5-18=-1376/308, 6-18=-132/925,
	6-16=-157/684, 7-16=-734/194, 8-16=-153/647, 9-13=0/346, 8-14=-93/875,
	9-14=-1962/405

NOTES-

1) Attached 9-3-7 scab 9 to 11, 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 3-3-5 from end at joint 9, nail 2 row(s) at 2" o.c. for 5-6-15.
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=4.2psf; h=25ft; 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 20-2-15, Interior(1) 20-2-15 to 28-0-0, Exterior(2R) 28-0-0 to 32-2-15, Interior(1) 32-2-15 to 43-10-5 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
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A6	Hip	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:43:28 2021 Page 2
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NOTES-

10) 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 298 lb uplift at joint 2 and 277 lb uplift at joint 11.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A7	Hip	1	1	Job Reference (optional)

I44692854

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:33:31 2021 Page 1
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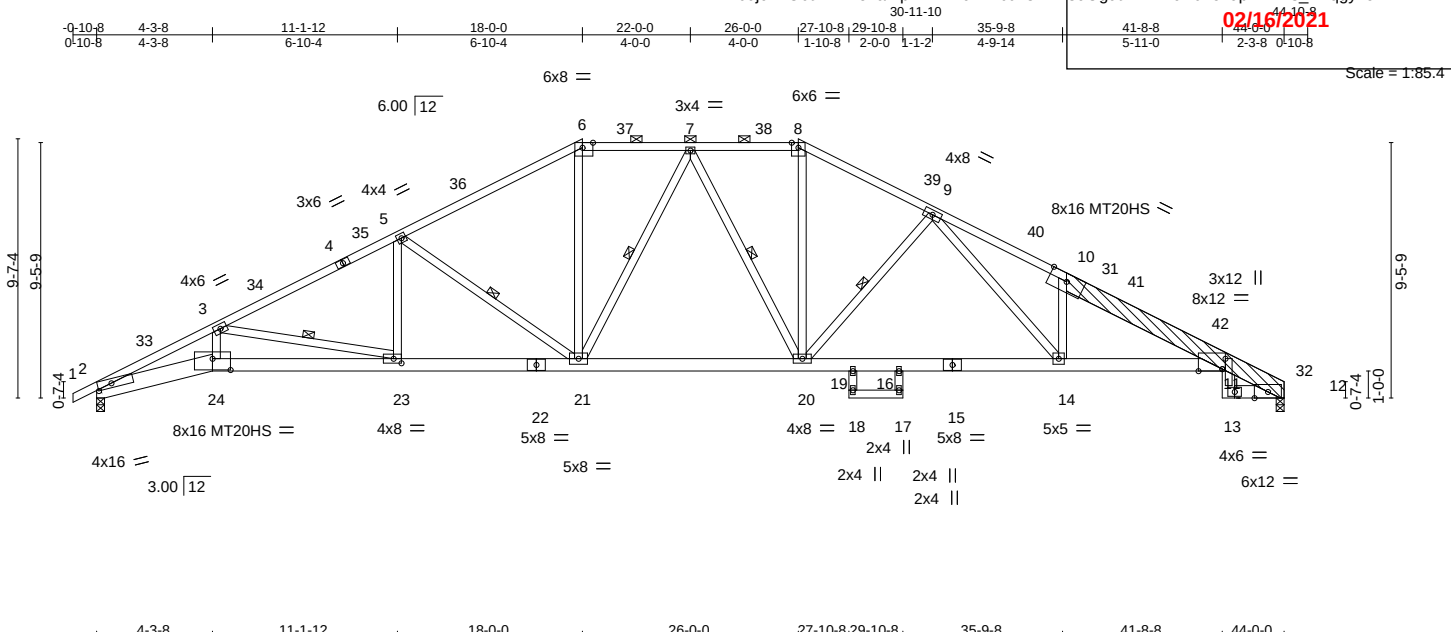

Plate Offsets (X,Y)-- [2:0-6-4,0-2-0], [6:0-4-10,Edge], [11:0-10-10,Edge], [11:0-4-10,0-1-6], [23:0-3-8,0-2-0], [24:0-8-0,0-5-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.33	20-21	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.74	20-21	>707	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.42	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 273 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except*
	6-8: 2x4 SPF No.2, 10-12: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except*
	2-24: 2x8 SP 2400F 2.0E, 22-24,11-15: 2x6 SPF 2100F 1.8E
	11-13,12-13,15-22: 2x6 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x8 SP 2400F 2.0E
LBR SCAB	10-12 2x8 SP 2400F 2.0E one side

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except
	2-0-0 oc purlins (2-11-6 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-23, 5-21, 9-20, 7-21, 7-20

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=171(LC 20)
Max Uplift 2=-355(LC 16), 12=-334(LC 17)
Max Grav 2=2492(LC 2), 12=2411(LC 2)

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

TOP CHORD	2-3=-7327/1088, 3-5=-4926/688, 5-6=-3699/544, 6-7=-3168/528, 7-8=-3162/520,
	8-9=-3640/548, 9-10=-5546/822, 10-11=-5387/679, 11-12=-1574/238
BOT CHORD	2-24=-1089/6589, 23-24=-1056/6372, 21-23=-601/4306, 20-21=-278/3267,
	19-20=-362/3846, 16-19=-365/3792, 14-16=-362/3846, 11-14=-517/4912, 11-13=-107/835
WEBS	3-24=-135/1149, 3-23=-2112/465, 5-23=-58/692, 5-21=-1488/353, 6-21=-126/1126,
	8-20=-147/1186, 9-20=-1139/298, 9-14=-286/1616, 10-14=-991/277, 7-21=-448/151,
	7-20=-445/160

NOTES-

1) Attached 9-3-7 scab 10 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 0-0-15 from end at joint 10, nail 2 row(s) at 7" o.c. for 3-0-15; starting at 4-5-13 from end at joint 10, nail 2 row(s) at 2" o.c. for 4-4-7.
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=4.2psf; h=25ft; 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(2R) 18-0-0 to 22-0-0, Interior(1) 22-0-0 to 26-0-0, Exterior(2R) 26-0-0 to 30-2-15, Interior(1) 30-2-15 to 43-10-5 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
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A7	Hip	1	1	J44692854

Job Reference (optional)

NOTES-

10) 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 355 lb uplift at joint 2 and 334 lb uplift at joint 12.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo	I44692855
2630568	A8	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:33:32 2021 Page 1
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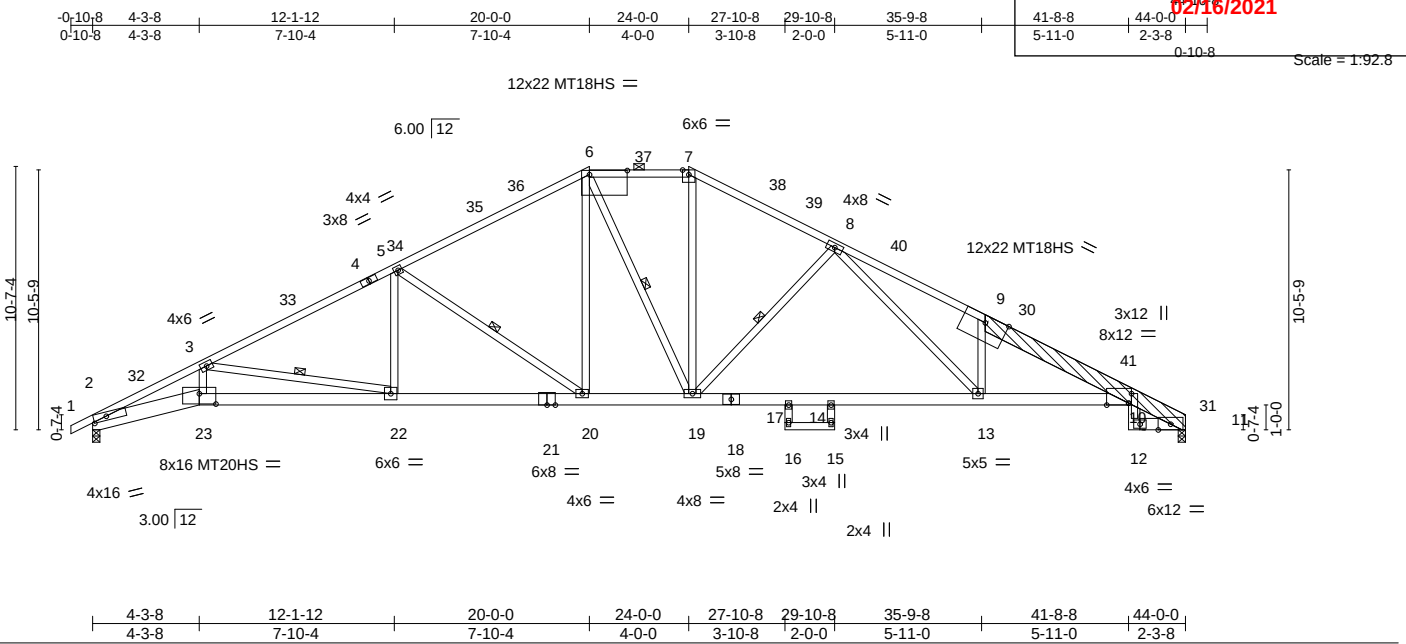

Plate Offsets (X,Y)-- [2:0-6-4,0-2-0], [6:1-6-4,0-2-0], [10:0-4-10,0-1-6], [10:0-10-10,Edge], [23:0-8-0,0-5-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.34	20	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.76	14	>693	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.42	11	n/a	n/a	MT18HS	197/144
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 273 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF 1650F 1.5E *Except*
	6-7: 2x4 SPF No.2, 9-11: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except*
	2-23: 2x8 SP 2400F 2.0E, 21-23,10-18: 2x6 SPF 2100F 1.8E
	10-12,11-12,18-21: 2x6 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x8 SP 2400F 2.0E
LBR SCAB	9-11 2x8 SP 2400F 2.0E one side

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except
	2-0-0 oc purlins (2-10-5 max.): 6-7.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-22, 5-20, 6-19, 8-19

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=189(LC 20)
Max Uplift 2=-351(LC 16), 11=-329(LC 17)
Max Grav 2=2492(LC 2), 11=2411(LC 2)

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

TOP CHORD	2-3=-7377/1099, 3-5=-4920/653, 5-6=-3527/528, 6-7=-2966/509, 7-8=-3478/531,
	8-9=-5759/825, 9-10=-5532/665, 10-11=-1574/235
BOT CHORD	2-23=-1121/6649, 22-23=-1090/6432, 20-22=-576/4306, 19-20=-255/2962,
	17-19=-342/3824, 14-17=-358/3751, 13-14=-342/3824, 10-13=-508/5071, 10-12=-106/835
WEBS	3-23=-133/1169, 3-22=-2312/522, 5-22=-40/732, 5-20=-1612/387, 6-20=-178/960,
	6-19=-246/290, 7-19=-153/1114, 8-19=-1246/340, 8-13=-311/1773, 9-13=-1012/303

NOTES-

1) Attached 9-3-7 scab 9 to 11, 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 0-0-15 from end at joint 9, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 4-5-13 from end at joint 9, nail 2 row(s) at 2" o.c. for 4-4-7.
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=4.2psf; h=25ft; 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(2E) 20-0-0 to 24-0-0, Exterior(2R) 24-0-0 to 28-2-15, Interior(1) 28-2-15 to 43-10-5 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
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) 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.

Continued on page 2

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A8	Hip	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:33:33 2021 Page 2
ID:b0jcEzO0th2MAe1aMpWBnxzu4zl-Y?spGm8DgneO7AjvOLCe5Tt2PzUqV818SeywkqzoDHu

NOTES-

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 351 lb uplift at joint 2 and 329 lb uplift at joint 11.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A9	Roof Special	3	1	Job Reference (optional)

I44692856

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
EFFECTIVE 02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:13:33 2021 Page 1
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-0-10-8	4-3-8	10-2-5	16-1-8	22-0-0	27-10-8	33-2-14	38-7-5	44-0-0	44-10-8
0-10-8	4-3-8	5-10-13	5-11-2	5-10-8	5-10-8	5-4-6	5-4-6	5-4-11	0-10-8

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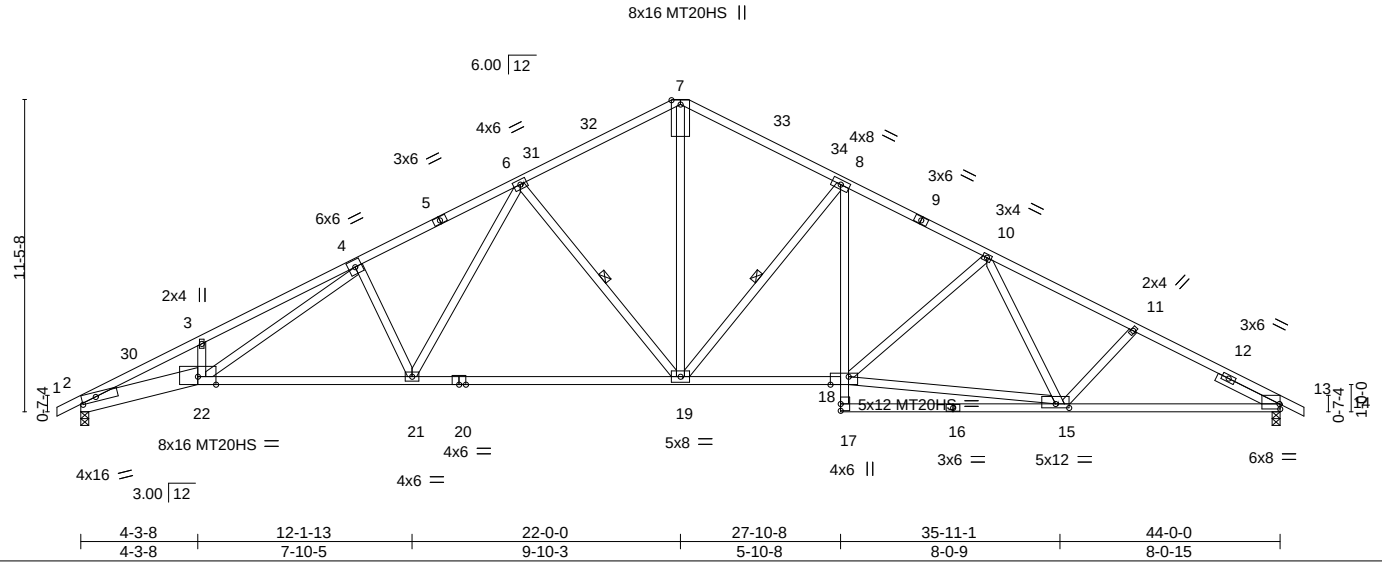

4-3-8	12-1-13	22-0-0	27-10-8	35-11-1	44-0-0
4-3-8	7-10-5	9-10-3	5-10-8	8-0-9	8-0-15

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.38	21-22	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.90	19-21	>587	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.39	13	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 217 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	1-5,9-14: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except*
	2-22: 2x8 SP 2400F 2.0E, 20-22: 2x4 SPF 1650F 1.5E
	13-16: 2x4 SP 2400F 2.0E
WEBS	2x4 SPF No.2
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 6-19, 8-19

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=-201(LC 21)
Max Uplift 2=-347(LC 16), 13=-349(LC 17)
Max Grav 2=2490(LC 2), 13=2504(LC 2)

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

TOP CHORD	2-3=-7165/1045, 3-4=-7153/1165, 4-6=-4551/684, 6-7=-3030/502, 7-8=-3033/500,
	8-10=-3860/548, 10-11=-4043/576, 11-13=-4249/591
BOT CHORD	2-22=-1076/6423, 21-22=-650/4381, 19-21=-404/3361, 18-19=-247/3374, 8-18=-131/815,
	15-17=-8/320, 13-15=-435/3693
WEBS	3-22=-296/169, 4-22=-528/2454, 4-21=-982/312, 6-21=-233/1253, 6-19=-1192/355,
	7-19=-277/2030, 8-19=-1188/330, 15-18=-327/3353, 10-18=-455/206

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 22-0-0, Exterior(2R) 22-0-0 to 25-0-0, Interior(1) 25-0-0 to 44-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) The Fabrication Tolerance at joint 7 = 16%
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 347 lb uplift at joint 2 and 349 lb uplift at joint 13.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and reference standard ANSI/TPI 1.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A9	Roof Special	3	1	J44692856

Job Reference (optional)

NOTES-

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A9A	Roof Special	1	1	Job Reference (optional)

I44692857

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 13:33:37 2021 Page 1
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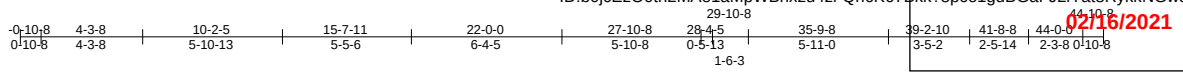

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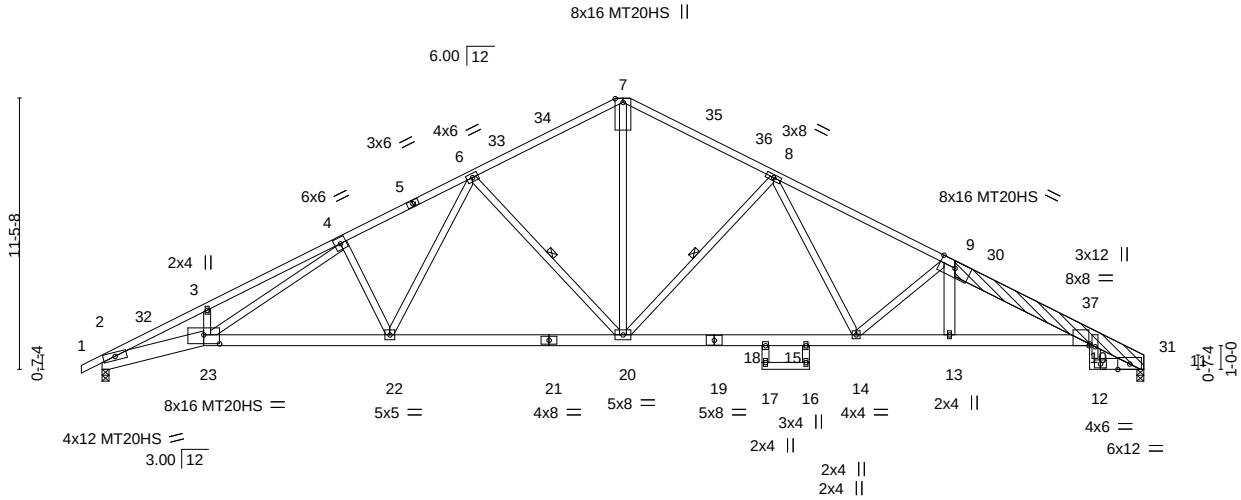

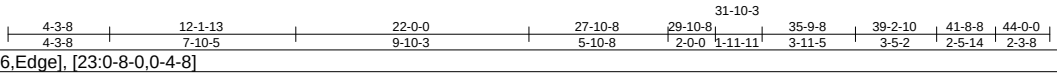

Plate Offsets (X,Y)-- [10:0-0-6,Edge], [23:0-8-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.32	22-23	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.71	18-20	>739	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.40	11	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 279 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP 2400F 2.0E *Except*
	5-7: 2x4 SPF No.2, 9-11: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SPF No.2 *Except*
	2-23: 2x8 SP 2400F 2.0E, 21-23,10-19: 2x6 SPF 2100F 1.8E
	10-12,11-12,19-21: 2x6 SPF No.2
WEBS	2x4 SPF No.2 *Except*
	9-13: 2x6 SPF No.2
OTHERS	2x8 SP 2400F 2.0E
LBR SCAB	9-11 2x8 SP 2400F 2.0E one side

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 6-20, 8-20

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=207(LC 20)
Max Uplift 2=-347(LC 16), 11=-325(LC 17)
Max Grav 2=2492(LC 2), 11=2411(LC 2)

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

TOP CHORD	2-3=-7218/1059, 3-4=-7206/1182, 4-6=-4631/692, 6-7=-3070/500, 7-8=-3077/505,
	8-9=-4565/612, 9-10=-5488/713, 10-11=-1574/233
BOT CHORD	2-23=-1094/6469, 22-23=-664/4446, 20-22=-433/3482, 18-20=-282/3466,
	15-18=-287/3404, 14-15=-282/3466, 13-14=-555/5046, 10-13=-556/5030, 10-12=-104/835
WEBS	3-23=-297/173, 4-23=-530/2415, 4-22=-928/295, 6-22=-228/1252, 6-20=-1250/364,
	7-20=-270/2035, 8-20=-1226/359, 8-14=-152/1063, 9-14=-1396/343

NOTES-

1) Attached 9-2-5 scab 9 to 11, 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 0-0-15 from end at joint 9, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 4-4-11 from end at joint 9, nail 2 row(s) at 2" o.c. for 4-4-7.
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=4.2psf; h=25ft; 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 22-0-0, Exterior(2R) 22-0-0 to 25-0-0, Interior(1) 25-0-0 to 43-10-5 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
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are MT20 plates unless otherwise indicated.
8) The Fabrication Tolerance at joint 7 = 12%
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) 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.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A9A	Roof Special	1	1	Job Reference (optional)

J44692857

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:13:33 2021 Page 2
ID:b0jcEzO0th2MAe1aMpWBnxzu4zI-Qn6K67Bkk?8pco1gdBGaFJ2lYat8RykkNGw8tbzoDHq

NOTES-

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 347 lb uplift at joint 2 and 325 lb uplift at joint 11.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A10	Roof Special	1	1	J44692858

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
EFFECTIVE 02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:57:12 2021 Page 1
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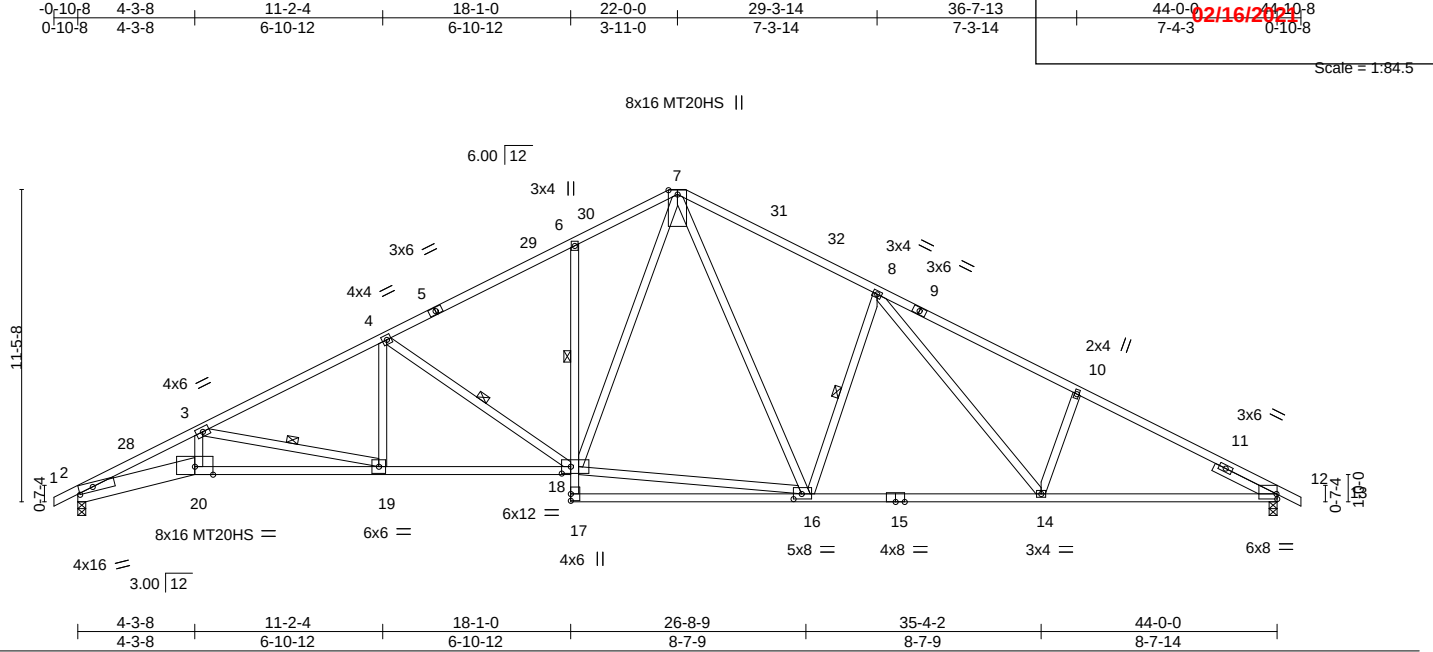

4-3-8	11-2-4	18-1-0	26-8-9	35-4-2	44-0-0
4-3-8	6-10-12	6-10-12	8-7-9	8-7-9	8-7-14

Plate Offsets (X,Y)-- [2:0-6-4,0-2-0], [12:Edge,0-2-4], [16:0-3-10,0-2-4], [18:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.32	18-19	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.73	18-19	>723	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.32	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 224 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	1-5,9-13: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except*
	2-20: 2x8 SP 2400F 2.0E, 18-20,12-15: 2x4 SP 2400F 2.0E
WEBS	2x4 SPF No.2
SLIDER	Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied. Except:
	1 Row at midpt 6-18
WEBS	1 Row at midpt 3-19, 4-18, 8-16

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=201(LC 16)
Max Uplift 2=-347(LC 16), 12=-349(LC 17)
Max Grav 2=2490(LC 2), 12=2504(LC 2)

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

TOP CHORD	2-3=-7209/1064, 3-4=-4804/657, 4-6=-3594/526, 6-7=-3458/610, 7-8=-3311/569, 8-10=-4091/650, 10-12=-4243/579
BOT CHORD	2-20=-1098/6479, 19-20=-1066/6270, 18-19=-604/4221, 6-18=-425/200, 14-16=-252/3123, 12-14=-405/3687
WEBS	3-20=-143/1160, 3-19=-2099/473, 4-19=-47/677, 4-18=-1393/347, 16-18=-174/2261, 7-18=-380/1666, 7-16=-293/974, 8-16=-961/362, 8-14=-198/725, 10-14=-466/237

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 22-0-0, Exterior(2R) 22-0-0 to 25-0-0, Interior(1) 25-0-0 to 44-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) All plates are MT20 plates unless otherwise indicated.
7) The Fabrication Tolerance at joint 7 = 12%
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 347 lb uplift at joint 2 and 349 lb uplift at joint 12.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 5,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A10	Roof Special	1	1	J44692858

Job Reference (optional)

NOTES-

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A11	Hip	1	1	J44692859

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
EFFECTIVE 02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:12:55 2021 Page 1
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-0-10-8 4-3-8 11-2-4 18-1-0 19-10-8 24-1-8 30-8-14 37-4-5 44-0-0 44-10-8
0-10-8 4-3-8 6-10-12 6-10-12 1-9-8 4-3-0 6-7-6 6-7-6 6-7-11 0-10-8

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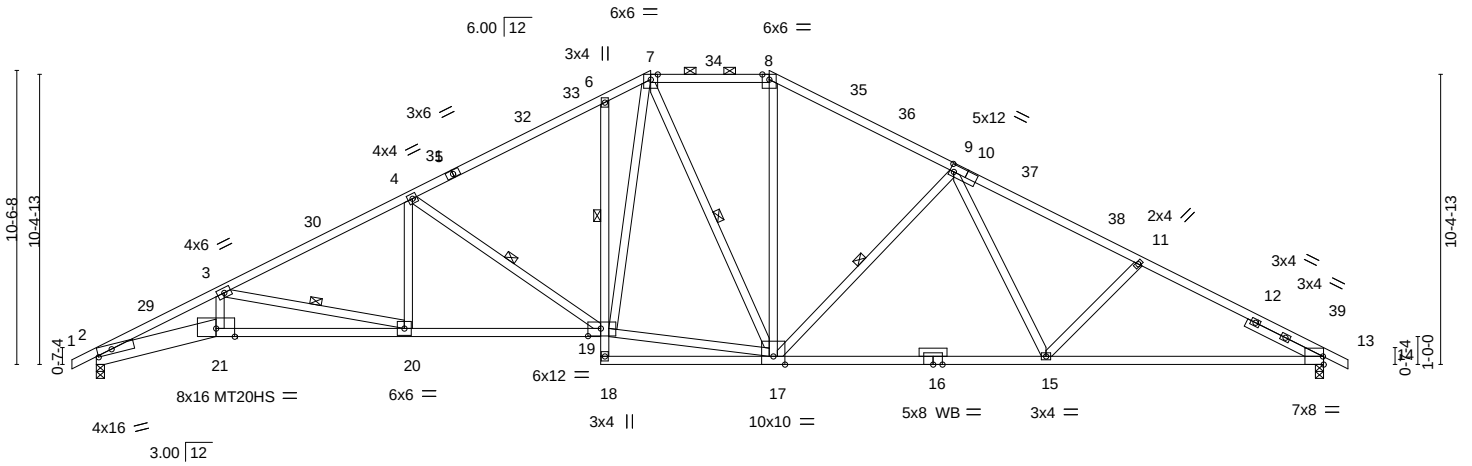

4-3-8 11-2-4 18-1-0 19-10-8 24-1-8 34-0-9 44-0-0
4-3-8 6-10-12 6-10-12 1-9-8 4-3-0 9-11-1 9-11-7

Plate Offsets (X,Y)-- [2:0-6-4,0-2-0], [10:0-1-12,0-3-0], [10:0-0-0,0-1-12], [19:0-5-8,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.33	19-20	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.79	15-17	>670	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.34	13	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 230 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-5,10-14: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except* 2-21: 2x8 SP 2400F 2.0E, 19-21,13-16: 2x4 SP 2400F 2.0E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2
SLIDER	Right 2x4 SPF No.2 3-0-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-3-4 max.): 7-8.
BOT CHORD	Rigid ceiling directly applied. Except: 1 Row at midpt 6-19
WEBS	1 Row at midpt 3-20, 4-19, 7-17, 9-17

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=-182(LC 21)
Max Uplift 2=-351(LC 16), 13=-353(LC 17)
Max Grav 2=2490(LC 2), 13=2504(LC 2)

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

TOP CHORD	2-3=-7209/1066, 3-4=-4939/665, 4-6=-3716/539, 6-7=-3537/605, 7-8=-2655/496, 8-9=-3149/509, 9-11=-4043/575, 11-13=-4280/601
BOT CHORD	2-21=-1081/6479, 20-21=-1049/6270, 19-20=-592/4357, 6-19=-409/174, 15-17=-299/3357, 13-15=-431/3744
WEBS	3-21=-140/1161, 3-20=-2099/468, 4-20=-46/676, 4-19=-1454/347, 17-19=-203/2682, 7-19=-364/1798, 7-17=-602/164, 8-17=-113/859, 9-17=-1009/308, 9-15=-73/537, 11-15=-391/211

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 19-10-8, Exterior(2E) 19-10-8 to 24-1-8, Exterior(2R) 24-1-8 to 28-4-7, Interior(1) 28-4-7 to 44-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 351 lb uplift at joint 2 and 353 lb uplift at joint 13.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A11	Hip	1	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:12:55 2021 Page 2
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NOTES-

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo	J44692860
2630568	A12	Hip	1	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:12:57 2021 Page 1
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-0-10-8 4-3-8 11-1-0 17-10-8 22-0-0 26-1-8 32-0-14 38-0-5 44-0-0 44-10-8
0-10-8 4-3-8 6-9-8 6-9-8 4-1-8 4-1-8 5-11-6 5-11-6 5-11-11 0-10-8

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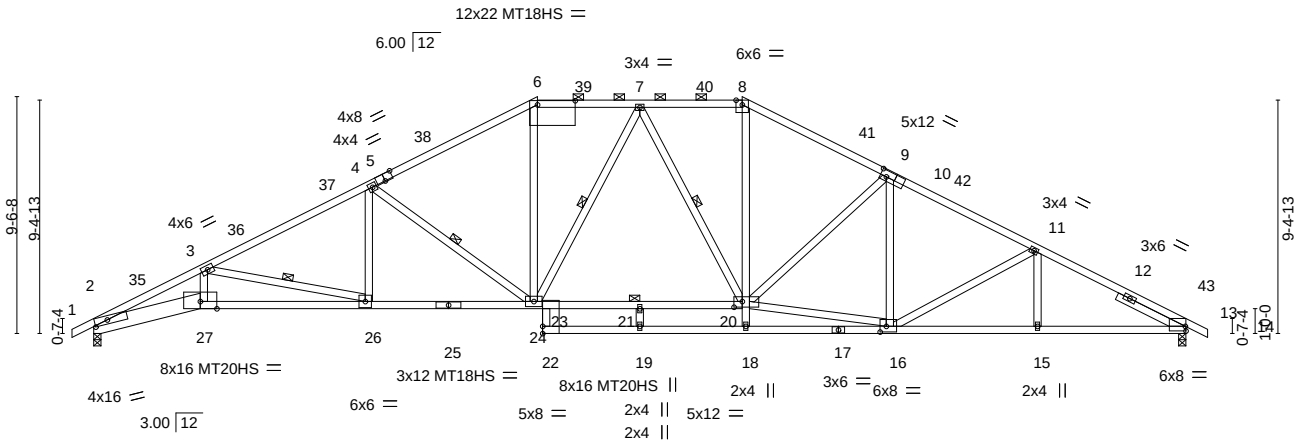

4-3-8 11-1-0 17-10-8 18-1-0 22-0-0 26-1-8 32-0-14 38-0-5 44-0-0
4-3-8 6-9-8 6-9-8 0-2-8 3-11-0 4-1-8 5-11-6 5-11-6 5-11-11

Plate Offsets (X,Y)-- [2:0-6-4,0-2-0], [5:0-4-0,Edge], [6:1-6-4,0-2-0], [10:0-3-0,0-3-0], [10:0-0-0,0-1-12], [13:Edge,0-2-4], [16:0-3-0,0-2-12], [20:0-4-0,0-2-12], [22:0-0-0,0-1-12], [23:0-0-0,0-1-12]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.33	24-26	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.73	24-26	>717	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.34	13	n/a	n/a	MT18HS	197/144
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 234 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 1-5,10-14: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except* 2-27: 2x8 SP 2400F 2.0E, 25-27,13-17: 2x4 SP 2400F 2.0E 20-25: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2
SLIDER	Right 2x4 SPF No.2 3-0-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-11-12 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-26, 4-24, 7-24, 7-20
JOINTS	1 Brace at Jt(s): 21

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=-164(LC 21)
Max Uplift 2=-355(LC 16), 13=-357(LC 17)
Max Grav 2=2490(LC 2), 13=2504(LC 2)

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

TOP CHORD	2-3=-7203/1064, 3-4=-4830/676, 4-6=-3664/541, 6-7=-3137/523, 7-8=-3087/523, 8-9=-3557/540, 9-11=-3860/556, 11-13=-4222/593
BOT CHORD	2-27=-1059/6473, 26-27=-1029/6265, 24-26=-585/4237, 23-24=-276/3216, 21-23=-278/2797, 20-21=-278/2797, 19-22=0/419, 18-19=0/419, 16-18=0/477, 15-16=-431/3688, 13-15=-431/3688
WEBS	3-27=-135/1156, 3-26=-2080/455, 4-26=-51/670, 8-20=-140/1105, 16-20=-321/2952, 11-16=-382/164, 6-24=-124/1107, 4-24=-1452/341, 9-20=-536/223, 7-24=-404/156, 7-20=-497/156

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 17-10-8, Exterior(2R) 17-10-8 to 22-0-0, Interior(1) 22-0-0 to 26-1-8, Exterior(2R) 26-1-8 to 30-4-7, Interior(1) 30-4-7 to 44-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A12	Hip	1	1	J44692860

Job Reference (optional)

NOTES-

9) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 355 lb uplift at joint 2 and 357 lb uplift at joint 13.
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.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A13	Hip	1	1	J44692861

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
IS ESSUMMIT MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:13:00 2021 Page 1
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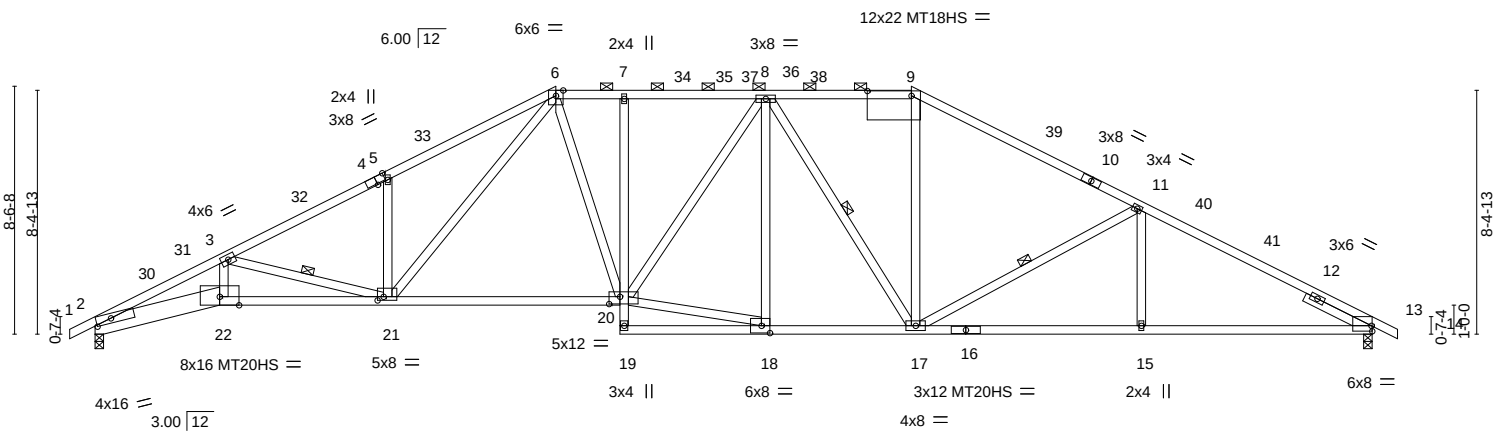

4-3-8 10-1-0 15-10-8 18-1-0 23-1-4 28-1-8 36-0-9 44-0-0
4-3-8 5-9-8 5-9-8 2-2-8 5-0-4 5-0-4 7-11-1 7-11-7

Plate Offsets (X,Y)-- [2:0-6-4,0-2-0], [4:0-3-11,Edge], [9:1-6-4,0-2-0], [13:Edge,0-2-4], [18:0-3-8,0-3-0], [20:0-4-8,0-3-0], [21:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.31	20-21	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.75	20-21	>706	180	MT20HS	148/108
TCDL	20.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.33	13	n/a	n/a	MT18HS	197/144
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 231 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SP 2400F 2.0E *Except*
	6-9: 2x4 SPF No.2, 1-4,10-14: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SP 2400F 2.0E *Except*
	2-22: 2x8 SP 2400F 2.0E, 7-19,16-19: 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 (2-7-14 max.): 6-9.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 3-21, 8-17, 11-17

REACTIONS. (size) 2=0-3-8, 13=0-3-8
Max Horz 2=-146(LC 21)
Max Uplift 2=-359(LC 16), 13=-361(LC 17)
Max Grav 2=2490(LC 2), 13=2504(LC 2)

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

TOP CHORD	2-3=-7153/1061, 3-5=-4999/704, 5-6=-5035/842, 6-7=-3625/556, 7-8=-3616/556,
	8-9=-3014/514, 9-11=-3534/515, 11-13=-4237/597
BOT CHORD	2-22=-1036/6419, 21-22=-1003/6214, 20-21=-371/3410, 7-20=-451/118, 17-18=-271/3269,
	15-17=-415/3680, 13-15=-415/3680
WEBS	3-22=-146/1128, 3-21=-1867/413, 5-21=-659/241, 18-20=-248/3214, 8-20=-163/678,
	8-18=-574/93, 8-17=-671/157, 9-17=-102/921, 11-17=-884/269, 11-15=0/271,
	6-21=-372/1731, 6-20=-149/851

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 15-10-8, Exterior(2R) 15-10-8 to 20-1-7, Interior(1) 20-1-7 to 28-1-8, Exterior(2R) 28-1-8 to 32-4-7, Interior(1) 32-4-7 to 44-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 359 lb uplift at joint 2 and 361 lb uplift at joint 13.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A13	Hip	1	1	J44692861

Job Reference (optional)

NOTES-

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A14	HIP	1	1	J44692862

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMERSVILLE, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:03:07 2021 Page 1
ID:b0jcEzO0th2MAe1aMpWBnxzu4zI-y2U5m9mn_FknvPry4L8MKx5lBTrgk3UaKKxn97zoDIN

-0-10-8 6-2-3 12-4-0 13-10-8 16-8-8 23-5-0 30-1-8 37-0-9 44-0-0 44-10-8
0-10-8 6-2-3 6-1-13 1-6-8 2-10-0 6-8-8 6-8-8 6-11-1 6-11-7 0-10-8

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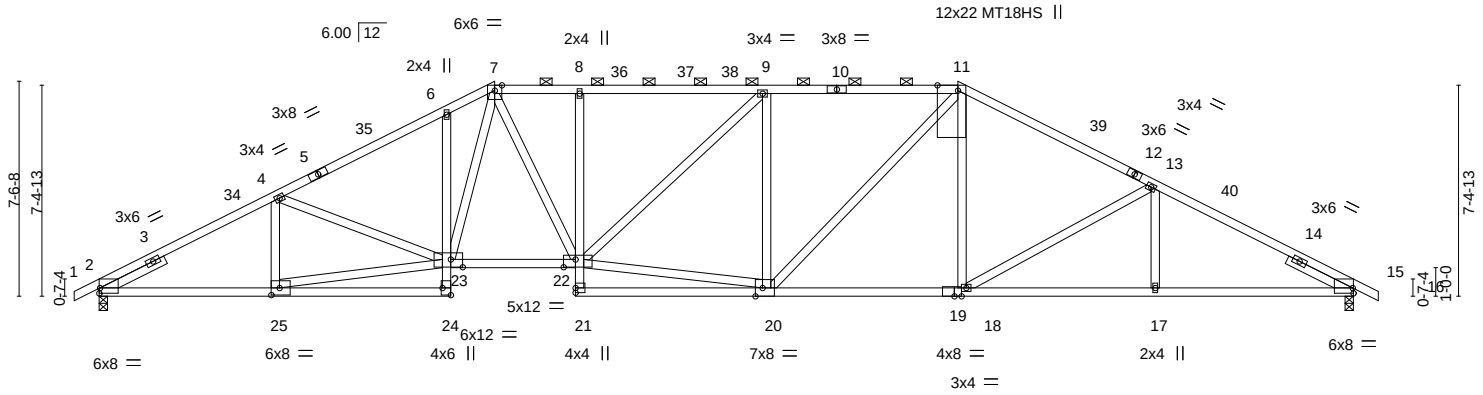

6-2-3 12-4-0 13-10-8 16-8-8 23-5-0 30-1-8 37-0-9 44-0-0
6-2-3 6-1-13 1-6-8 2-10-0 6-8-8 6-8-8 6-11-1 6-11-7

Plate Offsets (X,Y)-- [2:Edge,0-2-4], [11:0-2-4,Edge], [15:Edge,0-2-4], [19:0-3-0,0-0-0], [20:0-3-0,Edge], [22:0-5-0,0-3-4], [23:0-5-0,0-3-4], [24:Edge,0-3-8], [25:0-3-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.29	22-23	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.66	22-23	>798	180	MT18HS	197/144
TCDL	20.0	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.26	15	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 224 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
2-24,15-19: 2x4 SP 2400F 2.0E
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 (2-4-4 max.): 7-11.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 15=0-3-8
Max Horz 2=128(LC 20)
Max Uplift 2=-363(LC 16), 15=-363(LC 17)
Max Grav 2=2496(LC 2), 15=2496(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-4214/602, 4-6=-4478/646, 6-7=-4387/719, 7-8=-4082/613, 8-9=-4067/614, 9-11=-3727/567, 11-13=-3713/543, 13-15=-4228/605
BOT CHORD 2-25=-566/3669, 24-25=-26/276, 6-23=-427/161, 22-23=-418/3652, 8-22=-617/171, 18-20=-268/3208, 17-18=-433/3680, 15-17=-433/3680
WEBS 4-25=-576/150, 23-25=-547/3440, 4-23=-84/419, 20-22=-360/3547, 9-22=-174/525, 9-20=-1048/261, 11-20=-199/926, 11-18=-50/512, 13-18=-717/218, 7-23=-250/1117, 7-22=-209/1107

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 13-10-8, Exterior(2R) 13-10-8 to 18-1-7, Interior(1) 18-1-7 to 30-1-8, Exterior(2R) 30-1-8 to 34-4-7, Interior(1) 34-4-7 to 44-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) The Fabrication Tolerance at joint 11 = 8%
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 363 lb uplift at joint 2 and 363 lb uplift at joint 15.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and reference standard ANSI/TPI 1.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A14	HIP	1	1	J44692862

Job Reference (optional)

NOTES-

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

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A15	HIP	1	1	

Job Reference (optional) I44692863

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:13:03 2021 Page 1

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0-10-8 5-11-7 5-11-1 0-5-8 4-4-8 7-8-8 7-8-8 5-11-1 5-11-7 0-10-8

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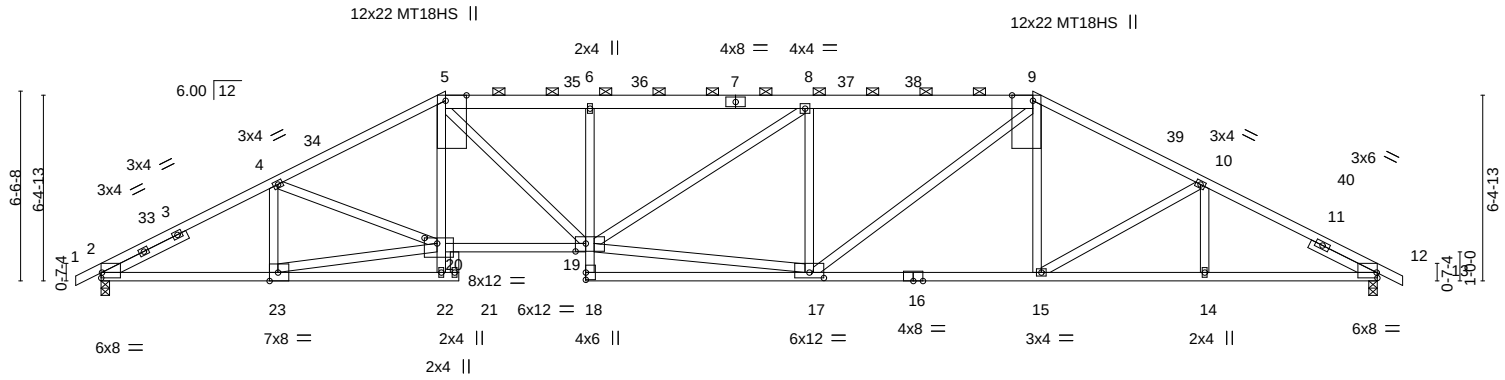

5-11-7 11-10-8 12-4-0 16-8-8 24-5-0 32-1-8 38-0-9 44-0-0

5-11-7 5-11-1 0-5-8 4-4-8 7-8-8 7-8-8 5-11-1 5-11-7

Plate Offsets (X,Y)-- [2:Edge,0-2-4], [5:0-2-4,Edge], [9:0-2-4,Edge], [12:Edge,0-2-4], [17:0-6-0,0-2-4], [19:0-4-4,0-3-4], [23:0-3-8,Edge], [24:0-5-4,0-2-4], [24:0-1-12,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.30	19-20	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.69	19-20	>764	180	MT18HS	197/144
TCDL	20.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.27	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 227 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
5-7,7-9: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except*
2-21,12-16: 2x4 SP 2400F 2.0E, 19-20: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2 *Except*
17-19: 2x4 SPF 1650F 1.5E

SLIDER Left 2x4 SPF No.2 3-2-12, Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (2-9-12 max.): 5-9.

BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=109(LC 20)
Max Uplift 2=-361(LC 16), 12=-366(LC 17)
Max Grav 2=2505(LC 2), 12=2499(LC 2)

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

TOP CHORD 2-4=-4231/601, 4-5=-4627/654, 5-6=-4992/693, 6-8=-4953/689, 8-9=-4432/621, 9-10=-3878/572, 10-12=-4219/610

BOT CHORD 2-23=-548/3703, 19-20=-486/4064, 6-19=-799/204, 17-18=-24/332, 15-17=-320/3408, 14-15=-448/3675, 12-14=-448/3675

WEBS 4-23=-601/152, 5-19=-288/1540, 17-19=-506/4152, 8-19=-214/714, 8-17=-1320/314, 9-17=-279/1466, 9-15=-26/416, 10-15=-500/164, 5-20=-81/682, 20-23=-543/3663, 4-20=-120/602

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 11-10-8, Exterior(2R) 11-10-8 to 16-1-7, Interior(1) 16-1-7 to 32-1-8, Exterior(2R) 32-1-8 to 36-4-7, Interior(1) 36-4-7 to 44-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) The Fabrication Tolerance at joint 5 = 12%, joint 9 = 8%
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 361 lb uplift at joint 2 and 366 lb uplift at joint 12.

February 5,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A15	HIP	1	1	J44692863

Job Reference (optional)

NOTES-

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A16	Hip Structural Gable	1	1	Job Reference (optional)

I44692864

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
FIRE SUMMIT MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:13:07 2021 Page 1
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-0-10-8 4-11-7 9-10-8 12-4-0 16-8-8 23-9-0 30-8-0 34-1-8 40-0-0
0-10-8 4-11-7 4-11-1 2-5-8 4-4-8 7-0-8 6-11-0 3-5-8 5-10-8

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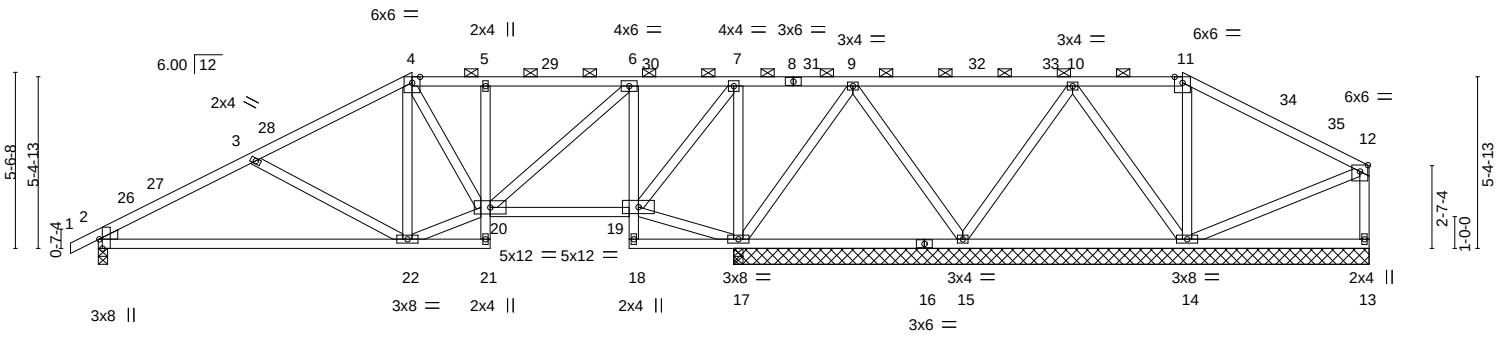

9-10-8 12-4-0 16-8-8 20-3-8 27-2-8 34-1-8 40-0-0
9-10-8 2-5-8 4-4-8 3-7-0 6-11-0 6-11-0 5-10-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.14	22-25	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.30	22-25	>814	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.02	17	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 189 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-11.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. All bearings 20-0-0 except (jt=length) 2=0-3-8.
(lb) - Max Horz 2=139(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 13 except 2=-172(LC 16), 14=-138(LC 17), 17=-389(LC 16), 15=-119(LC 17)
Max Grav All reactions 250 lb or less at joint(s) except 2=1058(LC 41), 14=686(LC 57), 13=298(LC 41), 17=2141(LC 40), 17=1874(LC 1), 15=612(LC 40)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1437/269, 3-4=-933/182, 4-5=-713/182, 5-6=-728/186, 7-9=-142/771, 9-10=-57/264
BOT CHORD 2-22=-260/1209, 5-20=-399/111, 6-19=-1067/265, 15-17=-323/138
WEBS 3-22=-594/197, 20-22=-63/788, 6-20=-212/1013, 11-14=-406/121, 7-17=-1144/244, 17-19=-777/241, 7-19=-214/1167, 9-17=-792/180, 10-15=-565/148

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 9-10-8, Exterior(2R) 9-10-8 to 14-1-7, Interior(1) 14-1-7 to 34-1-8, Exterior(2R) 34-1-8 to 38-4-7, Interior(1) 38-4-7 to 39-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 13 except (jt=lb) 2=172, 14=138, 17=389, 15=119.
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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A17	Roof Special	1	1	Job Reference (optional)

I44692865

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:10:23 2021 Page 1
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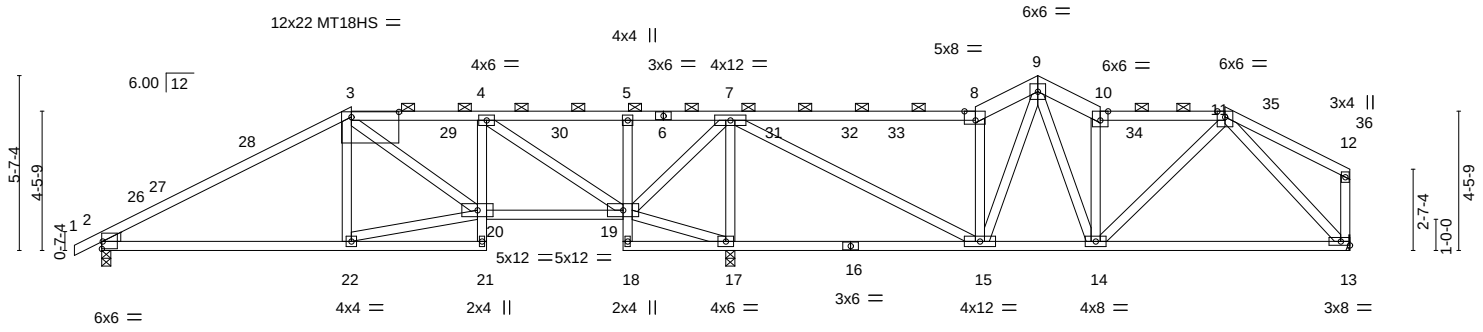
-0-10-8	8-0-0	12-4-0	16-8-8	20-1-12	22-4-4	28-0-0	30-0-0	32-0-0	36-0-0	40-0-0
0-10-8	8-0-0	4-4-0	4-4-8	3-5-4	2-2-8	5-7-12	2-0-0	2-0-0	4-0-0	4-0-0

Scale = 1:73.8



8-0-0	12-4-0	16-8-8	20-1-12	28-0-0	32-0-0	36-0-0	40-0-0
8-0-0	4-4-0	4-4-8	3-5-4	7-10-4	4-0-0	4-0-0	4-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.99	Vert(LL)	-0.12	22-25	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.26	22-25	>946	180	MT18HS	197/144
TCDL	20.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.04	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 190 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
3-6,6-8: 2x4 SPF 1650F 1.5E, 8-9,9-10: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
16-18: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 17=0-3-8, 13=Mechanical
Max Horz 2=141(LC 15)
Max Uplift 2=-190(LC 16), 17=-423(LC 16), 13=-143(LC 17)
Max Grav 2=1029(LC 48), 17=2763(LC 47), 13=877(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1264/247, 3-4=-975/263, 7-8=-752/192, 8-9=-913/242, 9-10=-1034/237, 10-11=-899/194
BOT CHORD 2-22=-205/1006, 4-20=-32/379, 19-20=-200/1003, 5-19=-257/74, 15-17=-928/163, 14-15=-104/648, 13-14=-133/619
WEBS 20-22=-198/987, 4-19=-1259/227, 17-19=-935/190, 7-19=-190/1041, 7-17=-2306/435, 7-15=-261/1795, 8-15=-952/258, 9-15=-117/291, 9-14=-129/680, 10-14=-800/179, 11-14=-21/396, 11-13=-834/173

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 11-0-0, Interior(1) 11-0-0 to 30-0-0, Exterior(2E) 30-0-0 to 32-0-0, Interior(1) 32-0-0 to 36-0-0, Exterior(2R) 36-0-0 to 39-0-0, Interior(1) 39-0-0 to 39-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) The Fabrication Tolerance at joint 3 = 8%
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Refer to girder(s) for truss to truss connections.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A17	Roof Special	1	1	J44692865

Job Reference (optional)

NOTES-

11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=190, 17=423, 13=143.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A18	Roof Special Girder	1	1	Job Reference (optional)

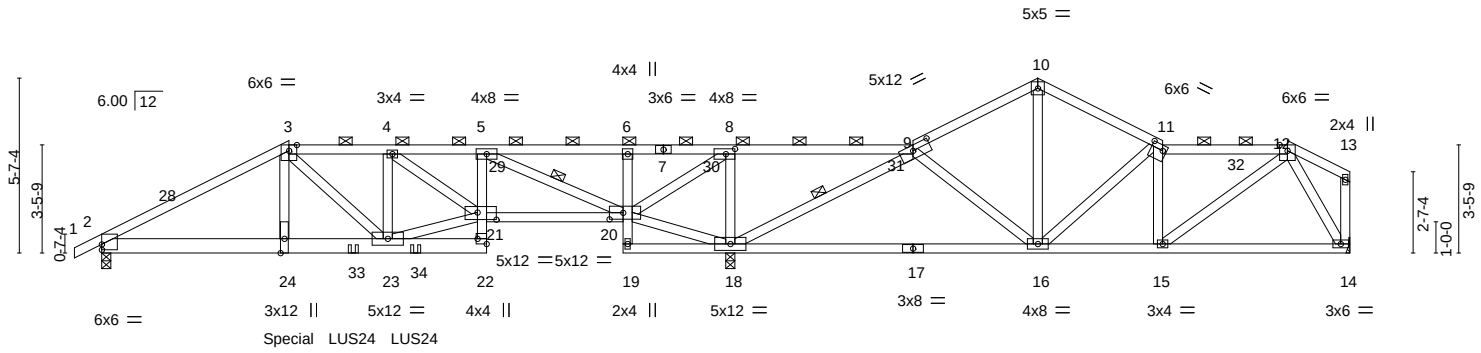
I44692866

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:14:33 2021 Page 1
ID:b0jcEzO0th2MAe1aMpWBnxzu4zl-bLDeHGwJ9xF4LFmFnsMBpTbo1J_9YZBL4BrQaRzoDIB

-0-10-8	3-0-3	6-0-0	9-2-0	12-4-0	16-8-8	20-1-12	21-4-4	26-0-0	30-0-0	34-0-0	38-0-0	40-0-0
0-10-8	3-0-3	2-11-13	3-2-0	3-2-0	4-4-8	3-5-4	1-2-8	4-7-12	4-0-0	4-0-0	4-0-0	2-0-0

Scale = 1:73.8



3-0-3	6-0-0	9-2-0	12-4-0	16-8-8	20-1-12	26-0-0	30-0-0	34-0-0	38-0-0	40-0-0
3-0-3	2-11-13	3-2-0	3-2-0	4-4-8	3-5-4	5-10-4	4-0-0	4-0-0	4-0-0	2-0-0

Plate Offsets (X,Y)-- [2:0-0-0,0-2-1], [8:0-3-8,0-2-0], [9:0-6-12,0-2-0], [11:0-4-8,0-2-0], [20:0-5-4,0-2-8], [21:0-7-4,0-2-12], [22:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.15	16-18	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.30	16-18	>788	180		
TCDL	20.0	Rep Stress Incr	NO	WB	0.63	Horz(CT)	0.07	18	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 187 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except* 7-9: 2x4 SPF 1650F 1.5E
BOT CHORD	2x4 SPF No.2 *Except* 2-22: 2x6 SPF No.2, 17-19: 2x4 SP 2400F 2.0E
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-4-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-0 max.): 3-9, 11-12.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 5-20, 9-18

REACTIONS. (size) 2=0-3-8, 14=Mechanical, 18=0-3-8
Max Horz 2=141(LC 11)
Max Uplift 2=-419(LC 12), 14=-217(LC 76), 18=-682(LC 12)
Max Grav 2=1772(LC 44), 14=720(LC 26), 18=3608(LC 43)

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

TOP CHORD	2-3=-2997/746, 3-4=-2723/676, 4-5=-2553/614, 5-6=-91/611, 6-8=-96/647, 8-9=-483/2322, 9-10=-785/310, 10-11=-780/291, 11-12=-896/313
BOT CHORD	2-24=-676/2628, 23-24=-666/2585, 22-23=-70/260, 5-21=-217/1052, 20-21=-598/2616, 6-20=-367/100, 16-18=-543/571, 15-16=-304/905, 14-15=-142/380
WEBS	3-24=-229/1004, 5-20=-3442/780, 9-16=-103/817, 10-16=-184/285, 11-16=-563/137, 11-15=-357/168, 8-18=-1736/408, 18-20=-2315/537, 8-20=-465/2091, 9-18=-2239/392, 12-15=-215/706, 12-14=-706/260, 4-23=-370/204, 4-21=-396/194, 21-23=-604/2581

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=419, 14=217, 18=682.
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.
12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 10-0-12 to connect truss(es) to back face of bottom chord.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	A18	Roof Special Girder	1	1	J44692866

Job Reference (optional)

NOTES-

13) Fill all nail holes where hanger is in contact with lumber.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 880 lb down and 284 lb up at 6-0-0 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-71, 3-9=-81, 9-10=-71, 10-11=-71, 11-12=-81, 12-13=-71, 22-25=-20, 20-21=-20, 14-19=-20
   Concentrated Loads (lb)
   Vert: 24=-880(B) 33=-347(B) 34=-347(B)

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	B1	GABLE	1	1	

Job Reference (optional) I44692867

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEES SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:33:38 2021 Page 1
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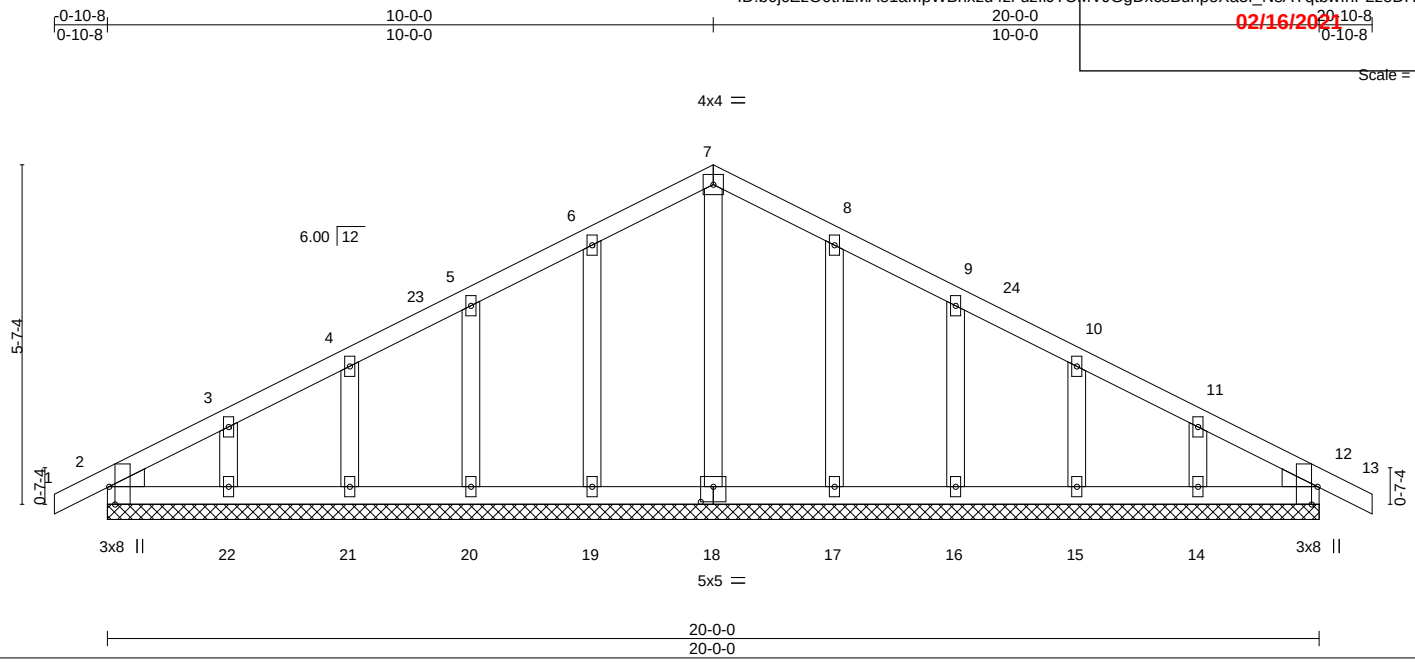


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [12:0-3-8,Edge], [12:0-0-3,0-5-0], [12:0-0-1,0-0-3], [18:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	12	n/r	120	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	13	n/r	120		
TCDL	20.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	12	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 81 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz 2=96(LC 20)
Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 20, 21, 22, 16, 15, 14, 12 except 19=256(LC 23), 17=256(LC 24)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-10-8 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) All plates are 2x4 MT20 unless otherwise indicated.
8) Gable requires continuous bottom chord bearing.
9) Gable studs spaced at 2-0-0 oc.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 14, 12.
12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

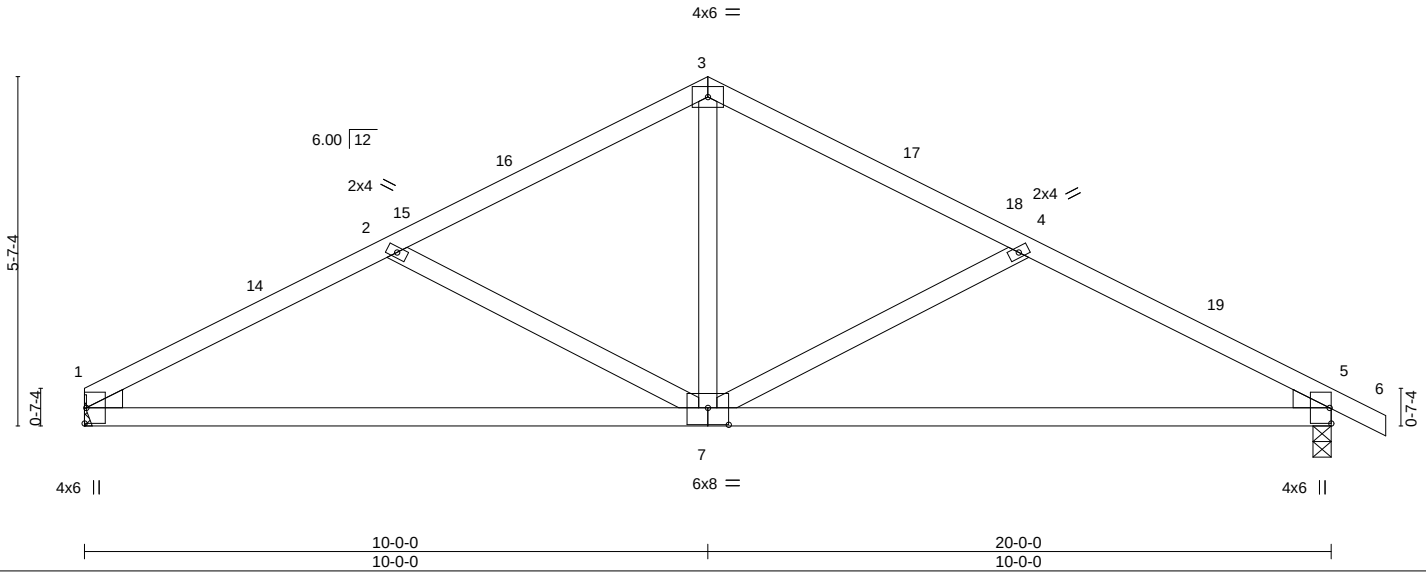
Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo	I44692868
2630568	B2	Common	3	1	Job Reference (optional)	

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
EEE SUMMIT MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:33:39 2021 Page 1
ID:b0jcEzO0th2MAe1aMpWBnxzu4zI-M9D4XpD_GdOXr5A3lcJ2Kk7BwOXnvyf1qaPFyUzoDHo

5-0-3 | 10-0-0 | 14-11-13 | 20-0-0 | 20-10-8
5-0-3 | 4-11-13 | 4-11-13 | 5-0-3 | 0-10-8

Scale = 1:37.0



10-0-0 | 20-0-0
10-0-0 | 10-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.13	7-10	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.28	7-10	>862	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.04	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 69 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 1=Mechanical, 5=0-3-8
Max Horz 1=-103(LC 21)
Max Uplift 1=-148(LC 16), 5=-168(LC 17)
Max Grav 1=1098(LC 2), 5=1180(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1770/374, 2-3=-1324/295, 3-4=-1323/292, 4-5=-1765/368
BOT CHORD 1-7=-250/1511, 5-7=-249/1503
WEBS 3-7=-88/638, 4-7=-499/207, 2-7=-507/208

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 20-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=148, 5=168.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	B2A	Common	1	1	J44692869

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:13:41 2021 Page 1
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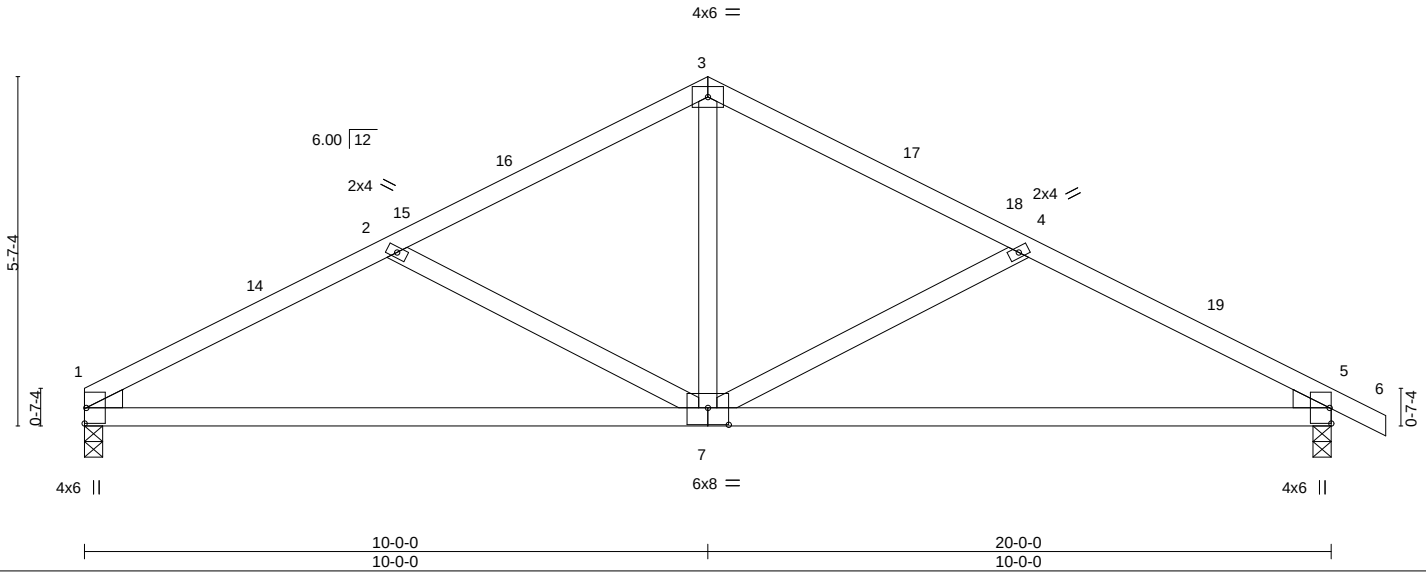
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
EFFECTIVE MAY 1, 2020 CITY
02/16/2021

5-0-3 | 10-0-0 | 14-11-13 | 20-0-0 | 20-10-8
5-0-3 | 4-11-13 | 4-11-13 | 5-0-3 | 0-10-8

Scale = 1:37.0



10-0-0 | 20-0-0
10-0-0 | 10-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.13	7-10	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.28	7-10	>862	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.04	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 69 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-103(LC 21)
Max Uplift 1=-148(LC 16), 5=-168(LC 17)
Max Grav 1=1098(LC 2), 5=1180(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1770/374, 2-3=-1324/295, 3-4=-1323/292, 4-5=-1765/368
BOT CHORD 1-7=-250/1511, 5-7=-249/1503
WEBS 3-7=-88/638, 4-7=-499/207, 2-7=-507/208

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 20-10-8 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=148, 5=168.
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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo	I44692870
2630568	B3	Common	5	1	Job Reference (optional)	

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:47:23 2021 Page 1
ID:b0jcEzO0th2MAe1aMpWBnxzu4zI-nkvD9rFtZYn6iZveQkslyNliDbZS6IPTWYdvYpzoDHI

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
ENGINEERING DIVISION
02/16/2021

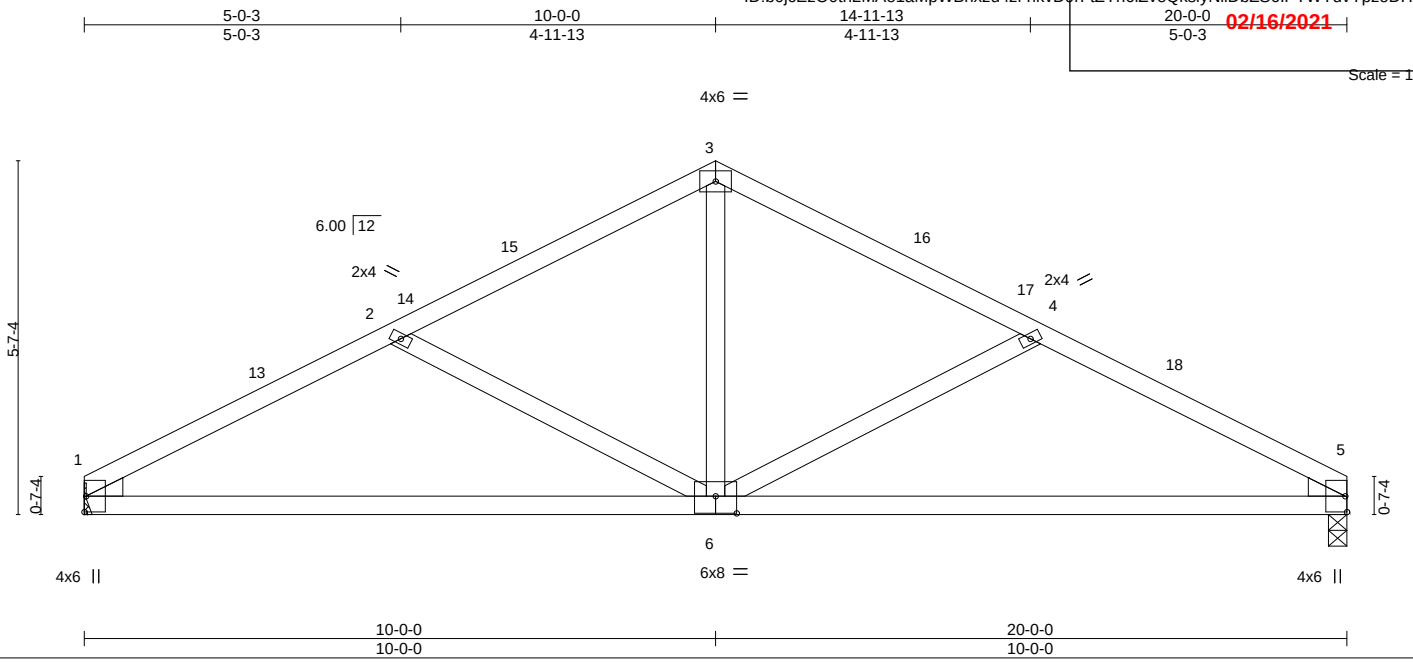


Plate Offsets (X,Y)-- [1:0-0-1,0-0-3], [1:0-0-3,0-5-0], [5:0-0-3,0-5-0], [5:0-0-1,0-0-3], [6:0-4-0,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.13	6-9	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.28	6-9	>866	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.04	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 68 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 1=Mechanical, 5=0-3-8
Max Horz 1=88(LC 16)
Max Uplift 1=-148(LC 16), 5=-148(LC 17)
Max Grav 1=1100(LC 2), 5=1100(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1774/374, 2-3=-1328/296, 3-4=-1328/296, 4-5=-1774/374
BOT CHORD 1-6=-271/1514, 5-6=-266/1514
WEBS 3-6=-89/640, 4-6=-507/208, 2-6=-507/208

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 20-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=148, 5=148.
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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	CJ1	Diagonal Hip Girder	4	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:43:43 2021 Page 1
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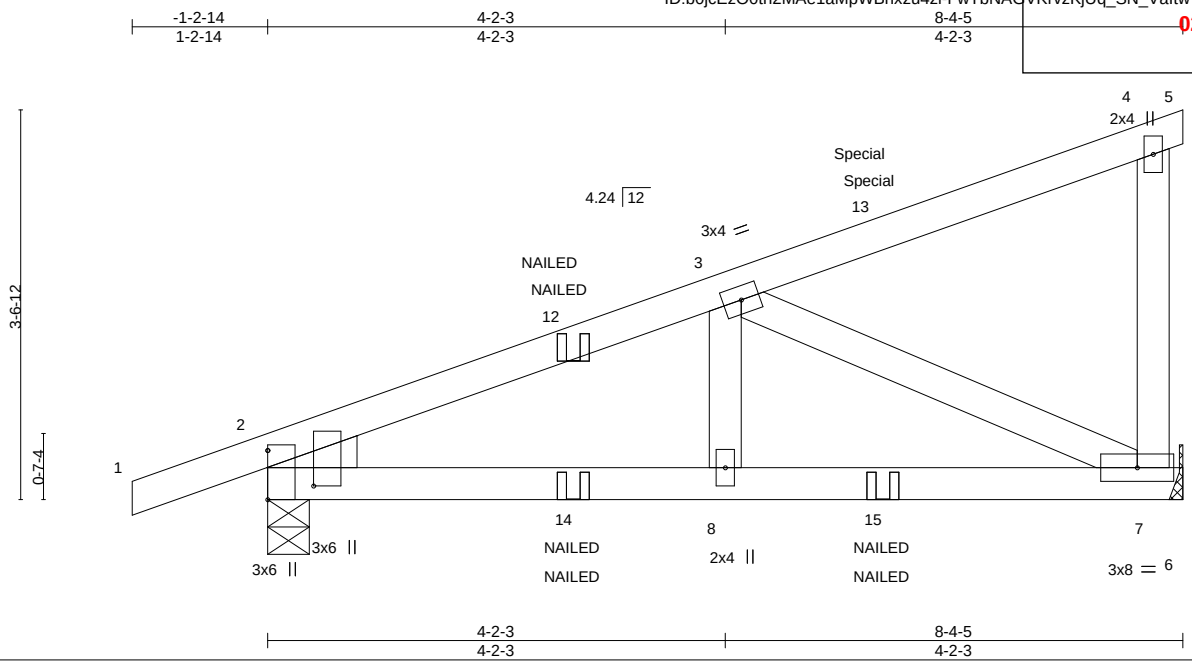

Plate Offsets (X,Y)-- [2:0-3-14,0-5-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.02	7-8	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.04	7-8	>999	180		
TCDL	20.0	Rep Stress Incr	NO	WB	0.24	Horz(CT)	0.01	7	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 32 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 7=Mechanical, 2=0-4-9
Max Horz 2=149(LC 11)
Max Uplift 7=-154(LC 12), 2=-162(LC 8)
Max Grav 7=561(LC 19), 2=602(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-745/181
BOT CHORD 2-8=-208/669, 7-8=-208/669
WEBS 3-7=-735/243

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=154, 2=162.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 87 lb down and 72 lb up at 5-7-7, and 87 lb down and 72 lb up at 5-7-7 on top 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

February 5,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	CJ1	Diagonal Hip Girder	4	1	J44692871

Job Reference (optional)

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-71, 4-5=-71, 6-9=-20
   Concentrated Loads (lb)
   Vert: 13=-113(F=-56, B=-56) 14=-13(F=-7, B=-7) 15=-68(F=-34, B=-34)

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	CJ2	Diagonal Hip Girder	1	1	Job Reference (optional)

I44692872

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:44:33 2021 Page 1
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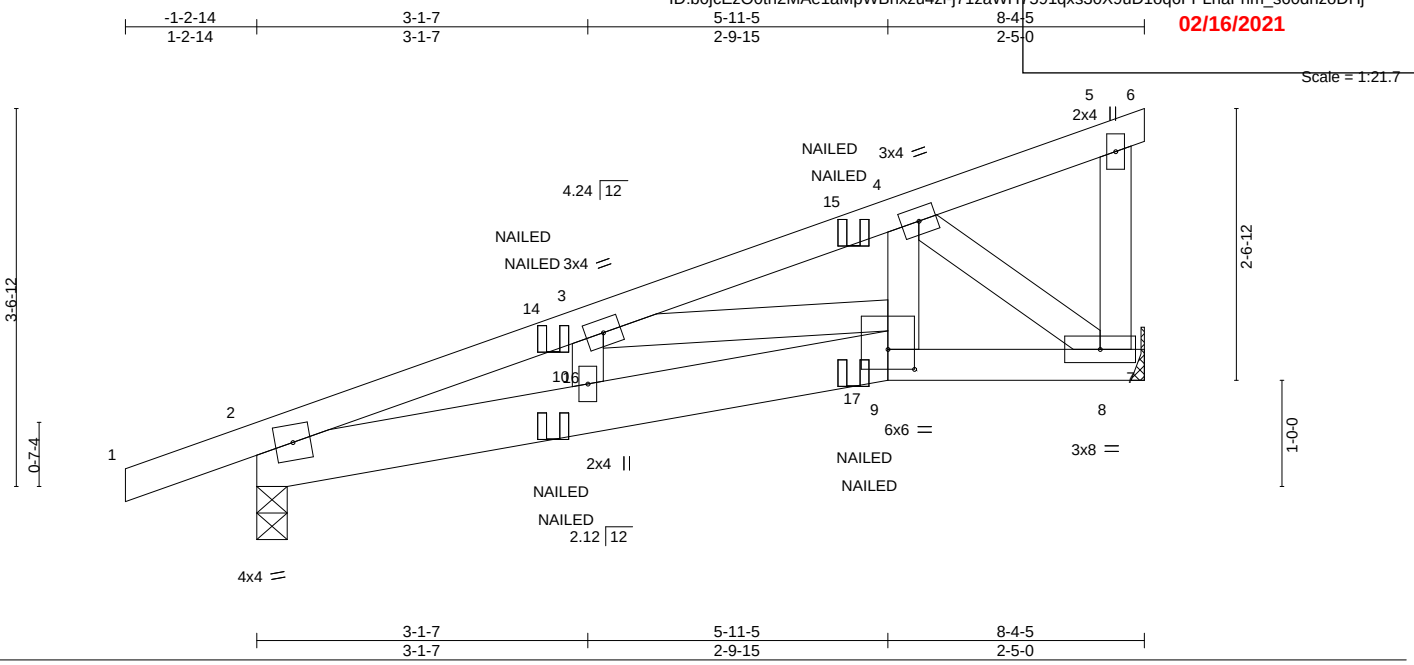

Plate Offsets (X,Y)-- [9:0-3-0,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	-0.02	10	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.32	Vert(CT)	-0.04	9-10	>999	180		
TCDL	20.0	Rep Stress Incr	NO	WB	0.12	Horz(CT)	0.01	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 35 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 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 or 5-7-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 2=0-3-7
Max Horz 2=129(LC 9)
Max Uplift 8=-157(LC 12), 2=-165(LC 8)
Max Grav 8=562(LC 19), 2=604(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1089/294, 3-4=-732/191
BOT CHORD 2-10=-325/994, 9-10=-331/1023, 8-9=-202/611
WEBS 3-9=-368/132, 4-9=-97/384, 4-8=-757/251

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 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) 8=157, 2=165.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-71, 5-6=-71, 9-11=-20, 7-9=-20

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	CJ2	Diagonal Hip Girder	1	1	J44692872

Job Reference (optional)

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 15=-80(F=-40, B=-40) 16=-16(F=-8, B=-8) 17=-101(F=-50, B=-50)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	D1	GABLE	1	1	J44692873

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:43:45 2021 Page 1
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-0-10-8 0-10-8 | 4-7-8 4-7-8 | 9-3-0 4-7-8 | 10-1-8 0-10-8

Scale = 1:20.4

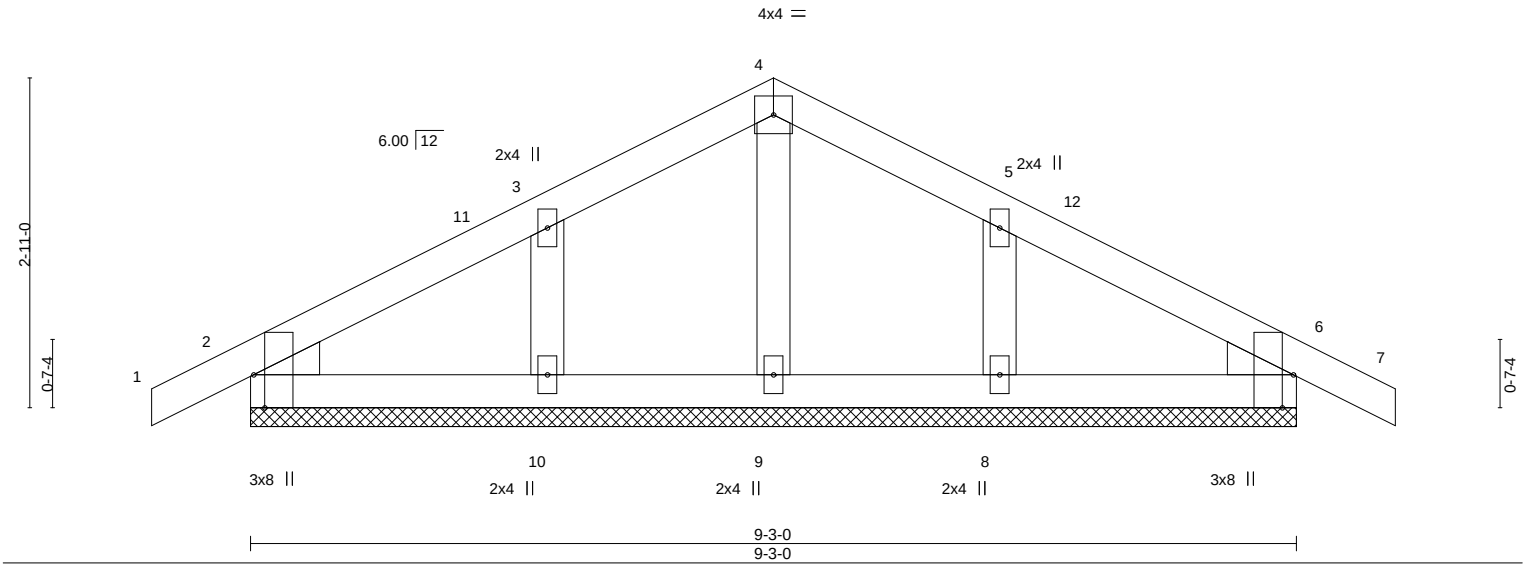

Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [6:0-0-1,0-0-3], [6:0-0-3,0-5-0], [6:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.00	6	n/r	120	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	7	n/r	120		
TCDL	20.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 32 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. All bearings 9-3-0.
(lb) - Max Horz 2=-48(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=324(LC 23), 8=324(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-261/209, 5-8=-261/208

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 4-7-8, Corner(3R) 4-7-8 to 7-7-8, Exterior(2N) 7-7-8 to 10-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.
6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 10, 8.
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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	D2	Common	4	1	

Job Reference (optional) I44692874

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:44:40 2021 Page 1
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-0-10-8 4-7-8 9-3-0 10-1-8
0-10-8 4-7-8 4-7-8 0-10-8

Scale = 1:20.7

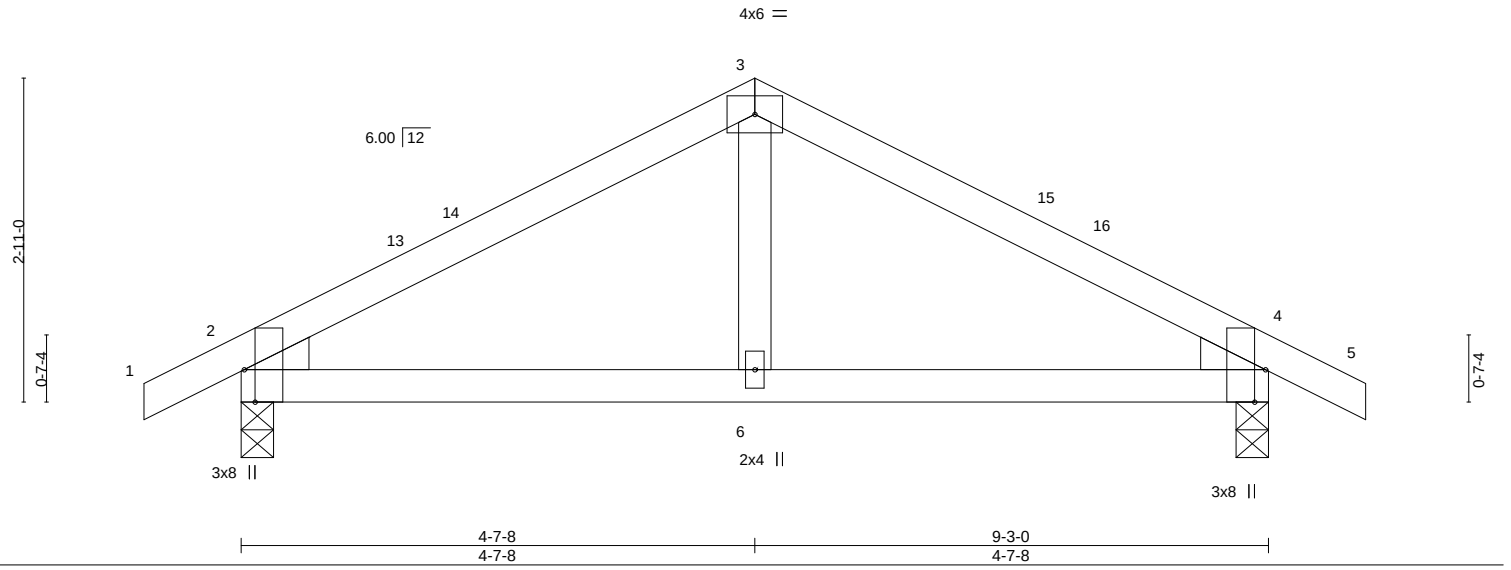


Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge], [4:0-0-1,0-0-3], [4:0-0-3,0-5-0], [4:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.02	6-9	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.03	6-9	>999	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 29 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=-48(LC 17)
Max Uplift 2=-88(LC 16), 4=-88(LC 17)
Max Grav 2=587(LC 2), 4=587(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-637/256, 3-4=-637/256
BOT CHORD 2-6=-114/500, 4-6=-114/500

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 4-7-8, Exterior(2R) 4-7-8 to 7-7-8, Interior(1) 7-7-8 to 10-1-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

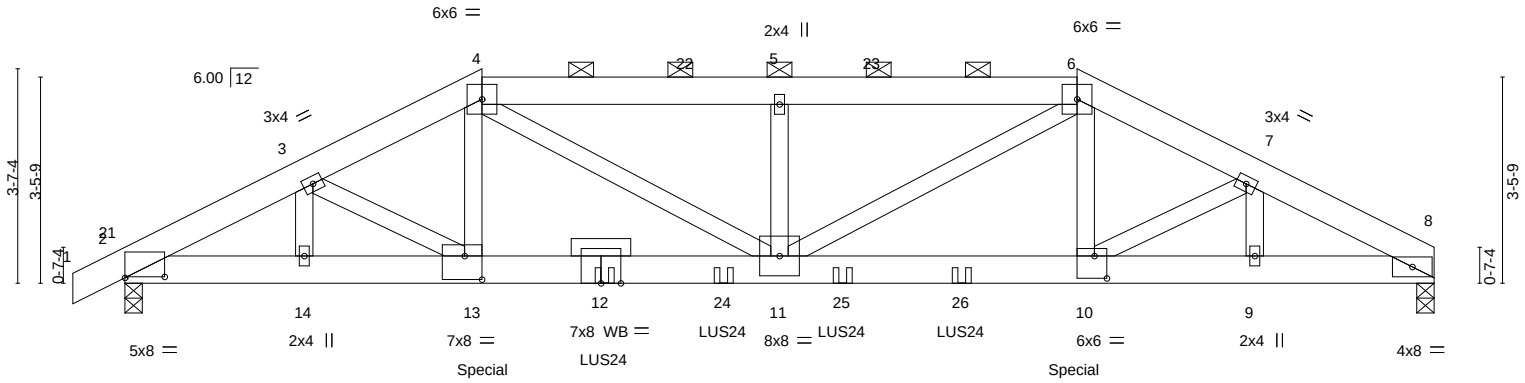
Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	E1	Hip Girder	1	1	Job Reference (optional)

I44692875

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 13:48:48 2021 Page 1
ID:b0jcEzO0th2MAe1aMpWBnxzu4zI-cuGUQuKd8OXGQUNnm?z9Ce?fY0f9W?ZMvU4DmTzoDHf

0-10-8 3-0-3 6-0-0 11-0-0 16-0-0 18-11-13 22-0-0
0-10-8 3-0-3 2-11-13 5-0-0 5-0-0 2-11-13 3-0-3

Scale = 1:38.7



3-0-3 6-0-0 11-0-0 16-0-0 18-11-13 22-0-0
3-0-3 2-11-13 5-0-0 5-0-0 2-11-13 3-0-3

Plate Offsets (X,Y)-- [2:0-8-0,0-0-3], [10:0-2-8,0-4-8], [13:0-3-8,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.14	10-11	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.30	10-11	>894	180		
TCDL	20.0	Rep Stress Incr	NO	WB	0.38	Horz(CT)	0.07	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MS							Weight: 120 lb	FT = 20%
BCDL	10.0											

LUMBER-

TOP CHORD	2x6 SPF No.2
BOT CHORD	2x6 SP 2400F 2.0E *Except* 8-12: 2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

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

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=66(LC 64)
Max Uplift 8=-609(LC 13), 2=-628(LC 12)
Max Grav 8=2685(LC 37), 2=2777(LC 37)

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

TOP CHORD	2-3=-4935/1143, 3-4=-5376/1250, 4-5=-6138/1372, 5-6=-6138/1372, 6-7=-5393/1256, 7-8=-4959/1154
BOT CHORD	2-14=-1022/4344, 13-14=-1022/4344, 11-13=-1075/4810, 10-11=-1034/4826, 9-10=-981/4364, 8-9=-981/4364
WEBS	3-14=-352/107, 3-13=-279/598, 4-13=-289/1226, 4-11=-367/1552, 5-11=-637/171, 6-11=-362/1533, 6-10=-295/1245, 7-10=-298/595, 7-9=-341/105

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=609, 2=628.
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 LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 14-0-12 to connect truss(es) to back face of bottom chord.
12) Fill all nail holes where hanger is in contact with lumber.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 880 lb down and 284 lb up at 6-0-0, and 880 lb down and 284 lb up at 15-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-71, 4-6=-81, 6-8=-71, 15-18=-20
   Concentrated Loads (lb)
   Vert: 12=-347(B) 13=-880(B) 10=-880(B) 24=-347(B) 25=-347(B) 26=-347(B)

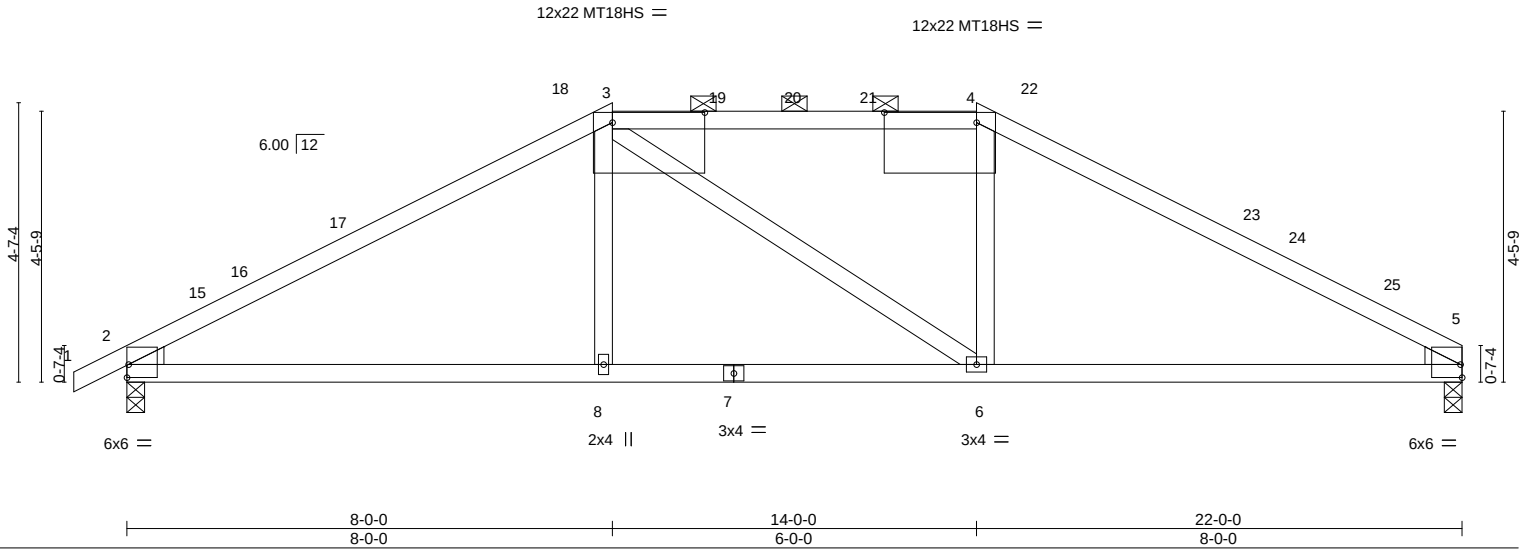
Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	E2	Hip	1	1	J44692876

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:33:50 2021 Page 1
ID:b0jcEzO0th2MAe1aMpWBnxzu4zl-YHOFraLug?nzfnWAuQ?dH34zBqIb_yEfMoZKrLzoDHd

0-10-8 8-0-0 14-0-0 22-0-0
0-10-8 8-0-0 6-0-0 8-0-0

Scale = 1:38.0



8-0-0 14-0-0 22-0-0
8-0-0 6-0-0 8-0-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.13	6-14	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.25	6-14	>999	180	MT18HS	197/144
TCDL	20.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.04	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 72 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 3-4: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-2-15 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=85(LC 20)
Max Uplift 2=-189(LC 16), 5=-169(LC 17)
Max Grav 2=1323(LC 41), 5=1225(LC 41)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1867/295, 3-4=-1542/318, 4-5=-1871/295
BOT CHORD 2-8=-183/1543, 6-8=-184/1537, 5-6=-171/1548
WEBS 3-8=0/282, 4-6=0/283

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 14-0-0, Exterior(2R) 14-0-0 to 18-2-15, Interior(1) 18-2-15 to 22-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Provide adequate drainage to prevent water ponding.
7) All plates are MT20 plates unless otherwise indicated.
8) The Fabrication Tolerance at joint 4 = 16%, joint 3 = 16%
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=189, 5=169.
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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	E3	Hip	1	2	Job Reference (optional)

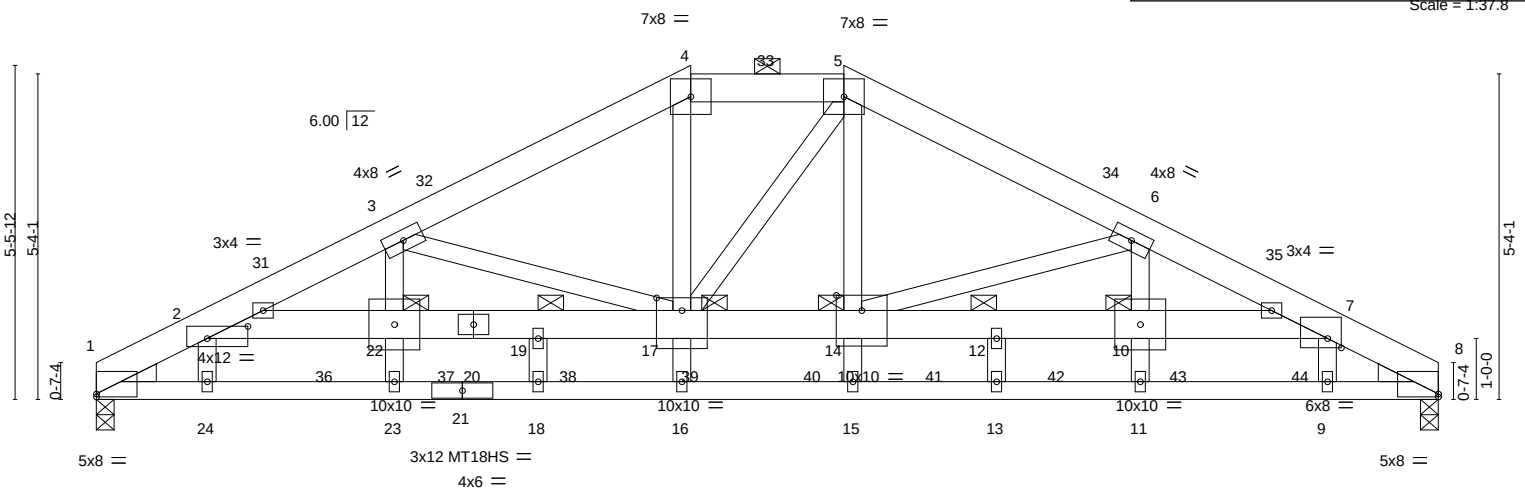
J44692877

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMERVILLE, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:13:57 2021 Page 1
ID:b0jcEzO0th2MAe1aMpWBnxzu4zl-UfW?FFN8Cc1hv5gZ?r15MU9KId_?SnQxp52RvEzoDHb

4-10-10 | 9-8-15 | 12-3-1 | 17-1-6 | 22-8-0
4-10-10 | 4-10-5 | 2-6-2 | 4-10-5 | 4-10-10

Scale = 1:37.8



1-9-13 | 4-10-10 | 7-2-15 | 9-8-15 | 12-3-1 | 14-9-1 | 17-1-6 | 20-2-3 | 22-0-0
1-9-13 | 3-0-13 | 2-4-4 | 2-6-0 | 2-6-2 | 2-6-0 | 2-4-4 | 3-0-13 | 1-9-13

Plate Offsets (X,Y)-- [1:0-0-0,0-0-10], [2:0-8-0,0-2-6], [7:0-2-11,0-1-13], [8:0-0-0,0-0-10], [14:0-5-0,0-3-0], [17:0-5-0,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.02	18	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.25	12	>999	180	MT18HS	244/190
TCDL	20.0	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.10	8	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 288 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x6 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
1-21,8-21: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 17, 14, 22, 10, 12, 19

REACTIONS. (size) 1=0-3-8, 8=0-3-8
Max Horz 1=85(LC 16)
Max Grav 1=6188(LC 40), 8=5990(LC 40)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-26=-10351/0, 2-3=-11262/0, 3-4=-7846/0, 4-5=-6727/0, 5-6=-7699/0, 6-7=-11178/0, 7-8=-10292/0
BOT CHORD 1-24=0/8745, 23-24=0/8718, 18-23=0/8718, 16-18=0/8718, 15-16=0/8749, 13-15=0/8749, 11-13=0/8749, 9-11=0/8749, 8-9=0/8775, 2-22=0/1575, 19-22=0/1575, 17-19=0/1575, 14-17=-2004/0, 12-14=0/1460, 10-12=0/1460, 7-10=0/1460
WEBS 4-17=0/3109, 5-14=0/3102, 3-22=0/2324, 3-17=-3260/0, 6-14=-3309/0, 6-10=0/2337, 22-23=0/350, 10-11=0/361, 14-15=0/288, 12-13=-259/0, 2-24=-543/0, 7-9=-523/0

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 9-8-15, Exterior(2E) 9-8-15 to 12-3-1, Exterior(2R) 12-3-1 to 16-6-0, Interior(1) 16-6-0 to 22-0-0 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
5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
6) Unbalanced snow loads have been considered for this design.
7) Provide adequate drainage to prevent water ponding.
8) All plates are MT20 plates unless otherwise indicated.
9) All plates are 2x4 MT20 unless otherwise indicated.
10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
12) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-71, 4-5=-81, 5-8=-71, 25-28=-20, 2-7=-20
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
2) 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, 25-28=-20, 2-7=-20
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
3) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-77, 4-5=-78, 5-8=-77, 25-28=-20, 2-7=-20
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
4) Dead + 0.75 Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-63, 4-5=-71, 5-8=-63, 25-28=-20, 2-7=-20
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
5) Dead + 0.75 Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-32=-63, 4-32=-78, 4-5=-78, 5-8=-47, 25-28=-20, 2-7=-20
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
6) Dead + 0.75 Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-47, 4-5=-78, 5-34=-78, 8-34=-63, 25-28=-20, 2-7=-20
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
7) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-40, 4-5=-40, 5-8=-40, 9-25=-40, 9-28=-20, 2-7=-40
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
8) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-31=29, 4-31=20, 4-5=29, 5-34=29, 8-34=20, 25-28=-8, 2-7=-8
   Horz: 1-31=-41, 4-31=-32, 5-34=41, 8-34=32
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
9) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-32=20, 4-32=29, 4-5=29, 5-35=20, 8-35=29, 25-28=-8, 2-7=-8
   Horz: 1-32=-32, 4-32=-41, 5-35=32, 8-35=41
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
10) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-4=-56, 4-5=-56, 5-8=-56, 25-28=-20, 2-7=-20
   Horz: 1-4=16, 5-8=-16
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
11) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-4=-56, 4-5=-56, 5-8=-56, 25-28=-20, 2-7=-20
   Horz: 1-4=16, 5-8=-16
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)
12) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-4=0, 4-5=29, 5-8=13, 25-28=-8, 2-7=-8
   Horz: 1-4=-12, 5-8=25
   Concentrated Loads (lb)
   Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

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LOAD CASE(S) Standard

13) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=13, 4-5=29, 5-8=0, 25-28=-8, 2-7=-8
Horz: 1-4=-25, 5-8=12
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

14) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-40, 4-5=-11, 5-8=-27, 25-28=-20, 2-7=-20
Horz: 1-4=-0, 5-8=13
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

15) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-27, 4-5=-11, 5-8=-40, 25-28=-20, 2-7=-20
Horz: 1-4=-13, 5-8=0
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

16) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=29, 4-33=29, 5-33=11, 5-8=11, 25-28=-8, 2-7=-8
Horz: 1-4=-41, 5-8=23
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

17) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=11, 4-33=11, 5-33=29, 5-8=29, 25-28=-8, 2-7=-8
Horz: 1-4=-23, 5-8=41
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

18) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=16, 4-33=16, 5-33=6, 5-8=6, 25-28=-8, 2-7=-8
Horz: 1-4=-28, 5-8=18
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

19) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=6, 4-33=6, 5-33=16, 5-8=16, 25-28=-8, 2-7=-8
Horz: 1-4=-18, 5-8=28
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

20) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-11, 4-33=-11, 5-33=-29, 5-8=-29, 25-28=-20, 2-7=-20
Horz: 1-4=-29, 5-8=11
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

21) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-29, 4-33=-29, 5-33=-11, 5-8=-11, 25-28=-20, 2-7=-20
Horz: 1-4=-11, 5-8=29
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

22) Dead + Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-32=-71, 4-32=-91, 4-5=-91, 5-8=-49, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

23) Dead + Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-49, 4-5=-91, 5-34=-91, 8-34=-71, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

24) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-4=-40, 4-5=-40, 5-8=-40, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

25) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-63, 4-5=-49, 5-8=-53, 25-28=-20, 2-7=-20
Horz: 1-4=-0, 5-8=10
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

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LOAD CASE(S) Standard

26) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-53, 4-5=-49, 5-8=-63, 25-28=-20, 2-7=-20
Horz: 1-4=-10, 5-8=0
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

27) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-41, 4-33=-49, 5-33=-62, 5-8=-55, 25-28=-20, 2-7=-20
Horz: 1-4=-22, 5-8=9
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

28) Dead + 0.75 Snow (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-55, 4-33=-62, 5-33=-49, 5-8=-41, 25-28=-20, 2-7=-20
Horz: 1-4=-9, 5-8=22
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

29) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-77, 4-5=-56, 5-8=-68, 25-28=-20, 2-7=-20
Horz: 1-4=-0, 5-8=10
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

30) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-68, 4-5=-56, 5-8=-77, 25-28=-20, 2-7=-20
Horz: 1-4=-10, 5-8=0
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

31) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-56, 4-33=-56, 5-33=-69, 5-8=-69, 25-28=-20, 2-7=-20
Horz: 1-4=-22, 5-8=9
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

32) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-69, 4-33=-69, 5-33=-56, 5-8=-56, 25-28=-20, 2-7=-20
Horz: 1-4=-9, 5-8=22
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

33) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-28, 4-5=-28, 5-8=-28, 25-28=-8, 2-7=-8
Horz: 1-4=16, 5-8=-16
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

34) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=4, 4-5=4, 5-8=4, 25-28=-8, 2-7=-8
Horz: 1-4=-16, 5-8=16
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

35) 3rd Dead + 0.75 Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-47, 4-5=-78, 5-8=-47, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

36) 4th Dead + 0.75 Snow (Unbal. Left): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-31=-63, 4-31=-78, 4-5=-47, 5-8=-47, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

37) 5th Dead + 0.75 Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-47, 4-5=-78, 5-8=-47, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

38) 6th Dead + 0.75 Snow (Unbal. Right): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-47, 4-5=-47, 5-35=-78, 8-35=-63, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

39) 7th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15

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LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-4=-49, 4-5=-107, 5-8=-49, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

40) 8th Unbal.Dead + Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-107, 4-5=-49, 5-8=-107, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

41) 9th Unbal.Dead + Snow (Unbal. Left) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-49, 4-5=-91, 5-8=-49, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

42) 10th Unbal.Dead + Snow (Unbal. Left) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-31=-71, 4-31=-91, 4-5=-49, 5-8=-49, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

43) 11th Unbal.Dead + Snow (Unbal. Right) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-49, 4-5=-91, 5-8=-49, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

44) 12th Unbal.Dead + Snow (Unbal. Right) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-49, 4-5=-49, 5-35=-91, 8-35=-71, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

45) 13th Unbal.Dead + 0.75 Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-47, 4-5=-91, 5-8=-47, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

46) 14th Unbal.Dead + 0.75 Snow (balanced) + Parallel: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-91, 4-5=-47, 5-8=-91, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

47) 15th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-47, 4-5=-69, 5-8=-37, 25-28=-20, 2-7=-20
Horz: 1-4=-0, 5-8=10
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

48) 16th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-90, 4-5=-25, 5-8=-81, 25-28=-20, 2-7=-20
Horz: 1-4=-0, 5-8=10
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

49) 17th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-37, 4-5=-69, 5-8=-47, 25-28=-20, 2-7=-20
Horz: 1-4=-10, 5-8=0
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

50) 18th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right) + Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-81, 4-5=-25, 5-8=-90, 25-28=-20, 2-7=-20
Horz: 1-4=-10, 5-8=0
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

51) 19th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-25, 4-33=-69, 5-33=-82, 5-8=-38, 25-28=-20, 2-7=-20
Horz: 1-4=-22, 5-8=9
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

52) 20th Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Continued on page 6

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-4=-69, 4-33=-25, 5-33=-38, 5-8=-82, 25-28=-20, 2-7=-20
Horz: 1-4=-22, 5-8=9
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

53) 21st Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-38, 4-33=-82, 5-33=-69, 5-8=-25, 25-28=-20, 2-7=-20
Horz: 1-4=-9, 5-8=22
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

54) 22nd Unbal.Dead + 0.75 Snow (unbal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-82, 4-33=-38, 5-33=-25, 5-8=-69, 25-28=-20, 2-7=-20
Horz: 1-4=-9, 5-8=22
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

55) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-5=-90, 5-8=-40, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

56) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-40, 4-5=-90, 5-8=-90, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

57) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-77, 4-5=-78, 5-8=-40, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

58) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-40, 4-5=-78, 5-8=-77, 25-28=-20, 2-7=-20
Concentrated Loads (lb)
Vert: 2=-915(F) 36=-915(F) 37=-915(F) 38=-915(F) 39=-915(F) 40=-915(F) 41=-915(F) 42=-915(F) 43=-915(F) 44=-915(F)

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	L1	GABLE	1	1	Job Reference (optional)

I44692878

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:03:57 2021 Page 1
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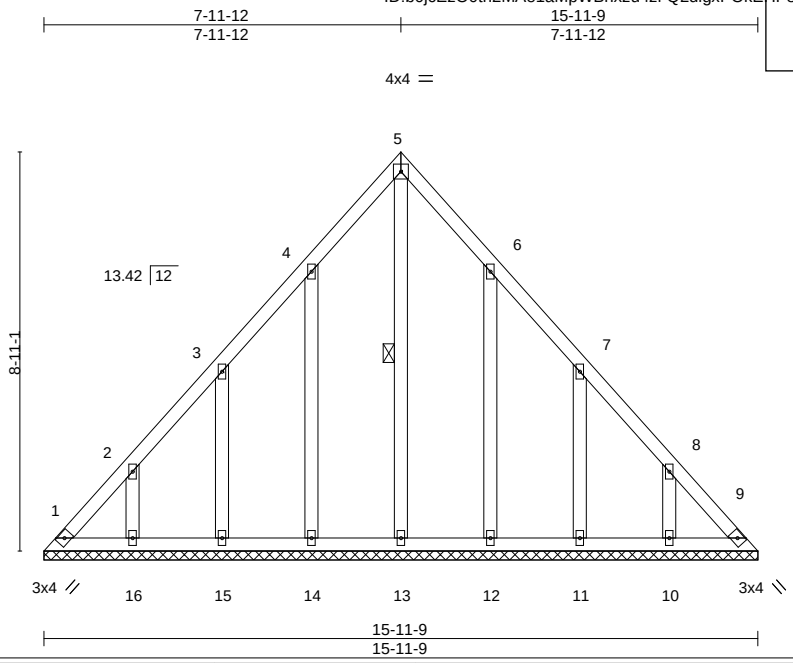

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 81 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-13

REACTIONS. All bearings 15-11-9.
(lb) - Max Horz 1=231(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-145(LC 14), 15=-144(LC 14), 16=-145(LC 14), 12=-143(LC 15), 11=-145(LC 15), 10=-144(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 15, 11 except 14=261(LC 25), 16=252(LC 25), 12=259(LC 26), 10=252(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-312/205, 8-9=-280/198

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 7-11-12, Exterior(2R) 7-11-12 to 10-11-12, Interior(1) 10-11-12 to 15-7-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=145, 15=144, 16=145, 12=143, 11=145, 10=144.
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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	L2	GABLE	1	1	J44692879

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:13:55 2021 Page 1
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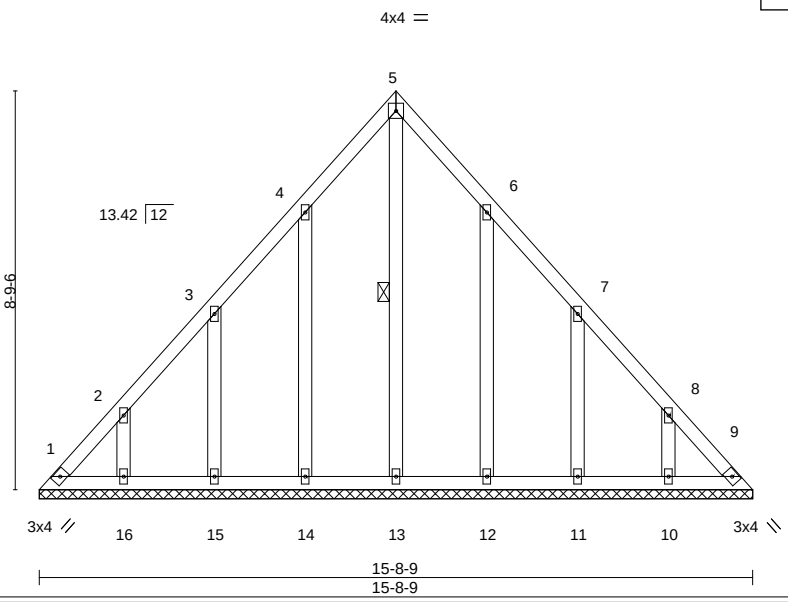

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	9	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 79 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-13

REACTIONS. All bearings 15-8-9.
(lb) - Max Horz 1=-227(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9 except 14=-145(LC 14), 15=-145(LC 14), 16=-139(LC 14), 12=-143(LC 15), 11=-146(LC 15), 10=-139(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 15, 16, 11, 10 except 14=260(LC 25), 12=259(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-310/201, 8-9=-279/197

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 7-10-4, Exterior(2R) 7-10-4 to 10-10-4, Interior(1) 10-10-4 to 15-4-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9 except (jt=lb) 14=145, 15=145, 16=139, 12=143, 11=146, 10=139.
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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo	J44692880
2630568	L3	GABLE	1	1	Job Reference (optional)	

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:13:50 2021 Page 1
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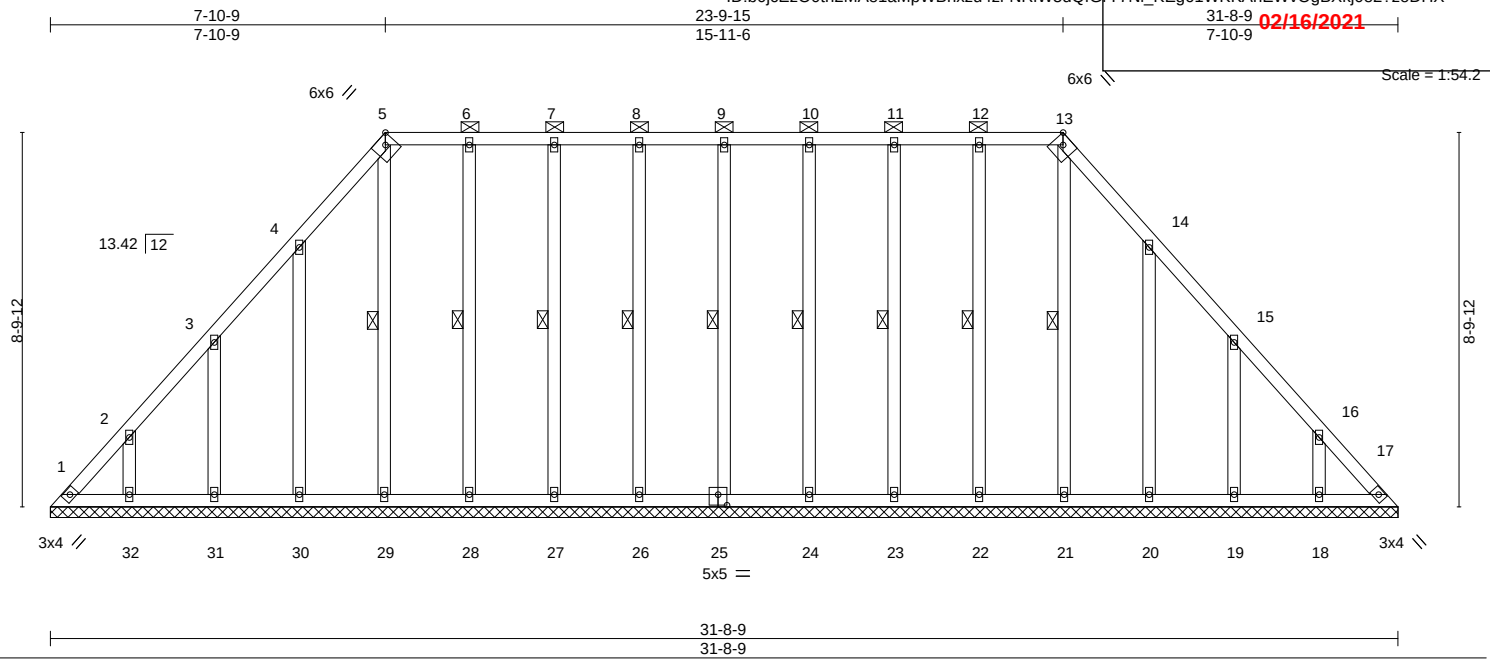

Plate Offsets (X,Y)-- [5:0-2-10,Edge], [13:0-2-10,Edge], [25:0-2-8,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.01	17	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 190 lb	FT = 20%
BCDL	10.0											

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-25, 8-26, 7-27, 6-28, 5-29, 10-24, 11-23, 12-22, 13-21

REACTIONS. All bearings 31-8-9.
(lb) - Max Horz 1=-229(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 17, 25, 26, 27, 28, 29, 24, 23, 22 except 1=-110(LC 12), 30=-152(LC 14), 31=-143(LC 14), 32=-140(LC 14), 20=-151(LC 15), 19=-144(LC 15), 18=-140(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 17, 25, 26, 27, 28, 29, 31, 32, 24, 23, 22, 21, 19, 18 except 30=263(LC 25), 20=262(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-300/231

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-5-15, Interior(1) 3-5-15 to 7-10-9, Exterior(2R) 7-10-9 to 12-4-6 , Interior(1) 12-4-6 to 23-9-15, Exterior(2R) 23-9-15 to 28-3-12, Interior(1) 28-3-12 to 31-4-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 25, 26, 27, 28, 29, 24, 23, 22 except (jt=lb) 1=110, 30=152, 31=143, 32=140, 20=151, 19=144, 18=140.
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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	L5	GABLE	1	1	

Job Reference (optional) I44692881

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:03:58 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021

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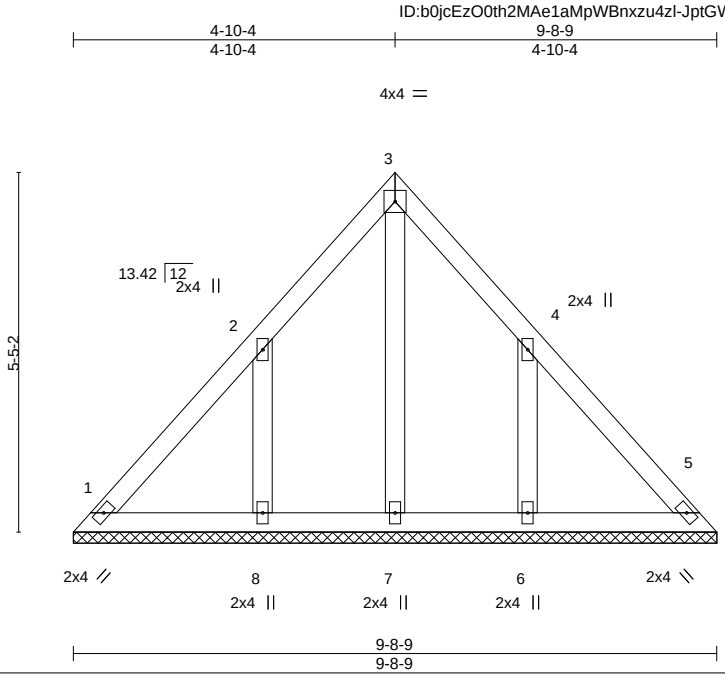

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. All bearings 9-8-9.
(lb) - Max Horz 1=137(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-198(LC 14), 6=-197(LC 15)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=345(LC 25), 6=344(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-315/208, 4-6=-315/208

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 4-10-4, Exterior(2R) 4-10-4 to 7-10-4 , Interior(1) 7-10-4 to 9-4-10 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=198, 6=197.
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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	M1	Jack-Open	8	1	Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:58:33 2021 Page 1
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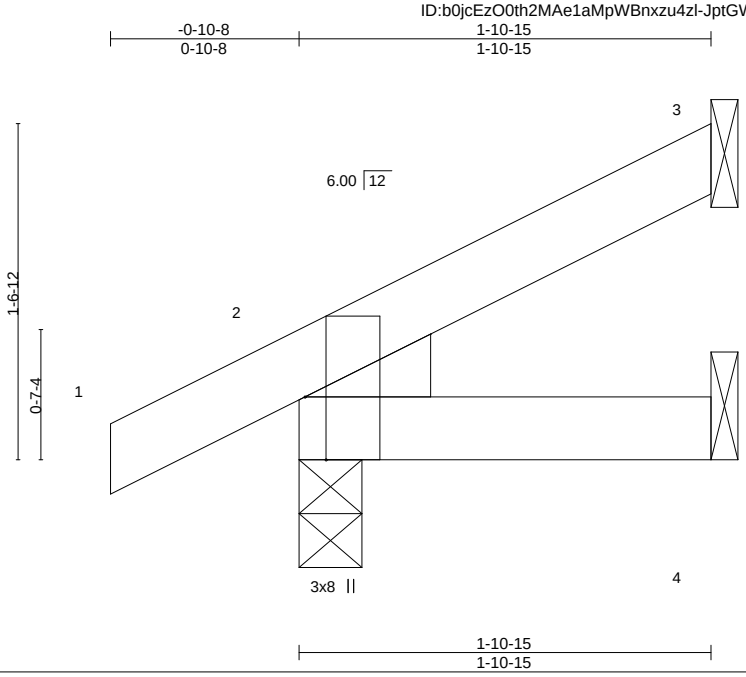

Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	7	>999	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 7 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=54(LC 16)
Max Uplift 3=-27(LC 16), 2=-28(LC 16), 4=-4(LC 16)
Max Grav 3=62(LC 23), 2=206(LC 23), 4=35(LC 7)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	M2	Jack-Open	8	1	J44692883

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF LEES SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:33:59 2021 Page 1
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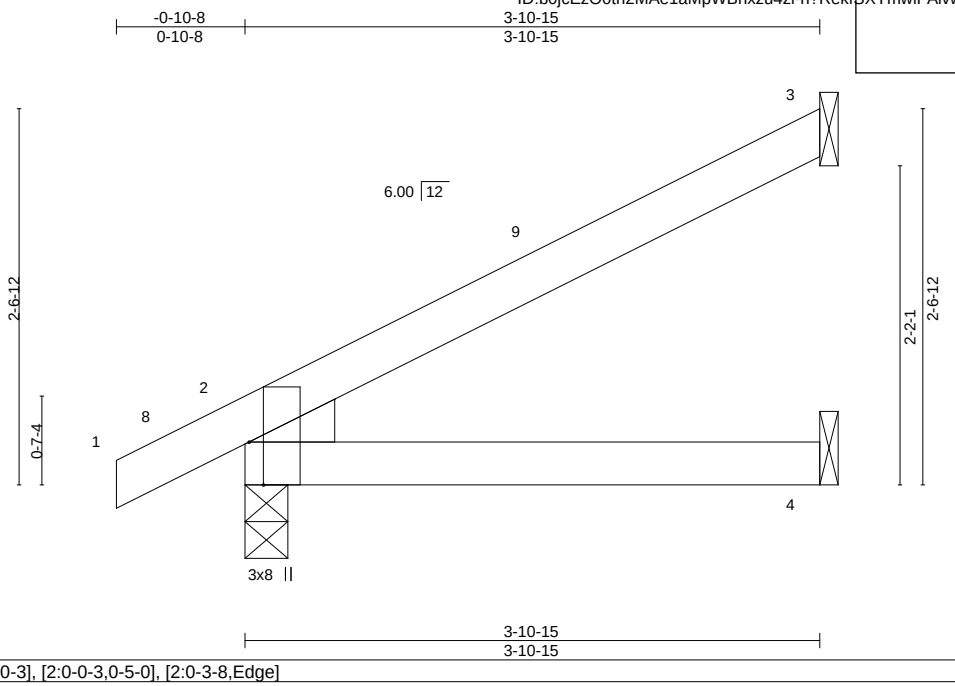

Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	0.02	4-7	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.03	4-7	>999	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 11 lb	FT = 20%
BCDL	10.0											

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

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) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=94(LC 16)
Max Uplift 3=-60(LC 16), 2=-36(LC 16), 4=-3(LC 16)
Max Grav 3=156(LC 23), 2=325(LC 23), 4=76(LC 7)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	M3	Jack-Closed	17	1	

Job Reference (optional) I44692884

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 14:00:00 2021 Page 1
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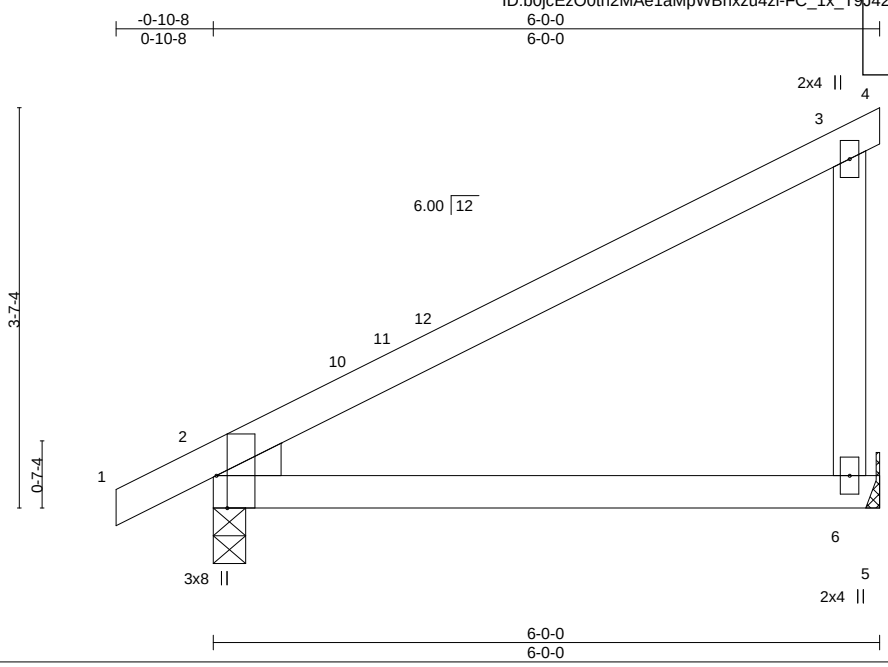

Plate Offsets (X,Y)-- [2:0-0-1,0-0-3], [2:0-0-3,0-5-0], [2:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.59	Vert(LL)	0.07	6-9	>924	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.14	6-9	>479	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.03	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS								
BCDL	10.0										Weight: 20 lb	FT = 20%

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

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

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=139(LC 15)
Max Uplift 6=-82(LC 16), 2=-59(LC 16)
Max Grav 6=367(LC 23), 2=399(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-6=-274/217

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	M5	Monopitch Supported Gable	2	1	J44692885

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:44:40 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021

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0-6-0 1-6-0

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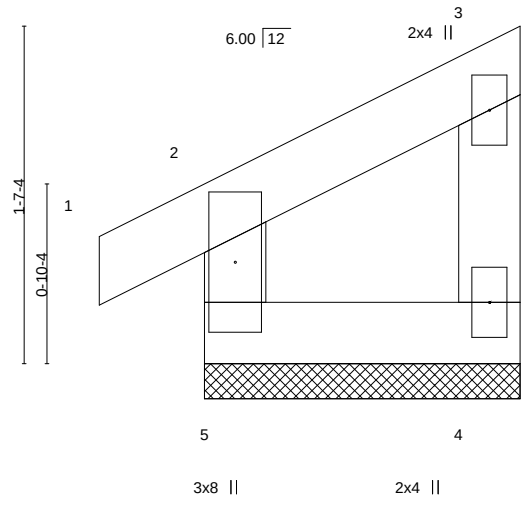

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	1	n/r	120		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 6 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 5=1-6-0, 4=1-6-0
Max Horz 5=55(LC 13)
Max Uplift 5=-23(LC 16), 4=-29(LC 13)
Max Grav 5=140(LC 2), 4=53(LC 30)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
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.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	M6	Jack-Open	9	1	

Job Reference (optional) I44692886

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:47:07 2021 Page 1
ID:b0jcEzO0th2MAe1aMpWBnxzu4zI-Ba6nMgVQrnIG6dRUbxDRmba2RfUQoPMQ7fTzGfzoDHR

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
ISSUED MM/DD/YYYY
02/16/2021

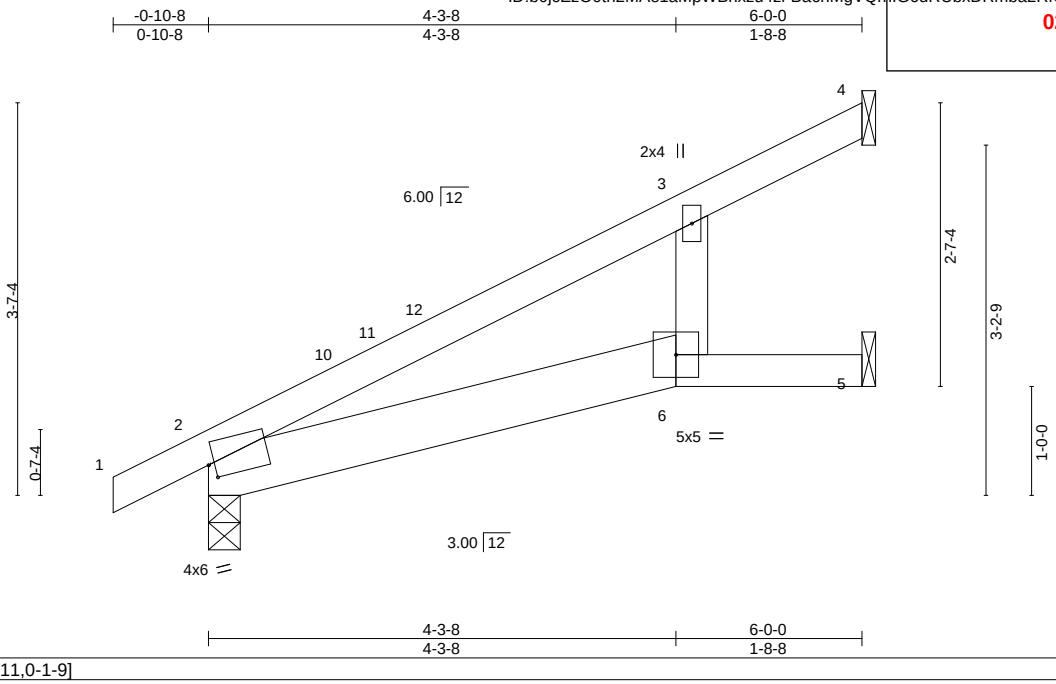

Plate Offsets (X,Y)-- [2:0-0-11,0-1-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	0.11	6	>639	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.21	6	>347	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.05	5	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-AS							Weight: 20 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-6: 2x6 SPF No.2
WEBS 2x4 SPF No.2

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=136(LC 16)
Max Uplift 4=-102(LC 16), 2=-46(LC 16)
Max Grav 4=330(LC 23), 2=411(LC 2), 5=33(LC 7)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 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) 2 except (jt=lb) 4=102.
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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	M7	Jack-Open	2	1	

Job Reference (optional) I44692887

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
EEE-SUMMIT, MISSOURI

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:11:47 2021 Page 1
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02/16/2021

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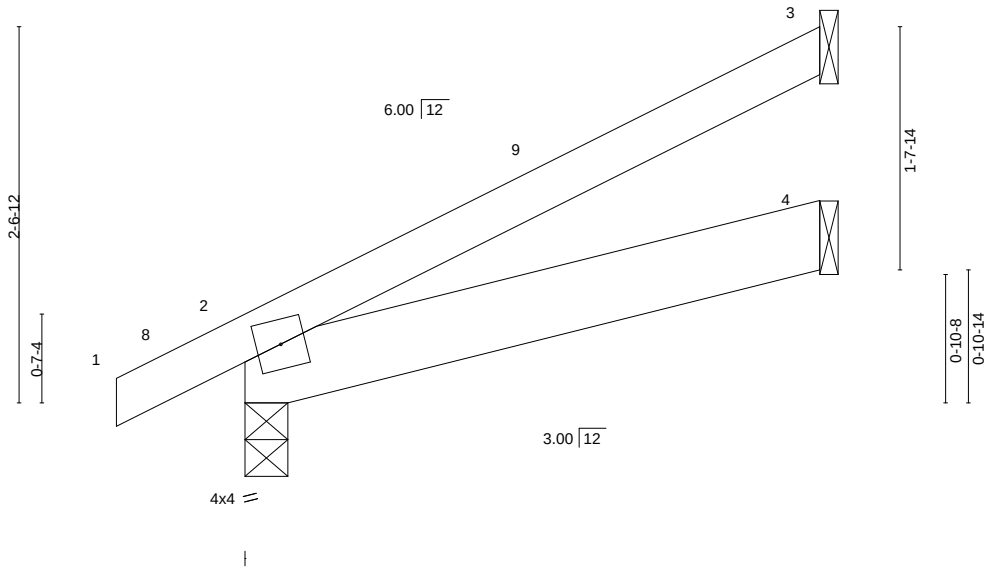

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.01	4-7	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	4-7	>999	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 14 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 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) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=94(LC 16)
Max Uplift 3=-55(LC 16), 2=-36(LC 16), 4=-8(LC 16)
Max Grav 3=140(LC 23), 2=325(LC 23), 4=89(LC 7)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 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) 3, 2, 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	M8	Jack-Open	2	1	J44692888

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 14:03:32 2021 Page 1
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RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
ENGINEERING SUMMIT, MISSOURI
02/16/2021

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0-10-8 1-10-15

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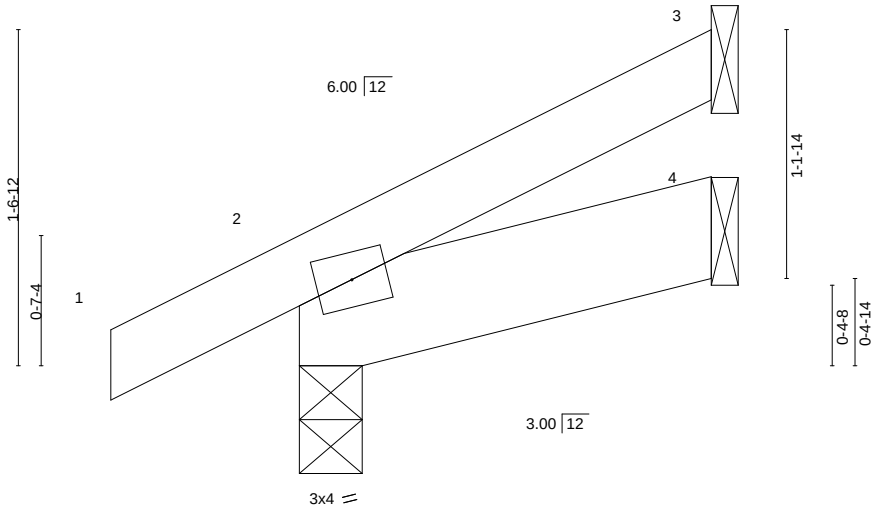

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	7	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	7	>999	180		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-MP							Weight: 7 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=54(LC 16)
Max Uplift 3=-25(LC 16), 2=-28(LC 16), 4=-6(LC 16)
Max Grav 3=56(LC 23), 2=206(LC 23), 4=41(LC 7)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 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) 3, 2, 4.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	V1	Valley	1	1	J44692889

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:34:10 2021 Page 1
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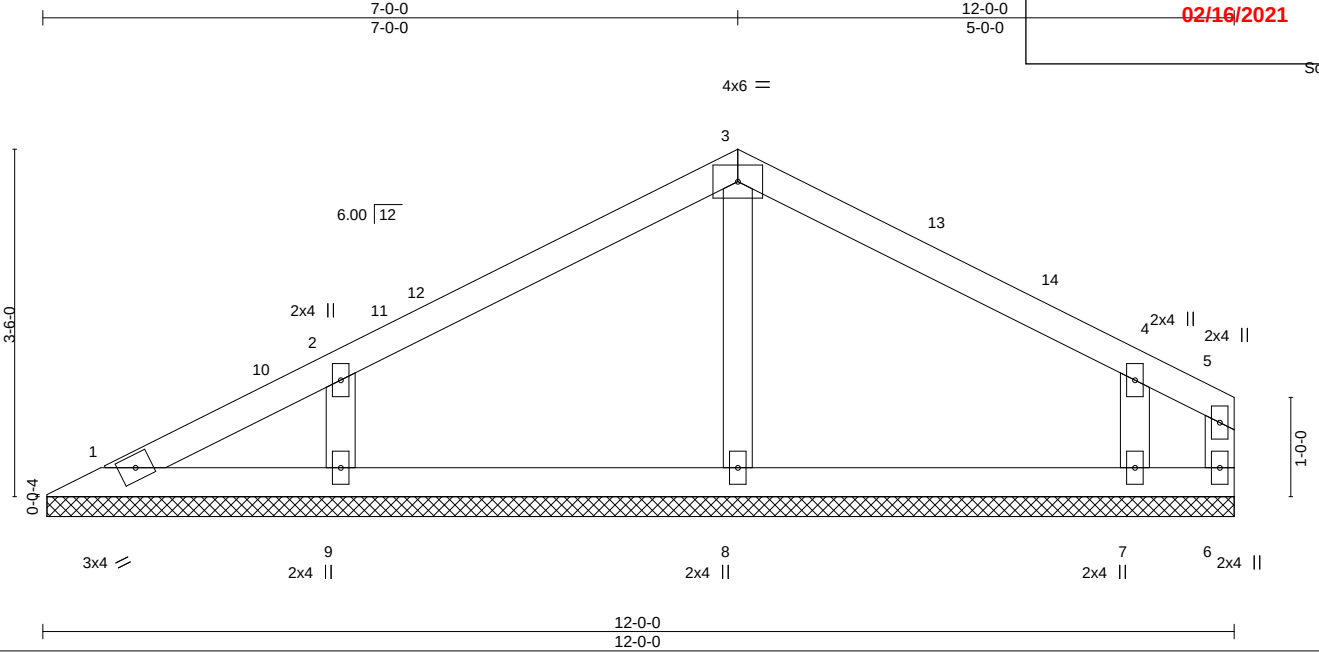


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	6	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 34 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 11-11-8.
(lb) - Max Horz 1=63(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8 except 6=-135(LC 23), 9=-124(LC 16), 7=-152(LC 17)
Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 8=414(LC 2), 9=437(LC 22), 7=496(LC 23)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-8=-329/109, 2-9=-368/214, 4-7=-433/260

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 11-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8 except (jt=lb) 6=135, 9=124, 7=152.
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.

February 5,2021

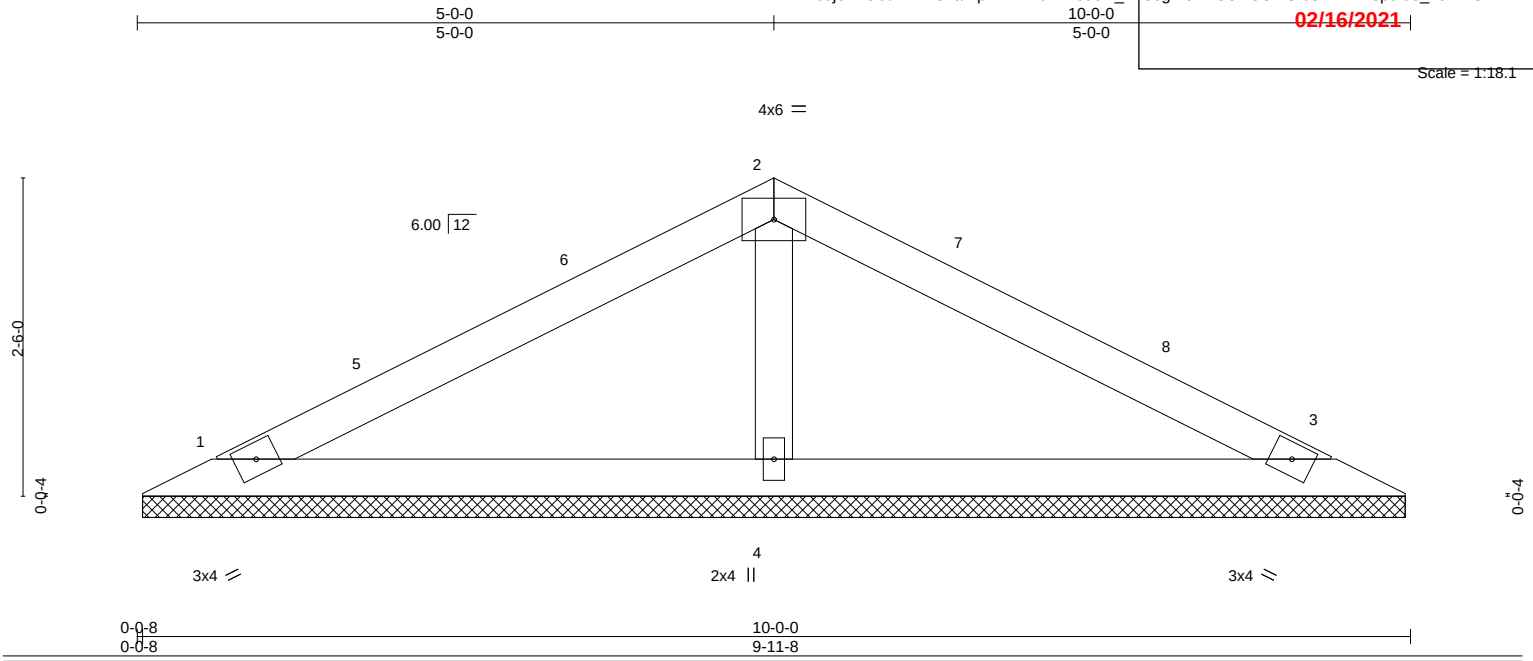
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	V2	Valley	1	1	J44692890

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:04:05 2021 Page 1
ID:b0jcEzO0th2MAe1aMpWBnxzu4zl-c9ow_iXl8cgrz5A2G3m8ODCf0sYw?mrspdids_zoDHO

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 25 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 1=9-11-0, 3=9-11-0, 4=9-11-0
Max Horz 1=-39(LC 17)
Max Uplift 1=-42(LC 16), 3=-50(LC 17), 4=-45(LC 16)
Max Grav 1=239(LC 22), 3=239(LC 23), 4=520(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-379/184

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-0-0, Exterior(2R) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 9-4-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	V3	Valley	1	1	J44692891

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:04:00 2021 Page 1
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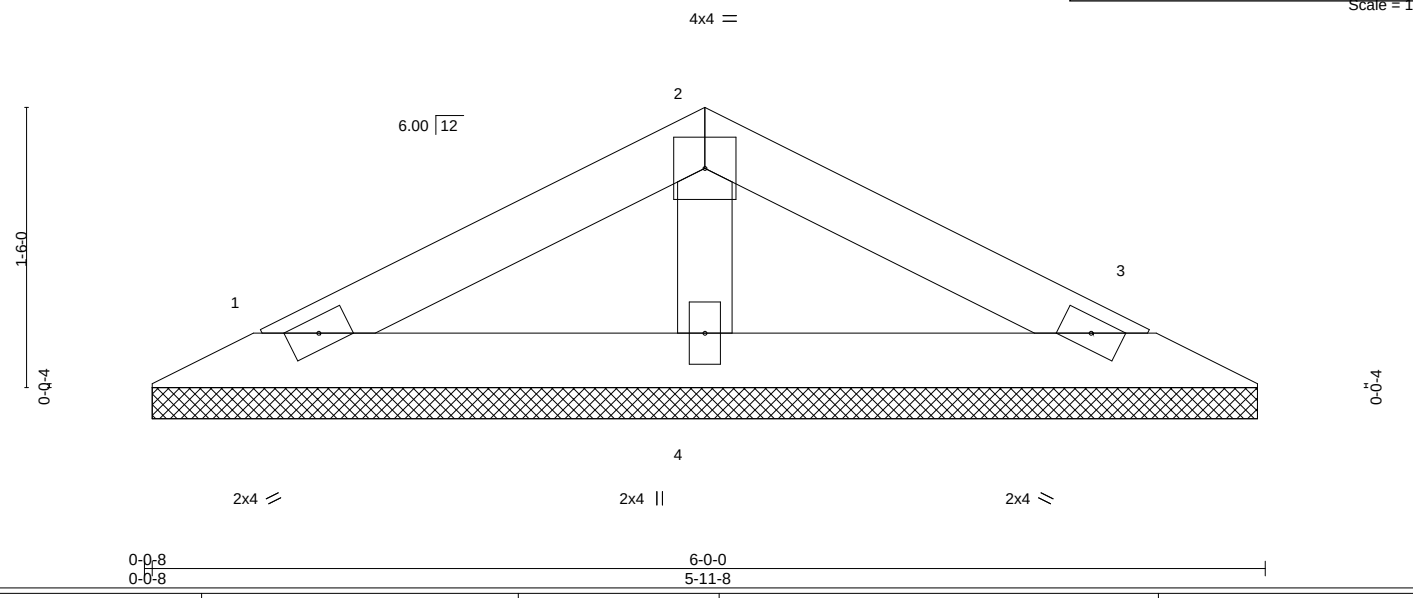
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021



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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 14 lb	FT = 20%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
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=5-11-0, 3=5-11-0, 4=5-11-0
Max Horz 1=-21(LC 17)
Max Uplift 1=-28(LC 16), 3=-32(LC 17), 4=-15(LC 16)
Max Grav 1=135(LC 2), 3=135(LC 2), 4=252(LC 2)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	V4	Valley	1	1	J44692892

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 14:14:07 2021 Page 1
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3-8-8

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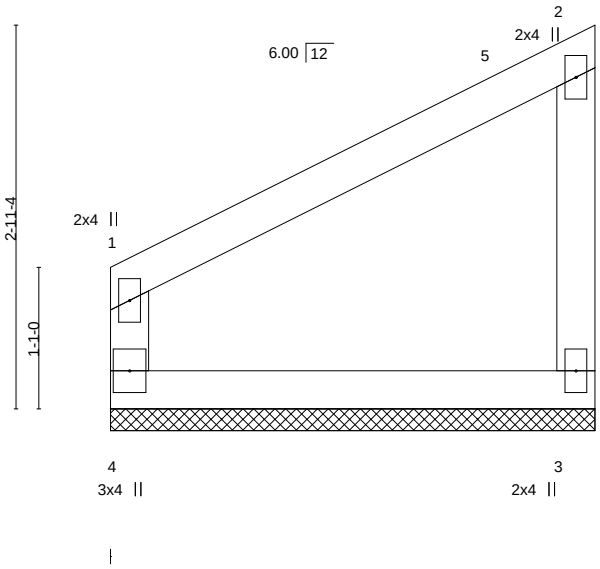

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 12 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

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

REACTIONS. (size) 4=3-8-8, 3=3-8-8
Max Horz 4=103(LC 13)
Max Uplift 4=-21(LC 16), 3=-49(LC 16)
Max Grav 4=196(LC 22), 3=196(LC 22)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-6-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 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.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	V5	Valley	1	1	J44692893

Job Reference (optional)

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 11:44:07 2021 Page 1
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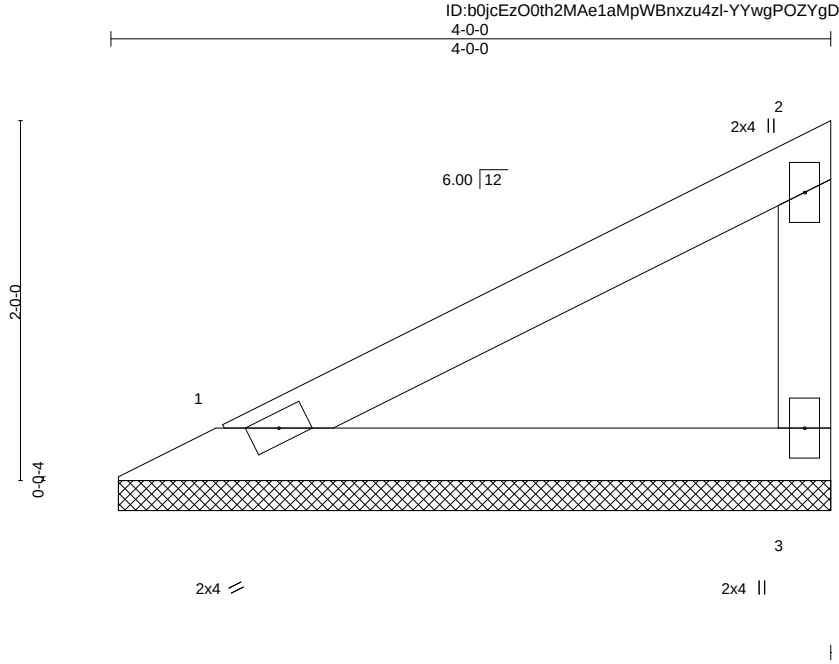

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 10 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 1=3-11-8, 3=3-11-8
Max Horz 1=67(LC 13)
Max Uplift 1=-24(LC 16), 3=-41(LC 16)
Max Grav 1=184(LC 22), 3=184(LC 22)

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

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	V6	Valley	1	1	J44692894

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 05 14:08:03 2021 Page 1

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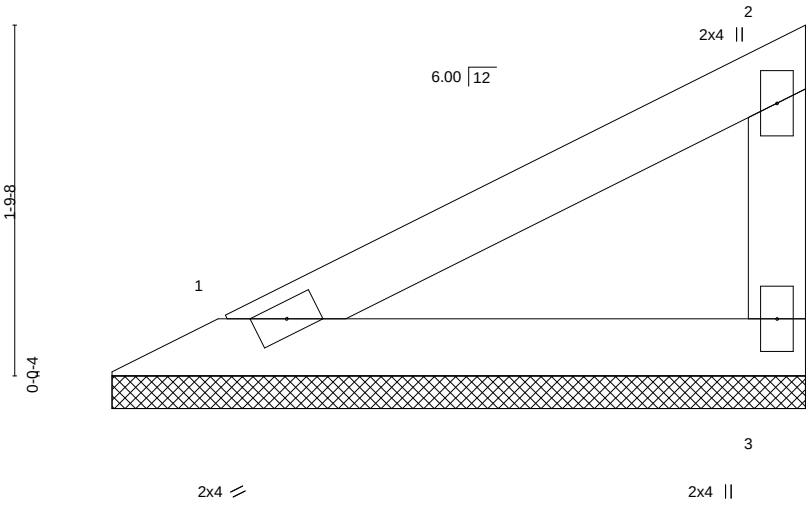

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 9 lb	FT = 20%
BCDL	10.0											

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-7-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-6-8, 3=3-6-8
Max Horz 1=59(LC 13)
Max Uplift 1=-21(LC 16), 3=-36(LC 16)
Max Grav 1=158(LC 22), 3=158(LC 22)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	V7	Valley	1	1	J44692895

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:44:09 2021 Page 1
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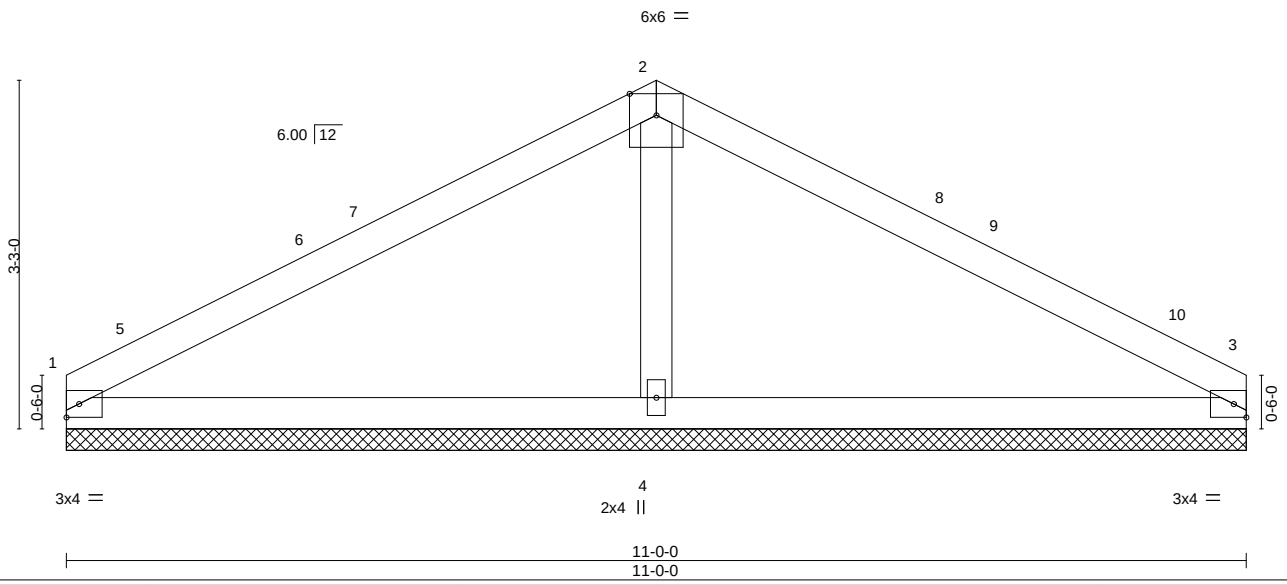
RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.58	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 30 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 1=11-0-0, 3=11-0-0, 4=11-0-0
Max Horz 1=-52(LC 17)
Max Uplift 1=-53(LC 16), 3=-63(LC 17), 4=-55(LC 16)
Max Grav 1=288(LC 22), 3=288(LC 23), 4=645(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-469/205

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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 5-6-0, Exterior(2R) 5-6-0 to 8-6-0, Interior(1) 8-6-0 to 11-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
ANDREW THOMAS JOHNSON
NUMBER PE-2017018993
PROFESSIONAL ENGINEER

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	V8	Valley	1	1	J44692896

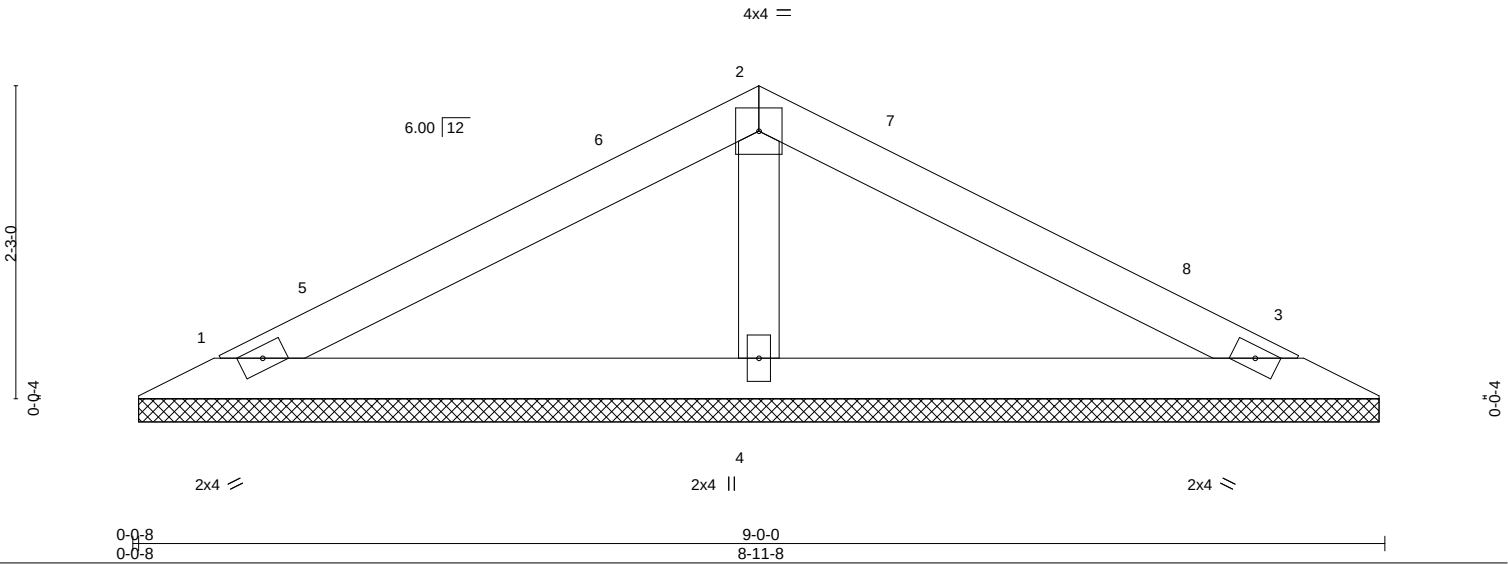
Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:04:11 2021 Page 1
ID:b0jcEzO0th2MAe1aMpWBnxzu4zI-y7bp1PbRz8I83s203dMJ5GvVHtFmg1GbyvPOYBzoDHJ

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
CITY OF SUMMIT, MISSOURI
02/16/2021

4-6-0
4-6-0
9-0-0
4-6-0

Scale = 1:16.6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%
BCDL	10.0											

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

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

REACTIONS. (size) 1=8-11-0, 3=8-11-0, 4=8-11-0
Max Horz 1=34(LC 16)
Max Uplift 1=-46(LC 16), 3=-52(LC 17), 4=-24(LC 16)
Max Grav 1=228(LC 22), 3=228(LC 23), 4=412(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-315/163

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-6-0, Exterior(2R) 4-6-0 to 7-6-0, Interior(1) 7-6-0 to 8-4-7 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/woodside ridge #42/mo
2630568	V9	VALLEY	1	1	J44692897

Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Feb 5 11:04:11 2021 Page 1
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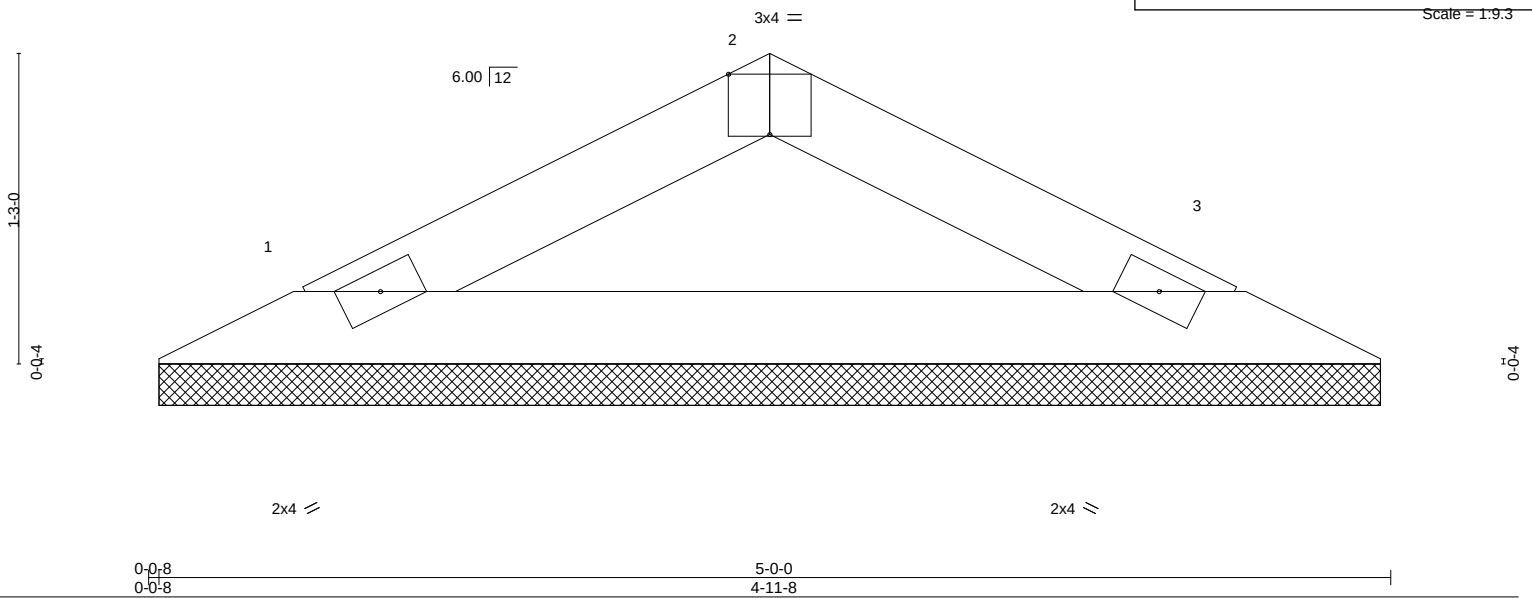


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
TCDL	20.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-P								
BCDL	10.0										Weight: 10 lb	FT = 20%

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

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

REACTIONS. (size) 1=4-11-0, 3=4-11-0
Max Horz 1=-17(LC 17)
Max Uplift 1=-28(LC 16), 3=-28(LC 17)
Max Grav 1=206(LC 2), 3=206(LC 2)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; 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) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
4) Unbalanced snow loads have been considered for this design.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

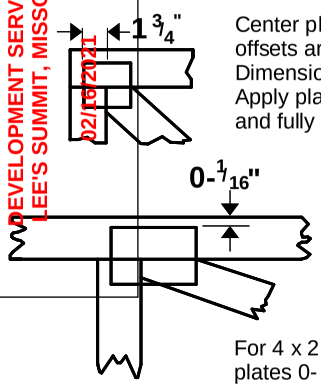
February 5,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/16/2021

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.

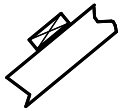
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

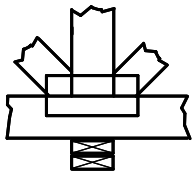
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

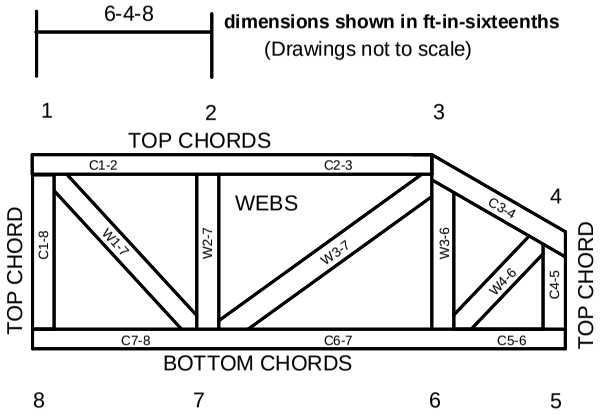


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.