



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

Re: 2643945
summit/woodside ridge #36/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: I44773642 thru I44773725

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

Missouri COA: Engineering 001193



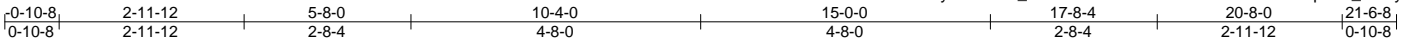
February 12, 2021

Sevier, Scott ,Engineer

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

Job 2643945	Truss A01	Truss Type Hip Girder	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773642
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:29 2021 Page 1
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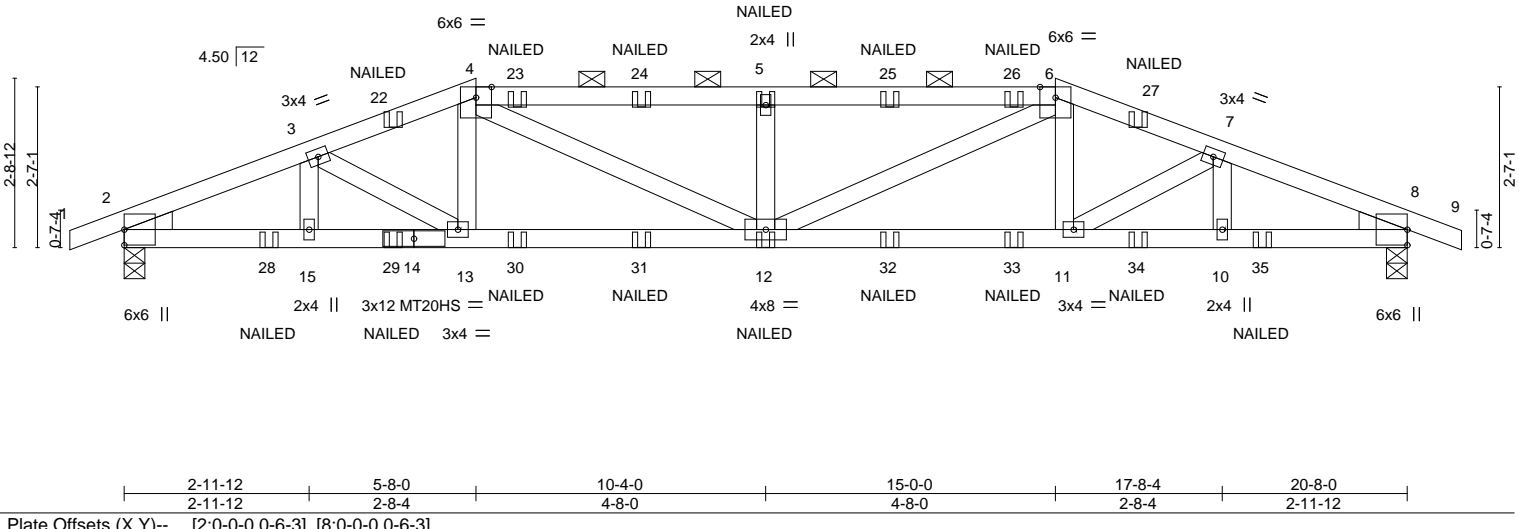


Plate Offsets (X, Y)--	[2:0-0-0,0-6-3], [8:0-0-0,0-6-3]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.89	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.90	Vert(LL) -0.15 12 >999 240	MT20HS	148/108
BCLL 0.0	Lumber DOL 1.15	WB 0.25	Vert(CT) -0.33 12 >750 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.08 8 n/a n/a		
	Code IRC2018/TPI2014			Weight: 79 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-9-4 oc purlins, except 2-0-0 oc purlins (2-3-7 max.): 4-6.
 BOT CHORD Rigid ceiling directly applied or 9-10-8 oc bracing.

REACTIONS. (size) 2=0-4-0, 8=0-4-0
 Max Horz 2=37(LC 8)
 Max Uplift 2=-327(LC 4), 8=-327(LC 5)
 Max Grav 2=1751(LC 1), 8=1751(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3198/587, 3-4=-3196/595, 4-5=-3836/729, 5-6=-3836/729, 6-7=-3196/595,
 7-8=-3198/587
 BOT CHORD 2-15=-524/2913, 13-15=-524/2913, 12-13=-520/2996, 11-12=-492/2996, 10-11=-497/2913,
 8-10=-497/2913
 WEBS 4-13=0/262, 4-12=-205/1007, 5-12=-718/241, 6-12=-205/1007, 6-11=0/262

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=327, 8=327.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-90, 4-6=-90, 6-9=-90, 16-19=-20



February 12, 2021

Job 2643945	Truss A01	Truss Type Hip Girder	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773642 Job Reference (optional)
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:29 2021 Page 2
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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 12=-27(B) 5=-60(B) 23=-60(B) 24=-60(B) 25=-60(B) 26=-60(B) 28=-177(B) 29=-144(B) 30=-27(B) 31=-27(B) 32=-27(B) 33=-27(B) 34=-144(B) 35=-177(B)

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

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

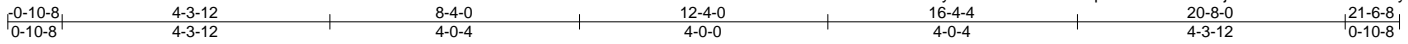


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	summit/woodside ridge #36/MO	144773643
2643945	A02	Hip	1	1		

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:30 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-vwY1YxvwPipbFNkhVTxbP7XjW9UrQznAiT5VQzmEy?



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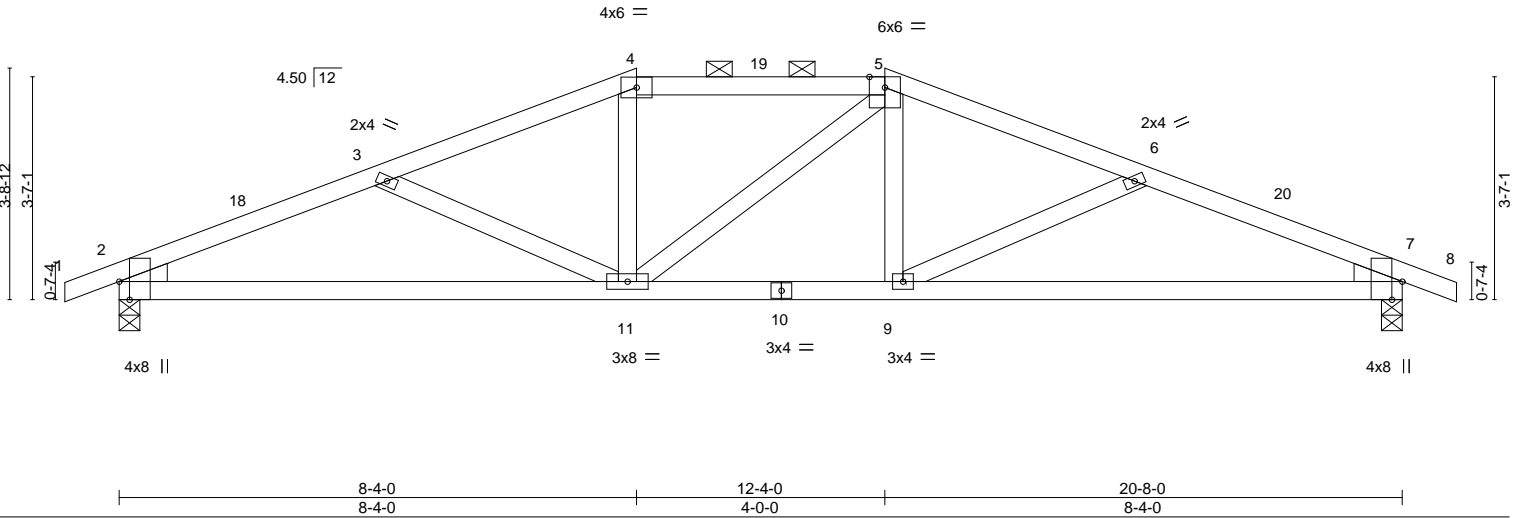


Plate Offsets (X,Y)--	[2:0-0-0,0-6-3], [2:0-3-8,Edge], [7:0-0-0,0-6-3], [7:0-3-8,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.42	Vert(LL) -0.09 9-11 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.67	Vert(CT) -0.19 9-17 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.06 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 75 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (4-4-1 max.): 4-5.
 BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-4-0, 7=0-4-0
 Max Horz 2=54(LC 12)
 Max Uplift 2=-163(LC 8), 7=-163(LC 9)
 Max Grav 2=1215(LC 1), 7=1215(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2211/313, 3-4=-1874/264, 4-5=-1713/272, 5-6=-1874/264, 6-7=-2211/313
 Exterior(2R) 12-4-0 to 16-6-9, Interior(1) 16-6-9 to 21-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 BOT CHORD 2-11=-245/2001, 9-11=-163/1712, 7-9=-245/2001
 WEBS 3-11=-331/125, 4-11=-2/287, 5-9=-2/288, 6-9=-332/125

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 8-4-0, Exterior(2E) 8-4-0 to 12-4-0, Exterior(2R) 12-4-0 to 16-6-9, Interior(1) 16-6-9 to 21-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=163, 7=163.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

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



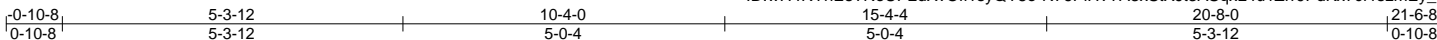
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss A03	Truss Type Common	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773644
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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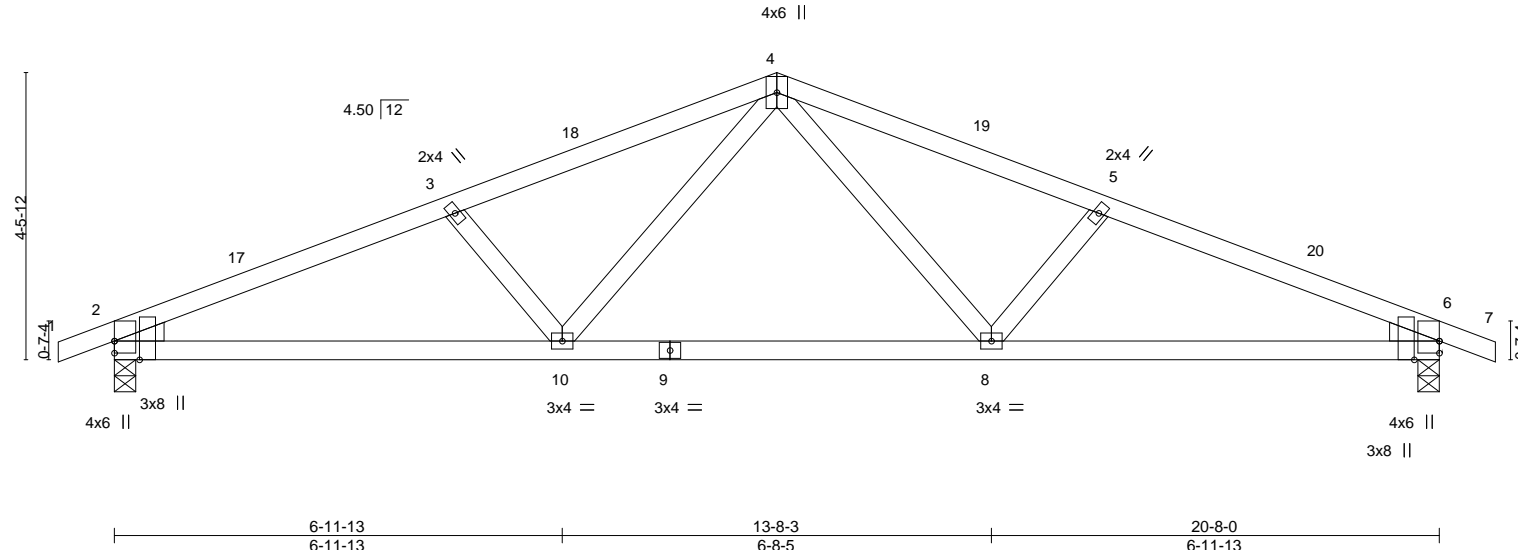


Plate Offsets (X, Y)--	[2:0-3-8,Edge], [6:0-3-8,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.10	8-10	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.24	8-10	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.06	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS							
									Weight: 71 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-4-0, 6=0-4-0
Max Horz 2=67(LC 12)
Max Uplift 2=-149(LC 8), 6=-149(LC 9)
Max Grav 2=1215(LC 1), 6=1215(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2205/335, 3-4=-1950/317, 4-5=-1950/317, 5-6=-2205/335
BOT CHORD 2-10=-251/1989, 8-10=-139/1421, 6-8=-256/1989
WEBS 3-10=-413/148, 4-10=-78/570, 4-8=-78/570, 5-8=-413/148

- 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-4-0, Exterior(2R) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 21-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=149, 6=149.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



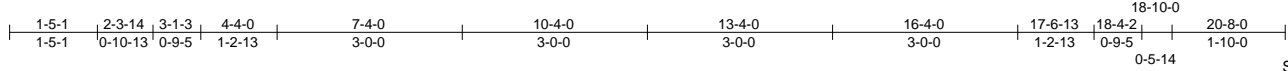
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Job 2643945	Truss A04	Truss Type ROOF SPECIAL GIRDER	Qty 1	Ply 2	summit/woodside ridge #36/MO 144773645
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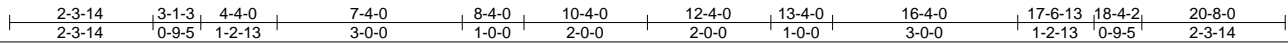
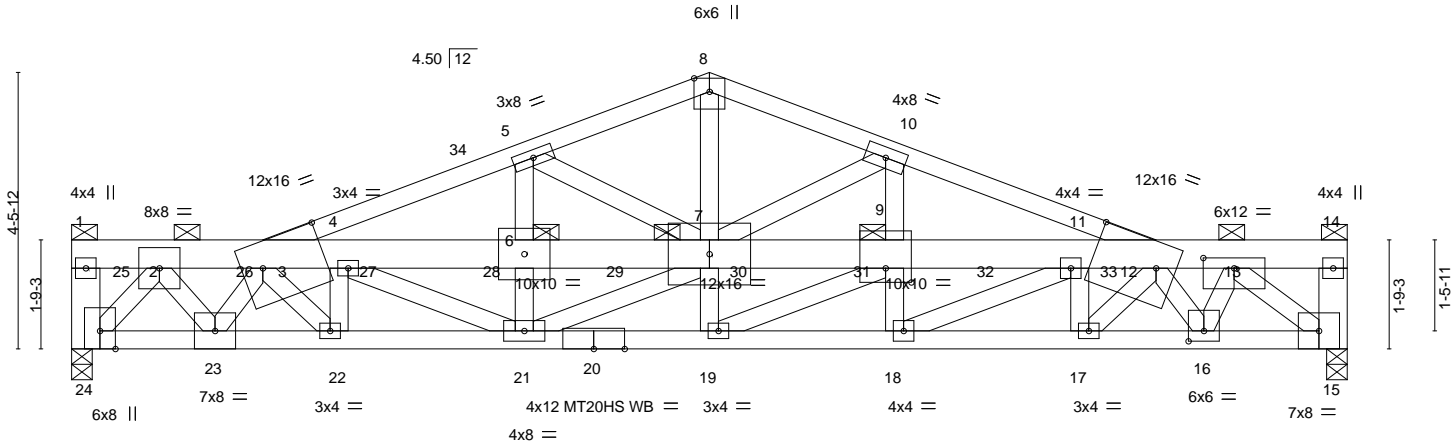


Plate Offsets (X,Y)-- [3:1-0-0,0-5-0], [9:0-5-0,0-2-12], [12:1-0-4,0-5-0], [13:0-6-0,0-2-0], [16:0-3-0,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.87	Vert(LL)	-0.02	19	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.35	18-19	>693	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	NO	WB 0.87	Horz(CT)	0.13	15	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 266 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF No.2 *Except* 3-8,8-12: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-10-11 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-9 max.): 1-14.
BOT CHORD 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except* 1-24,14-15: 2x6 SPF No.2	JOINTS 1 Brace at Jt(s): 1, 14, 7, 6, 9

REACTIONS. (size) 24=0-4-0, 15=0-4-0
 Max Horz 24=16(LC 12)
 Max Grav 24=7116(LC 1), 15=7072(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-24=-844/0, 1-2=-367/0, 2-3=-8851/0, 3-4=-5040/0, 4-6=-4350/0, 6-7=-4350/0,
 7-9=-2320/0, 9-11=-3230/0, 11-12=-4731/0, 12-13=-9368/0, 13-14=-4111/0, 3-5=-9466/0,
 5-8=-7468/0, 8-10=-7466/0, 10-12=-10067/0, 14-15=-539/0
 BOT CHORD 23-24=0/5605, 22-23=0/13195, 21-22=0/13679, 19-21=0/11510, 18-19=0/12420,
 17-18=0/13921, 16-17=0/13532, 15-16=0/7707
 WEBS 7-8=0/4955, 9-10=0/2362, 7-10=-2567/0, 5-6=0/1832, 5-7=-1937/0, 7-19=0/506,
 9-18=0/859, 11-17=-659/0, 4-22=-883/0, 4-21=-761/0, 7-21=0/1629, 9-19=-1089/0,
 11-18=-1690/0, 2-24=-8053/0, 2-23=0/5969, 3-23=-6682/0, 3-22=0/981, 13-15=-9657/0,
 13-16=0/5001, 12-16=-6406/0, 12-17=0/792

- NOTES-**
- 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-3-0 oc, 2x4 - 1 row at 0-4-0 oc.
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 24-2 2x4 - 1 row at 0-4-0 oc, member 23-3 2x4 - 1 row at 0-7-0 oc, member 15-13 2x4 - 1 row at 0-4-0 oc, member 16-12 2x4 - 1 row at 0-7-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) interior zone and C-C Exterior(2E) 3-6-2 to 6-6-2, Interior(1) 6-6-2 to 10-4-0, Exterior(2R) 0-2-12 to 3-6-2, Interior(1) 3-6-2 to 20-5-4, Exterior(2R) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 17-1-14 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 24, 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and conform to the 2018 International Residential Code and ANSI/TPI 1.



February 12, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	summit/woodside ridge #36/MO	144773645
2643945	A04	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

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

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NOTES-

- 10) 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 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-90, 12-14=-90, 3-8=-90, 8-12=-90, 15-24=-20
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-78, 12-14=-78, 3-8=-77, 8-12=-77, 15-24=-20
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-40, 12-14=-40, 3-8=-40, 8-12=-40, 15-24=-40
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=29, 12-14=22, 3-34=31, 8-34=28, 8-10=34, 10-12=28, 15-24=-8
Horz: 1-24=18, 3-34=-43, 8-34=-40, 8-10=46, 10-12=40, 14-15=32
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=22, 12-14=29, 3-5=28, 5-8=34, 8-12=28, 15-24=-8
Horz: 1-24=-32, 3-5=-40, 5-8=-46, 8-12=40, 14-15=-18
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-54, 12-14=-54, 3-8=-59, 8-12=-59, 15-24=-20
Horz: 1-24=-21, 3-8=19, 8-12=-19, 14-15=-29
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-54, 12-14=-54, 3-8=-59, 8-12=-59, 15-24=-20
Horz: 1-24=29, 3-8=19, 8-12=-19, 14-15=21
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=4, 12-14=4, 3-8=28, 8-12=19, 15-24=-8
Horz: 1-24=11, 3-8=-40, 8-12=31, 14-15=16
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=14, 12-14=14, 3-8=19, 8-12=28, 15-24=-8
Horz: 1-24=-16, 3-8=-31, 8-12=40, 14-15=-11
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-34, 12-14=-34, 3-8=-21, 8-12=-31, 15-24=-20
Horz: 1-24=22, 3-8=-19, 8-12=9, 14-15=6
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-3=-25, 12-14=-25, 3-8=-31, 8-12=-21, 15-24=-20
Horz: 1-24=-6, 3-8=-9, 8-12=19, 14-15=-22
Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

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Job	Truss	Truss Type	Qty	Ply	summit/woodside ridge #36/MO	144773645
2643945	A04	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:33 2021 Page 3

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-KVEAAzxpigBA6qSGAbUI0m97hMTYd8kdOR5m5lzmExy

LOAD CASE(S) Standard

- Uniform Loads (plf)
Vert: 1-3=4, 12-14=4, 3-8=30, 8-12=14, 15-24=-8
Horz: 1-24=6, 3-8=-42, 8-12=26, 14-15=14
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-3=14, 12-14=14, 3-8=14, 8-12=30, 15-24=-8
Horz: 1-24=-14, 3-8=-26, 8-12=42, 14-15=-6
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-3=4, 12-14=4, 3-8=19, 8-12=9, 15-24=-8
Horz: 1-24=6, 3-8=-31, 8-12=21, 14-15=14
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-3=14, 12-14=14, 3-8=9, 8-12=19, 15-24=-8
Horz: 1-24=-14, 3-8=-21, 8-12=31, 14-15=-6
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-3=-34, 12-14=-34, 3-8=-19, 8-12=-35, 15-24=20
Horz: 1-24=17, 3-8=-21, 8-12=5, 14-15=3
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-3=-25, 12-14=-25, 3-8=-35, 8-12=-19, 15-24=20
Horz: 1-24=-3, 3-8=-5, 8-12=21, 14-15=-17
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
- Uniform Loads (plf)
Vert: 1-3=-40, 12-14=-40, 3-8=-40, 8-12=-40, 15-24=-20
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-3=-73, 12-14=-73, 3-8=-64, 8-12=-70, 15-24=20
Horz: 1-24=16, 3-8=-14, 8-12=7, 14-15=4
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-3=-66, 12-14=-66, 3-8=-70, 8-12=-64, 15-24=20
Horz: 1-24=-4, 3-8=-7, 8-12=14, 14-15=-16
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-3=-73, 12-14=-73, 3-8=-62, 8-12=-74, 15-24=20
Horz: 1-24=13, 3-8=-16, 8-12=4, 14-15=2
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-3=-66, 12-14=-66, 3-8=-74, 8-12=-62, 15-24=20
Horz: 1-24=-2, 3-8=-4, 8-12=16, 14-15=-13
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 23) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
- Uniform Loads (plf)
Vert: 1-3=-28, 12-14=-28, 3-8=-28, 8-12=-28, 15-24=-8
Horz: 1-24=-16, 3-8=16, 8-12=-16, 14-15=-16
- Concentrated Loads (lb)
Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)
- 24) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss A04	Truss Type ROOF SPECIAL GIRDER	Qty 1	Ply 2	summit/woodside ridge #36/MO Job Reference (optional)	144773645
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:33 2021 Page 4
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-KVEAAzxpigBA6qSGAbUI0m97hMTYd8kdOR5m5lzmExy

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=4, 12-14=4, 3-8=4, 8-12=4, 15-24=-8
Horz: 1-24=16, 3-8=-16, 8-12=16, 14-15=16

Concentrated Loads (lb)

Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)

25) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-40, 12-14=-40, 3-8=-40, 8-12=-40, 15-24=-20

Concentrated Loads (lb)

Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)

26) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-40, 12-14=-90, 3-8=-40, 8-12=-90, 15-24=-20

Concentrated Loads (lb)

Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)

27) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-40, 12-14=-40, 3-8=-40, 8-12=-40, 15-24=-20

Concentrated Loads (lb)

Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)

28) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-40, 12-14=-78, 3-8=-40, 8-12=-77, 15-24=-20

Concentrated Loads (lb)

Vert: 13=-1750(F) 25=-1135(F) 26=-1135(F) 27=-1135(F) 28=-1135(F) 29=-1135(F) 30=-1135(F) 31=-1135(F) 32=-1135(F) 33=-1135(F)

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss B01	Truss Type HIP GIRDER	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773646
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:35 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-GuLwbfy3EHRIM8cel0Xm6BEVrA7h55hvsLas9dzmExw

Job Reference (optional)



Scale = 1:37.2

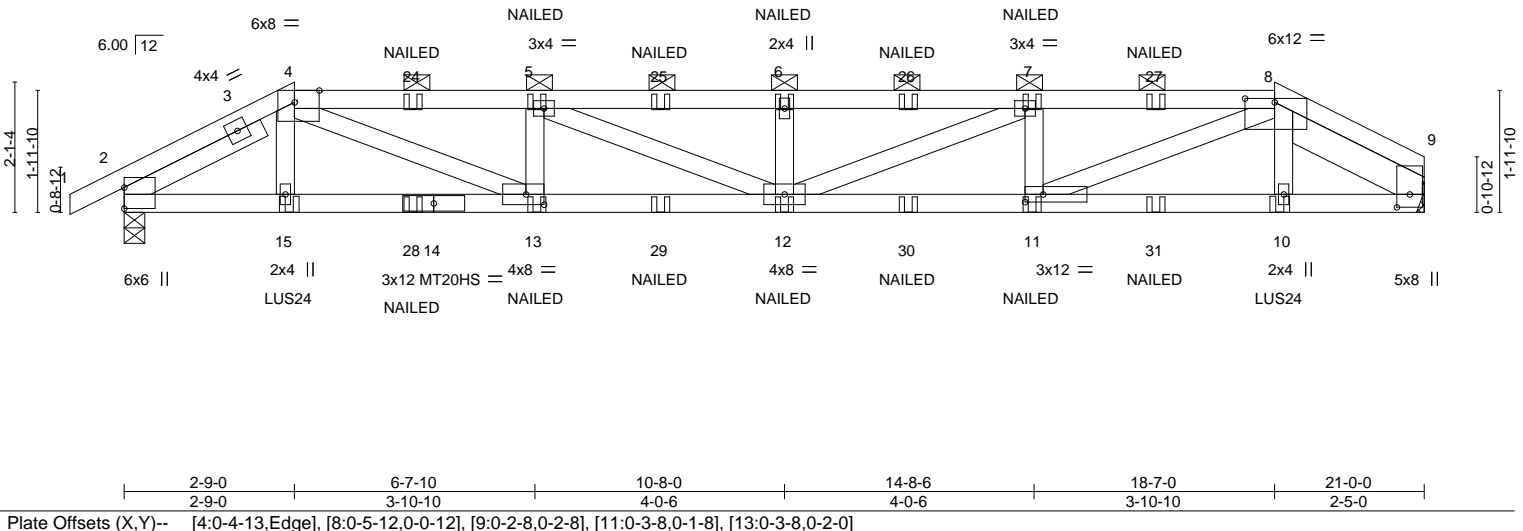


Plate Offsets (X, Y)--	[4:0-4-13,Edge], [8:0-5-12,0-0-12], [9:0-2-8,0-2-8], [11:0-3-8,0-1-8], [13:0-3-8,0-2-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.77	Vert(LL) -0.25 12 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.95	Vert(CT) -0.56 12 >453 180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr NO	WB 0.65	Horz(CT) 0.07 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 84 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-7-4 oc purlins, except 2-0-0 oc purlins (2-6-5 max.): 4-8.
 BOT CHORD Rigid ceiling directly applied or 8-8-14 oc bracing.

REACTIONS. (size) 9=Mechanical, 2=0-4-0
 Max Horz 2=37(LC 8)
 Max Uplift 9=251(LC 9), 2=267(LC 8)
 Max Grav 9=1797(LC 1), 2=1859(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-2876/414, 4-5=-4847/695, 5-6=-5502/779, 6-7=-5502/779, 7-8=-4704/673,
 8-9=-351/88
 BOT CHORD 2-15=-356/2521, 13-15=-356/2502, 12-13=-683/4843, 11-12=-652/4700, 10-11=-315/2313,
 9-10=-316/2337
 WEBS 4-13=-373/2585, 5-13=-863/202, 5-12=-126/733, 6-12=-459/137, 7-12=-146/885,
 7-11=-905/208, 8-11=-378/2634, 8-10=-18/291

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) 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) 9=251, 2=267.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 16-0-0 oc max. starting at 2-8-0 from the left end to 18-8-0 to connect truss(es) to back face of bottom chord.
 - 11) Fill all nail holes where hanger is in contact with lumber.
 - 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

Continued on page 2



February 12, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss B01	Truss Type HIP GIRDER	Qty 1	Ply 1	summit/woodside ridge #36/MO I44773646 Job Reference (optional)
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:35 2021 Page 2
ID:WH4RYhEsTNeUP2dXvOfi1syQY8e-GuLwbfy3EHRtM8cel0Xm6BEVrA7h55hvsLas9dzmExw

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-90, 4-8=-90, 8-9=-90, 16-20=-20

Concentrated Loads (lb)

Vert: 15=-292(B) 13=-41(B) 5=-57(B) 12=-41(B) 6=-57(B) 7=-57(B) 11=-41(B) 10=-292(B) 24=-57(B) 25=-57(B) 26=-57(B) 27=-57(B) 28=-41(B) 29=-41(B) 30=-41(B) 31=-41(B)

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

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



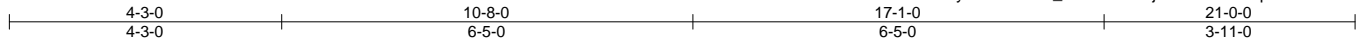
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss B02	Truss Type Hip	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773647
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:36 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-k4vlo_zh?bZklBrrj2?eOnf2aWxqd?34PKQh4zmExv



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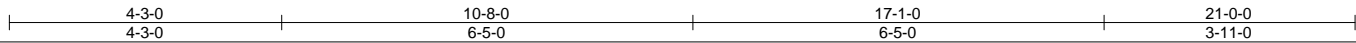
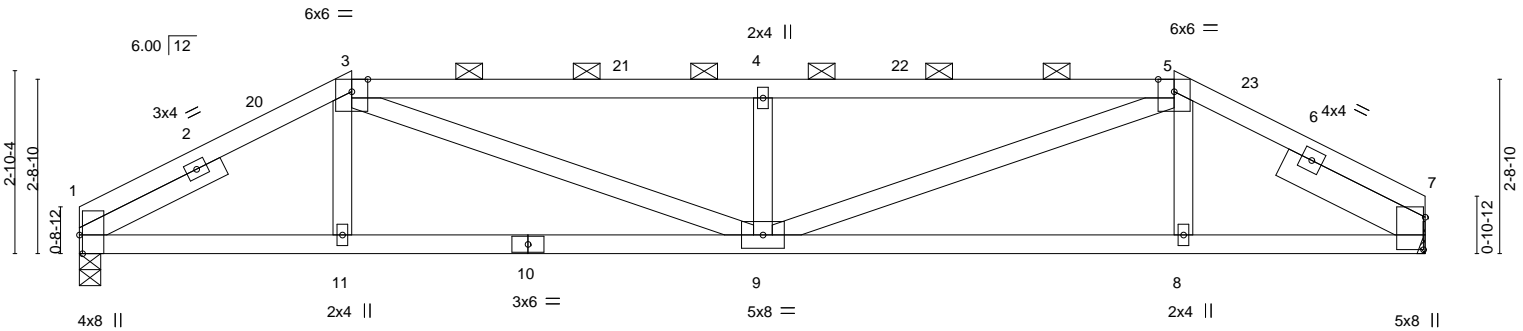


Plate Offsets (X, Y)--	[1:0-3-8,Edge], [7:0-6-1,0-0-5]				
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.80	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.75	Vert(LL) -0.11 9 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.32	Vert(CT) -0.27 8-9 >939 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.06 7 n/a n/a		
	Code IRC2018/TPI2014			Weight: 79 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-4-0, 7=Mechanical
Max Horz 1=35(LC 12)
Max Uplift 1=-128(LC 12), 7=-126(LC 13)
Max Grav 1=1155(LC 1), 7=1155(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1846/235, 3-4=-2685/350, 4-5=-2685/350, 5-7=-1742/226
BOT CHORD 1-11=-181/1623, 9-11=-184/1620, 8-9=-157/1513, 7-8=-155/1514
WEBS 3-9=-195/1212, 4-9=-711/187, 5-9=-204/1314

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 4-3-0, Exterior(2R) 4-3-0 to 8-5-15, Interior(1) 8-5-15 to 17-1-0, Exterior(2E) 17-1-0 to 21-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=128, 7=126.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

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

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

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



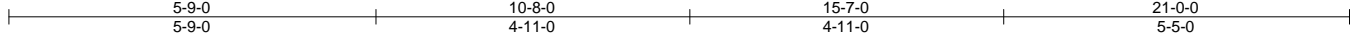
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss B03	Truss Type Hip	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773648
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:37 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-CHTh0K_JlvhbbSm1PRZEBcKuKzqvZ3yCJ33zEWzmExu



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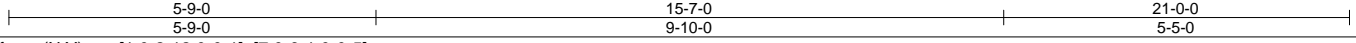
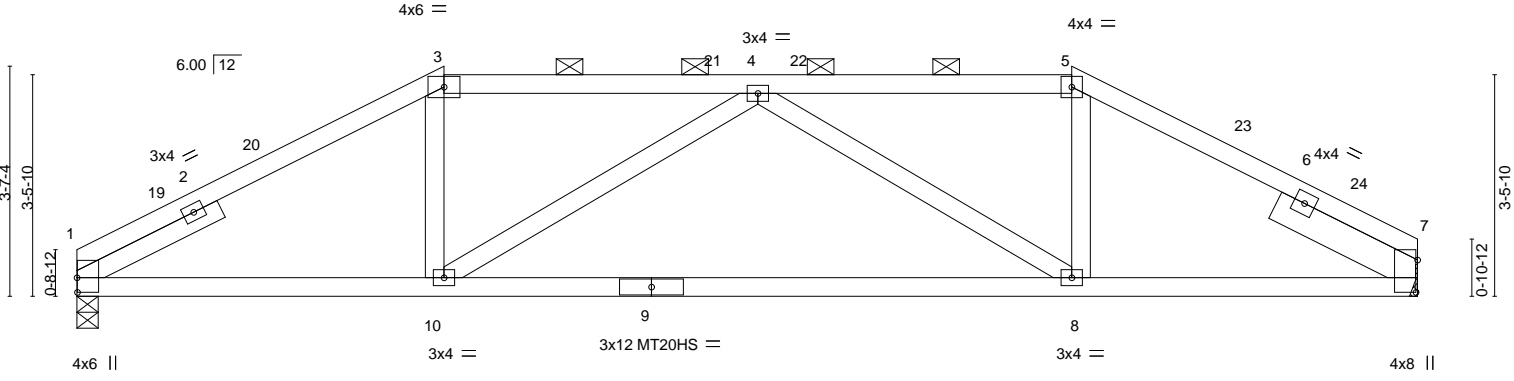


Plate Offsets (X,Y)-- [1:0-2-12,0-0-1], [7:0-6-1,0-0-5]

LOADING (psf)	SPACING 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) -0.27 8-10 >949 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.60 8-10 >423 180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.41	Horz(CT) 0.07 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 77 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-4-0, 7=Mechanical
Max Horz 1=47(LC 12)
Max Uplift 1=-126(LC 12), 7=-124(LC 13)
Max Grav 1=1155(LC 1), 7=1155(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1810/218, 3-4=-1545/224, 4-5=-1468/216, 5-7=-1737/213
BOT CHORD 1-10=-145/1561, 8-10=-216/1933, 7-8=-127/1485
WEBS 3-10=-2/462, 4-10=-561/155, 4-8=-638/160, 5-8=-2/478

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 5-9-0, Exterior(2R) 5-9-0 to 9-11-15, Interior(1) 9-11-15 to 15-7-0, Exterior(2R) 15-7-0 to 19-9-15, Interior(1) 19-9-15 to 21-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) 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=126, 7=124.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



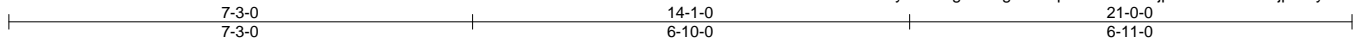
February 12, 2021

Job 2643945	Truss B04	Truss Type Hip	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773649
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:38 2021 Page 1

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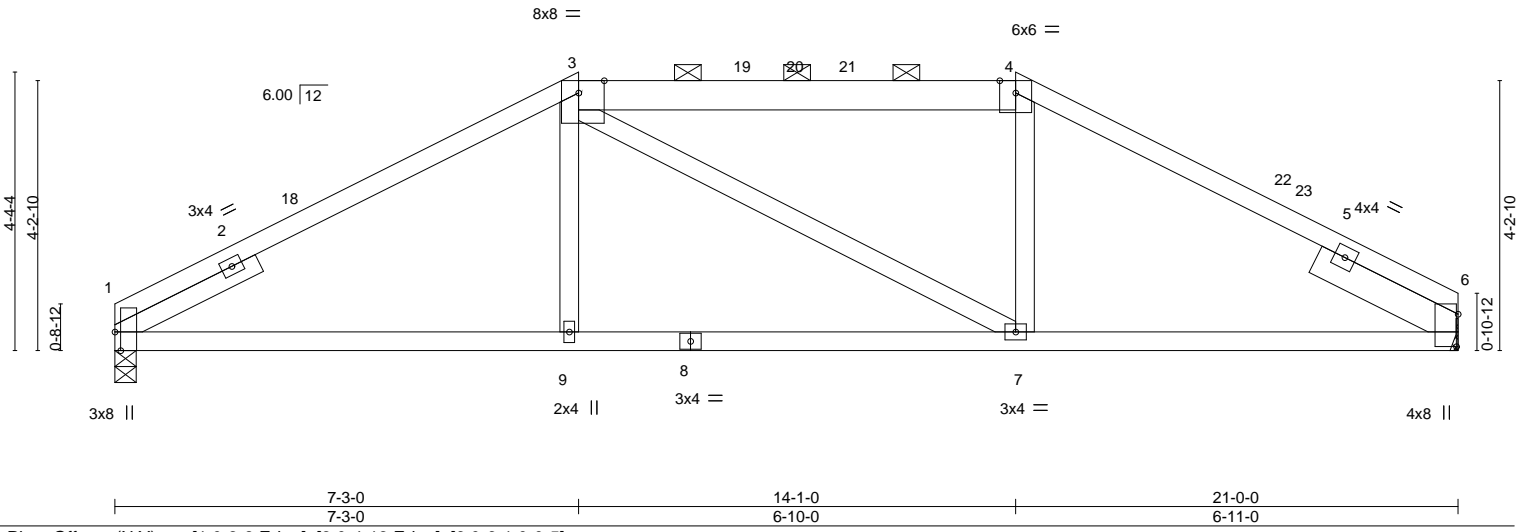


Plate Offsets (X,Y)--	[1:0-3-8,Edge], [3:0-4-13,Edge], [6:0-6-1,0-0-5]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.44	Vert(LL) -0.07 7-9 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.16 7-9 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.26	Horz(CT) 0.06 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 79 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-4: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (5-5-11 max.): 3-4.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 6=Mechanical
Max Horz 1=60(LC 12)
Max Uplift 1=-124(LC 12), 6=-122(LC 13)
Max Grav 1=1155(LC 1), 6=1155(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1674/232, 3-4=-1399/247, 4-6=-1659/228
BOT CHORD 1-9=-142/1462, 7-9=-144/1457, 6-7=-129/1405
WEBS 3-9=0/288, 4-7=0/285

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 7-3-0, Exterior(2R) 7-3-0 to 11-5-15, Interior(1) 11-5-15 to 14-1-0, Exterior(2R) 14-1-0 to 18-3-15, Interior(1) 18-3-15 to 21-0-0 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=124, 6=122.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

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

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

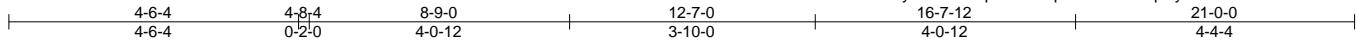


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss B05	Truss Type Hip	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773650
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:40 2021 Page 1

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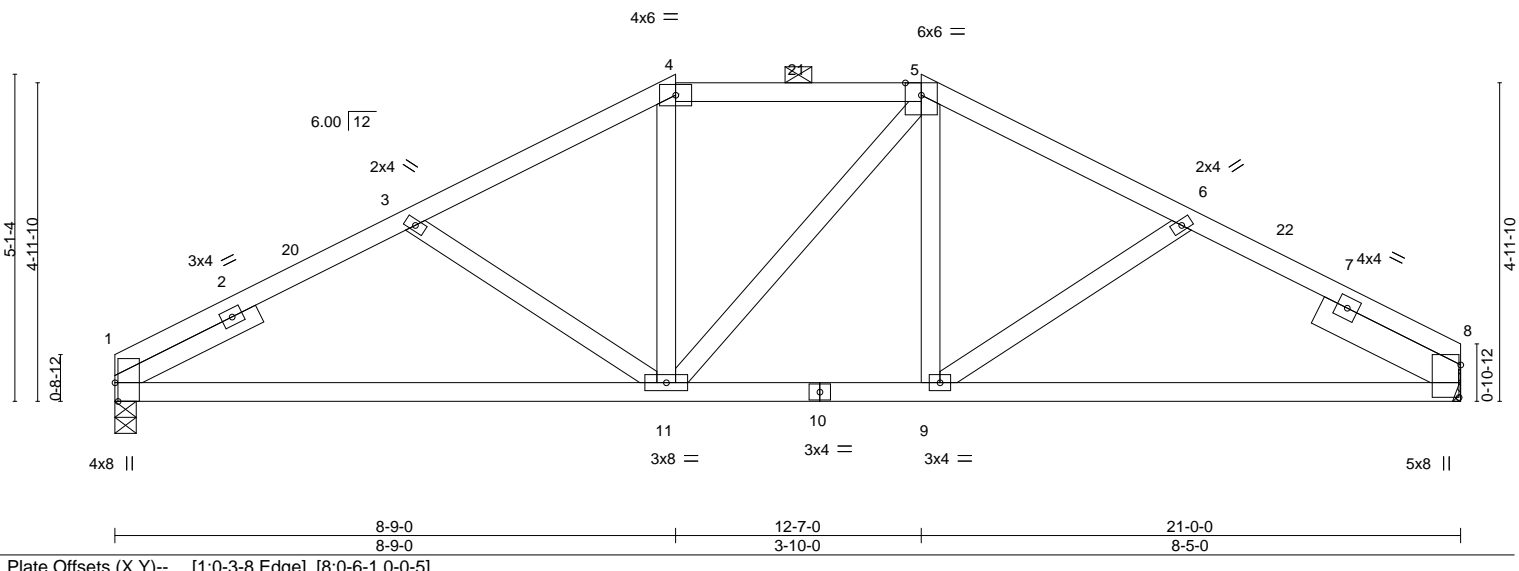


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [8:0-6-1,0-0-5]

LOADING (psf)	SPACING 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.35	Vert(LL) -0.10 11-14 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.60	Vert(CT) -0.21 11-14 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.13	Horz(CT) 0.05 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 85 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (5-0-14 max.): 4-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0	

REACTIONS. (size) 1=0-4-0, 8=Mechanical
 Max Horz 1=72(LC 12)
 Max Uplift 1=-122(LC 12), 8=-119(LC 13)
 Max Grav 1=1155(LC 1), 8=1155(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-1758/260, 3-4=-1510/231, 4-5=-1280/237, 5-6=-1466/228, 6-8=-1674/250
 BOT CHORD 1-11=-206/1529, 9-11=-99/1262, 8-9=-171/1432
 WEBS 4-11=-16/303, 5-9=-19/263, 3-11=-307/135

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 8-9-0, Exterior(2E) 8-9-0 to 12-7-0, Exterior(2R) 12-7-0 to 16-9-7, Interior(1) 16-9-7 to 21-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=122, 8=119.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

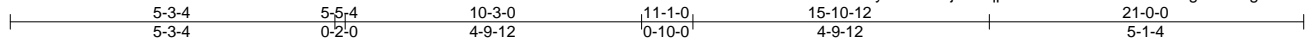
Job 2643945	Truss B06	Truss Type Hip	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773651
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:41 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-52jBsi1qp7C1433oeHeALSudYbEgVvBoEg1BNHzmExq

Job Reference (optional)



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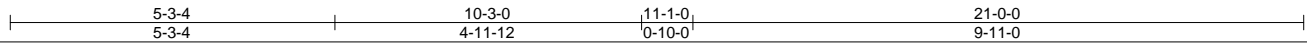
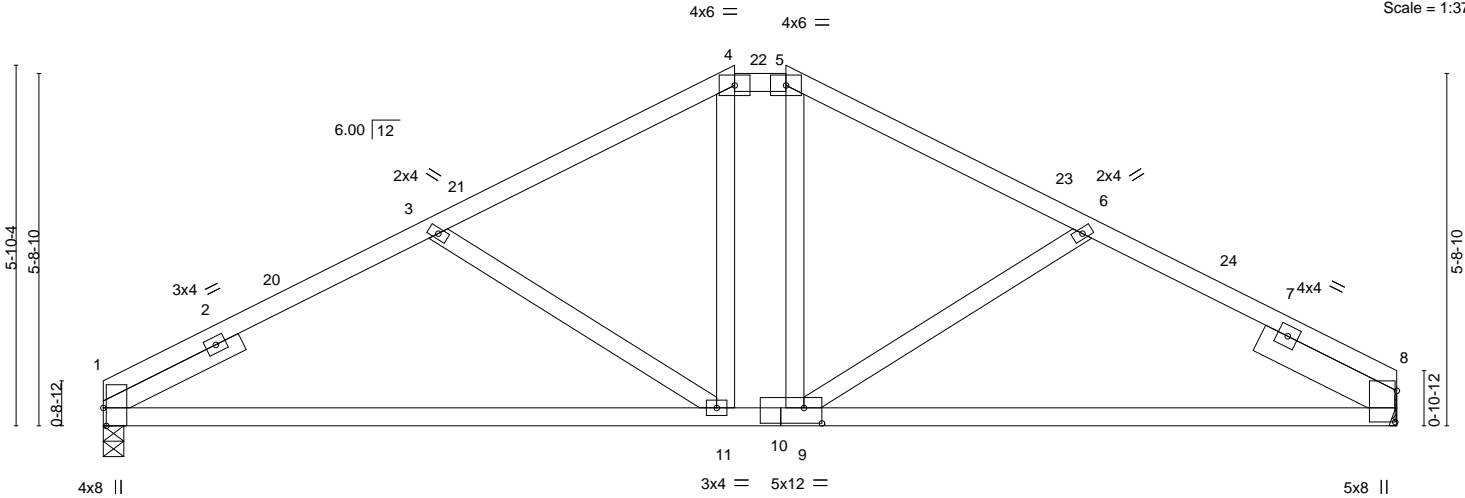


Plate Offsets (X, Y)--	[1:0-3-8,Edge], [8:0-6-1,0-0-5], [10:0-0-0,0-1-12], [10:0-3-8,0-3-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.37	Vert(LL) -0.16 11-14 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.72	Vert(CT) -0.34 11-14 >744 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.26	Horz(CT) 0.05 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 83 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (5-1-5 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-4-0, 8=Mechanical
Max Horz 1=84(LC 12)
Max Uplift 1=-119(LC 12), 8=-117(LC 13)
Max Grav 1=1155(LC 1), 8=1155(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1697/237, 3-4=-1387/204, 4-5=-1147/205, 5-6=-1375/203, 6-8=-1669/231
BOT CHORD 1-11=-207/1511, 9-11=-56/1147, 8-9=-147/1432
WEBS 4-11=-32/359, 5-9=-30/263, 6-9=-389/166, 3-11=-467/178

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 10-3-0, Exterior(2E) 10-3-0 to 11-1-0, Exterior(2R) 11-1-0 to 15-3-15, Interior(1) 15-3-15 to 21-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=119, 8=117.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



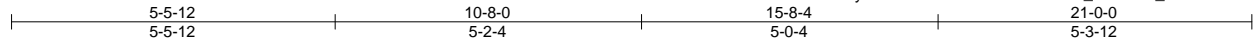
February 12, 2021

Job 2643945	Truss B07	Truss Type Common	Qty 4	Ply 1	summit/woodside ridge #36/MO 144773652
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:42 2021 Page 1

ID:wH4RYhEstNeUP2dXvOfi1syQY8e-ZEGZ322SaRKuiDe?C_9Pu1o4_ceEOMxTKnkjzmExp



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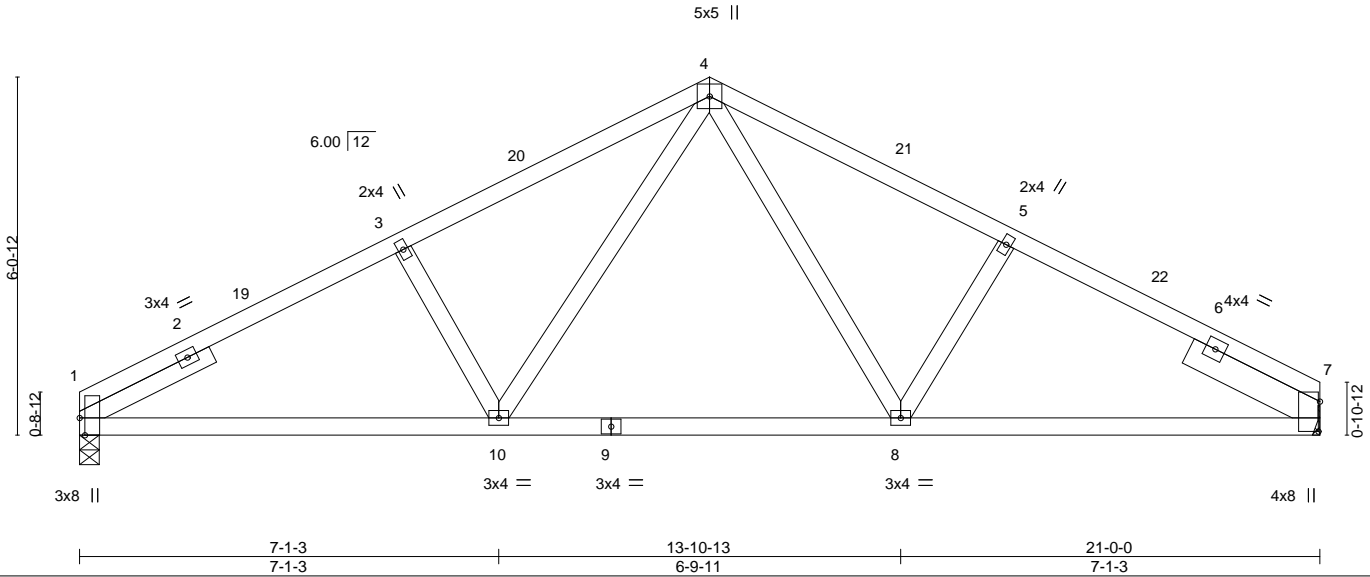


Plate Offsets (X, Y)--	[1:0-3-8,Edge], [7:0-6-1,0-0-5]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	-0.07	8-10	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.17	8-10	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.05	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 81 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x6 SPF No.2 2-6-0	

REACTIONS.	(size) 1=0-4-0, 7=Mechanical
	Max Horz 1=88(LC 12)
	Max Uplift 1=-118(LC 12), 7=-115(LC 13)
	Max Grav 1=1155(LC 1), 7=1155(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-3=-1764/283, 3-4=-1615/307, 4-5=-1533/294, 5-7=-1685/274
BOT CHORD	1-10=-201/1525, 8-10=-82/1074, 7-8=-178/1438
WEBS	3-10=-392/166, 4-10=-108/563, 4-8=-92/478, 5-8=-340/157

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 10-8-0, Exterior(2R) 10-8-0 to 13-8-0, Interior(1) 13-8-0 to 21-0-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=118, 7=115.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12, 2021

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 2643945	Truss C01	Truss Type HIP GIRDER	Qty 1	Ply 2	summit/woodside ridge #36/MO 144773653
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:44 2021 Page 1

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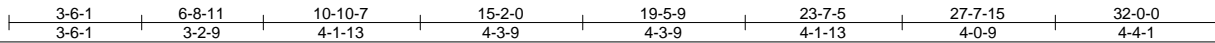
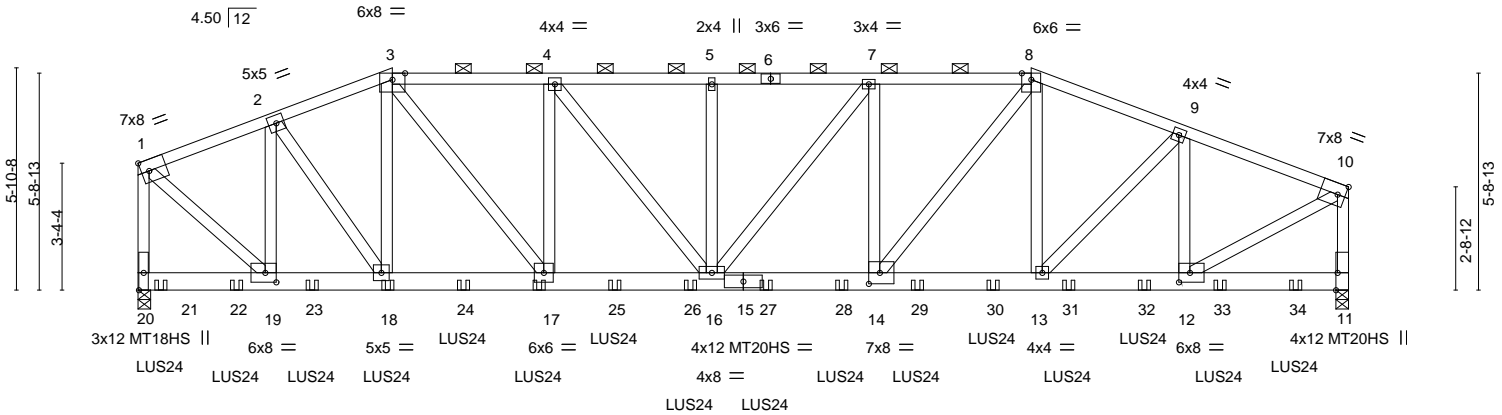


Plate Offsets (X,Y)-- [10:0-2-7,Edge], [11:0-5-8,Edge], [12:0-3-8,0-3-0], [14:0-3-8,0-3-8], [19:0-3-8,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.73	Vert(LL)	-0.18 14-16	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.40 14-16	>948	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	NO	WB 0.91	Horz(CT)	0.07 11	n/a	n/a	MT18HS	197/144
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 411 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-3-3 max.): 3-8.
BOT CHORD 2x6 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. (size) 20=0-4-0, 11=0-4-0
 Max Horz 20=85(LC 6)
 Max Uplift 20=1065(LC 4), 11=983(LC 5)
 Max Grav 20=7002(LC 1), 11=6968(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-5250/818, 2-3=-7105/1119, 3-4=-9337/1410, 4-5=-10507/1514, 5-7=-10507/1514, 7-8=-10150/1443, 8-9=-8657/1246, 9-10=-7111/1009, 1-20=-6300/982, 10-11=-6366/913
 BOT CHORD 18-19=-734/4864, 17-18=-995/6690, 16-17=-1342/9334, 14-16=-1375/10146, 13-14=-1120/8091, 12-13=-947/6596
 WEBS 2-19=-3313/524, 2-18=-441/3104, 3-18=-1317/133, 3-17=-571/4392, 4-17=-2031/264, 4-16=-201/1920, 5-16=-378/103, 7-16=-176/645, 7-14=-1046/236, 8-14=-439/3449, 9-13=-262/2207, 9-12=-2318/345, 1-19=-996/6457, 10-12=-1046/7457

- NOTES-**
- 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=1065, 11=983.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 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 0-7-4 from the left end to 30-7-4 to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.




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Continued on page 2

LOAD CASE(S) Standard

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss C01	Truss Type HIP GIRDER	Qty 1	Ply 2	summit/woodside ridge #36/MO I44773653 Job Reference (optional)
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:44 2021 Page 2
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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-90, 3-8=-90, 8-10=-90, 11-20=-20

Concentrated Loads (lb)

Vert: 18=-609(B) 17=-609(B) 21=-615(B) 22=-609(B) 23=-609(B) 24=-609(B) 25=-609(B) 26=-724(B) 27=-724(B) 28=-724(B) 29=-724(B) 30=-724(B) 31=-655(B)
32=-645(B) 33=-645(B) 34=-645(B)

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss C02	Truss Type Roof Special	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773654
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:45 2021 Page 1

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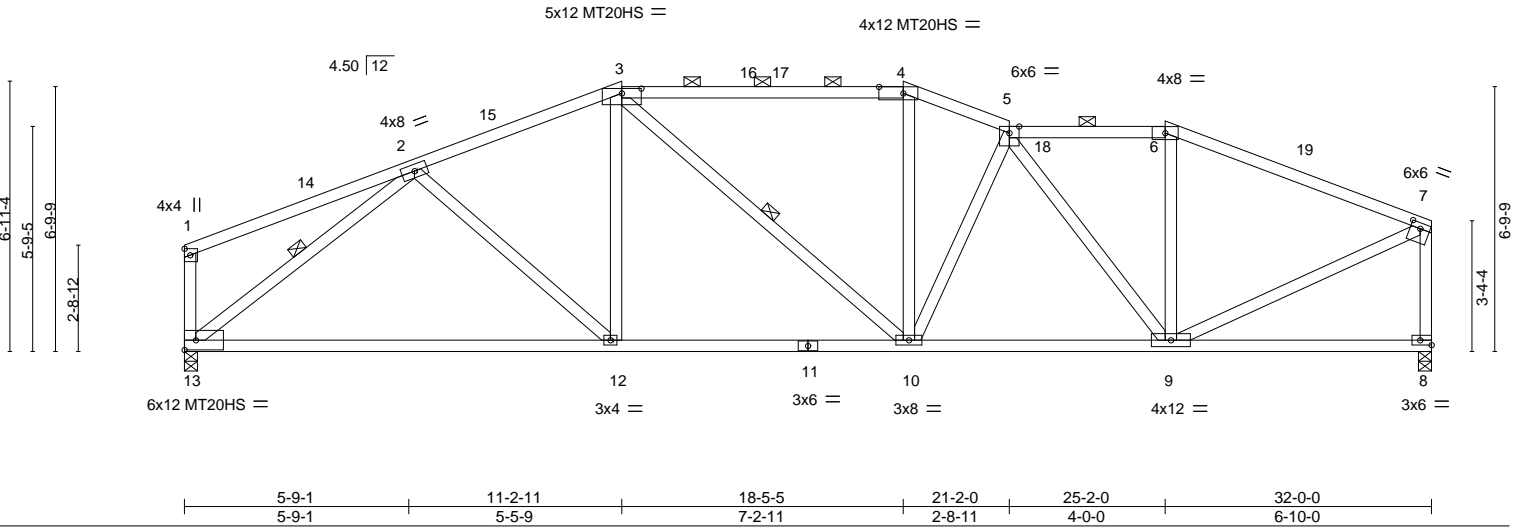


Plate Offsets (X, Y)--	[3:0-6-0,0-1-8], [4:0-7-8,0-2-0], [7:0-3-0,0-1-12], [8:Edge,0-1-8]
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LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.85	Vert(LL) -0.34 12-13 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.94	Vert(CT) -0.70 12-13 >545 180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.73	Horz(CT) 0.08 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS			
				Weight: 150 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 3-4: 2x4 SPF 1650F 1.5E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-4, 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-10, 2-13

REACTIONS. (size) 8=0-4-0, 13=0-4-0
 Max Horz 13=78(LC 11)
 Max Uplift 8=-220(LC 9), 13=-198(LC 8)
 Max Grav 8=1744(LC 1), 13=1744(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2183/311, 3-4=-2105/339, 4-5=-2255/345, 5-6=-1691/271, 6-7=-1904/253, 1-13=-296/66, 7-8=-1678/241
 BOT CHORD 12-13=-298/1789, 10-12=-264/1977, 9-10=-308/2220
 WEBS 2-12=0/407, 3-10=-85/323, 4-10=-2/333, 5-10=-283/117, 7-9=-212/1778, 5-9=-884/127, 2-13=-2137/287

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-4-2, Interior(1) 3-4-2 to 11-2-11, Exterior(2R) 11-2-11 to 14-5-1, Interior(1) 14-5-1 to 18-5-5, Exterior(2E) 18-5-5 to 21-2-0, Interior(1) 21-2-0 to 25-2-0, Exterior(2R) 25-2-0 to 28-4-6, Interior(1) 28-4-6 to 31-10-4 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
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=220, 13=198.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



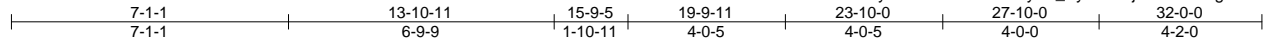
February 12, 2021

Job 2643945	Truss C03	Truss Type Roof Special	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773655
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:47 2021 Page 1

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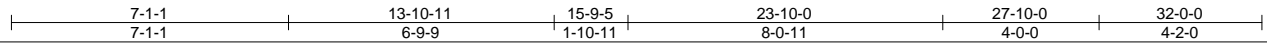
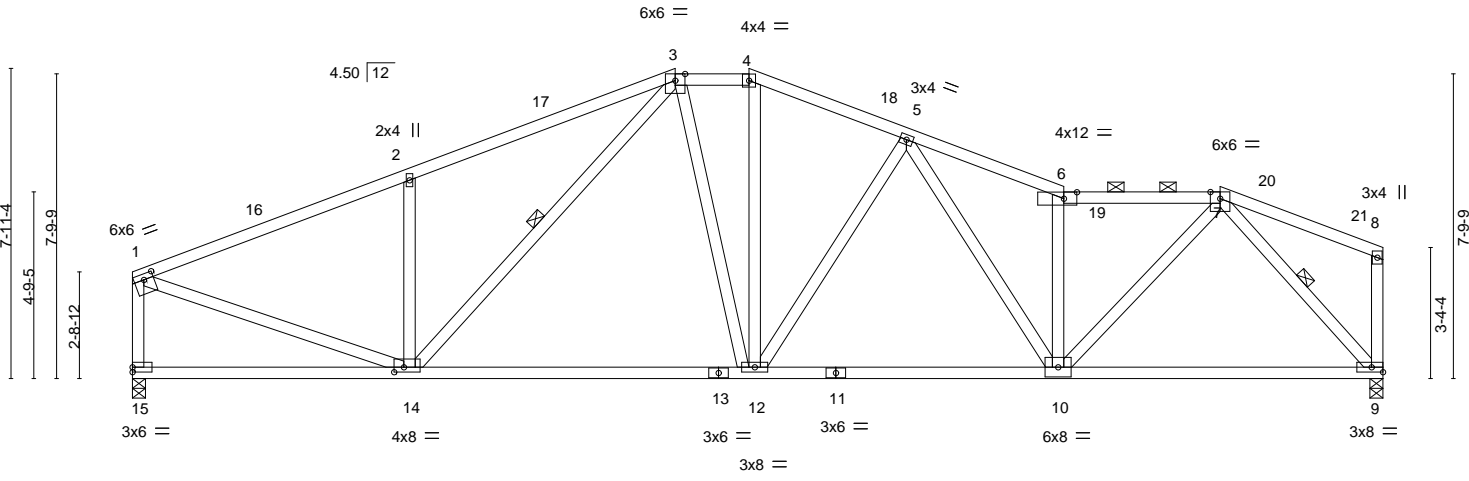


Plate Offsets (X,Y)-- [1:0-3-0,0-1-12], [6:0-4-0,0-2-0], [14:0-3-0,0-1-8]

LOADING (psf)	SPACING - 2-0-0	CSI	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.66	Vert(LL) -0.13 12-14 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.68	Vert(CT) -0.34 12-14 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.53	Horz(CT) 0.07 9 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS			
				Weight: 157 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-6-9 max.): 3-4, 6-7.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 7-9, 3-14

REACTIONS. (size) 15=0-4-0, 9=0-4-0
 Max Horz 15=69(LC 9)
 Max Uplift 15=180(LC 8), 9=203(LC 9)
 Max Grav 15=1744(LC 1), 9=1744(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-2193/261, 2-3=-2206/347, 3-4=-1850/304, 4-5=-2044/312, 5-6=-2558/341, 6-7=-2366/294, 1-15=-1679/206
 BOT CHORD 12-14=-234/1814, 10-12=-273/2144, 9-10=-205/1353
 WEBS 2-14=-673/228, 3-12=-88/346, 4-12=-71/485, 5-12=-572/162, 5-10=-65/397, 6-10=-1243/204, 7-10=-134/1504, 1-14=-185/1974, 7-9=-1964/278, 3-14=-143/360

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-4-2, Interior(1) 3-4-2 to 13-10-11, Exterior(2E) 13-10-11 to 15-9-5, Exterior(2R) 15-9-5 to 18-11-12, Interior(1) 18-11-12 to 27-10-0, Exterior(2R) 27-10-0 to 31-0-6, Interior(1) 31-0-6 to 31-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=180, 9=203.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

Job 2643945	Truss C04	Truss Type ROOF SPECIAL	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773656
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:48 2021 Page 1

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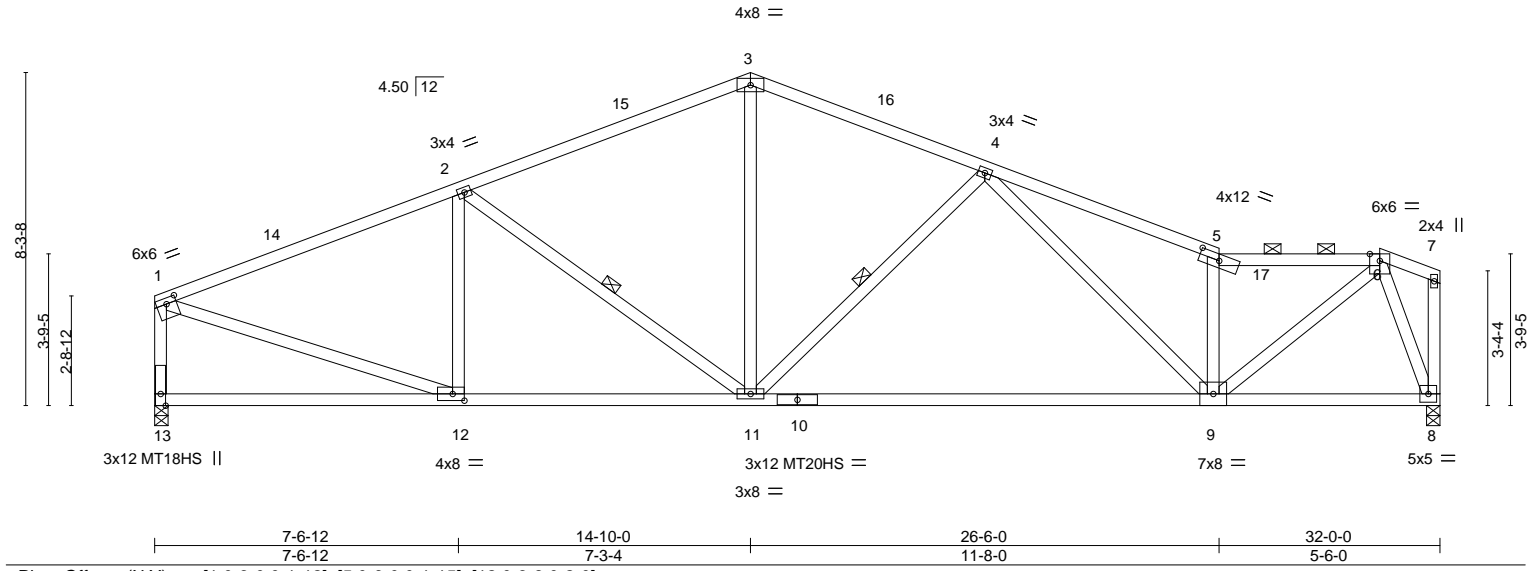


Plate Offsets (X,Y)--	[1:0-3-0,0-1-12], [5:0-6-0,0-1-15], [12:0-3-8,0-2-0]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.74	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.78	Vert(LL) -0.37 9-11 >999 240	MT20HS	148/108
BCLL 0.0	Lumber DOL 1.15	WB 0.54	Vert(CT) -0.81 9-11 >470 180	MT18HS	197/144
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.07 8 n/a n/a	Weight: 146 lb	FT = 20%
	Code IRC2018/TPI2014				

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-7-11 max.): 5-6.
BOT CHORD 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 2-11, 4-11

REACTIONS. (size) 13=0-4-0, 8=0-4-0
 Max Horz 13=65(LC 9)
 Max Uplift 13=-174(LC 8), 8=-197(LC 9)
 Max Grav 13=1744(LC 1), 8=1744(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-2223/242, 2-3=-2019/270, 3-4=-1988/273, 4-5=-2521/283, 5-6=-2326/230, 1-13=-1664/202
 BOT CHORD 11-12=-255/1983, 9-11=-262/2199, 8-9=-107/654
 WEBS 2-12=-501/116, 2-11=-394/158, 3-11=-63/787, 4-11=-670/199, 5-9=-1309/216, 6-9=-200/2200, 1-12=-178/1961, 6-8=-1805/227

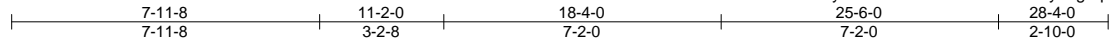
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 14-10-0, Exterior(2R) 14-10-0 to 17-10-0, Interior(1) 17-10-0 to 30-6-0, Exterior(2E) 30-6-0 to 31-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=174, 8=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.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

Job 2643945	Truss C05	Truss Type ROOF SPECIAL	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773657
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:49 2021 Page 1
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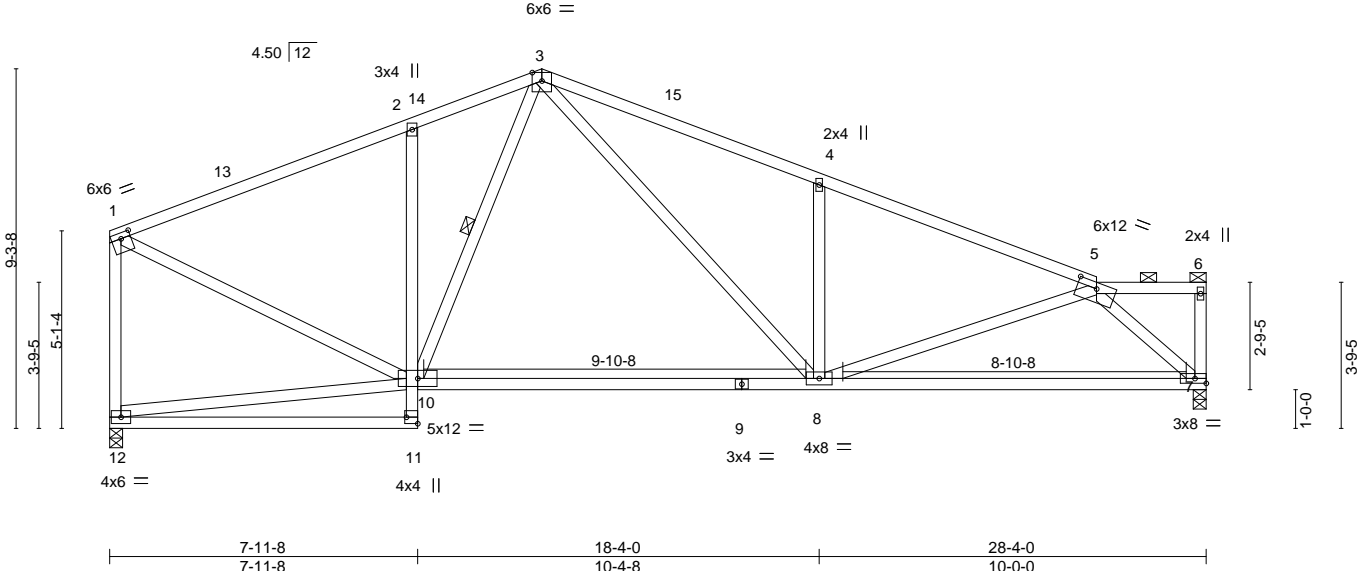


Plate Offsets (X, Y)--	[1:0-3-0,0-1-12], [5:0-6-0,0-1-15], [11:Edge,0-3-8]
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LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.89	Vert(LL) -0.24 8-10 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.90	Vert(CT) -0.54 8-10 >625 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.51	Horz(CT) 0.06 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 140 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-10

REACTIONS. (size) 7=0-4-0, 12=0-4-0
 Max Horz 12=-127(LC 10)
 Max Uplift 7=-180(LC 13), 12=-155(LC 8)
 Max Grav 7=1542(LC 1), 12=1542(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1559/233, 2-3=-1493/292, 3-4=-2249/358, 4-5=-2228/247, 1-12=-1478/191
 BOT CHORD 2-10=-589/200, 8-10=-150/1299, 7-8=-220/1514
 WEBS 3-10=-117/291, 3-8=-207/1071, 4-8=-711/240, 5-8=-10/500, 5-7=-2024/307, 1-10=-150/1451

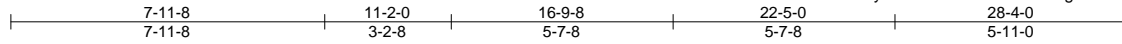
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 28-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=180, 12=155.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

Job 2643945	Truss C06	Truss Type ROOF SPECIAL	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773658
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:50 2021 Page 1
 ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Knbln8TiuKlfSGXgflICLM1HDHb6wy7Iaj9BGzmExh



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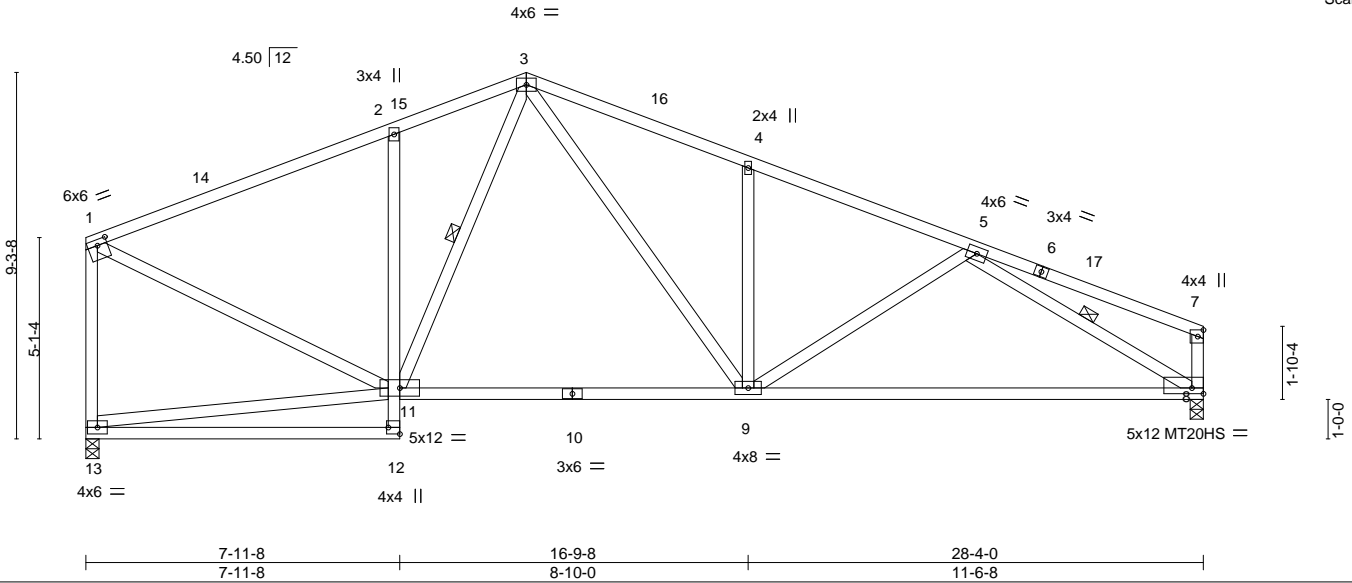


Plate Offsets (X, Y)--	[1:0-3-0,0-1-12], [8:Edge,0-1-12], [12:Edge,0-3-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.88	Vert(LL)	-0.33	8-9	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.79	Vert(CT)	-0.69	8-9	>487	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.48	Horz(CT)	0.07	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 142 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, excepting end verticals.
BOT CHORD 2x4 SPF No.2 *Except* 8-10: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-11, 5-8

REACTIONS. (size) 13=0-4-0, 8=0-4-0
 Max Horz 13=-133(LC 10)
 Max Uplift 13=-156(LC 8), 8=-175(LC 13)
 Max Grav 13=1542(LC 1), 8=1542(LC 1)

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

TOP CHORD	1-2=-1553/236, 2-3=-1494/297, 3-4=-2077/329, 4-5=-2067/258, 5-7=-308/51, 1-13=-1472/194, 7-8=-323/69
BOT CHORD	2-11=-599/203, 9-11=-102/1294, 8-9=-229/1895
WEBS	4-9=-542/178, 3-9=-188/1004, 3-11=-123/272, 5-8=-2019/274, 1-11=-154/1446

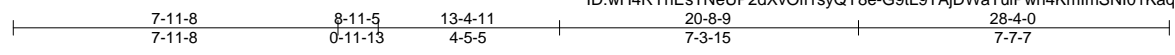
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 28-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=156, 8=175.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12, 2021

Job 2643945	Truss C07	Truss Type HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773659
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:52 2021 Page 1



Scale = 1:56.5

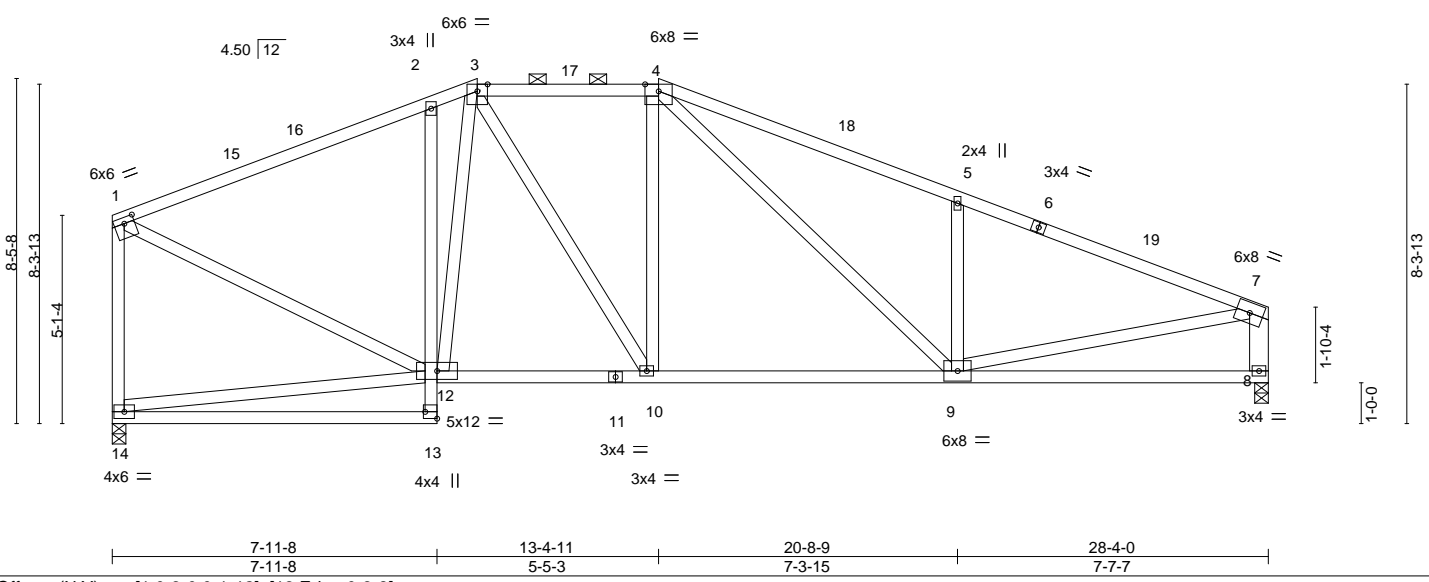


Plate Offsets (X,Y)--	[1:0-3-0,0-1-12], [13:Edge,0-3-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.85	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.52	Vert(LL) -0.11 13-14 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.45	Vert(CT) -0.22 13-14 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.05 8 n/a n/a		
	Code IRC2018/TPI2014			Weight: 150 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (4-5-0 max.): 3-4.
WEBS 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied.
7-8: 2x6 SPF No.2	

REACTIONS.	(size) 14=0-4-0, 8=0-4-0
	Max Horz 14=141(LC 10)
	Max Uplift 14=176(LC 8), 8=180(LC 9)
	Max Grav 14=1538(LC 1), 8=1538(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1543/241, 2-3=-1488/293, 3-4=-1548/275, 4-5=-2263/382, 5-7=-2270/282, 1-14=-1460/197, 7-8=-1460/208
BOT CHORD	2-12=-618/230, 10-12=-118/1312, 9-10=-128/1553
WEBS	3-10=-107/533, 4-10=-313/147, 4-9=-190/677, 5-9=-698/237, 7-9=-188/1844, 1-12=-157/1441

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 8-11-5, Exterior(2E) 8-11-5 to 13-4-11, Exterior(2R) 13-4-11 to 17-7-9, Interior(1) 17-7-9 to 28-1-4 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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=176, 8=180.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

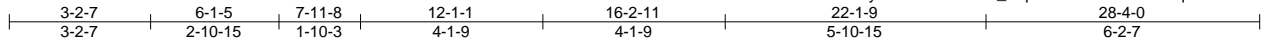


February 12, 2021

Job 2643945	Truss C08	Truss Type HIP GIRDER	Qty 1	Ply 2	summit/woodside ridge #36/MO 144773660
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:54 2021 Page 1

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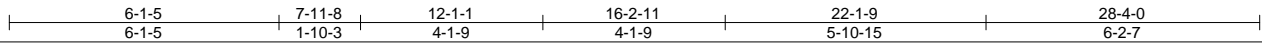
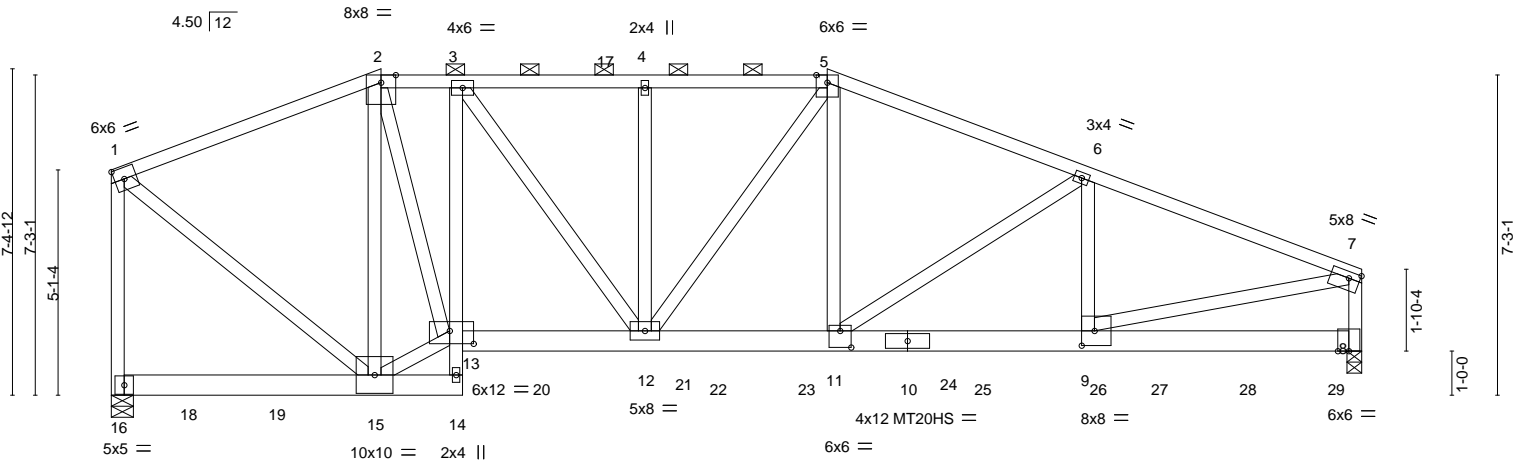


Plate Offsets (X,Y)--	[7:0-3-0,0-1-12], [9:0-3-8,0-4-0], [11:0-3-0,0-4-8], [13:0-6-8,0-3-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65	Vert(LL)	-0.15 9-11	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.54	Vert(CT)	-0.32 9-11	>999	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	NO	WB 0.97	Horz(CT)	0.09 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 338 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 5-7: 2x4 SPF 1650F 1.5E	TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-2-10 max.): 2-5.
BOT CHORD 2x6 SPF 2100F 1.8E *Except* 14-16: 2x6 SPF No.2, 3-14: 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. (size) 8=0-4-0, 16=0-6-0
 Max Horz 16=148(LC 6)
 Max Uplift 8=982(LC 5), 16=952(LC 4)
 Max Grav 8=6399(LC 1), 16=6147(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-4814/800, 2-3=-5967/1002, 3-4=-7446/1241, 4-5=-7449/1243, 5-6=-7997/1321,
 6-7=-8766/1377, 1-16=-5463/872, 7-8=-5241/837
 BOT CHORD 14-15=-52/326, 3-13=-2364/408, 12-13=-881/6014, 11-12=-1125/7368, 9-11=-1264/8121,
 8-9=-85/446
 WEBS 1-15=-877/5654, 2-15=-3731/562, 13-15=-680/4767, 2-13=-810/5290, 5-11=-389/2275,
 6-11=-850/184, 6-9=-328/376, 7-9=-1215/7914, 4-12=-522/130, 5-12=-24/303,
 3-12=-418/2466

- NOTES-**
- 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc, 2x4 - 1 row at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 8, 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=982, 16=952.
 - This truss 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 12, 2021

On the ground application representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss C08	Truss Type HIP GIRDER	Qty 1	Ply 2	summit/woodside ridge #36/MO I44773660 Job Reference (optional)
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:54 2021 Page 2

ID:wH4RYhEstNeUP2dXvOfi1syQY8e-CY?6a8B_I7qB83ZlvVMENBXmuqiT2cKIDChNK1zmExd

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 703 lb down and 113 lb up at 1-8-12, 703 lb down and 128 lb up at 3-8-12, 703 lb down and 162 lb up at 5-8-12, 712 lb down and 103 lb up at 7-9-12, 671 lb down and 116 lb up at 9-8-12, 671 lb down and 116 lb up at 11-8-12, 671 lb down and 116 lb up at 13-8-12, 671 lb down and 116 lb up at 15-8-12, 671 lb down and 169 lb up at 17-8-12, 671 lb down and 134 lb up at 19-8-12, 652 lb down and 103 lb up at 21-8-12, 652 lb down and 105 lb up at 23-8-12, and 652 lb down and 111 lb up at 25-8-12, and 658 lb down and 110 lb up at 27-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-90, 2-5=-90, 5-7=-90, 14-16=-20, 8-13=-20

Concentrated Loads (lb)

Vert: 14=-712(B) 15=-703(B) 18=-703(B) 19=-703(B) 20=-671(B) 21=-671(B) 22=-671(B) 23=-671(B) 24=-671(B) 25=-671(B) 26=-652(B) 27=-652(B) 28=-652(B) 29=-658(B)

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss D01	Truss Type HALF HIP GIRDER	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773661
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:55 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-gkZUoUCcWRy2ID8UTDuTvO3zYE02nCwsSsQwsTzmExc

Job Reference (optional)



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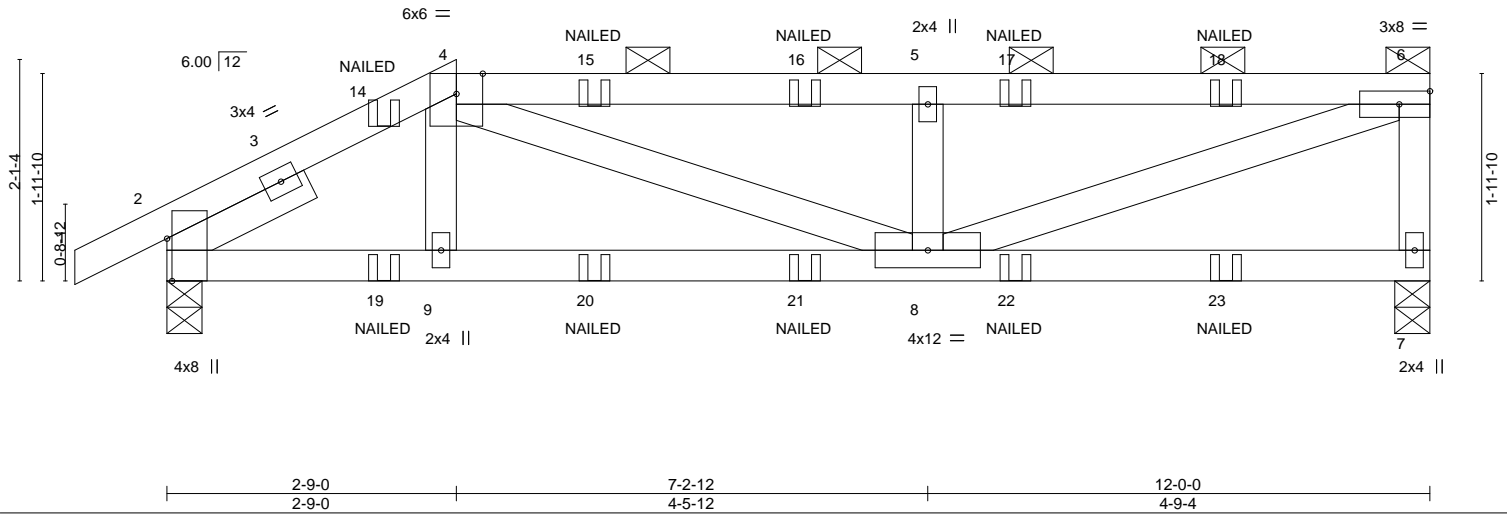


Plate Offsets (X, Y)--	[2:0-4-13,Edge]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.53	Vert(LL)	-0.05	8-9	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.65	Vert(CT)	-0.11	8-9	>999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.44	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 46 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-4 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-14 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-4-0, 2=0-4-0
Max Horz 2=65(LC 7)
Max Uplift 7=-136(LC 5), 2=-146(LC 8)
Max Grav 7=908(LC 1), 2=1015(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1386/205, 4-5=-1764/265, 5-6=-1761/264, 6-7=-830/155
BOT CHORD 2-9=-218/1205, 8-9=-220/1194
WEBS 4-8=-88/629, 5-8=-631/186, 6-8=-272/1780

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=136, 2=146.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-6=-90, 7-10=-20
Concentrated Loads (lb)
Vert: 14=-5(B) 15=-57(B) 16=-57(B) 17=-57(B) 18=-57(B) 19=-144(B) 20=-41(B) 21=-41(B) 22=-41(B) 23=-41(B)



February 12, 2021

Job 2643945	Truss D02	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773662
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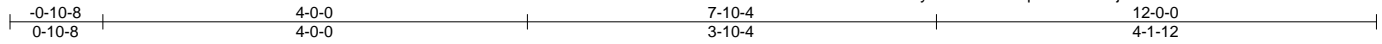
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

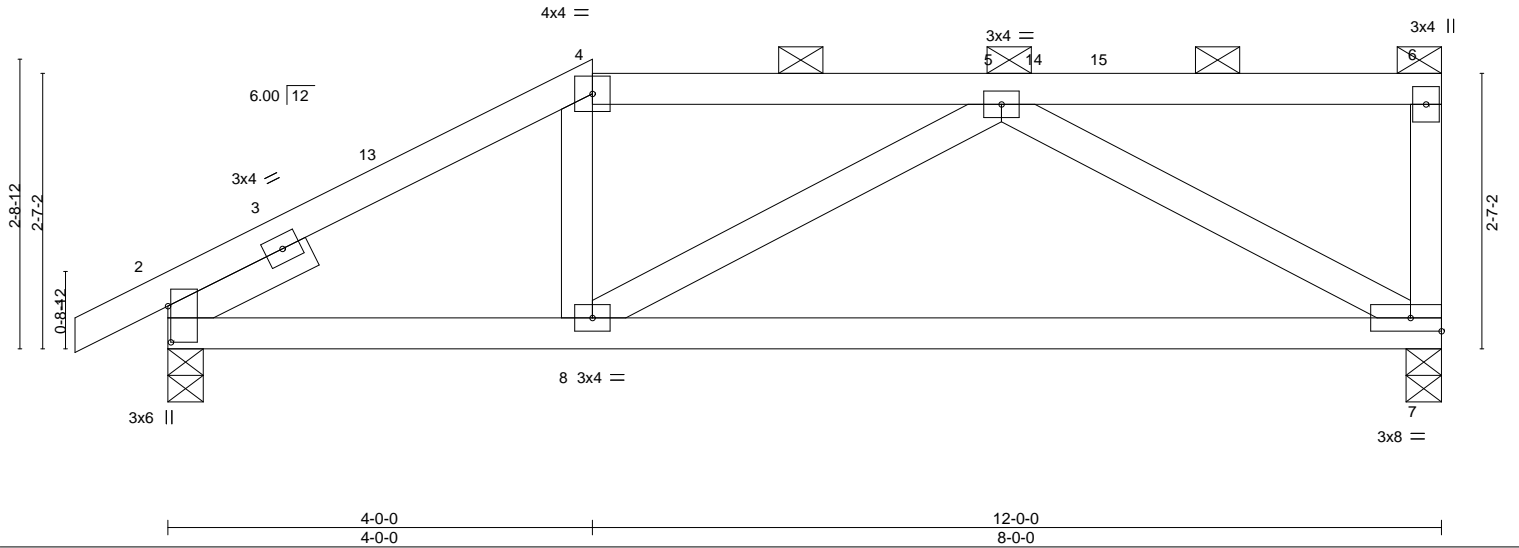
8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:56 2021 Page 1

ID:wH4RYhEstNeUP2dXvOfi1syQY8e-8x7s?qDEHk5vNNjh0wPiSccC0ePCWh6?hWATPwzmExb

Job Reference (optional)



Scale = 1:21.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	-0.10	7-8	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.22	7-8	>651		
BCLL 0.0	Rep Stress Incr	YES	WB 0.31	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 46 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 1-6-0

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

REACTIONS. (size) 2=0-4-0, 7=0-4-0
 Max Horz 2=88(LC 11)
 Max Uplift 2=-68(LC 12), 7=-95(LC 9)
 Max Grav 2=734(LC 1), 7=649(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-922/181, 4-5=-769/188
 BOT CHORD 2-8=-205/774, 7-8=-212/766
 WEBS 5-7=-810/221

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-0, Exterior(2R) 4-0-0 to 8-2-15, Interior(1) 8-2-15 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

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

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

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss D03	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO	144773663
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:57 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-d7gEDADs22Dm?WItaewx?p9H31nVF3p9vAv1xMzmExa

Job Reference (optional)

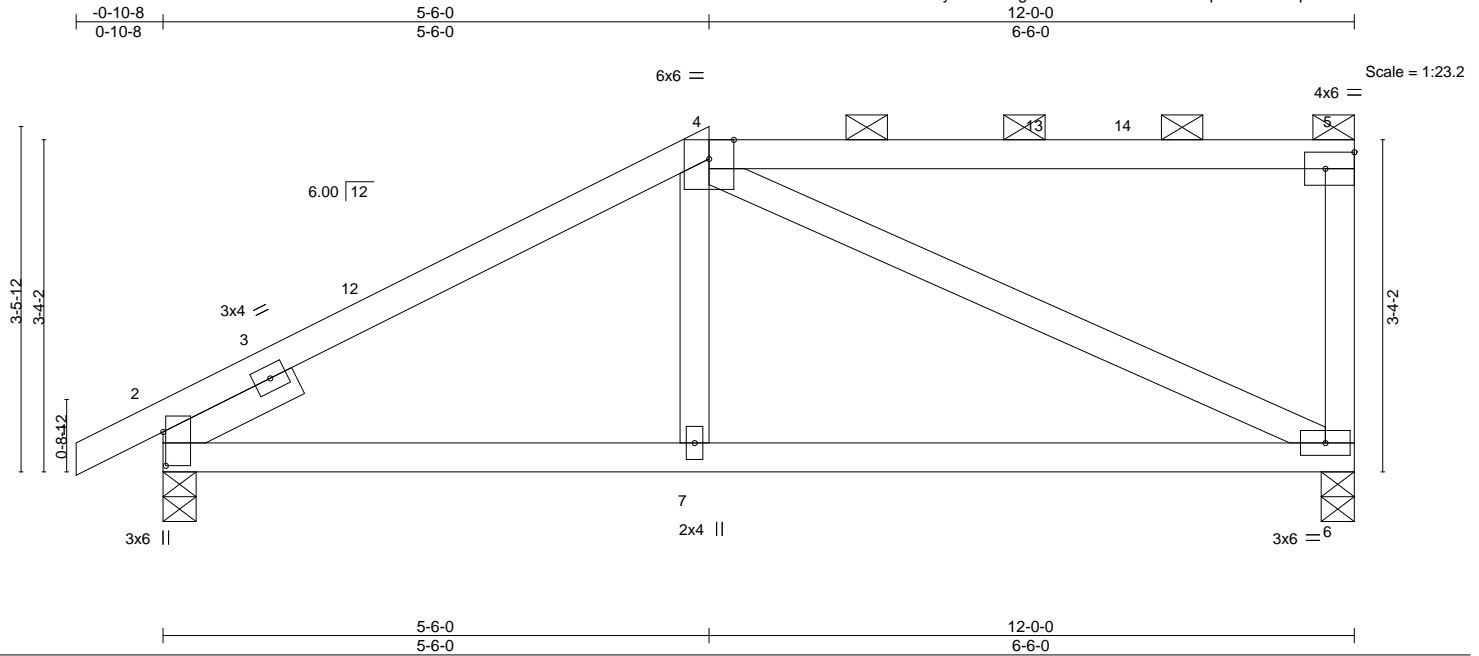


Plate Offsets (X, Y)--	[2:0-4-1,0-0-5], [5:Edge,0-2-0]				
LOADING (psf)	SPACING 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.65	Vert(LL) -0.05 6-7 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.33	Vert(CT) -0.09 6-7 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.60	Horz(CT) 0.01 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 45 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	

REACTIONS. (size) 2=0-4-0, 6=0-4-0
 Max Horz 2=116(LC 11)
 Max Uplift 2=-79(LC 12), 6=-92(LC 9)
 Max Grav 2=734(LC 1), 6=649(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-851/177, 5-6=-292/97
 BOT CHORD 2-7=-232/701, 6-7=-234/695
 WEBS 4-6=-680/210

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 5-6-0, Exterior(2R) 5-6-0 to 9-8-15, Interior(1) 9-8-15 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) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

Job 2643945	Truss D04	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773664
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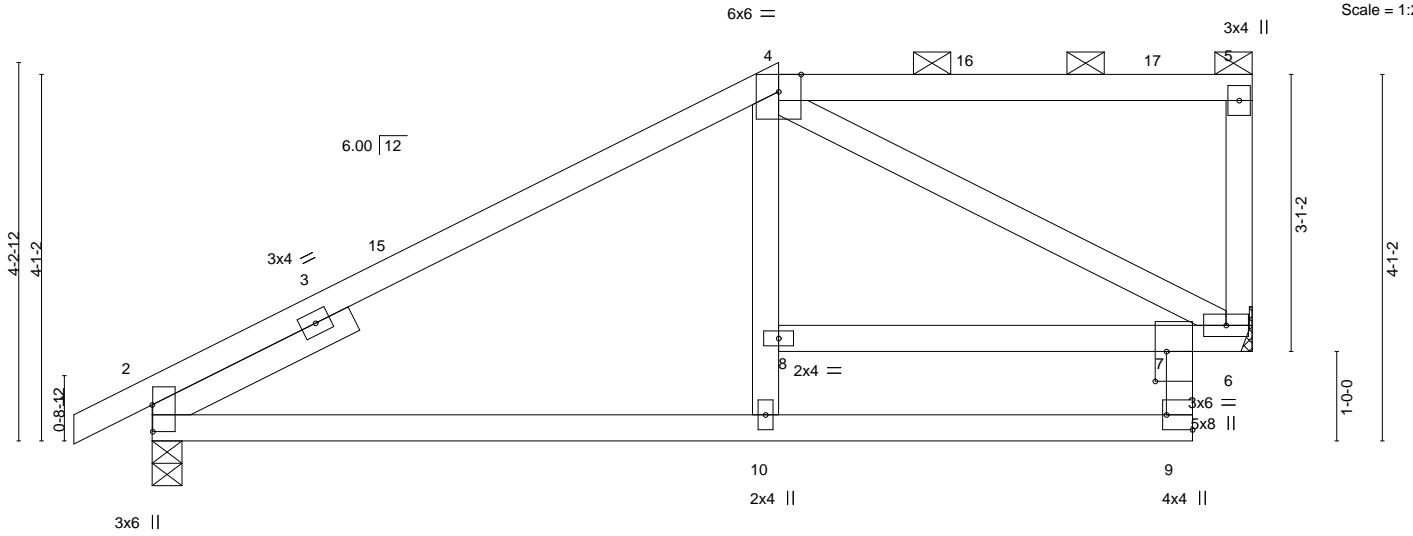
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:58 2021 Page 1

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Job Reference (optional)



Scale = 1:25.7

Plate Offsets (X, Y)--	[2:0-3-9,0-0-1], [7:0-4-0,0-1-8], [9:Edge,0-3-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.54	Vert(LL)	-0.06 10-13	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.46	Vert(CT)	-0.16 10-13	>936	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.46	Horz(CT)	0.06 6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						

Weight: 53 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 2-6-0	

REACTIONS. (size) 6=Mechanical, 2=0-4-0
 Max Horz 2=125(LC 9)
 Max Uplift 6=91(LC 9), 2=87(LC 12)
 Max Grav 6=665(LC 1), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-692/150
 BOT CHORD 2-10=-200/588, 9-10=-122/393, 7-8=-108/259, 6-7=-230/652
 WEBS 4-6=-732/232

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 7-0-0, Exterior(2R) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 12-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

Job 2643945	Truss D05	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773665
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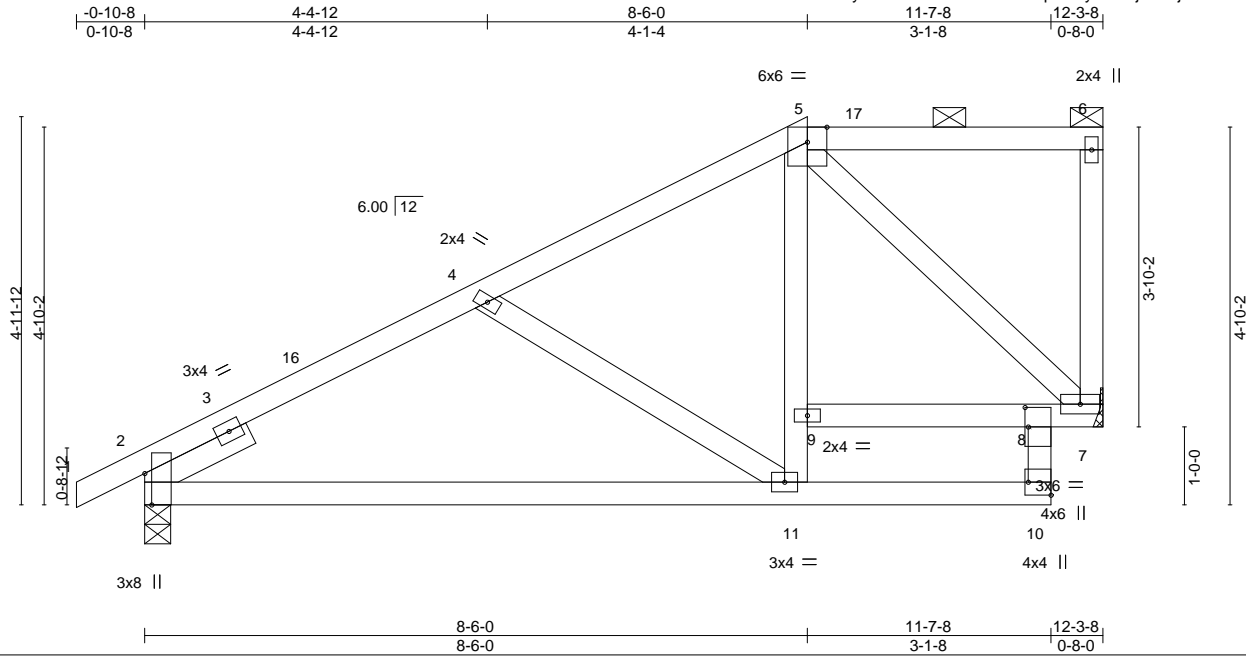
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:08:59 2021 Page 1

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Job Reference (optional)



Scale = 1:29.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.45	Vert(LL) -0.09 11-14 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.30	Vert(CT) -0.19 11-14 >781 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.04 7 n/a n/a		
	Code IRC2018/TPI2014			Weight: 56 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	

REACTIONS. (size) 7=Mechanical, 2=0-4-0
 Max Horz 2=153(LC 9)
 Max Uplift 7=87(LC 9), 2=91(LC 12)
 Max Grav 7=665(LC 1), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-829/171, 4-5=-537/127
 BOT CHORD 2-11=-296/736, 10-11=-115/306, 7-8=-163/423
 WEBS 4-11=-389/170, 9-11=-15/352, 5-9=-15/325, 5-7=-586/175

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



February 12, 2021

Job 2643945	Truss D06	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773666
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:00 2021 Page 1

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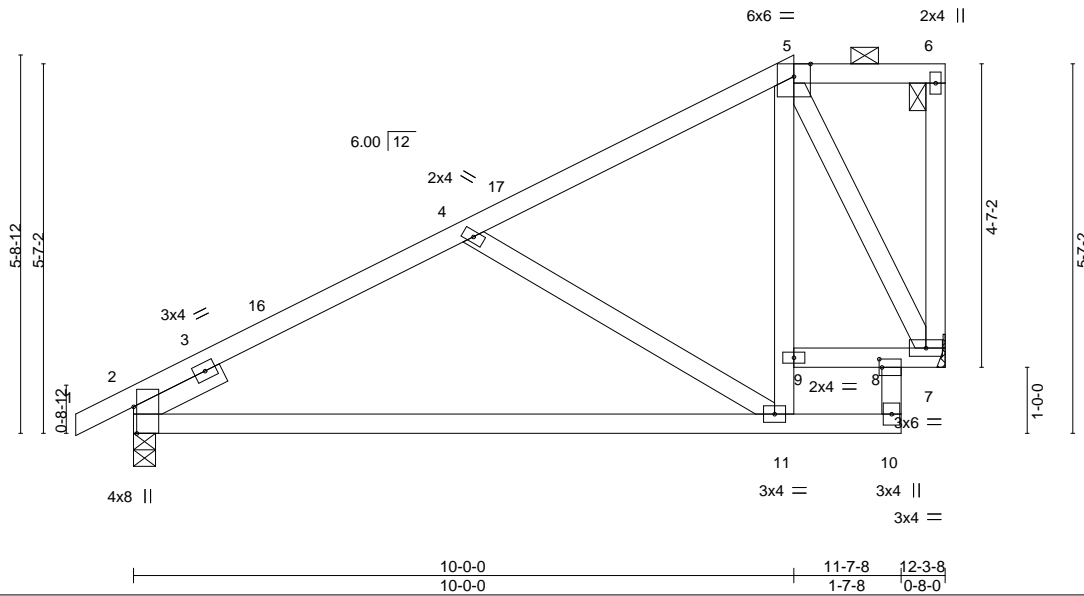


Plate Offsets (X,Y)--	[2:0-4-13,Edge], [8:0-0-8,0-1-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.16 11-14	>939	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.32 11-14	>456	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.28	Horz(CT)	0.02 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 57 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	

REACTIONS. (size) 7=Mechanical, 2=0-4-0
 Max Horz 2=181(LC 9)
 Max Uplift 7=-90(LC 12), 2=-90(LC 12)
 Max Grav 7=665(LC 1), 2=750(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-798/163, 4-5=-408/103
 BOT CHORD 2-11=-285/705, 7-8=-118/268
 WEBS 4-11=-509/199, 9-11=-12/499, 5-9=-34/427, 5-7=-605/165

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



February 12, 2021

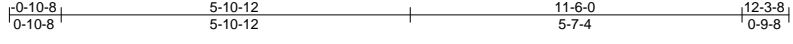
Job 2643945	Truss D07	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773667
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:01 2021 Page 1

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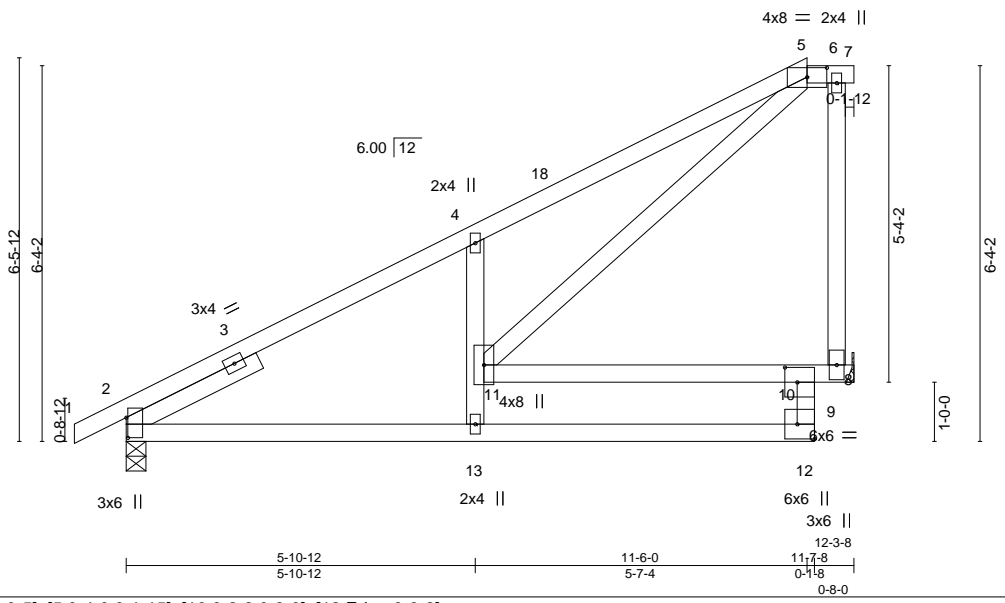


Plate Offsets (X,Y)--	[2:0-4-1,0-0-5], [5:0-4-0,0-1-15], [10:0-2-8,0-3-0], [12:Edge,0-3-8]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.77	Vert(LL)	-0.08	13-16	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.64	Vert(CT)	-0.16	13-16	>895		
BCLL 0.0	Rep Stress Incr	YES	WB 0.51	Horz(CT)	0.07	9	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 58 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 5-7.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x4 SPF No.2 2-6-0	

REACTIONS. (size) 2=0-4-0, 9=Mechanical
 Max Horz 2=221(LC 12)
 Max Uplift 2=-59(LC 12), 9=-144(LC 12)
 Max Grav 2=741(LC 1), 9=675(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-642/64, 4-5=-1003/208
 BOT CHORD 2-13=-189/667, 12-13=-113/443, 10-11=-443/113
 WEBS 4-11=-675/284, 5-11=-299/1030, 6-9=-527/192

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 11-6-0, Exterior(2E) 11-6-0 to 12-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 9=144.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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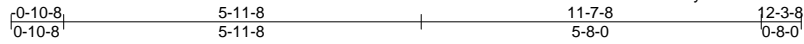
Job 2643945	Truss D08	Truss Type JACK-CLOSED	Qty 5	Ply 1	summit/woodside ridge #36/MO 144773668
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:02 2021 Page 1

ID:WH4RYhEsTNeUP2dXvOfi1syQY8e-z4U7GtH?tar251ArNBW6its9P2SivJdu3RdocZmExV



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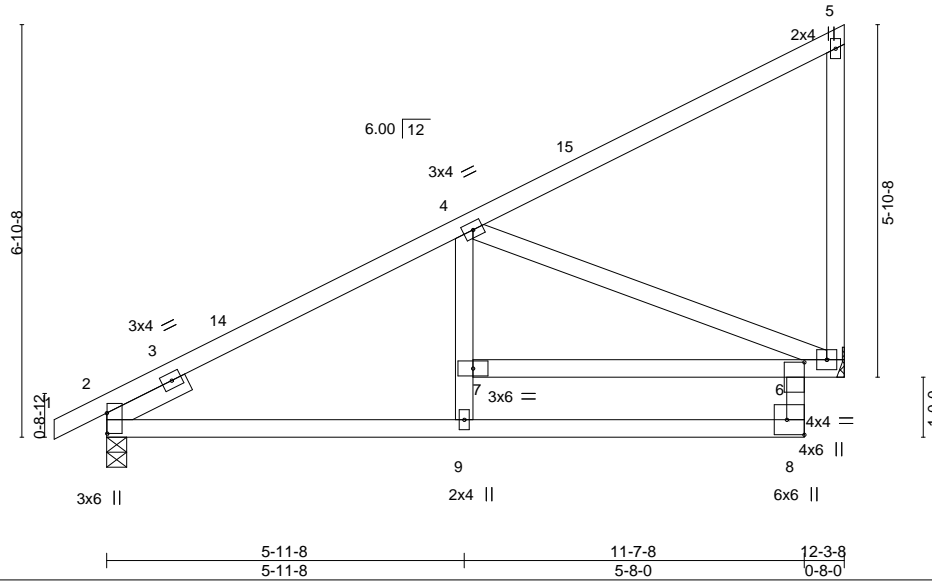


Plate Offsets (X,Y)--	[2:0-4-1,0-0-1], [6:0-0-8,0-4-8], [8:Edge,0-3-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.55	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.45	Vert(LL) -0.06 6-7 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.69	Vert(CT) -0.11 9-12 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.08 6 n/a n/a		
	Code IRC2018/TPI2014			Weight: 57 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	

REACTIONS. (size) 2=0-4-0, 6=Mechanical
 Max Horz 2=202(LC 12)
 Max Uplift 2=-36(LC 12), 6=-63(LC 12)
 Max Grav 2=781(LC 1), 6=744(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-846/0
 BOT CHORD 2-9=-166/730, 8-9=-59/445, 6-8=-27/350, 6-7=-151/403
 WEBS 4-7=0/289, 4-6=-910/225

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 6) 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 12, 2021

Job 2643945	Truss D09	Truss Type JACK-CLOSED	Qty 3	Ply 1	summit/woodside ridge #36/MO 144773669
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:03 2021 Page 1

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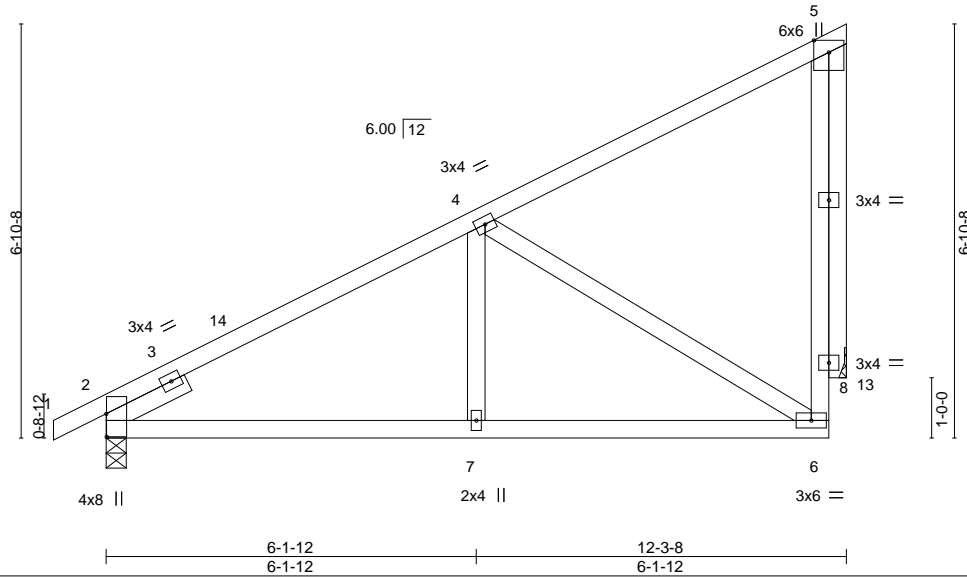


Plate Offsets (X,Y)--	[2:0-4-9,0-0-1]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.44	Vert(LL)	-0.03	6-7	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.05	6-7	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.57	Horz(CT)	0.02	13	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS						
								Weight: 57 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	


REACTIONS. (size) 2=0-4-0, 13=Mechanical
 Max Horz 2=187(LC 12)
 Max Uplift 2=-53(LC 12), 13=-93(LC 12)
 Max Grav 2=754(LC 1), 13=629(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-830/131, 6-8=-66/437, 5-8=-66/437
 BOT CHORD 2-7=-166/686, 6-7=-166/686
 WEBS 4-7=0/252, 4-6=-732/170, 5-13=-631/136

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 6) 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 12, 2021

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 2643945	Truss D10	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO	144773670
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:04 2021 Page 1

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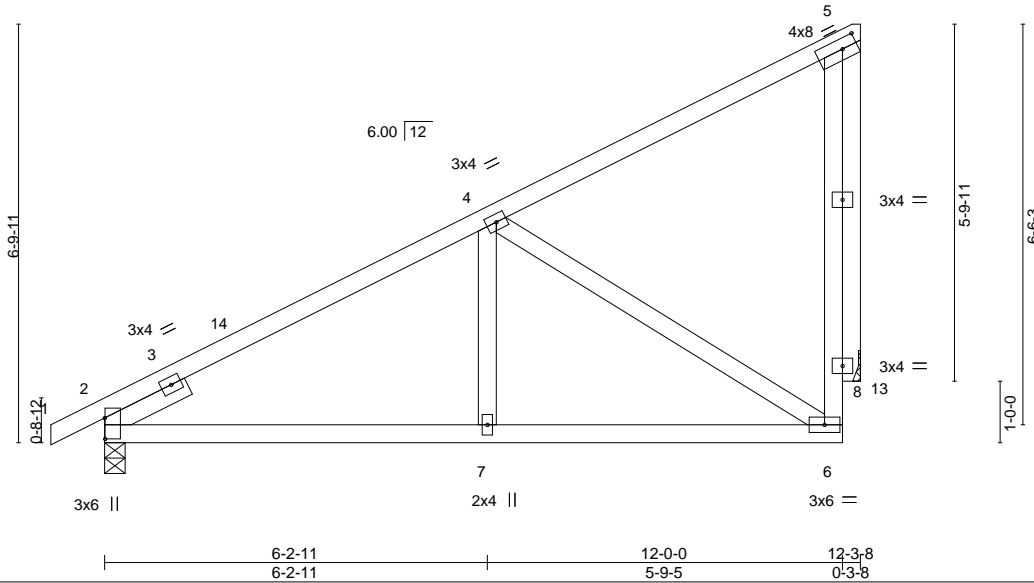


Plate Offsets (X,Y)--	[2:0-4-1,0-0-1], [5:0-2-15,0-2-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.43	Vert(LL)	0.03	7-11	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.06	7-11	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.02	13	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 57 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	

REACTIONS. (size) 2=0-4-0, 13=Mechanical
 Max Horz 2=216(LC 12)
 Max Uplift 2=-57(LC 12), 13=-153(LC 12)
 Max Grav 2=754(LC 1), 13=629(LC 1)

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

TOP CHORD 2-4=-798/33, 6-8=-80/440, 5-8=-80/440
 BOT CHORD 2-7=-171/677, 6-7=-171/677
 WEBS 4-7=0/254, 4-6=-728/193, 5-13=-631/153

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 13=153.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 6) 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 12, 2021

Job 2643945	Truss D11	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773671
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:05 2021 Page 1

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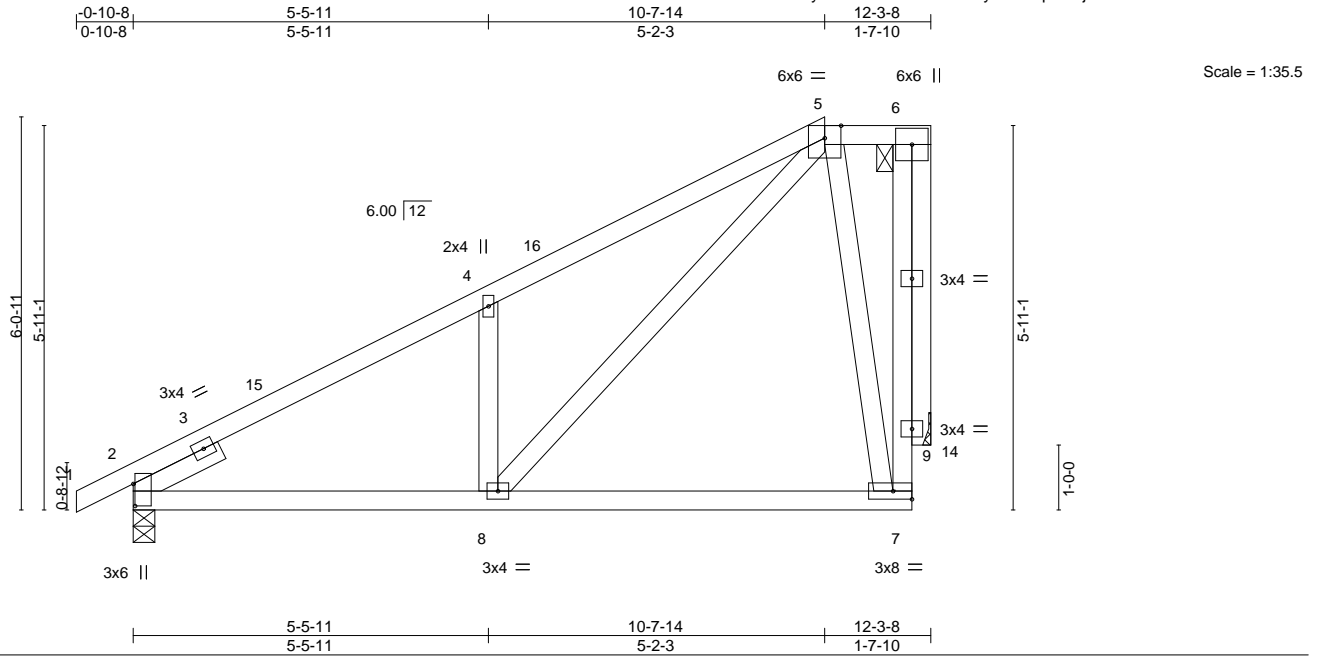


Plate Offsets (X,Y)--	[2:0-4-1,0-0-5]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.33	Vert(LL)	-0.04	7-8	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.10	7-8	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.34	Horz(CT)	-0.01	14	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 61 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	

REACTIONS. (size) 2=0-4-0, 14=Mechanical
 Max Horz 2=190(LC 12)
 Max Uplift 2=-68(LC 12), 14=-123(LC 12)
 Max Grav 2=754(LC 1), 14=629(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-877/60, 4-5=-910/179, 7-9=-215/649, 6-9=-215/649
 BOT CHORD 2-8=-221/719
 WEBS 4-8=-472/209, 5-8=-216/804, 5-7=-599/244, 6-14=-631/175

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-7-14, Exterior(2E) 10-7-14 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) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 14=123.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



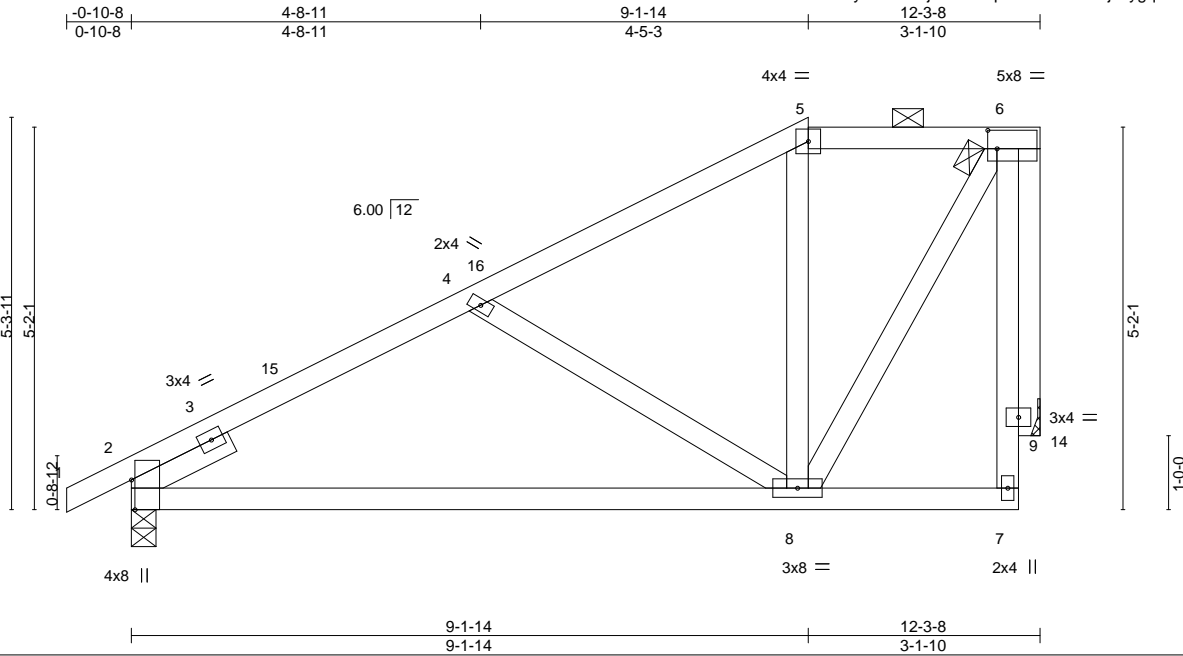
February 12, 2021

Job 2643945	Truss D12	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773672
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:06 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-ssje5FKVwpLUavUcc1a2sj1vygqDsDGT_3b?IKzmExR



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Plate Offsets (X,Y)--	[2:0-4-13,Edge], [6:0-1-8,0-3-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.26	Vert(LL) -0.11 8-12 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.48	Vert(CT) -0.22 8-12 >664 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.02 14 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS			
				Weight: 59 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	

REACTIONS. (size) 2=0-4-0, 14=Mechanical
 Max Horz 2=163(LC 12)
 Max Uplift 2=-75(LC 12), 14=-91(LC 12)
 Max Grav 2=754(LC 1), 14=629(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-828/125, 4-5=-494/54, 5-6=-364/91
 BOT CHORD 2-8=-257/732
 WEBS 4-8=-440/180, 6-8=-153/611, 6-14=-632/155

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 9-1-14, Exterior(2E) 9-1-14 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) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

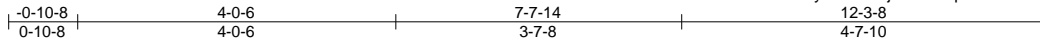
Job 2643945	Truss D13	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773673
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:06 2021 Page 1

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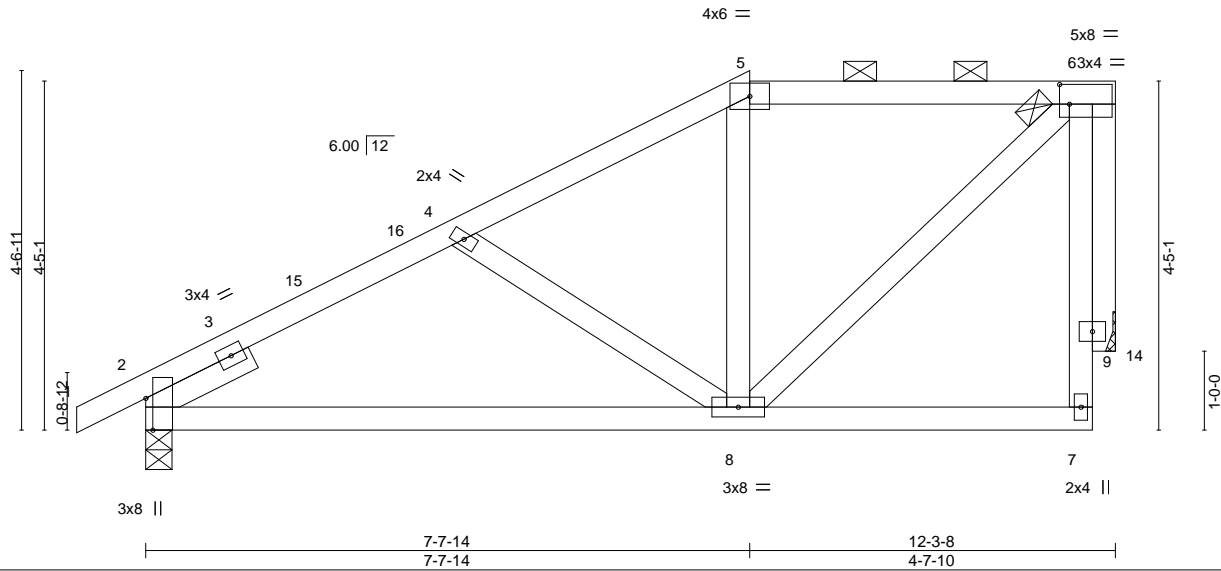


Plate Offsets (X,Y)--	[2:0-4-13,Edge], [6:0-1-8,0-3-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.05	8-12	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.10	8-12	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.02	14	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 55 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	


REACTIONS. (size) 2=0-4-0, 14=Mechanical
 Max Horz 2=135(LC 12)
 Max Uplift 2=-78(LC 12), 14=-75(LC 9)
 Max Grav 2=754(LC 1), 14=629(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-893/154, 4-5=-627/101, 5-6=-508/125
 BOT CHORD 2-8=-263/753
 WEBS 6-8=-150/581, 4-8=-301/149, 6-14=-635/152

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 7-7-14, Exterior(2E) 7-7-14 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) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 <p>16023 Swingley Ridge Rd Chesterfield, MO 63017</p>
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Job 2643945	Truss D14	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO	144773674
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:07 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-K2H0JbL8h6TLB33oAk5HPwZ0_3AEbcWdDjKZlnzmExQ

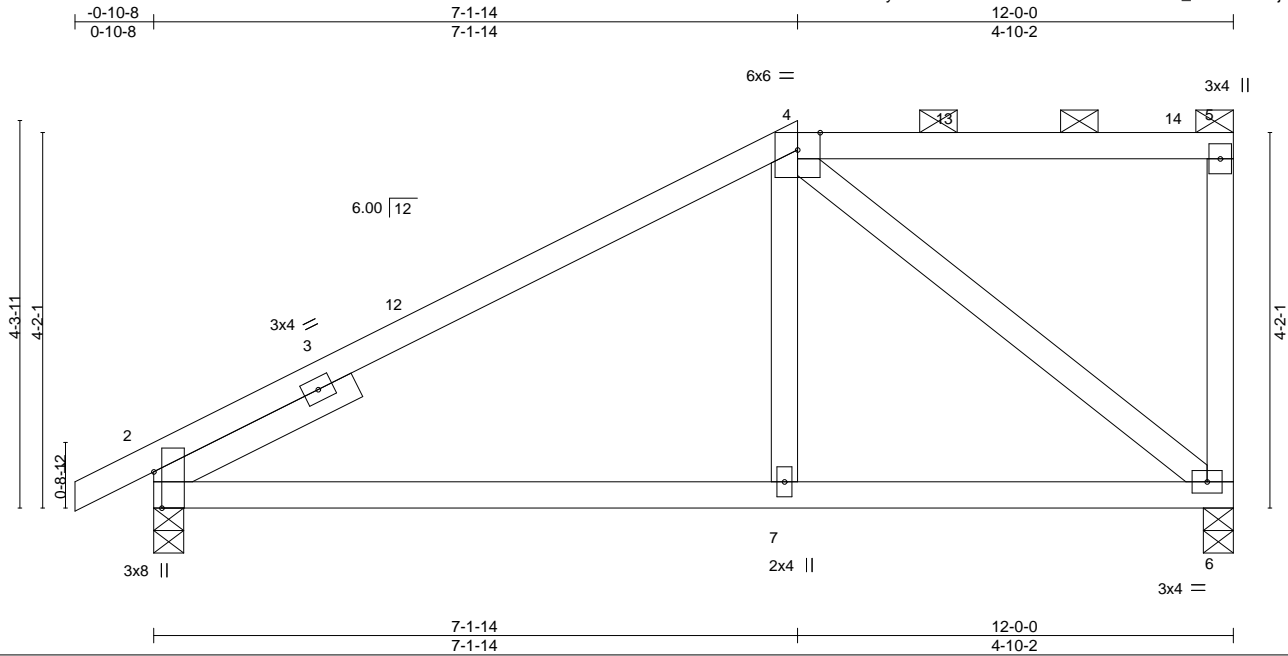


Plate Offsets (X, Y)--	[2:0-4-13,Edge]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	0.06	7-10	>999
TCDL 20.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.13	7-10	>999
BCLL 0.0	Rep Stress Incr	YES	WB 0.46	Horz(CT)	0.03	2	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
							PLATES
							MT20
							GRIP
							197/144
							Weight: 47 lb
							FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS	2x4 SPF No.2		Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 2-6-0		

REACTIONS. (size) 2=0-4-0, 6=0-4-0
 Max Horz 2=147(LC 11)
 Max Uplift 2=-87(LC 12), 6=-89(LC 9)
 Max Grav 2=734(LC 1), 6=649(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-661/149
 BOT CHORD 2-7=-220/563, 6-7=-221/556
 WEBS 4-7=0/279, 4-6=-702/234

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 7-1-14, Exterior(2R) 7-1-14 to 11-4-13, Interior(1) 11-4-13 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) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



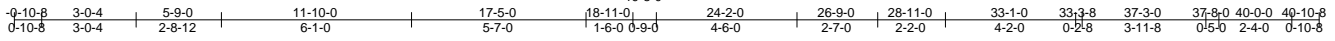
February 12, 2021

Job 2643945	Truss D15	Truss Type ROOF SPECIAL GIRDER	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773675
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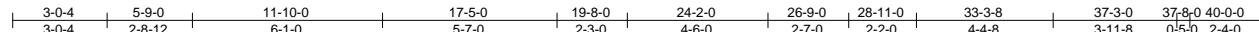
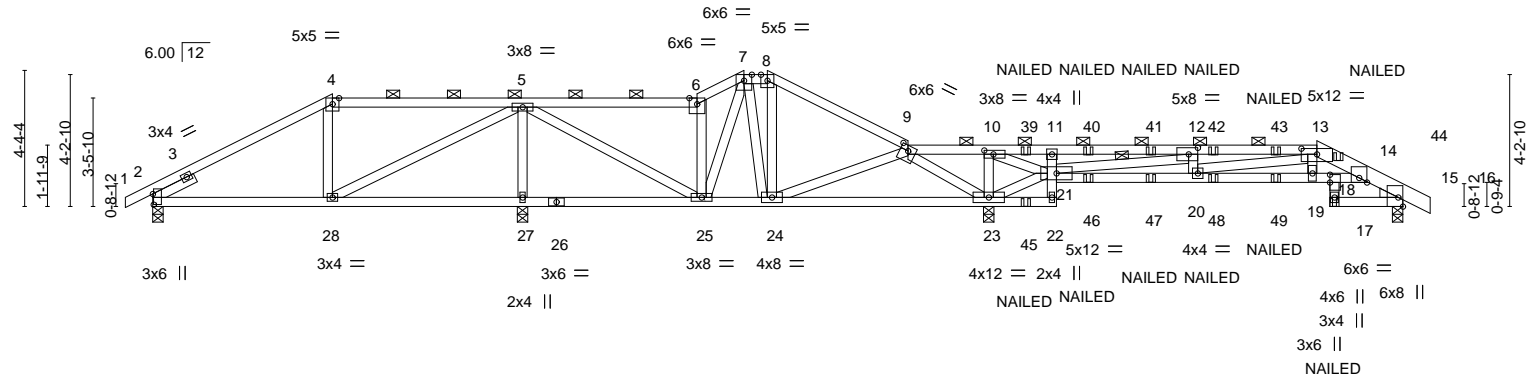
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:10 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-kdz9xcO0_1rw2WnNrsf_OZBV9H6Sozs3vhZDu6zmExN



Scale = 1:73.7



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.69	Vert(LL)	-0.13	19-20	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.78	Vert(CT)	-0.24	19-20	>653		
BCLL 0.0	Rep Stress Incr	NO	WB 0.49	Horz(CT)	0.07	15	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						
								Weight: 167 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 13-16: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-4 oc purlins, except 2-0-0 oc purlins (3-2-2 max.): 4-6, 7-8, 9-13.
BOT CHORD 2x4 SPF No.2 *Except* 14-21: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 10-0-0 oc bracing: 18-19
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 12-21
WEDGE Right: 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	

REACTIONS. All bearings 0-4-0.
 (lb) - Max Horz 2=67(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) except 2=121(LC 8), 15=198(LC 9), 27=261(LC 36), 23=396(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) except 2=701(LC 21), 15=977(LC 22), 27=1400(LC 25), 23=2452(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=668/151, 4-5=611/171, 5-6=552/221, 6-7=635/263, 7-8=476/240, 8-9=606/242, 9-10=339/1951, 10-11=97/725, 11-12=50/469, 12-13=2655/542, 13-14=2451/494, 14-15=759/180
 BOT CHORD 2-28=113/601, 24-25=133/464, 23-24=720/372, 11-21=351/87, 20-21=516/2655, 19-20=425/2362, 18-19=408/2261, 14-18=347/1889, 15-17=70/372
 WEBS 5-28=112/705, 5-27=1269/316, 5-25=212/731, 6-25=573/198, 7-25=129/364, 8-24=266/92, 9-24=169/1000, 12-21=3146/604, 12-20=78/448, 10-23=732/181, 21-23=1861/394, 10-21=280/1359, 9-23=1567/264, 13-19=115/631, 13-20=128/303

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 121 lb uplift at joint 2, 198 lb uplift at joint 15, 261 lb uplift at joint 27 and 396 lb uplift at joint 23.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



February 12, 2021

Continued on page 2

LOAD CASE(S) Standard

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

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

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss D15	Truss Type ROOF SPECIAL GIRDER	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773675 Job Reference (optional)
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:11 2021 Page 2
ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-CpXX9yOeL_nggMZPaADZmkgvgShXQ5D7LImRYzmExM

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-90, 4-6=-90, 6-7=-90, 7-8=-90, 8-9=-90, 9-13=-90, 13-16=-90, 22-29=-20, 18-21=-20, 17-36=-20

Concentrated Loads (lb)

Vert: 18=-144(F) 39=-57(F) 40=41(F) 41=41(F) 42=41(F) 43=41(F) 44=-5(F) 45=-41(F) 46=-195(F) 47=-195(F) 48=-195(F) 49=-195(F)

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss D16	Truss Type ROOF SPECIAL	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773676
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:13 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-9CelZeQuHyEUw_WyW?CheBpzUD??LZVbntVQzmExK



Scale: 1/4"=1'

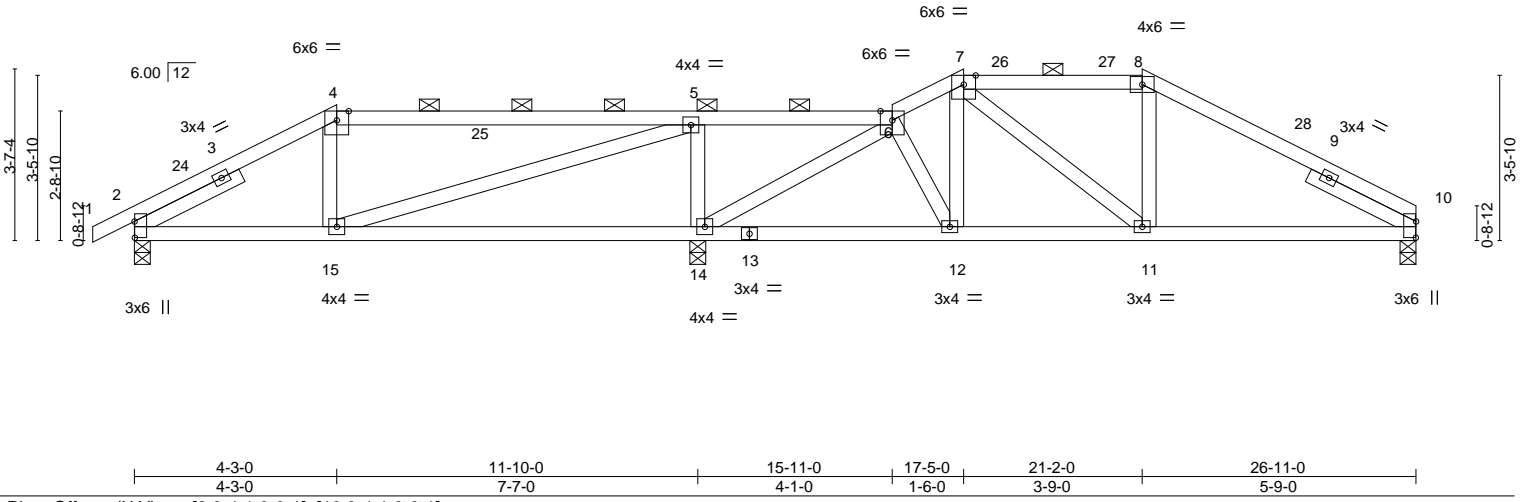


Plate Offsets (X,Y)--	[2:0-4-1,0-0-1], [10:0-4-1,0-0-1]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.86	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.41	Vert(LL) -0.07 14-15 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.42	Vert(CT) -0.16 14-15 >896 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.01 10 n/a n/a		
	Code IRC2018/TPI2014			Weight: 104 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (4-9-8 max.): 4-6, 7-8.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0	

REACTIONS. (size) 10=0-4-0, 2=0-4-0, 14=0-4-0
 Max Horz 2=58(LC 16)
 Max Uplift 10=83(LC 13), 2=-105(LC 12), 14=-180(LC 12)
 Max Grav 10=752(LC 1), 2=634(LC 1), 14=1654(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-652/131, 4-5=-660/153, 5-6=0/287, 6-7=-774/176, 7-8=-834/200, 8-10=-951/180
 BOT CHORD 2-15=-117/647, 14-15=-287/41, 12-14=-101/633, 11-12=-82/694, 10-11=-98/834
 WEBS 5-15=-122/981, 5-14=-958/214, 6-14=-1043/134

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 4-3-0, Exterior(2R) 4-3-0 to 7-3-0, Interior(1) 7-3-0 to 17-5-0, Exterior(2R) 17-5-0 to 20-5-0, Interior(1) 20-5-0 to 21-2-0, Exterior(2R) 21-2-0 to 24-2-0, Interior(1) 24-2-0 to 26-11-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 83 lb uplift at joint 10, 105 lb uplift at joint 2 and 180 lb uplift at joint 14.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

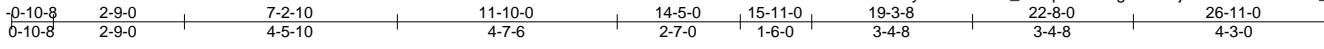


February 12, 2021

Job 2643945	Truss D17	Truss Type ROOF SPECIAL GIRDER	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773677
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:15 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-5bm2_KR9paUC9HgKeQF9jcuOYlv2TDZo2zG_aJzmExl



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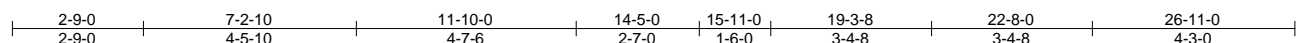
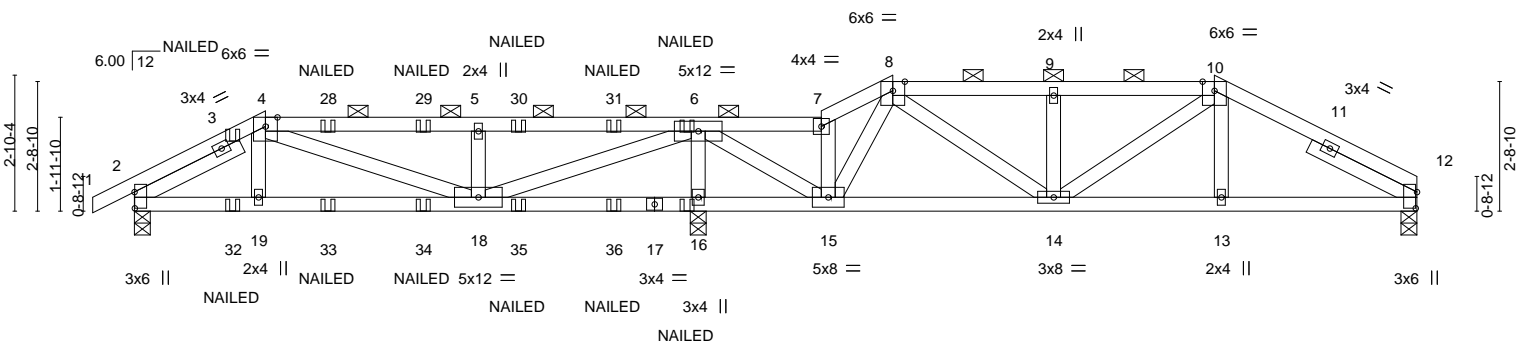


Plate Offsets (X, Y)-- [2:0-4-1,0-0-1], [12:0-4-1,0-0-5]

LOADING (psf)	SPACING - 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.04 18-19 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.43	Vert(CT) -0.09 18-19 >999 180		
BCLL 0.0	Rep Stress Incr NO	WB 0.52	Horz(CT) 0.01 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 107 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-0 oc purlins, except 2-0-0 oc purlins (5-1-8 max.): 4-7, 8-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 5-10-13 oc bracing: 16-18
5-9-5 oc bracing: 15-16.

REACTIONS. (size) 12=0-4-0, 2=0-4-0, 16=0-4-0
Max Horz 2=46(LC 12)
Max Uplift 12=81(LC 30), 2=-158(LC 8), 16=-258(LC 4)
Max Grav 12=704(LC 1), 2=855(LC 21), 16=2129(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1091/204, 4-5=-1058/214, 5-6=-1054/212, 6-7=-317/208, 7-8=-335/234,
8-9=-948/196, 9-10=-948/196, 10-12=-913/145
BOT CHORD 2-19=-185/975, 18-19=-186/959, 16-18=-944/121, 15-16=-944/121, 14-15=-154/475,
13-14=-95/823, 12-13=-93/826
WEBS 5-18=-587/177, 6-18=-298/2121, 6-16=-1928/296, 6-15=-124/1313, 8-15=-582/94,
8-14=-77/641, 9-14=-375/104

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 12, 158 lb uplift at joint 2 and 258 lb uplift at joint 16.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).


LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-7=-90, 7-8=-90, 8-10=-90, 10-12=-90, 20-24=-20



February 12, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss D17	Truss Type ROOF SPECIAL GIRDER	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773677 Job Reference (optional)
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:16 2021 Page 2
ID:wH4RYhEstNeUP2dXvOfi1syQY8e-ZnKQCgSnatc3nRFXB7mOGqRZlhFHCgpyHd0X6izmExH

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 6=-61(F) 16=-45(F) 3=-5(F) 28=-57(F) 29=-57(F) 30=-57(F) 31=-57(F) 32=-144(F) 33=-41(F) 34=-41(F) 35=-41(F) 36=-41(F)

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

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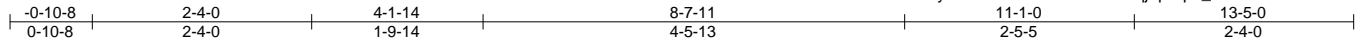
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss E02	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773678
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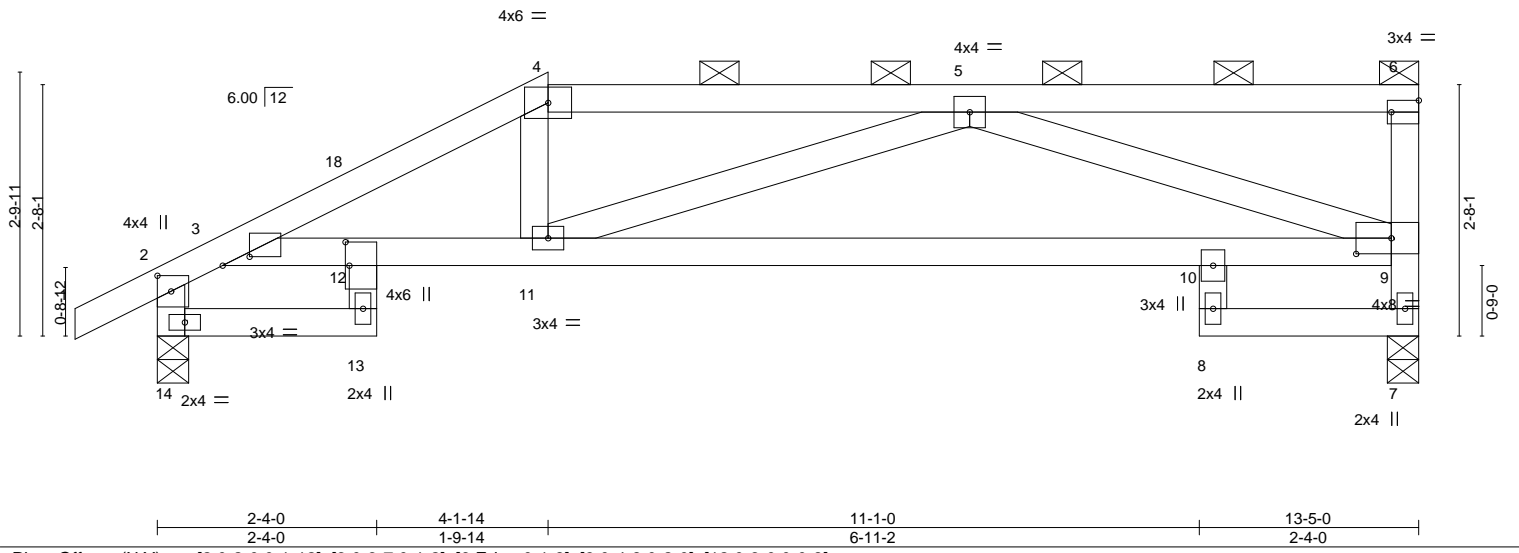
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:17 2021 Page 1

ID:wH4RYhEstNeUP2dXvOfi1syQY8e-1zuoP0TPLBkwObqIqHdp1_iS5YGx7U5WHI5eCzmExG



Scale = 1:24.5



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.63	Vert(LL)	-0.12 10-11	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.26 10-11	>597	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.56	Horz(CT)	0.07 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 53 lb	FT = 20%

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

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

REACTIONS. (size) 7=0-4-0, 14=0-4-0
Max Horz 14=96(LC 11)
Max Uplift 7=-106(LC 9), 14=-73(LC 12)
Max Grav 7=718(LC 1), 14=817(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-550/108, 3-4=-1477/234, 4-5=-1288/245, 7-9=-676/127, 2-14=-805/201
BOT CHORD 13-14=-144/259, 3-12=-147/1051, 11-12=-291/1310, 10-11=-289/1362, 9-10=-238/1428
WEBS 4-11=0/350, 5-9=-1264/338

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 4-1-14, Exterior(2R) 4-1-14 to 8-7-11, Interior(1) 8-7-11 to 13-3-4 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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 7 and 73 lb uplift at joint 14.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

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

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

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

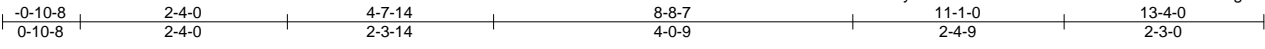
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss E03	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773679
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					Job Reference (optional)

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:18 2021 Page 1
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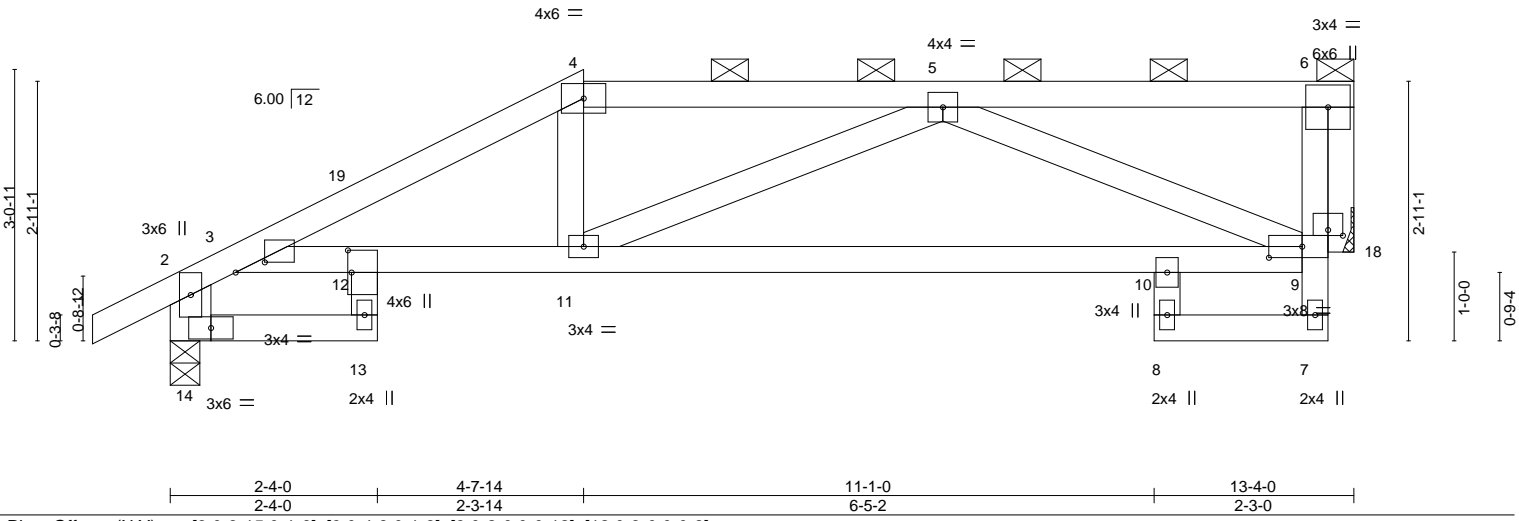


Plate Offsets (X,Y)--	[3:0-3-15,0-1-6], [9:0-4-8,0-1-8], [9:0-2-0,0-0-12], [12:0-3-0,0-0-8]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.49	Vert(LL) -0.08 10-11 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.61	Vert(CT) -0.17 10-11 >923 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.39	Horz(CT) 0.05 18 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 54 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-2-15 max.): 4-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2 *Except* 2-14: 2x6 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 14=0-4-0, 18=Mechanical
 Max Horz 14=79(LC 9)
 Max Uplift 14=-74(LC 12), 18=-95(LC 9)
 Max Grav 14=820(LC 1), 18=672(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-540/84, 3-4=-1352/226, 4-5=-1172/241, 5-6=-254/0, 6-9=-74/490, 2-14=-812/199
 BOT CHORD 3-12=-126/939, 11-12=-256/1187, 10-11=-235/1170, 9-10=-186/1196
 WEBS 4-11=0/290, 5-9=-1023/285, 6-18=-691/116

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 4-7-14, Exterior(2R) 4-7-14 to 8-8-7, Interior(1) 8-8-7 to 12-10-12 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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 14 and 95 lb uplift at joint 18.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

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

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



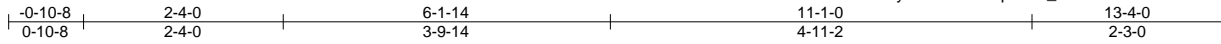
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss E04	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773680
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:19 2021 Page 1

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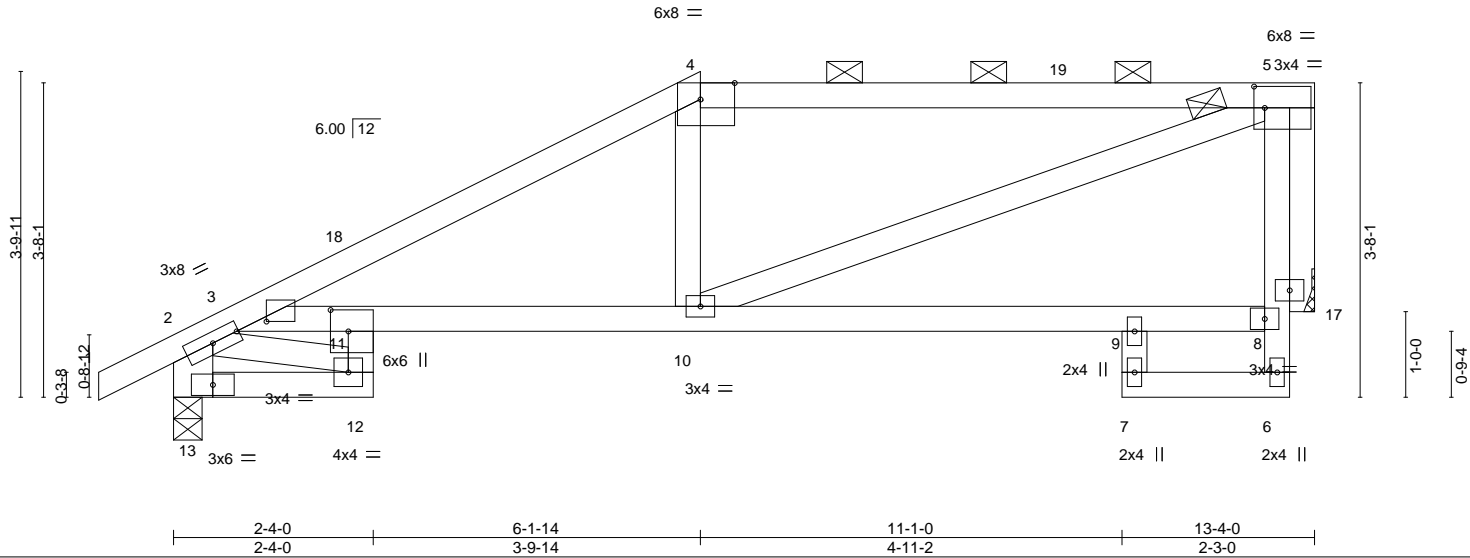


Plate Offsets (X, Y)--	[3:0-4-3,0-1-6], [4:0-4-13,Edge], [5:0-1-8,0-3-0], [11:0-3-0,0-2-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.74	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.75	Vert(LL) -0.07 10-11 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.27	Vert(CT) -0.15 10-11 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.06 17 n/a n/a		
	Code IRC2018/TPI2014			Weight: 56 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-11-2 max.): 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2 *Except* 2-13: 2x6 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 13=0-4-0, 17=Mechanical
 Max Horz 13=100(LC 12)
 Max Uplift 13=-82(LC 12), 17=-91(LC 9)
 Max Grav 13=820(LC 25), 17=672(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-592/72, 3-4=-1166/202, 4-5=-1013/236, 2-13=-822/190
 BOT CHORD 3-11=-98/689, 10-11=-247/1006, 8-9=-31/273
 WEBS 5-10=-229/839, 5-17=-686/130

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 6-1-14, Exterior(2R) 6-1-14 to 10-4-13, Interior(1) 10-4-13 to 12-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 82 lb uplift at joint 13 and 91 lb uplift at joint 17.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

Job 2643945	Truss E06	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773682
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:22 2021 Page 1
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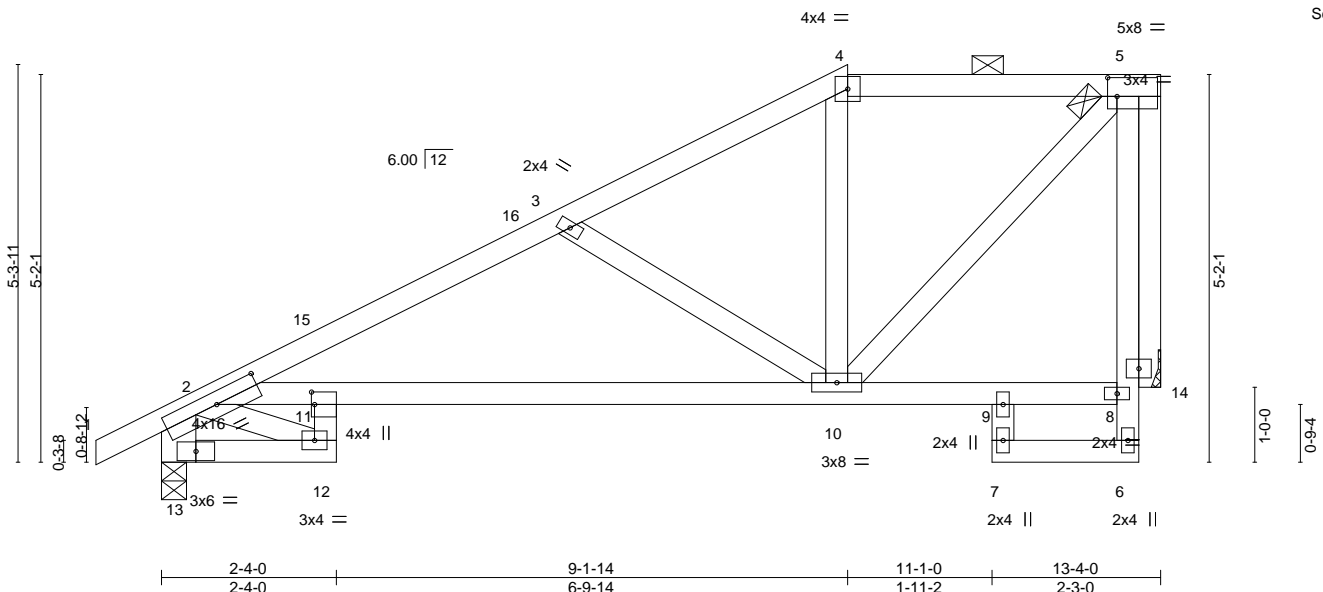


Plate Offsets (X, Y)--	[2:0-7-2,0-2-0], [5:0-1-8,0-3-0], [11:0-2-0,0-0-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.49	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.65	Vert(LL) -0.13 10-11 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.17	Vert(CT) -0.33 10-11 >471 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.09 14 n/a n/a		
	Code IRC2018/TPI2014			Weight: 65 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2 *Except* 2-13: 2x6 SPF No.2	
OTHERS 2x4 SPF No.2	

REACTIONS. (size) 13=0-4-0, 14=Mechanical
 Max Horz 13=151(LC 12)
 Max Uplift 13=-77(LC 12), 14=-83(LC 12)
 Max Grav 13=820(LC 1), 14=672(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1136/204, 3-4=-701/117, 4-5=-552/136, 2-13=-819/150
 BOT CHORD 2-11=-230/798, 10-11=-322/980
 WEBS 5-10=-173/691, 3-10=-508/202, 5-14=-676/149

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 9-1-14, Exterior(2E) 9-1-14 to 12-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 13 and 83 lb uplift at joint 14.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job 2643945	Truss E07	Truss Type Half Hip	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773683
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:22 2021 Page 1

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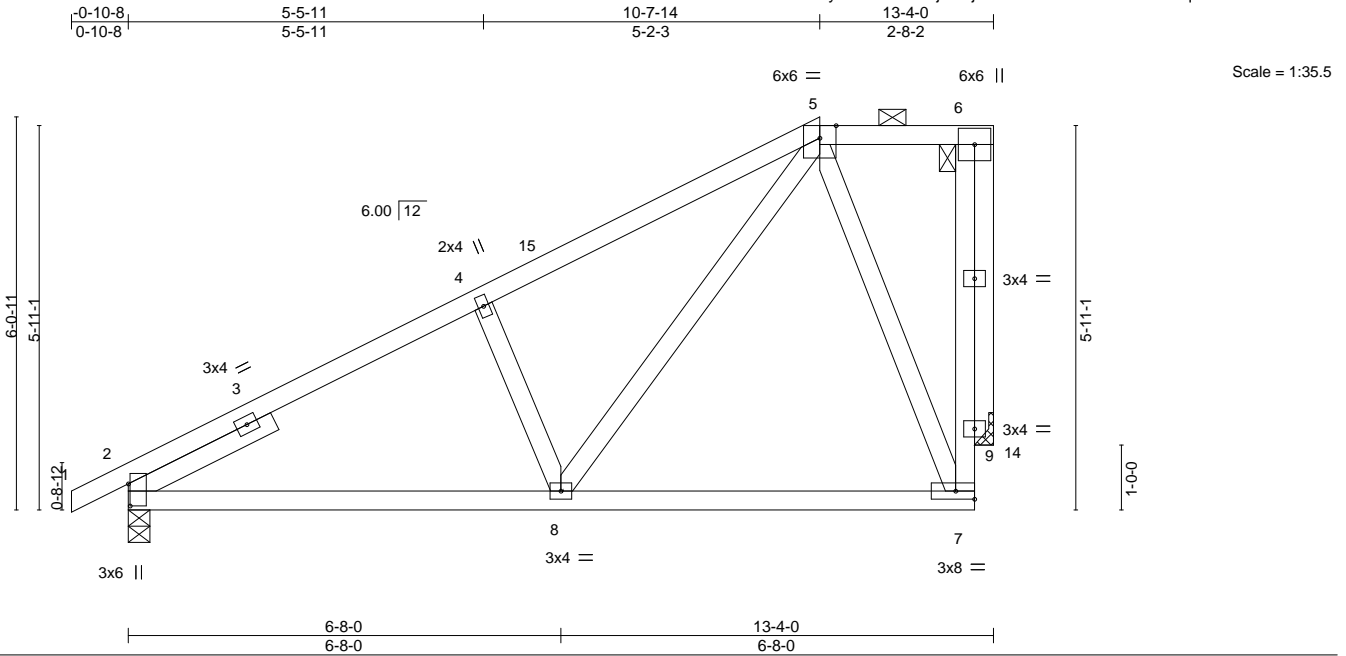


Plate Offsets (X,Y)--	[2:0-4-1,0-0-5]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.33	Vert(LL) -0.04 7-8 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.08 7-8 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.40	Horz(CT) 0.01 14 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 65 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 2-6-0	

REACTIONS. (size) 2=0-4-0, 14=Mechanical
 Max Horz 2=190(LC 12)
 Max Uplift 2=-77(LC 12), 14=-114(LC 12)
 Max Grav 2=806(LC 1), 14=691(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-814/86, 4-5=-827/127, 7-9=-170/633, 6-9=-170/633
 BOT CHORD 2-8=-239/800, 7-8=-97/272
 WEBS 4-8=-425/177, 5-8=-134/646, 5-7=-617/206, 6-14=-692/165

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-7-14, Exterior(2E) 10-7-14 to 12-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 77 lb uplift at joint 2 and 114 lb uplift at joint 14.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

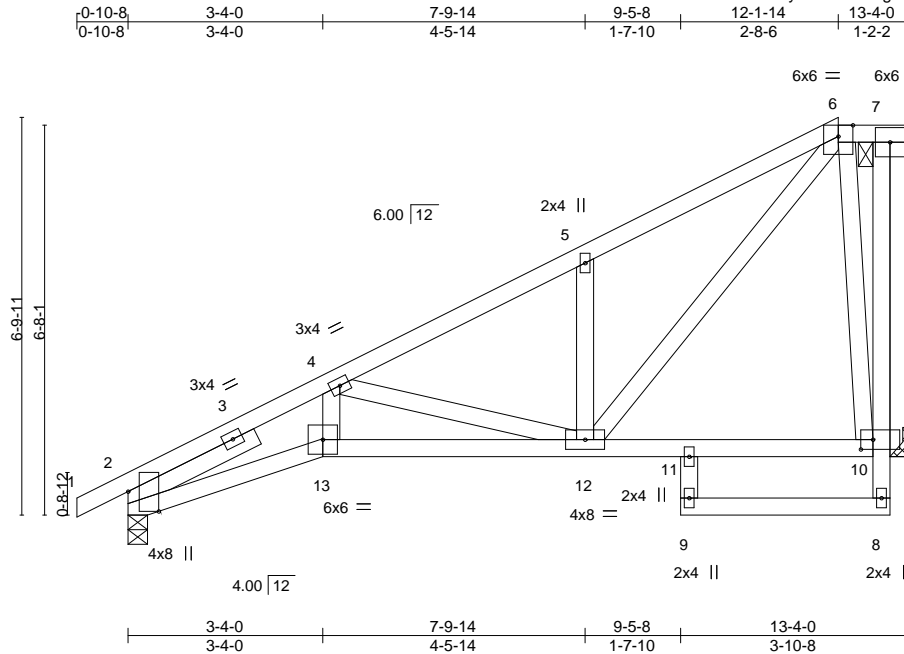
Job 2643945	Truss E08	Truss Type Half Hip	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773684
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:23 2021 Page 1

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Plate Offsets (X, Y)--	[2:0-4-1,Edge], [10:0-2-8,0-2-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.31	Vert(LL) -0.06 12-13 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.64	Vert(CT) -0.13 12-13 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.32	Horz(CT) 0.06 18 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS			
				Weight: 77 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
OTHERS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 2-6-0	

REACTIONS. (size) 2=0-4-0, 18=Mechanical
 Max Horz 2=218(LC 12)
 Max Uplift 2=66(LC 12), 18=149(LC 12)
 Max Grav 2=806(LC 1), 18=691(LC 25)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-1810/298, 4-5=-897/87, 5-6=-945/191, 7-10=-208/659
 BOT CHORD 2-13=-481/1618, 12-13=-444/1494
 WEBS 4-13=-107/479, 4-12=-759/250, 5-12=-464/184, 6-12=-259/1012, 6-10=-623/230,
 7-18=-692/188

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-1-14, Exterior(2E) 12-1-14 to 12-10-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 2 and 149 lb uplift at joint 18.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

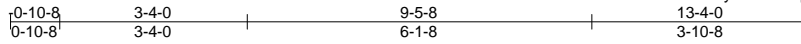
Job 2643945	Truss E09	Truss Type JACK-CLOSED	Qty 3	Ply 1	summit/woodside ridge #36/MO 144773685
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:24 2021 Page 1

ID: wH4RYhEsTNeUP2dXvOfi1syQY8e-KJpStPYohLcwkg3fovGbWmvBwxE4Jo77tyOlzmEx9



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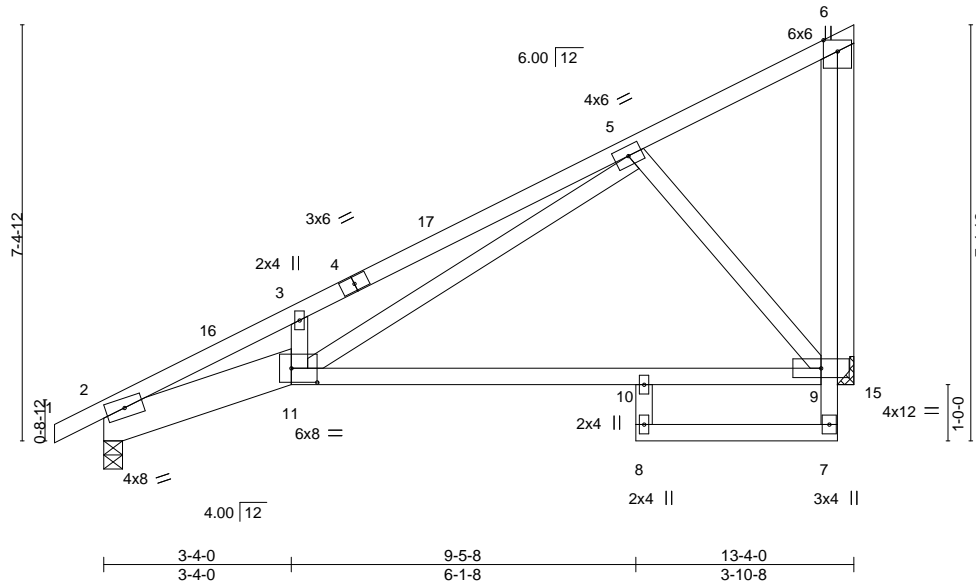


Plate Offsets (X,Y)-- [11:0-5-8,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.59	Vert(LL)	-0.22	10-11	>720	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.62	Vert(CT)	-0.51	10-11	>313		
BCLL 0.0	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.07	15	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS						
								Weight: 74 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-11: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS. (size) 2=0-4-0, 15=Mechanical
Max Horz 2=200(LC 12)
Max Uplift 2=-54(LC 12), 15=-96(LC 12)
Max Grav 2=806(LC 1), 15=691(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2039/194, 3-5=-2146/307, 6-9=-108/625
BOT CHORD 2-11=-376/1821, 10-11=-142/506, 9-10=-144/487
WEBS 3-11=-393/158, 5-9=-693/190, 5-11=-295/1596, 6-15=-692/137

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 2 and 96 lb uplift at joint 15.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss E10	Truss Type JACK-CLOSED	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773686
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:25 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-oWNq5lZQSeknMqRFDWQV7jJ6RKGDpghGLWhWwkzmEx8



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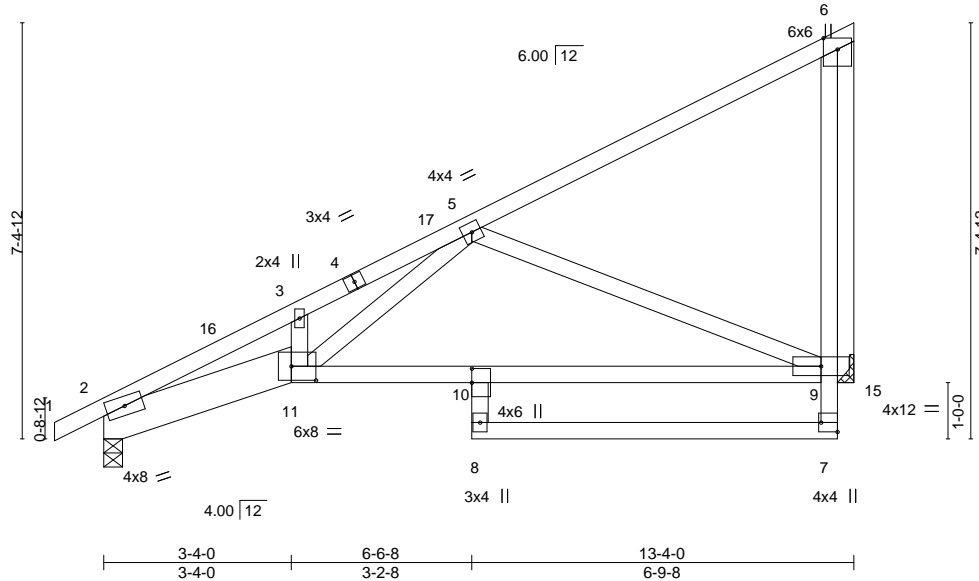


Plate Offsets (X,Y)-- [7:Edge,0-3-8], [10:0-3-0,0-0-0], [11:0-5-4,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.11	8	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.26	10	>599		
BCLL 0.0	Rep Stress Incr	YES	WB 0.80	Horz(CT)	0.05	15	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS						
								Weight: 76 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-11: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

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

REACTIONS. (size) 2=0-4-0, 15=Mechanical
Max Horz 2=200(LC 12)
Max Uplift 2=-54(LC 12), 15=-96(LC 12)
Max Grav 2=806(LC 1), 15=691(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1924/164, 3-5=-1842/210, 6-9=-58/459
BOT CHORD 2-11=-343/1693, 10-11=-247/922, 9-10=-283/791
WEBS 5-11=-139/968, 5-9=-938/233, 6-15=-692/137

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) 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.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 54 lb uplift at joint 2 and 96 lb uplift at joint 15.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12, 2021

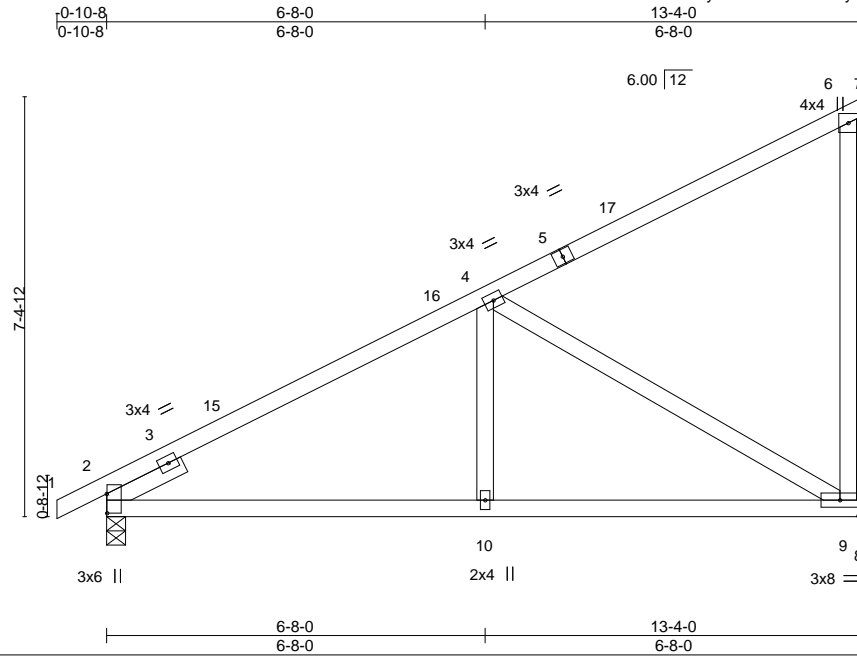
Job 2643945	Truss E11	Truss Type JACK-CLOSED	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773687
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:26 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-GixCl5a2DyseZ_0SnDxkgxsGbjgcY75QaAR3TAzmEx7



Scale = 1:40.6

Plate Offsets (X,Y)--	[2:0-4-1,0-0-1]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.53	Vert(LL)	-0.04	9-10	>999
TCDL 20.0	Lumber DOL	1.15	BC 0.37	Vert(CT)	-0.08	9-10	>999
BCLL 0.0	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.02	9	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
							PLATES
							MT20
							GRIP
							197/144
							Weight: 55 lb
							FT = 20%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 1-6-0

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

REACTIONS. (size) 2=0-4-0, 9=Mechanical
 Max Horz 2=265(LC 11)
 Max Uplift 2=-74(LC 12), 9=-83(LC 9)
 Max Grav 2=800(LC 1), 9=732(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-872/141
 BOT CHORD 2-10=-258/739, 9-10=-258/739
 WEBS 4-10=0/283, 4-9=-828/211

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-4-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 2 and 83 lb uplift at joint 9.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) 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 12, 2021

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

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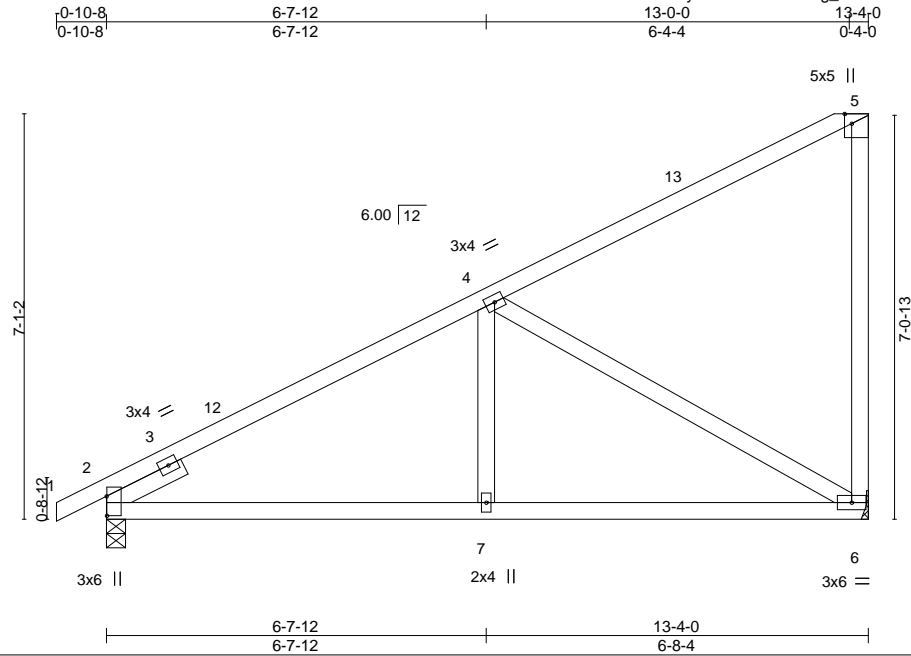
Job 2643945	Truss E12	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773688
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:27 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-kuUaWQbg_G?Vb7beLxSzC8ORz70hHZfZpqAc?dzmEx6



Scale = 1:40.3

Plate Offsets (X,Y)--	[2:0-4-1,0-0-1], [5:0-2-1,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.56	Vert(LL) -0.05 6-7 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.09 6-7 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.83	Horz(CT) 0.02 6 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS			
				Weight: 55 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 1-6-0	

REACTIONS. (size) 2=0-4-0, 6=Mechanical
 Max Horz 2=265(LC 11)
 Max Uplift 2=90(LC 12), 6=142(LC 12)
 Max Grav 2=807(LC 1), 6=723(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-891/143
 BOT CHORD 2-7=-252/757, 6-7=-252/757
 WEBS 4-7=0/287, 4-6=-847/215

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 2 and 142 lb uplift at joint 6.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 6) 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 12, 2021

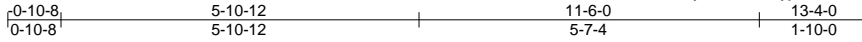
Job 2643945	Truss E13	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773689
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:28 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-C52yjmbJLZ7MDH9que_CIMxfWXLi06cj2UwAX3zmEx5



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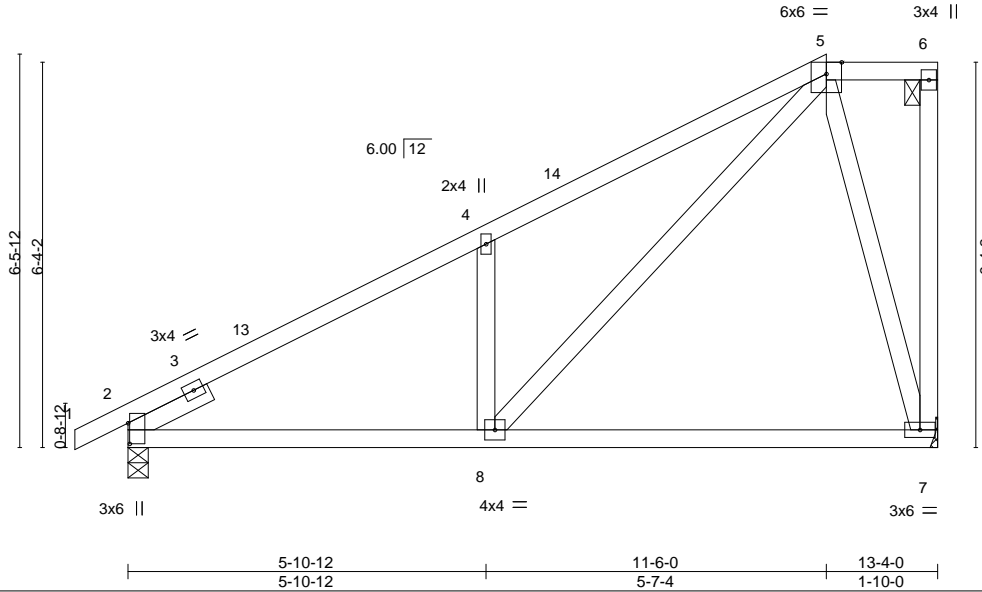


Plate Offsets (X,Y)--	[2:0-4-1,0-0-5]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.38	Vert(LL)	-0.08	7-8	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.39	Vert(CT)	-0.16	7-8	>972		
BCLL 0.0	Rep Stress Incr	YES	WB 0.47	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 61 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 5-6.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x4 SPF No.2 1-6-0	

REACTIONS. (size) 2=0-4-0, 7=Mechanical
 Max Horz 2=228(LC 11)
 Max Uplift 2=-97(LC 12), 7=-108(LC 12)
 Max Grav 2=807(LC 1), 7=723(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-967/145, 4-5=-1001/254
 BOT CHORD 2-8=-279/792
 WEBS 4-8=-512/215, 5-8=-219/892, 5-7=-676/308

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 11-6-0, Exterior(2E) 11-6-0 to 13-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 97 lb uplift at joint 2 and 108 lb uplift at joint 7.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



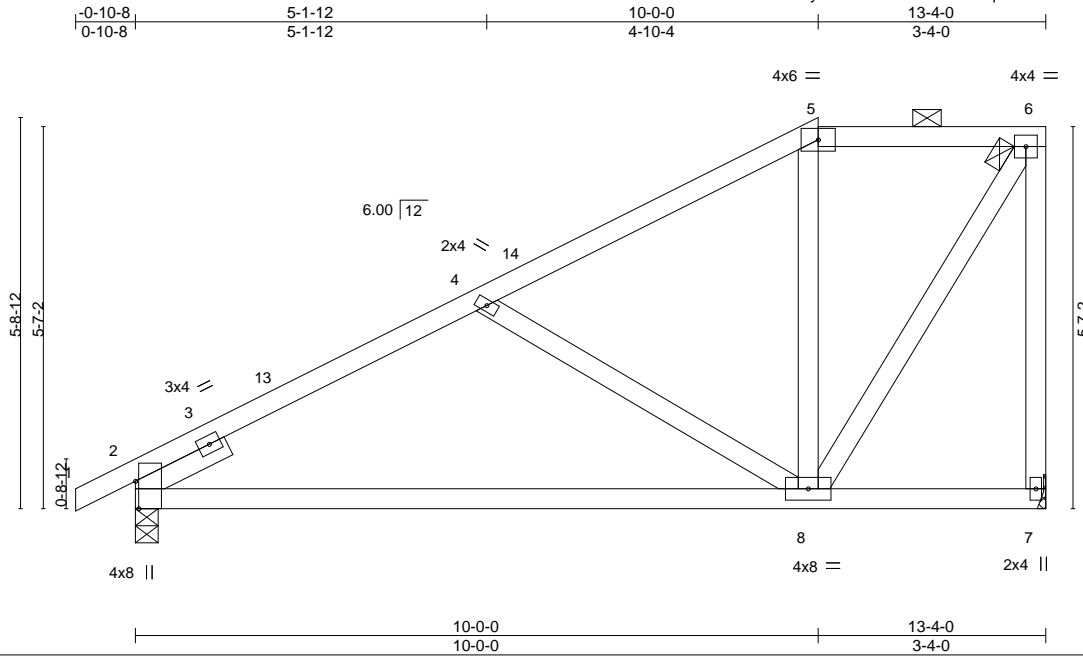
February 12, 2021

Job 2643945	Truss E14	Truss Type HALF HIP	Qty 1	Ply 1	summit/woodside ridge #36/MO	144773690
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:29 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-hHcLw6cxWtFDqRk1SMVRIZUrExe4lcvsG8fj3VzmEx4



Scale = 1:33.7

Plate Offsets (X,Y)--	[2:0-4-13,Edge]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	-0.16	8-11	>999
TCDL 20.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.32	8-11	>491
BCLL 0.0	Rep Stress Incr	YES	WB 0.27	Horz(CT)	0.02	2	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
							PLATES
							MT20
							GRIP
							197/144
							Weight: 59 lb
							FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 1-6-0

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

REACTIONS. (size) 7=Mechanical, 2=0-4-0
Max Horz 2=200(LC 11)
Max Uplift 7=93(LC 9), 2=98(LC 12)
Max Grav 7=723(LC 1), 2=807(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-908/176, 4-5=-526/122, 5-6=-384/137, 6-7=-723/206
BOT CHORD 2-8=-319/799
WEBS 4-8=-493/184, 6-8=-207/711

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2E) 10-0-0 to 13-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 7 and 98 lb uplift at joint 2.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

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

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



Job 2643945	Truss G01	Truss Type HIP GIRDER	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773691
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:31 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-dgk5LoeB2UVx4luPanXvN_Z2zkfDV69kS8q8OzmEx2

Job Reference (optional)



Scale = 1:27.4

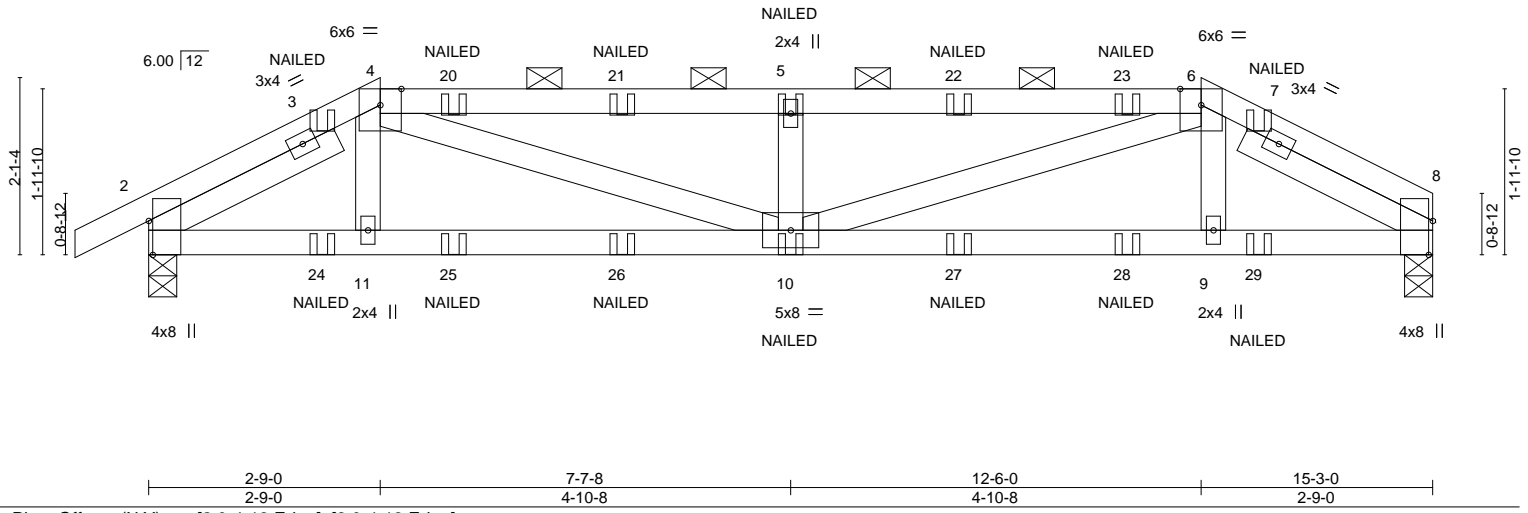


Plate Offsets (X, Y)--	[2:0-4-13,Edge], [8:0-4-13,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.81	Vert(LL) -0.09 10 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.21 10-11 >885 180		
BCLL 0.0	Rep Stress Incr NO	WB 0.35	Horz(CT) 0.03 8 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 59 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-1 oc purlins, except 2-0-0 oc purlins (2-7-0 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-4-0, 2=0-4-0
Max Horz 2=34(LC 8)
Max Uplift 8=-190(LC 9), 2=-207(LC 8)
Max Grav 8=1230(LC 1), 2=1314(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1916/290, 4-5=-3028/456, 5-6=-3028/456, 6-8=-1930/293
BOT CHORD 2-11=-255/1694, 10-11=-257/1680, 9-10=-243/1695, 8-9=-240/1709
WEBS 4-10=-213/1443, 5-10=-734/208, 6-10=-213/1433

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 8 and 207 lb uplift at joint 2.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 8) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-90, 4-6=-90, 6-8=-90, 12-16=-20
Concentrated Loads (lb)
Vert: 10=-41(B) 5=-57(B) 3=-5(B) 7=-5(B) 20=-57(B) 21=-57(B) 22=-57(B) 23=-57(B) 24=-144(B) 25=-41(B) 26=-41(B)
27=-41(B) 28=-41(B) 29=-144(B)



February 12, 2021

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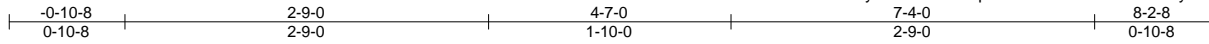
Job 2643945	Truss H01	Truss Type HIP GIRDER	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773692
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:32 2021 Page 1

ID:WH4RYhEsTNeUP2dXvOf1syQY8e-5slTZ8fpoodohvTc7U28vC6NA8nry1aly6uNgqzmEx1

Job Reference (optional)



Scale = 1:17.4

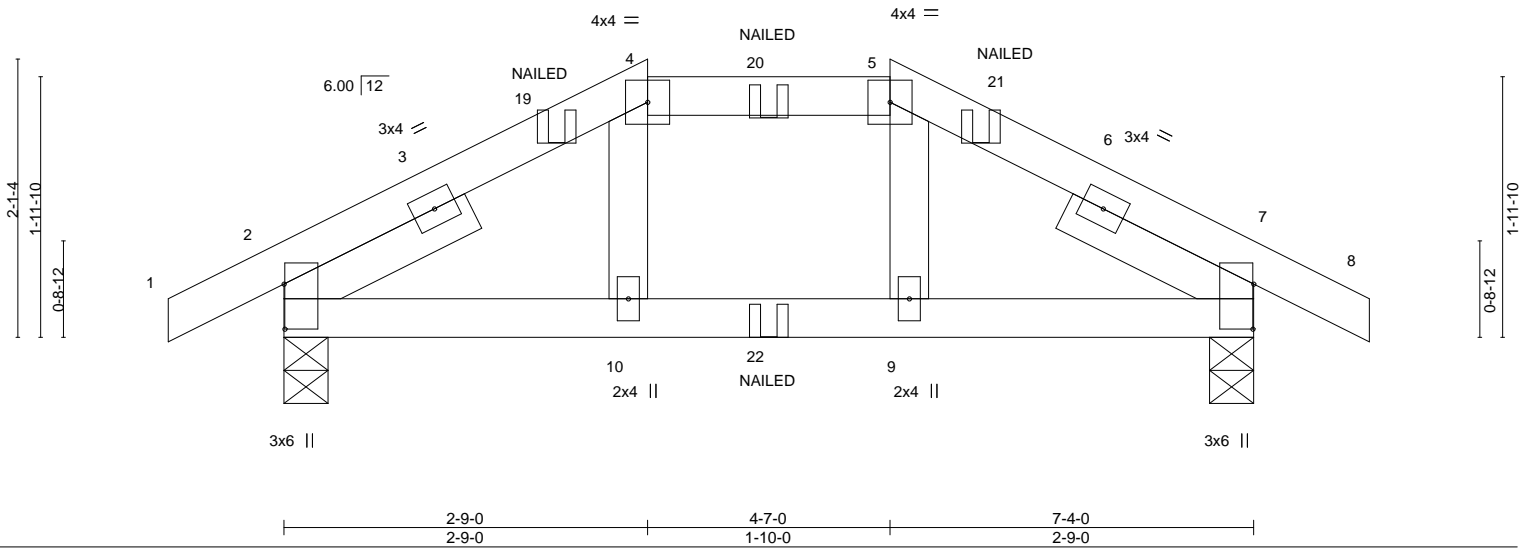


Plate Offsets (X,Y)--	[2:0-4-1,0-0-1], [7:0-4-1,0-0-1]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) -0.01 9 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.19	Vert(CT) -0.01 9-10 >999 180		
BCLL 0.0	Rep Stress Incr NO	WB 0.02	Horz(CT) 0.01 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 27 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 1-6-15, Right 2x4 SPF No.2 1-6-15

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

REACTIONS. (size) 2=0-4-0, 7=0-4-0
 Max Horz 2=28(LC 12)
 Max Uplift 2=88(LC 8), 7=88(LC 9)
 Max Grav 2=536(LC 1), 7=536(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-549/101, 4-5=-460/94, 5-7=-549/101
 BOT CHORD 2-10=-57/464, 9-10=-60/460, 7-9=-59/464

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 2 and 88 lb uplift at joint 7.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-90, 4-5=-90, 5-8=-90, 11-15=-20
 Concentrated Loads (lb)
 Vert: 19=-5(B) 20=-57(B) 21=-5(B) 22=-41(B)



February 12, 2021

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

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



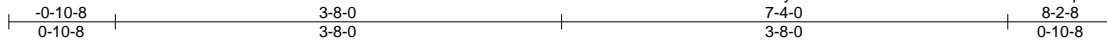
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss H02	Truss Type COMMON	Qty 4	Ply 1	summit/woodside ridge #36/MO 144773693
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:33 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-Z2srmUfRZ6lfJ22ohBZNSPeYqY6mgUcSBmdxCGzmEx0



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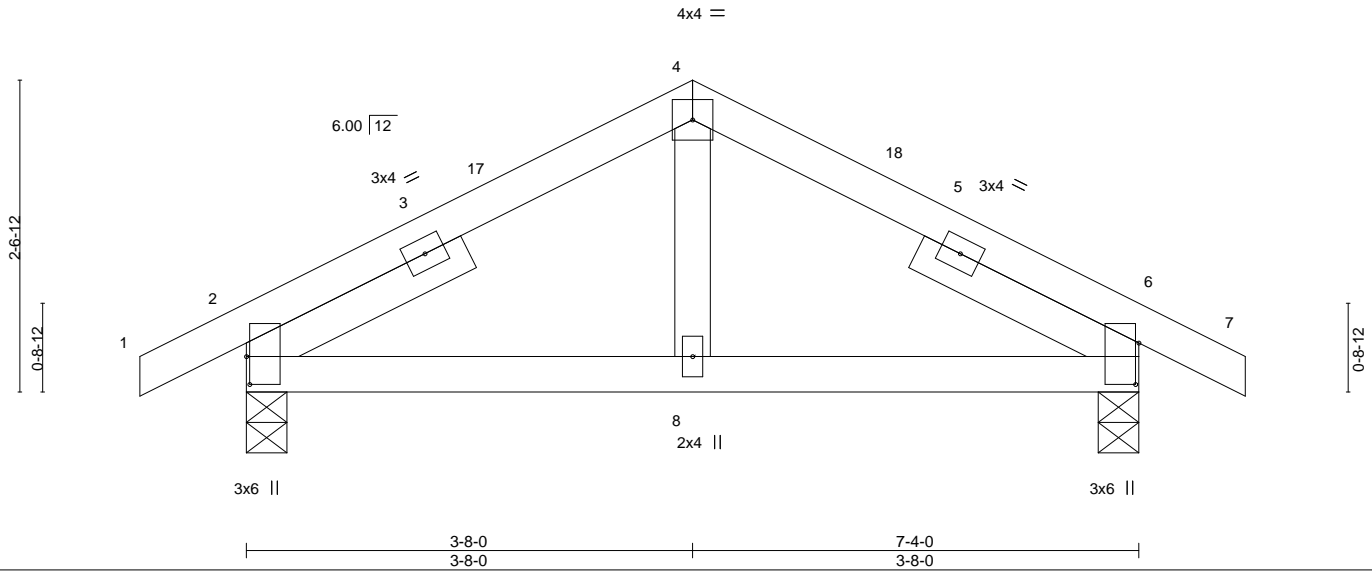


Plate Offsets (X,Y)--	[2:0-2-12,0-0-5], [6:0-4-1,0-0-5]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.15	in (loc) l/defl L/d	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.15	Vert(LL) -0.01 8-15 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.03	Vert(CT) -0.01 8-15 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.00 2 n/a n/a		
	Code IRC2018/TPI2014			Weight: 27 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 2-0-3, Right 2x4 SPF No.2 2-0-3	

REACTIONS. (size) 2=0-4-0, 6=0-4-0
 Max Horz 2=36(LC 12)
 Max Uplift 2=-57(LC 12), 6=-57(LC 13)
 Max Grav 2=482(LC 1), 6=482(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-384/185, 4-6=-384/185
 BOT CHORD 2-8=-63/332, 6-8=-63/332

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 3-8-0, Exterior(2R) 3-8-0 to 6-10-14, Interior(1) 6-10-14 to 8-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 2 and 57 lb uplift at joint 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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 12, 2021

Job 2643945	Truss J01	Truss Type JACK-OPEN	Qty 6	Ply 1	summit/woodside ridge #36/MO 144773694
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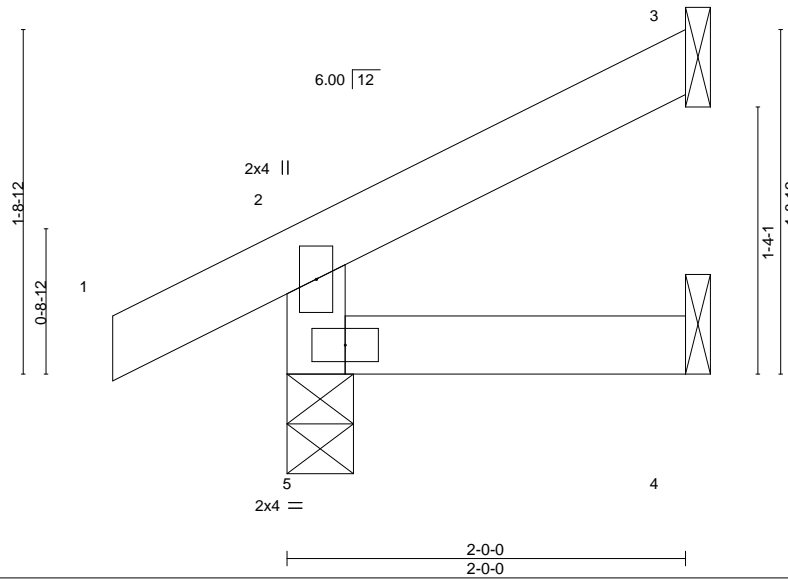
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:34 2021 Page 1

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Scale = 1:11.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	-0.00	5	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR					Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
 Max Horz 5=44(LC 12)
 Max Uplift 5=21(LC 12), 3=-29(LC 12)
 Max Grav 5=219(LC 1), 3=61(LC 1), 4=33(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 5 and 29 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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

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



16023 Swingley Ridge Rd
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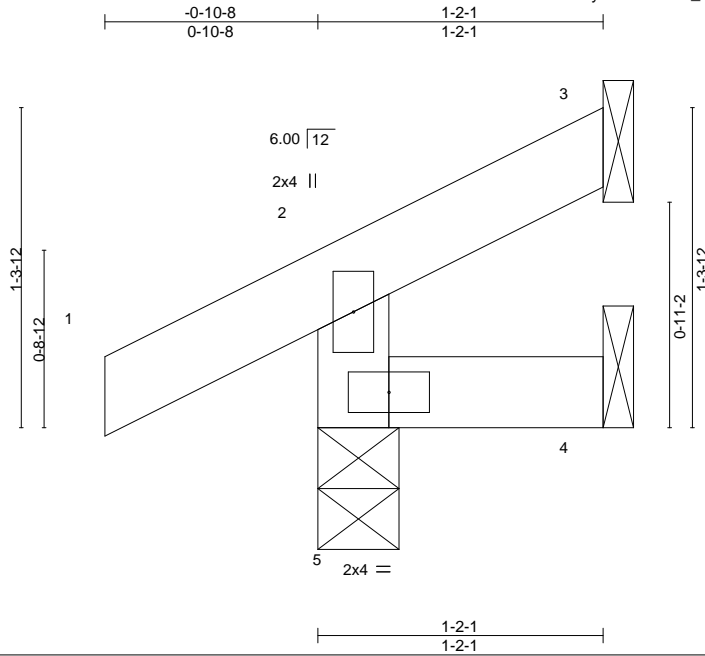
Job 2643945	Truss J01A	Truss Type Jack-Open	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773695
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:34 2021 Page 1

ID:wH4RYhEstNeUP2dXvOfi1syQY8e-1EPE_gg3KPtWxCd_Fv4c?dBkWyUwPxObQQNUlJzmEx?



Scale = 1:9.5

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	0.00	5	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	5	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR					Weight: 4 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 1-2-1 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
 Max Horz 5=30(LC 9)
 Max Uplift 5=22(LC 12), 3=-13(LC 12), 4=-2(LC 1)
 Max Grav 5=194(LC 1), 3=12(LC 19), 4=14(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 22 lb uplift at joint 5, 13 lb uplift at joint 3 and 2 lb uplift at joint 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss J02	Truss Type JACK-OPEN	Qty 7	Ply 1	summit/woodside ridge #36/MO	144773696
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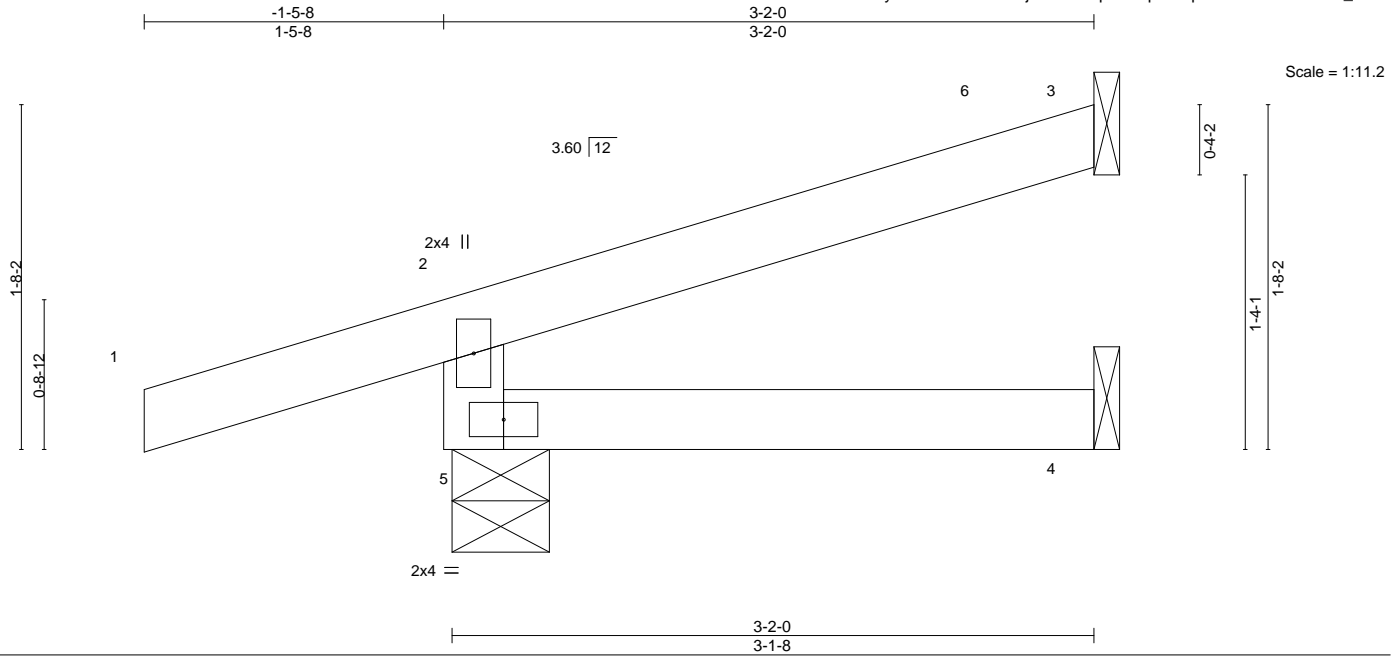
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:35 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-VRzcBAhi5j?NYMCApccrXqktGMpU8Oelf462H9zmEx_

Job Reference (optional)



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	-0.01	4-5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR							
								Weight: 9 lb	FT = 20%	

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

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

REACTIONS. (size) 5=0-5-11, 3=Mechanical, 4=Mechanical
 Max Horz 5=49(LC 8)
 Max Uplift 5=88(LC 8), 3=34(LC 12)
 Max Grav 5=346(LC 1), 3=99(LC 1), 4=52(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-311/200

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-5-8 to 2-9-7, Exterior(2R) 2-9-7 to 3-1-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 5 and 34 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

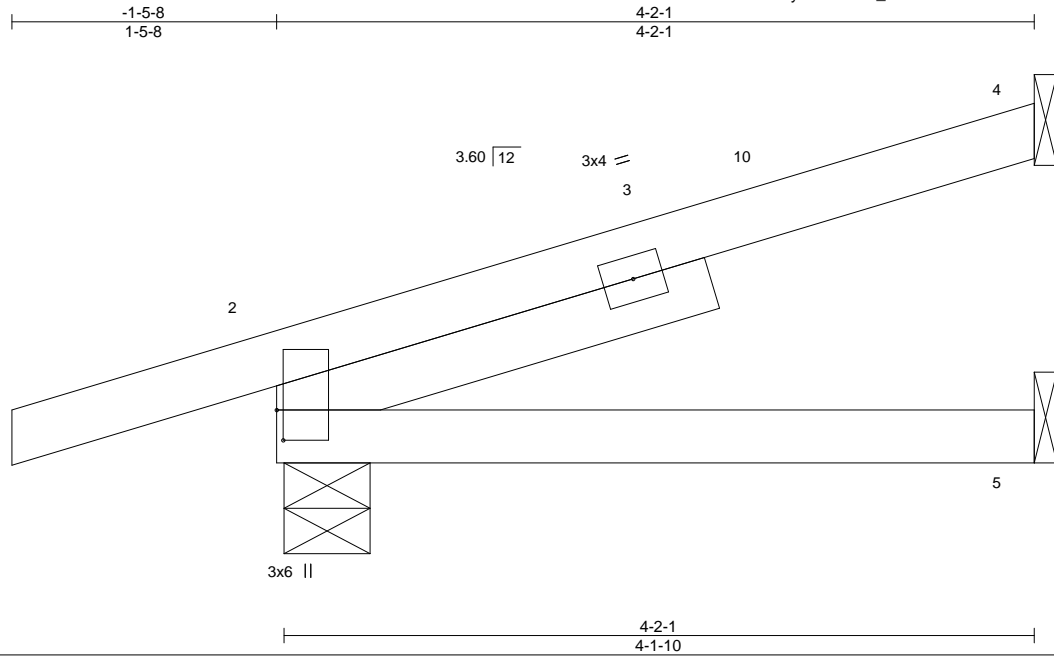
Job 2643945	Truss J02A	Truss Type Jack-Open	Qty 2	Ply 1	summit/woodside ridge #36/MO 144773697
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Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:36 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-zdX_OViKs17EAWnNMK7442G2YI8btrutksbobzmEwz



Scale = 1:12.7

Plate Offsets (X,Y)--	[2:0-2,0,0-7]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.25	Vert(LL)	-0.01 5-8	>999	240
TCDL 20.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.03 5-8	>999	180
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01 2	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS				
							PLATES
							MT20
							GRIP
							197/144
							Weight: 14 lb
							FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x4 SPF No.2 2-6-0		

REACTIONS. (size) 4=Mechanical, 2=0-5-11, 5=Mechanical
 Max Horz 2=67(LC 8)
 Max Uplift 4=-46(LC 12), 2=-84(LC 8)
 Max Grav 4=152(LC 1), 2=381(LC 1), 5=72(LC 3)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-5-8 to 2-9-7, Exterior(2R) 2-9-7 to 4-1-5 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
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 4 and 84 lb uplift at joint 2.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 6) 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 12, 2021

Job 2643945	Truss J03	Truss Type HALF HIP GIRDER	Qty 7	Ply 1	summit/woodside ridge #36/MO 144773698
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:37 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOf1syQY8e-Sp5McrydKF4ogLZw1eJcFpDt9RNclm16Ob8K1zmEwy

Job Reference (optional)

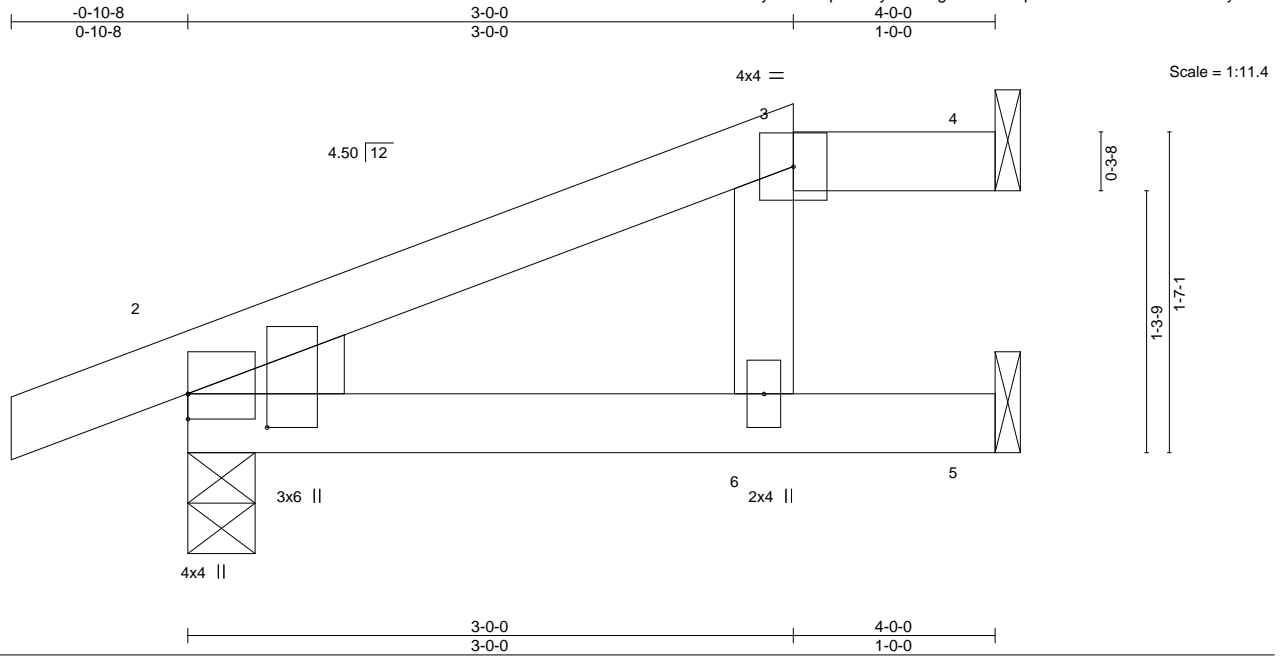


Plate Offsets (X, Y)--	[2:0-2-0,0-4-11]						
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.21	Vert(LL)	-0.02	6-9	>999
TCDL 20.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.05	6-9	>948
BCLL 0.0	Rep Stress Incr	NO	WB 0.02	Horz(CT)	0.03	4	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP				
							PLATES
							MT20
							GRIP
							197/144
							Weight: 13 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 or 4-0-0 oc purlins, except 2-0-0 oc purlins: 3-4.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-4-0, 5=Mechanical
 Max Horz 2=49(LC 4)
 Max Uplift 4=-32(LC 11), 2=-55(LC 4), 5=-29(LC 8)
 Max Grav 4=85(LC 22), 2=304(LC 1), 5=164(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 32 lb uplift at joint 4, 55 lb uplift at joint 2 and 29 lb uplift at joint 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 48 lb down and 39 lb up at 3-11-4, and 28 lb down and 32 lb up at 3-0-0 on top chord, and 27 lb down and 2 lb up at 3-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-3=-90, 3-4=-90, 5-7=-20
 Concentrated Loads (lb)
 Vert: 4=-24(F) 6=2(F)



February 12, 2021

Job	Truss	Truss Type	Qty	Ply	summit/woodside ridge #36/MO	144773699
2643945	J03A	Half Hip	2	1		

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:38 2021 Page 1

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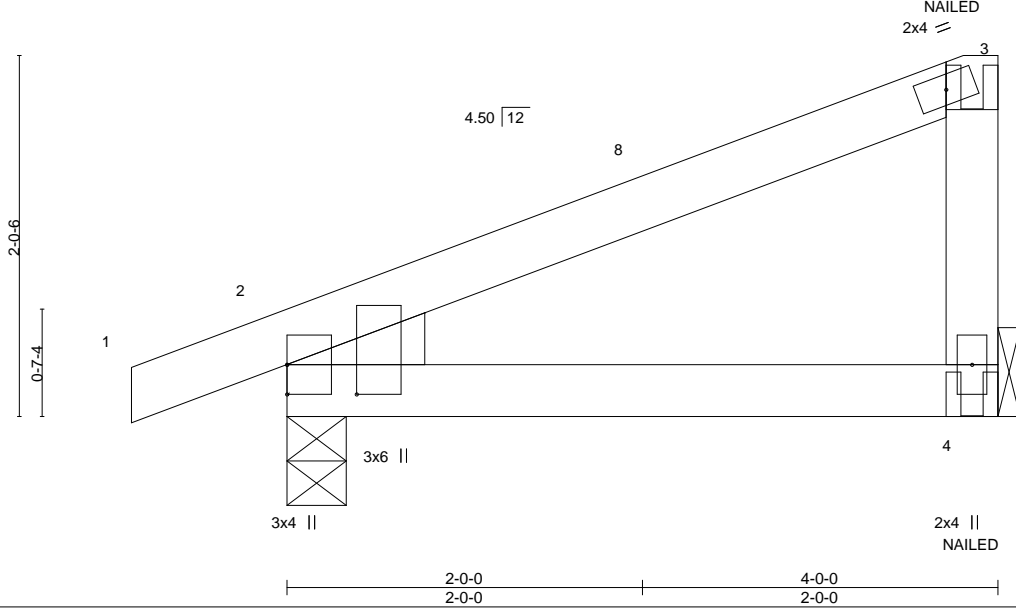


Plate Offsets (X,Y)--	[2:0-2-0,0-4-11]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	-0.01	4-7	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.03	4-7	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	2	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 13 lb	FT = 20%

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

REACTIONS. (size) 4=Mechanical, 2=0-4-0
 Max Horz 2=72(LC 11)
 Max Uplift 4=-53(LC 12), 2=-55(LC 8)
 Max Grav 4=312(LC 1), 2=300(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 3-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) Refer to girder(s) for truss to truss connections.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 4 and 55 lb uplift at joint 2.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 6) 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.
 - 7) "NAILED" indicates 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)	Standard
1) Dead + Roof Live (balanced):	Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)	
	Vert: 1-3=-90, 4-5=-20
Concentrated Loads (lb)	
	Vert: 3=-75(F) 4=-33(F)



February 12, 2021

Job 2643945	Truss J04	Truss Type JACK-OPEN	Qty 17	Ply 1	summit/woodside ridge #36/MO 144773700
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:39 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-OCd71XkC9yVo1zVy2SgniguZ4z8N4CdKZI4FPwzmEww

Job Reference (optional)



Scale = 1:13.3

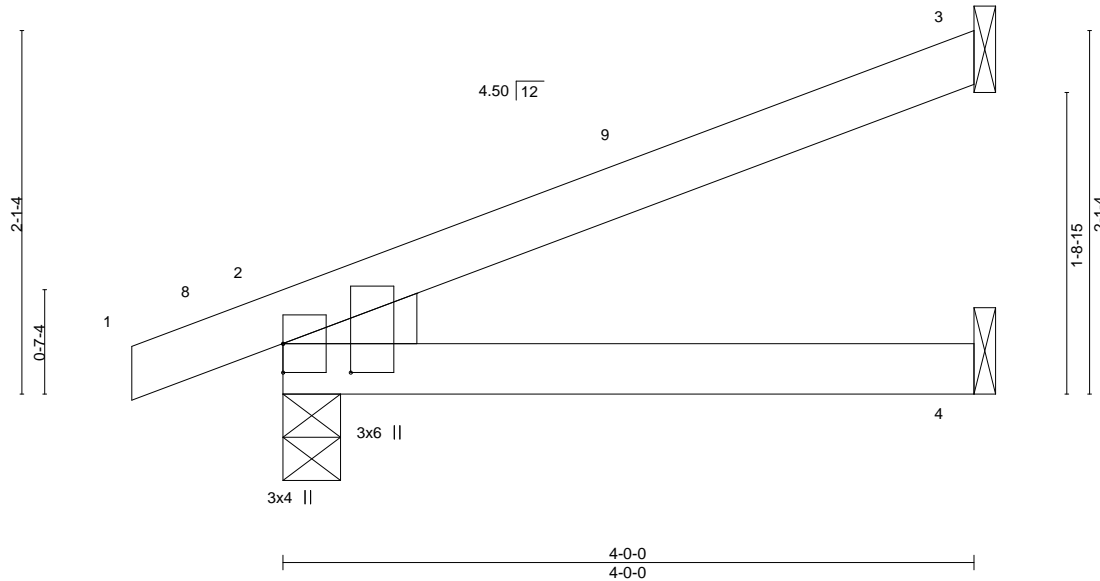


Plate Offsets (X,Y)--	[2:0-2-0,0-4-11]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) 0.02 4-7 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.03 4-7 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01 2 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
 Max Horz 2=66(LC 8)
 Max Uplift 3=-46(LC 12), 2=-47(LC 8)
 Max Grav 3=147(LC 1), 2=304(LC 1), 4=77(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 3 and 47 lb uplift at joint 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) 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 12, 2021

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

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

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss J05	Truss Type Jack-Open	Qty 2	Ply 1	summit/woodside ridge #36/MO 144773701
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:39 2021 Page 1

ID: wH4RYhEsTNeUP2dXvOf1syQY8e-OCD71XkC9yVo1zVy2SgnigubdzBe4CdKZI4FPwzmEww

Job Reference (optional)

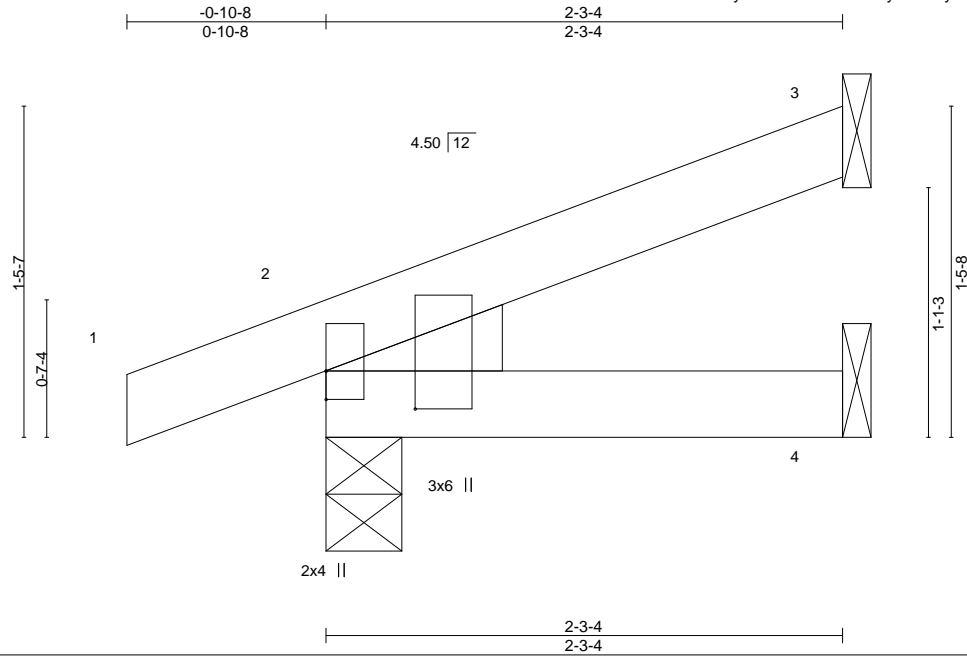


Plate Offsets (X,Y)--	[2:0-2-0,0-4-11]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00 7 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.05	Vert(CT) -0.00 7 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 2 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 7 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-3-4 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
 Max Horz 2=44(LC 8)
 Max Uplift 3=-23(LC 12), 2=-42(LC 8), 4=-2(LC 12)
 Max Grav 3=72(LC 1), 2=216(LC 1), 4=41(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 23 lb uplift at joint 3, 42 lb uplift at joint 2 and 2 lb uplift at joint 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

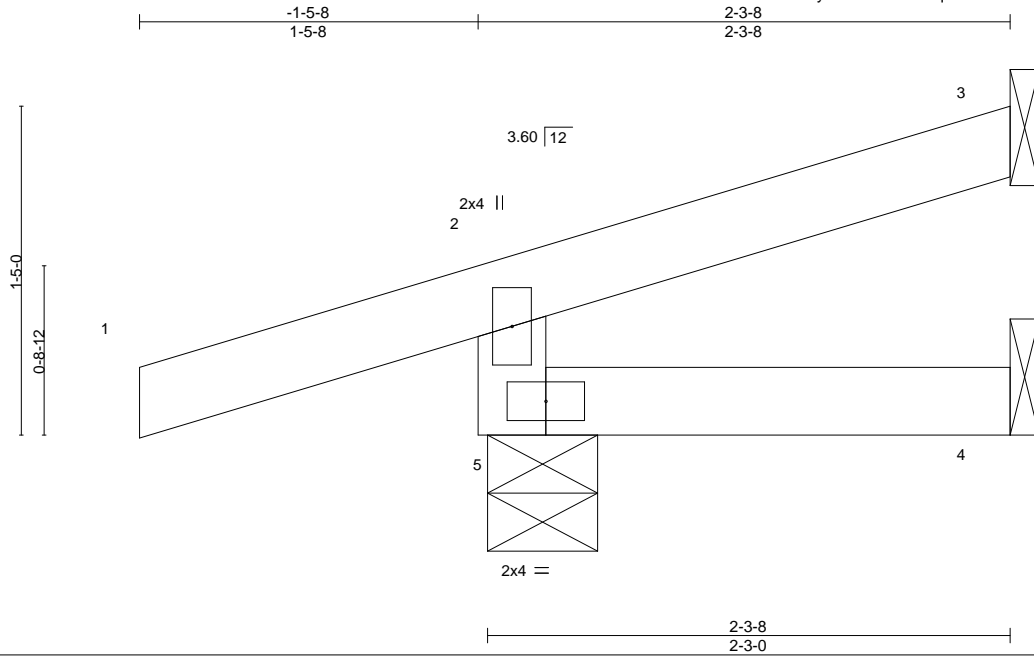
Job 2643945	Truss J06	Truss Type Jack-Open	Qty 2	Ply 1	summit/woodside ridge #36/MO 144773702
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:40 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-sOnVEtlqwFdf748bAB0EuRk?NXqptUoMqoxMzmEww



Scale = 1:9.9

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.22	Vert(LL)	0.00	5	>999	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT)	-0.00	4-5	>999		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR						
	Code IRC2018/TPI2014						Weight: 7 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 2-3-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-5-11, 3=Mechanical, 4=Mechanical
 Max Horz 5=39(LC 8)
 Max Uplift 5=88(LC 8), 3=21(LC 12)
 Max Grav 5=315(LC 1), 3=52(LC 1), 4=32(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-279/188

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 88 lb uplift at joint 5 and 21 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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

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

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss J07	Truss Type Half Hip Girder	Qty 2	Ply 1	summit/woodside ridge #36/MO	144773703
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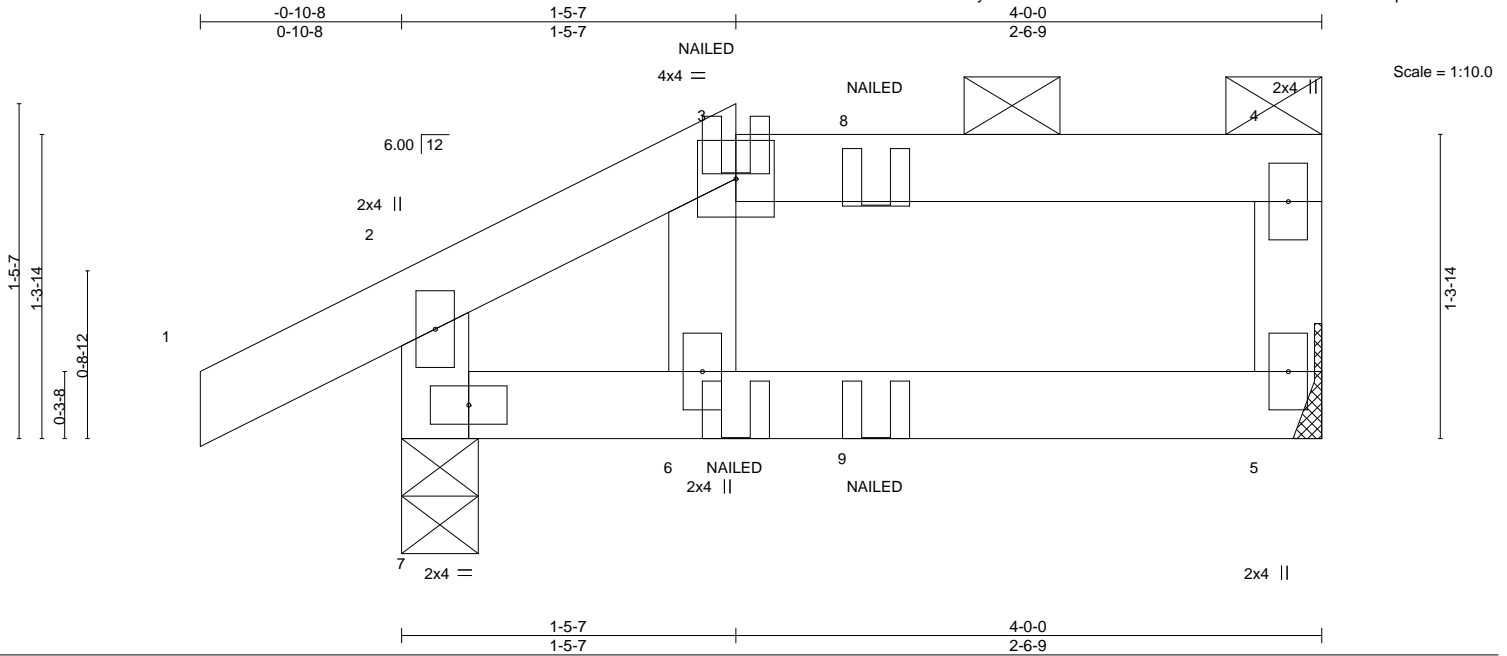
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:41 2021 Page 1

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Job Reference (optional)



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	6	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	-0.01	5-6	>999		
BCLL 0.0	Rep Stress Incr	NO	WB 0.01	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR					Weight: 13 lb	FT = 20%

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

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

REACTIONS. (size) 5=Mechanical, 7=0-4-0
 Max Horz 7=45(LC 28)
 Max Uplift 5=37(LC 5), 7=48(LC 8)
 Max Grav 5=197(LC 1), 7=312(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 5 and 48 lb uplift at joint 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-90, 2-3=-90, 3-4=-90, 5-7=-20
 Concentrated Loads (lb)
 Vert: 6=5(F) 9=-14(F)



February 12, 2021

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

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

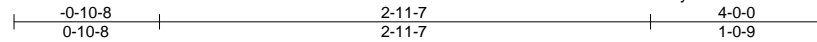
Job 2643945	Truss J08	Truss Type Half Hip	Qty 2	Ply 1	summit/woodside ridge #36/MO 144773704
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:42 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-onuFz5SttNuREXjaEUJJW51A8IHYZnGgJv0FzmEwt



Scale = 1:13.9

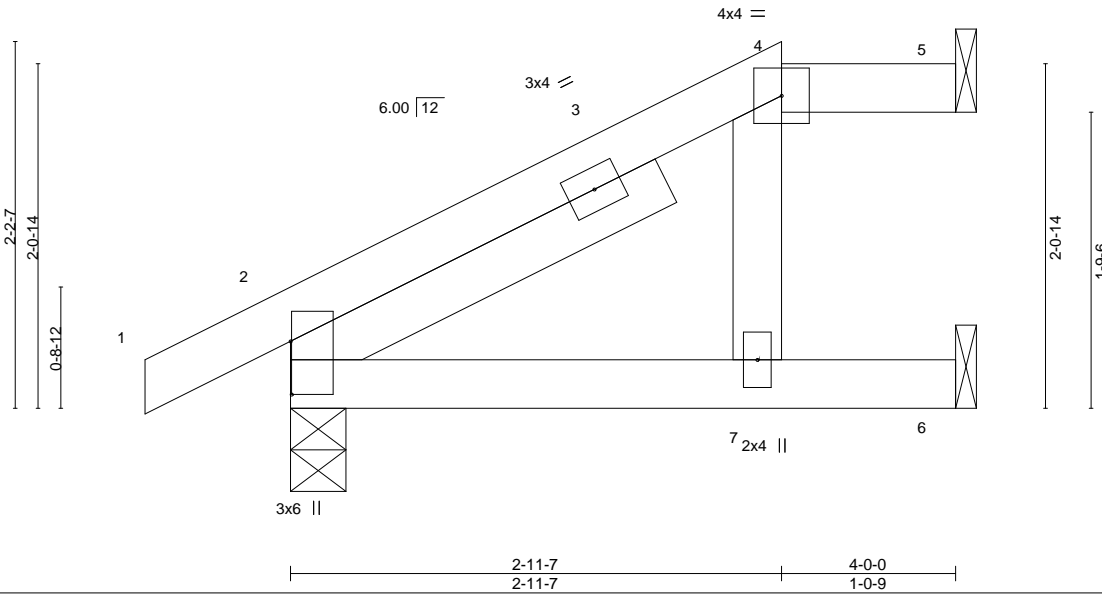


Plate Offsets (X,Y)--	[2:0-3-13,0-0-1]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.18	Vert(LL) 0.03 7-10 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.35	Vert(CT) -0.05 7-10 >994 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.04 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 15 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins: 4-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x4 SPF No.2 2-6-0	

REACTIONS. (size) 5=Mechanical, 2=0-4-0, 6=Mechanical
 Max Horz 2=64(LC 12)
 Max Uplift 5=-12(LC 8), 2=-34(LC 12), 6=-27(LC 12)
 Max Grav 5=44(LC 1), 2=304(LC 1), 6=164(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-299/173

- 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-7, Exterior(2E) 2-11-7 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 12 lb uplift at joint 5, 34 lb uplift at joint 2 and 27 lb uplift at joint 6.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

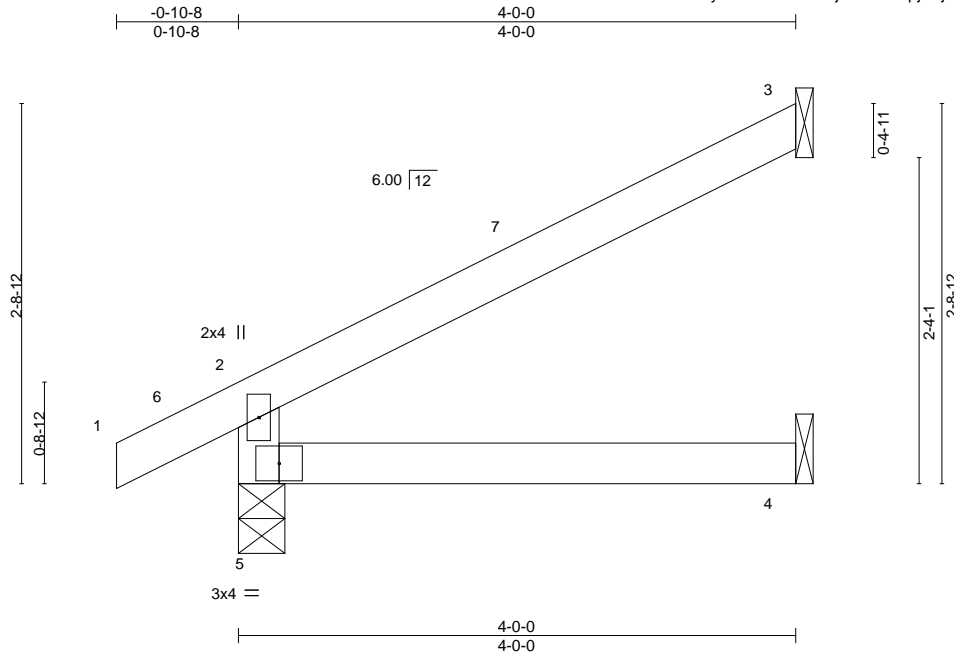
Job 2643945	Truss J09	Truss Type Jack-Open	Qty 5	Ply 1	summit/woodside ridge #36/MO 144773705
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:43 2021 Page 1

ID:wH4RYhEstNeUP2dXvOfi1syQY8e-GzSdsvnjDA0EWbpjHlIjsW3FuaXH0?cwUK2TYhzmEws



Scale = 1:16.5

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

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

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

REACTIONS. (size) 5=0-4-0, 3=Mechanical, 4=Mechanical
 Max Horz 5=79(LC 12)
 Max Uplift 5=26(LC 12), 3=-59(LC 12)
 Max Grav 5=313(LC 1), 3=150(LC 1), 4=74(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-5=-284/140

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 5 and 59 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



February 12, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss J10	Truss Type JACK-OPEN	Qty 4	Ply 1	summit/woodside ridge #36/MO 144773706
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Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:43 2021 Page 1
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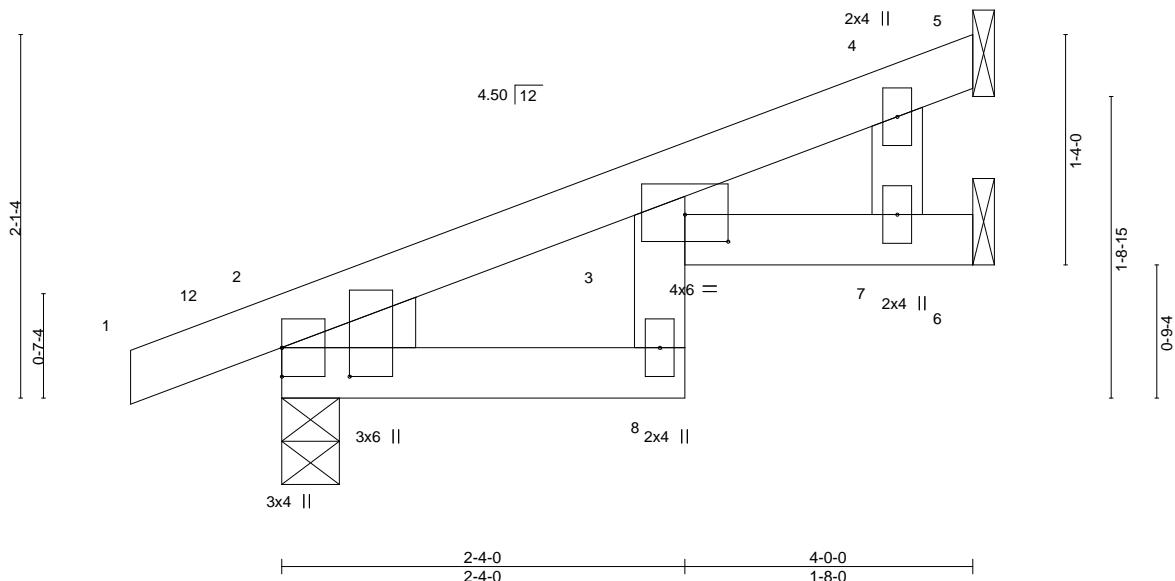


Plate Offsets (X,Y)--	[2:0-2-0,0-4-11], [3:0-3-0,0-1-14]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	-0.03	8	>999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	-0.06	8	>797		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.04	6	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS					Weight: 13 lb	FT = 20%

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

REACTIONS. (size) 5=Mechanical, 2=0-4-0, 6=Mechanical
 Max Horz 2=66(LC 8)
 Max Uplift 5=-7(LC 1), 2=-47(LC 8), 6=-51(LC 12)
 Max Grav 5=7(LC 12), 2=305(LC 1), 6=215(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-1, Interior(1) 2-1-1 to 3-11-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 5, 47 lb uplift at joint 2 and 51 lb uplift at joint 6.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) 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 12, 2021

Job 2643945	Truss J11	Truss Type JACK-OPEN	Qty 5	Ply 1	summit/woodside ridge #36/MO 144773707
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:44 2021 Page 1

ID:wH4RYhEstNeUP2dXvOfi1syQY8e-kA004FoL_U858lOvq?GyPkbQq_sYISs3j_o047zmEwr



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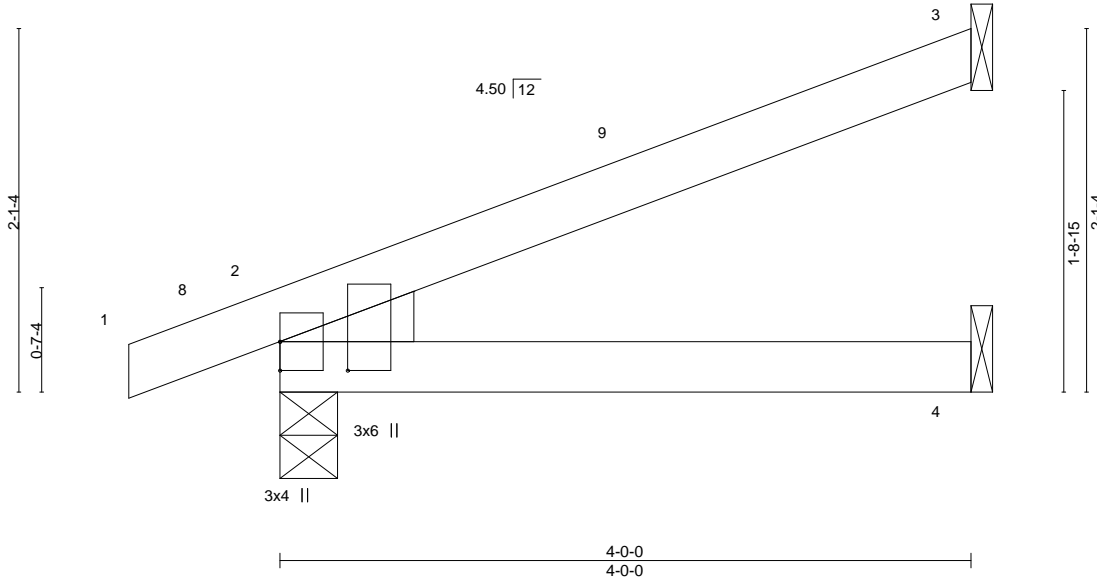


Plate Offsets (X,Y)--	[2:0-2-0,0-4-11]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) 0.02 4-7 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.20	Vert(CT) -0.03 4-7 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.01 2 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-4-0, 4=Mechanical
 Max Horz 2=66(LC 8)
 Max Uplift 3=-46(LC 12), 2=-47(LC 8)
 Max Grav 3=147(LC 1), 2=304(LC 1), 4=77(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 3 and 47 lb uplift at joint 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) 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 12, 2021

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss J12	Truss Type JACK-OPEN	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773708
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:45 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-DMaOHapzloGyluz5OjnBxx8eCOECUv6DyeXZdazmEwq

Job Reference (optional)

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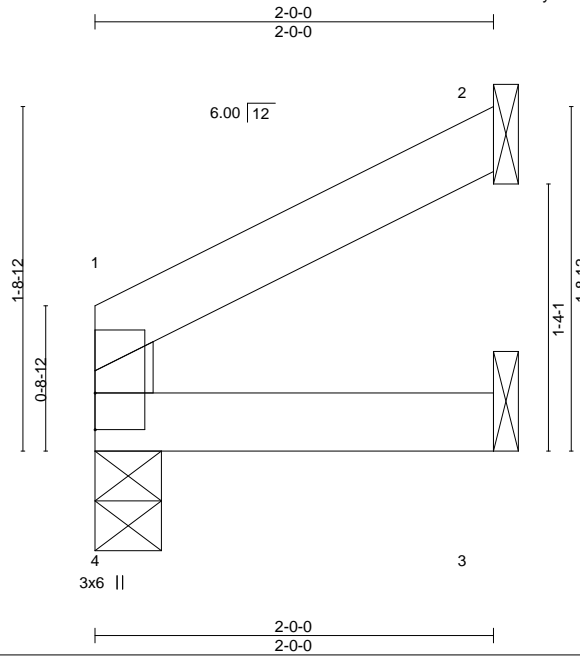


Plate Offsets (X, Y)--	[1:0-0-14, 0-1-12], [4:0-0-0, 0-1-12]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.06	Vert(LL) -0.00 4 >999 240	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00 3-4 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.00 2 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR		Weight: 5 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	

REACTIONS. (size) 4=0-4-0, 2=Mechanical, 3=Mechanical
 Max Horz 4=30(LC 9)
 Max Uplift 2=-31(LC 12)
 Max Grav 4=101(LC 1), 2=77(LC 1), 3=37(LC 3)

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

NOTES-
 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 3) Refer to girder(s) for truss to truss connections.
 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 2.
 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

Job 2643945	Truss J13	Truss Type JACK-OPEN	Qty 1	Ply 1	summit/woodside ridge #36/MO	144773709
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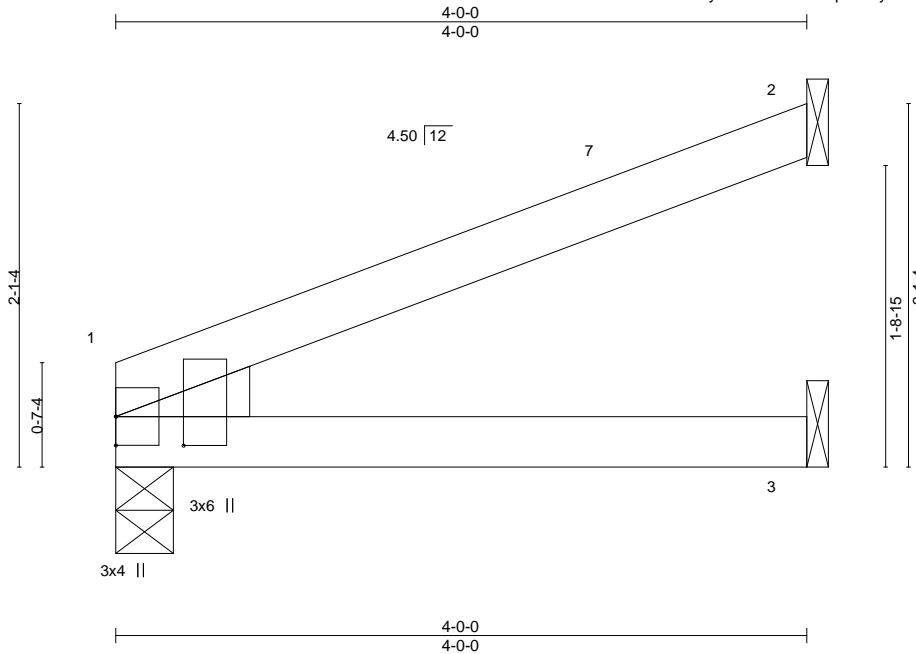
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:45 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-DMaOHapzIoGyluz5OjnBxx8bMOBKUv6DyeXZdazmEwq

Job Reference (optional)



Scale = 1:13.3

Plate Offsets (X,Y)--		[1:0-2-0,0-4-11]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL) 0.02	3-6	>999	240	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.23	Vert(CT) -0.03	3-6	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT) 0.01	1	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 10 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-4-0, 2=Mechanical, 3=Mechanical
 Max Horz 1=54(LC 12)
 Max Uplift 1=-18(LC 12), 2=-46(LC 12)
 Max Grav 1=217(LC 1), 2=151(LC 1), 3=79(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 18 lb uplift at joint 1 and 46 lb uplift at joint 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) 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 12, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss LG01	Truss Type GABLE	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773710
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

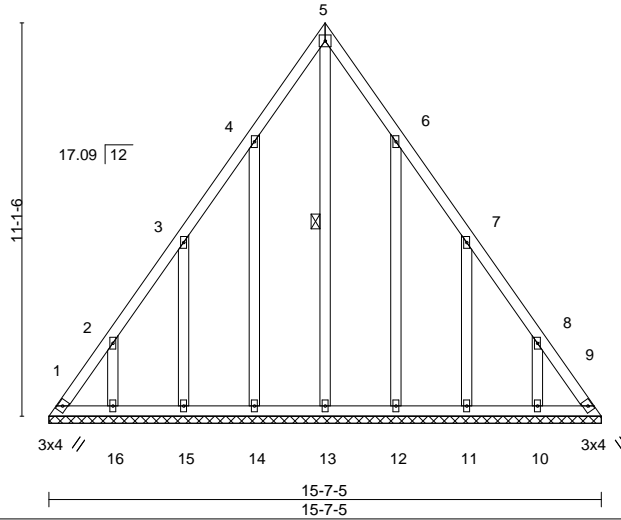
8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:46 2021 Page 1

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4x4 =

Scale = 1:65.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.27	Horz(CT)	0.01	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 93 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SPF No.2	WEBS 1 Row at midpt 5-13

REACTIONS. All bearings 15-7-5.
 (lb) - Max Horz 1=277(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) except 1=163(LC 10), 9=129(LC 11), 14=182(LC 12), 15=185(LC 12), 16=176(LC 12), 12=181(LC 13), 11=186(LC 13), 10=176(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 13 except 1=349(LC 12), 9=328(LC 13), 14=280(LC 19), 15=267(LC 19), 16=262(LC 19), 12=278(LC 20), 11=268(LC 20), 10=261(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-438/297, 2-3=-272/207, 8-9=-413/297
 BOT CHORD 1-16=-180/266, 15-16=-180/266, 14-15=-180/266, 13-14=-180/266, 12-13=-180/266, 11-12=-180/266, 10-11=-180/266, 9-10=-180/266
 WEBS 4-14=-260/199, 3-15=-268/204, 6-12=-260/197, 7-11=-268/204

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-6 to 3-3-6, Interior(1) 3-3-6 to 7-9-11, Exterior(2R) 7-9-11 to 10-9-11, Interior(1) 10-9-11 to 15-3-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are 2x4 MT20 unless otherwise indicated.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 163 lb uplift at joint 1, 129 lb uplift at joint 9, 182 lb uplift at joint 14, 185 lb uplift at joint 15, 176 lb uplift at joint 16, 181 lb uplift at joint 12, 186 lb uplift at joint 11 and 176 lb uplift at joint 10.
 - 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 12, 2021

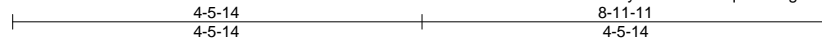
Job 2643945	Truss LG02	Truss Type GABLE	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773711
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Builders FirstSource (Valley Center),

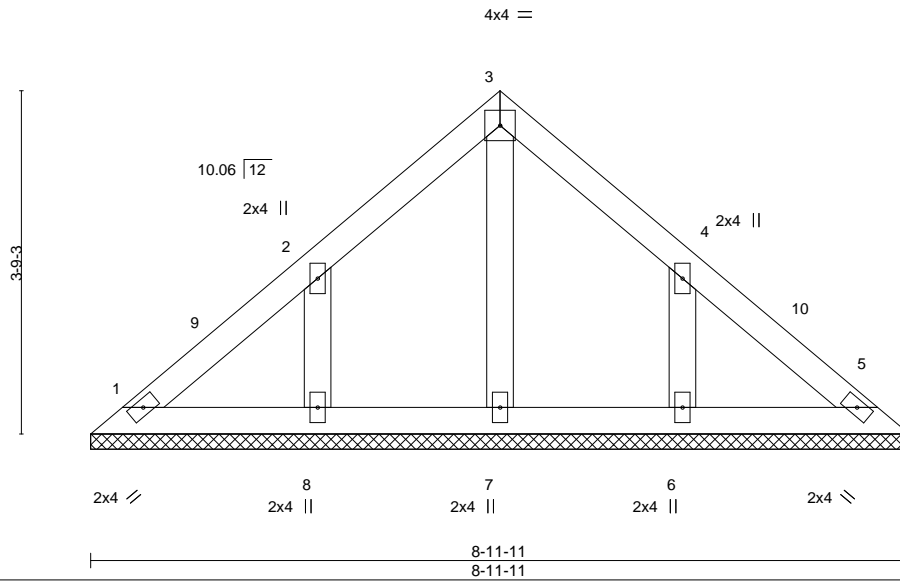
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:47 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-9li8iGqDGPWg?C6UV8pf0MDyDBwpy6WPY0ghSzmEwo



Scale = 1:25.3



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 30 lb	FT = 20%

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

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

REACTIONS. All bearings 8-11-11.
 (lb) - Max Horz 1=80(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=108(LC 12), 6=108(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=287(LC 19), 6=287(LC 20)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 4-5-14, Exterior(2R) 4-5-14 to 7-5-14, Interior(1) 7-5-14 to 8-6-14 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=108, 6=108.
- This truss 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 12, 2021

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

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

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss LG03	Truss Type GABLE	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773712
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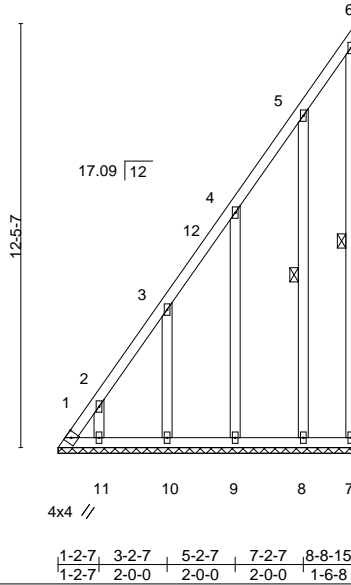
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:48 2021 Page 1

ID:3seZTgShN_qvheloPBpz4myNXMX-dxGWwcrs1jeXcMhg3rKuZam60bGBhDBfecmEDVzmEwn
 1-2-7 | 3-2-7 | 5-2-7 | 7-2-7 | 8-8-15
 1-2-7 | 2-0-0 | 2-0-0 | 2-0-0 | 1-6-8

Scale = 1:67.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0 Plate Grip DOL 1.15	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.24	Horz(CT)	0.00		n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 65 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 6-7, 5-8

REACTIONS. All bearings 8-8-15.
 (lb) - Max Horz 1=434(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=-248(LC 10), 11=-153(LC 12), 10=-185(LC 12), 9=-185(LC 12), 8=-165(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 7, 11, 8 except 1=601(LC 12), 10=274(LC 19), 9=273(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-782/679, 2-3=-614/553, 3-4=-409/386
 WEBS 3-10=-283/236, 4-9=-283/202, 5-8=-253/181

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-6 to 4-6-4, Exterior(2R) 4-6-4 to 8-7-3 zone; cantilever left and right exposed ; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) All plates are 2x4 MT20 unless otherwise indicated.
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=248, 11=153, 10=185, 9=185, 8=165.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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



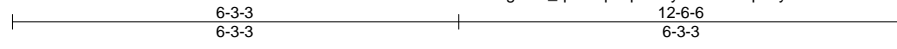
Job 2643945	Truss LG04	Truss Type GABLE	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773713
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:49 2021 Page 1

ID:3seZTgShN_qvhelqPBpz4myNXMX-57pv7ysUo0mNEWGtdZs76nJlr?c8QjJptFVnmLzmEwm



3x4 =

Scale = 1:32.3

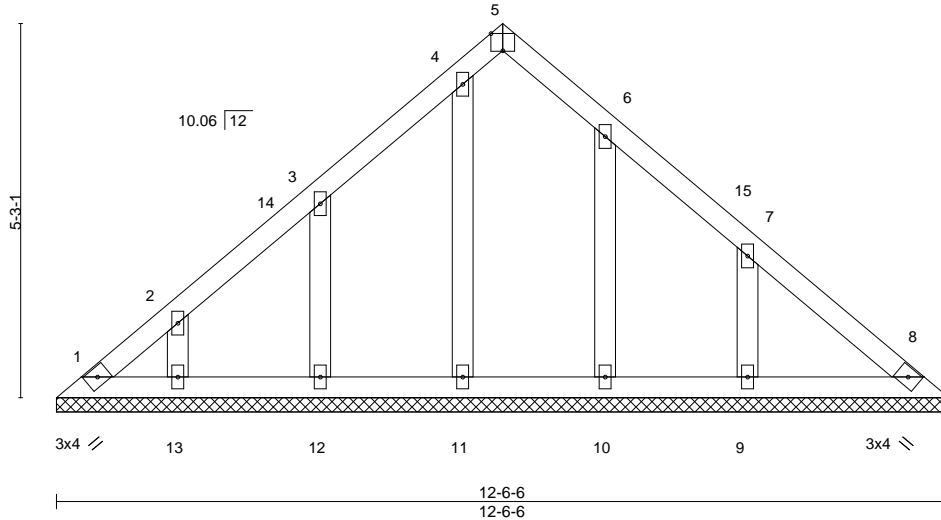


Plate Offsets (X,Y)--	[5:0-2-0,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES
TCLL 25.0	Plate Grip DOL	1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999
TCDL 20.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	8	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					
								Weight: 47 lb FT = 20%

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

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

REACTIONS. All bearings 12-6-6.
 (lb) - Max Horz 1=115(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 12, 11, 10 except 9=116(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 8, 13, 12, 11, 10 except 9=300(LC 20)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 6-3-3, Exterior(2R) 6-3-3 to 9-3-3, Interior(1) 9-3-3 to 12-1-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 12, 11, 10 except (jt=lb) 9=116.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

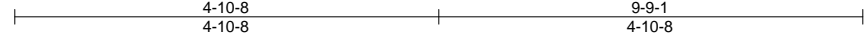
Job 2643945	Truss LG05	Truss Type GABLE	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773714
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:50 2021 Page 1

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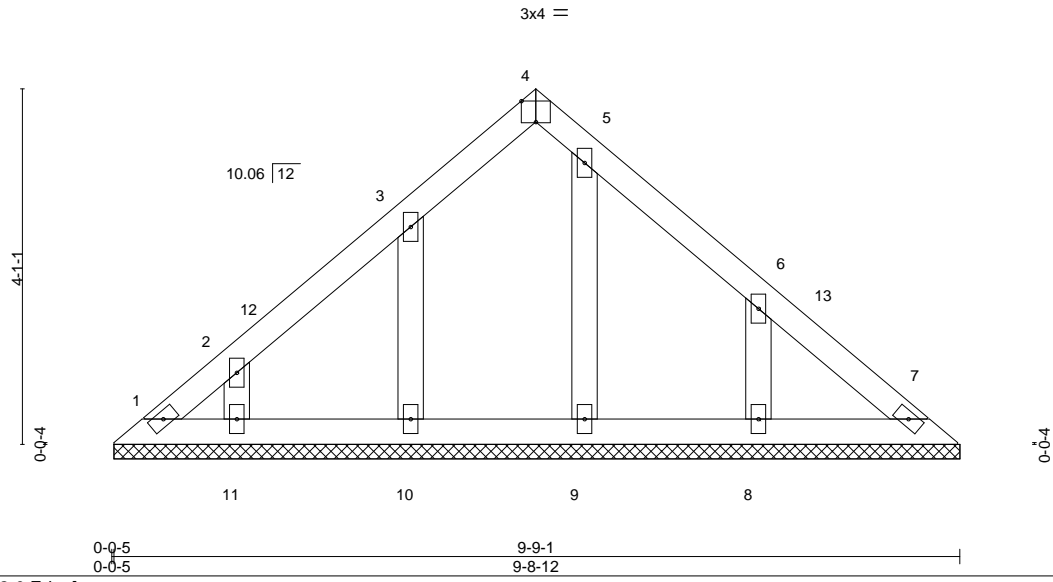


Plate Offsets (X,Y)--	[4:0-2-0,Edge]
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LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) n/a - n/a 999	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.03	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 7 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 33 lb	FT = 20%

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

REACTIONS. All bearings 9-8-12.
 (lb) - Max Horz 1=88(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 10, 9 except 8=104(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 10, 9 except 8=261(LC 20)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 3-5-4, Interior(1) 3-5-4 to 4-10-8, Exterior(2R) 4-10-8 to 7-10-8, Interior(1) 7-10-8 to 9-4-4 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
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 10, 9 except (jt=lb) 8=104.
 - This truss 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 12, 2021

<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 16023 Swingley Ridge Rd Chesterfield, MO 63017
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Job 2643945	Truss LG06	Truss Type GABLE	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773715
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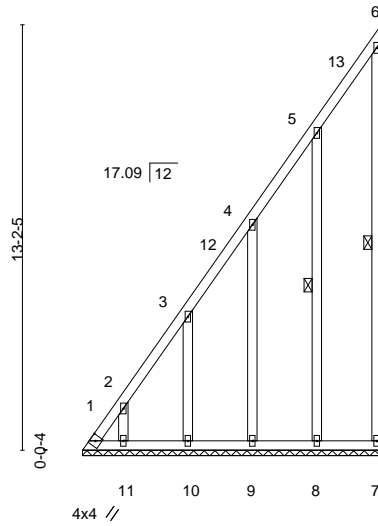
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:51 2021 Page 1

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-1WxfYetkKe05TpQFKzubBCOdDolsuay5KZ_uqEzmEwk
9-3-3
9-3-3

Scale = 1:71.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.23	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 68 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 6-7, 5-8

REACTIONS. All bearings 9-3-3.

(lb) - Max Horz 1=451(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 7 except 1=257(LC 10), 8=182(LC 12), 9=182(LC 12), 10=186(LC 12), 11=155(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 7, 11 except 1=621(LC 12), 8=279(LC 19), 9=265(LC 19), 10=275(LC 19)

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

TOP CHORD 1-2=809/705, 2-3=647/585, 3-4=435/418, 4-5=258/260
 WEBS 5-8=287/201, 4-9=273/197, 3-10=284/234

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-6 to 4-6-4, Exterior(2R) 4-6-4 to 9-1-7 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are 2x4 MT20 unless otherwise indicated.
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=257, 8=182, 9=182, 10=186, 11=155.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss LG07	Truss Type GABLE	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773716
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:52 2021 Page 1

ID:3seZTgShN_qvhelqPBpz4myNXMX-Viv11_uM5x8y5z?SlhPqjQxpbCdh3fZDKRMgzmEwj



4x4 =

Scale = 1:44.7

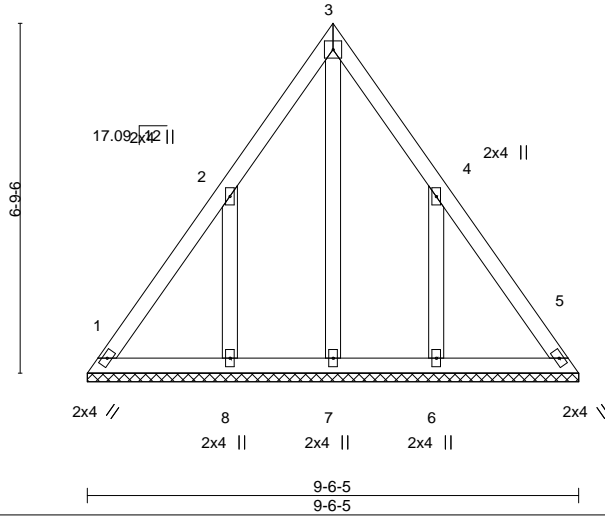


Plate Offsets (X, Y)--	[4:0-0,1,0-0-0]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.11	Vert(LL) n/a - n/a 999	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.05	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 43 lb	FT = 20%

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

REACTIONS. All bearings 9-6-5.
 (lb) - Max Horz 1=165(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=247(LC 12), 6=246(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=367(LC 19), 6=366(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-352/254, 4-6=-352/253

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-6 to 3-3-6, Interior(1) 3-3-6 to 4-9-3, Exterior(2R) 4-9-3 to 7-9-3, Interior(1) 7-9-3 to 9-2-15 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=247, 6=246.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

Job 2643945	Truss LG08	Truss Type GABLE	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773717
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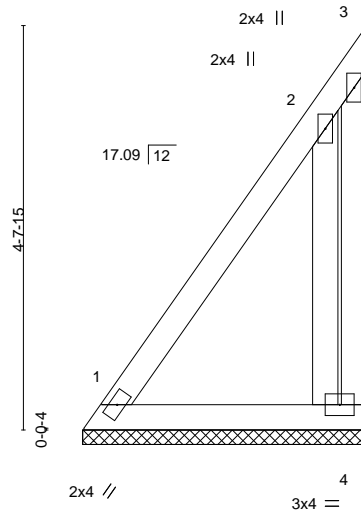
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:53 2021 Page 1

ID:3seZTgShN_qvhelqPBpz4myNXMX-_u3PzJv_sFGpj7aesOw3GdZTcyUMWjOotT?v6zmEwi
3-3-5
3-3-5

Scale = 1:26.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-3-5, 4=3-3-5
Max Horz 1=144(LC 9)
Max Uplift 1=35(LC 8), 4=102(LC 9)
Max Grav 1=205(LC 20), 4=209(LC 19)

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

TOP CHORD 2-3=-279/260, 3-4=-264/278
WEBS 2-4=-411/340

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 4=102.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

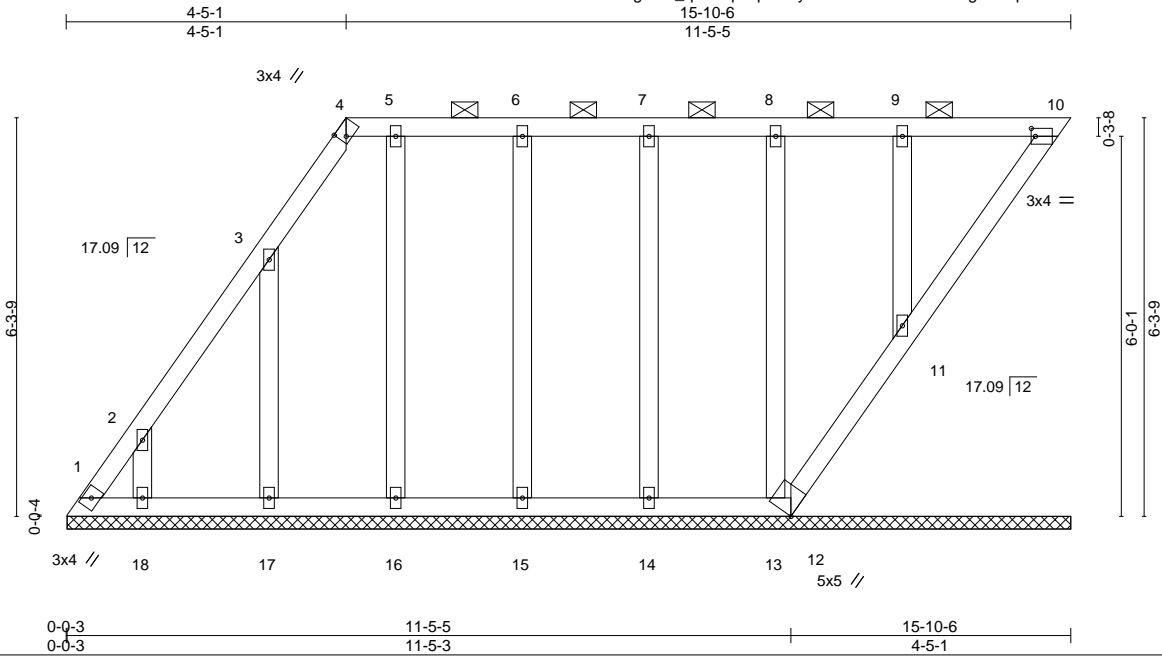
Job 2643945	Truss LG09	Truss Type GABLE	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773718
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:54 2021 Page 1

ID:3seZTgShN_qvhelqPBpz4myNXMX-S5doAfwcdZOgKH9qG6Rlor09T0JB5zWY0XDYRYzmEwh
15-10-6
11-5-5



Scale = 1:36.4

Plate Offsets (X,Y)--	[4:0-1-2,Edge], [10:0-0-12,0-1-8], [12:0-1-7,0-1-0], [13:0-1-0,0-1-7]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.12	Horz(CT)	-0.00	10	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 78 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 4-10.
OTHERS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 15-10-3.
 (lb) - Max Horz 1=222(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 12, 16, 15, 14, 13, 11 except 18=162(LC 12), 17=160(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 1, 10, 12, 18, 16, 15, 14, 13 except 17=252(LC 19), 11=290(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=304/248

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-6 to 3-2-7, Interior(1) 3-2-7 to 4-5-1, Exterior(2R) 4-5-1 to 7-2-7, Interior(1) 7-2-7 to 15-7-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 12, 16, 15, 14, 13, 11 except (jt=lb) 18=162, 17=160.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 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.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



February 12, 2021

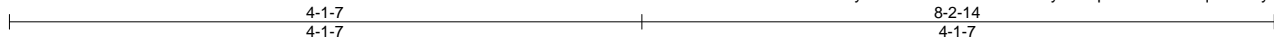
Job 2643945	Truss V01	Truss Type Valley	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773719
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

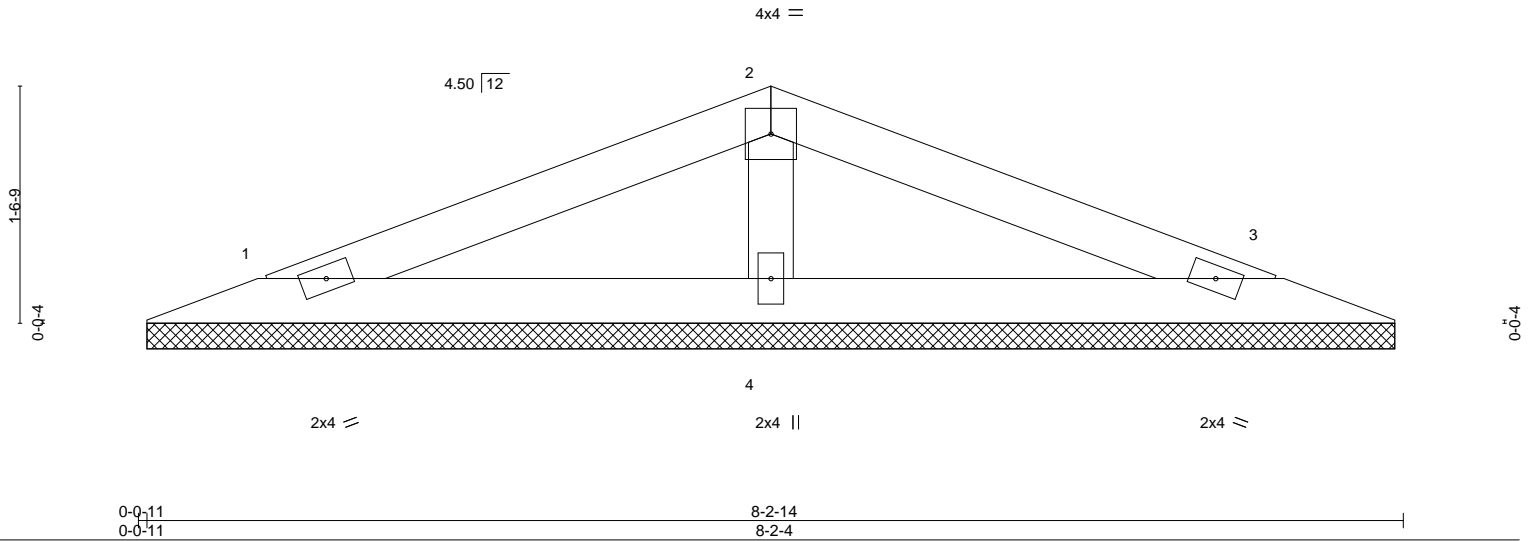
8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:55 2021 Page 1

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Job Reference (optional)



Scale = 1:15.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0 Plate Grip DOL 1.15	TC 0.25	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.04	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 18 lb	FT = 20%

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

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

REACTIONS. (size) 1=8-1-9, 3=8-1-9, 4=8-1-9
 Max Horz 1=20(LC 16)
 Max Uplift 1=31(LC 12), 3=34(LC 13), 4=17(LC 8)
 Max Grav 1=179(LC 1), 3=179(LC 1), 4=364(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-282/146

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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



Job 2643945	Truss V03	Truss Type VALLEY	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773720
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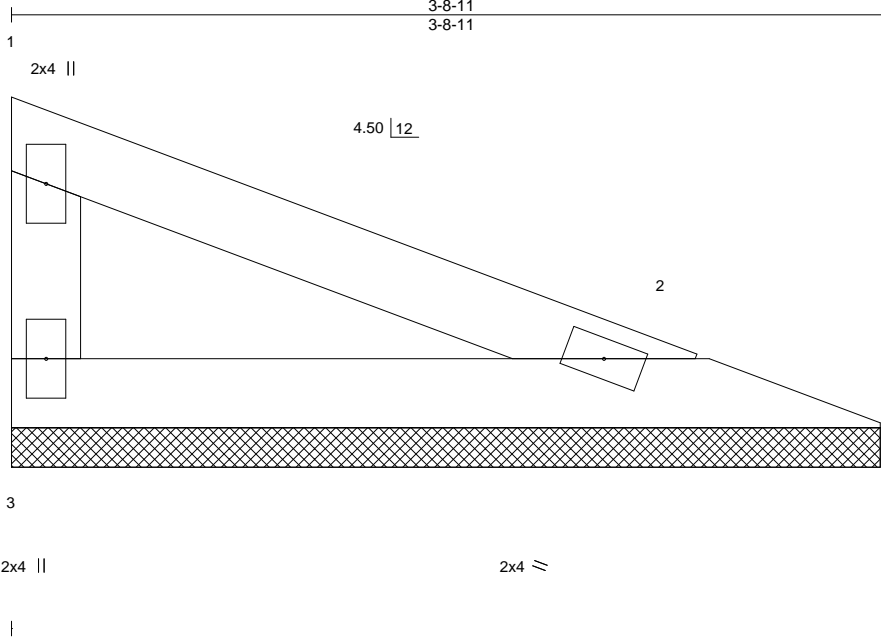
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:55 2021 Page 1

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Job Reference (optional)



Scale = 1:9.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.17	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.07	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 9 lb	FT = 20%
	Code IRC2018/TPI2014							

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 3-8-11 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=3-8-0, 2=3-8-0
 Max Horz 3=-42(LC 8)
 Max Uplift 3=-26(LC 13), 2=-19(LC 13)
 Max Grav 3=151(LC 1), 2=151(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

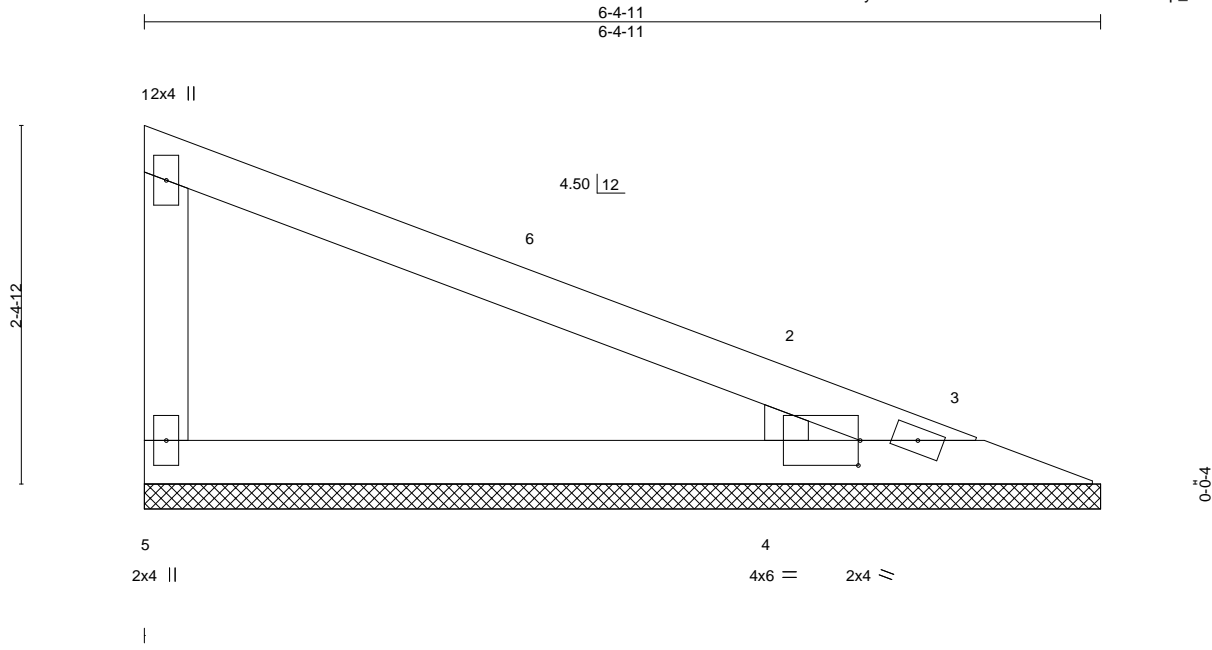
Job 2643945	Truss V04	Truss Type GABLE	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773721
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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:56 2021 Page 1

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Scale = 1:15.4

Plate Offsets (X,Y)--	[2:0-1-12,0-0-10], [4:0-0-2,0-2-0], [4:0-1-12,0-0-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.12	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 16 lb	FT = 20%

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

REACTIONS. (size) 5=6-4-11, 3=6-4-11, 4=6-4-11
 Max Horz 5=-82(LC 8)
 Max Uplift 5=-30(LC 13), 3=-78(LC 1), 4=-96(LC 13)
 Max Grav 5=183(LC 1), 3=38(LC 13), 4=489(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-4=-400/244

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-3-8, Interior(1) 4-3-8 to 5-6-10 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
 - 2) Gable requires continuous bottom chord bearing.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

Job 2643945	Truss V05	Truss Type VALLEY	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773722
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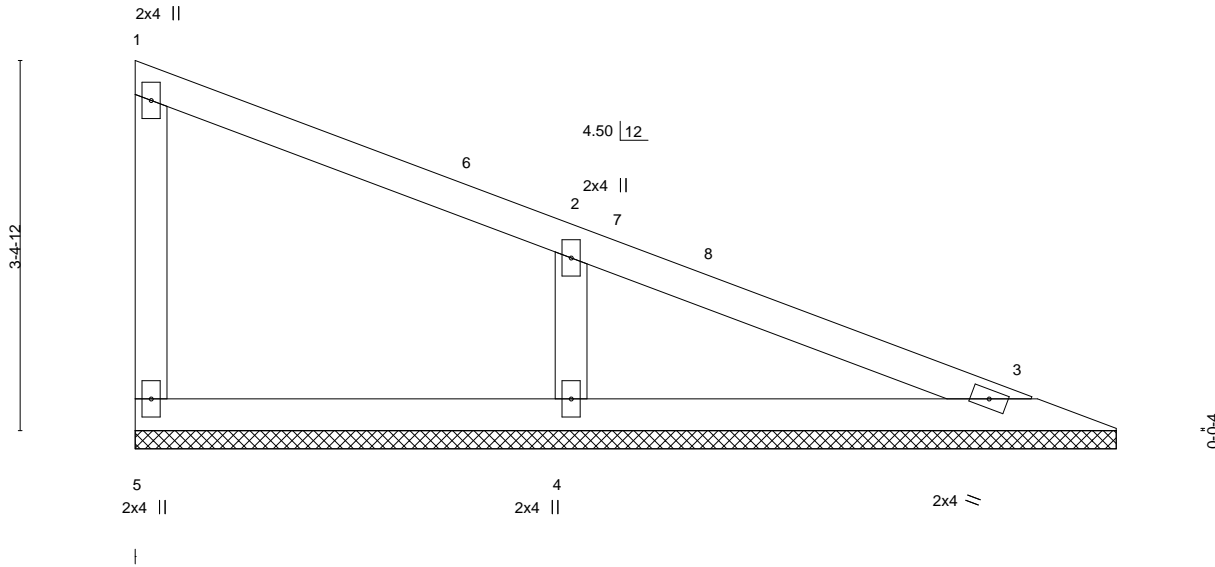
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:57 2021 Page 1

9-0-11
9-0-11

ID:wH4RYhEsTNeUP2dXvOfi1syQY8e-sglwohyVwUmFBktP5E??QTedIDJZILB_iVRC2tmEwe

Scale = 1:21.1



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.31	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 25 lb	FT = 20%
	Code IRC2018/TPI2014							

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

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

REACTIONS. (size) 5=9-0-0, 3=9-0-0, 4=9-0-0
Max Horz 5=-122(LC 8)
Max Uplift 5=-21(LC 8), 3=-8(LC 13), 4=-93(LC 9)
Max Grav 5=161(LC 1), 3=185(LC 1), 4=542(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-434/201

- NOTES-**
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-4-11, Interior(1) 4-4-11 to 8-2-10 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
 - 2) Gable requires continuous bottom chord bearing.
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
 - 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss V06	Truss Type VALLEY	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773723
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Builders FirstSource (Valley Center), Valley Center, KS - 67147,

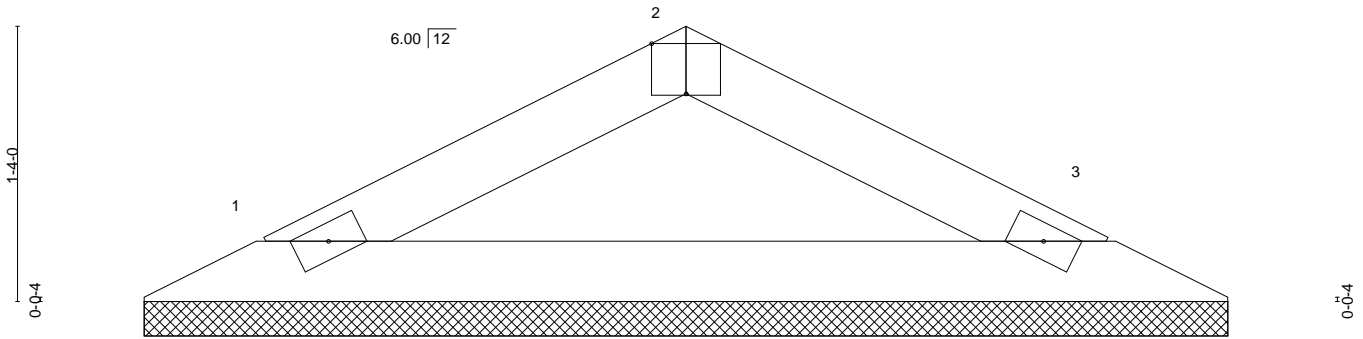
8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:58 2021 Page 1

ID:wH4RYhEstNeUP2dXvOfi1syQY8e-Kssl01z7hnu6puSbfxWEzhArUde11oK7x9BlaKzmEwd



3x4 =

Scale = 1:11.1



2x4

2x4

5-3-6

5-3-14

5-3-6

0-0-8

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 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.18	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 11 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 5-3-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-2-14, 3=5-2-14
Max Horz 1=-16(LC 13)
Max Uplift 1=-23(LC 12), 3=-23(LC 13)
Max Grav 1=223(LC 1), 3=223(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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

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

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



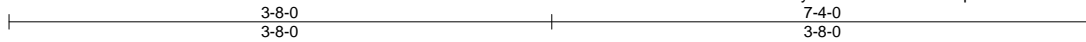
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 2643945	Truss V07	Truss Type Valley	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773724
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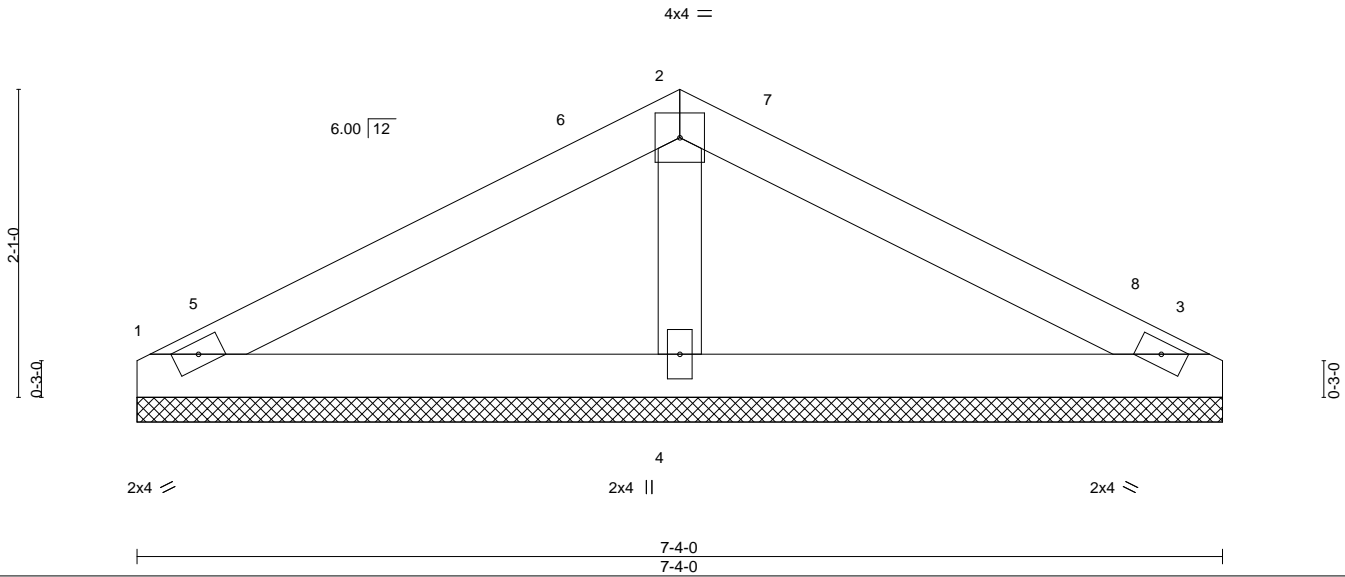
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:58 2021 Page 1

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Scale = 1:15.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.29	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 20.0	Plate Grip DOL 1.15	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 19 lb	FT = 20%
	Code IRC2018/TPI2014							

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

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

REACTIONS. (size) 1=7-4-0, 3=7-4-0, 4=7-4-0
 Max Horz 1=28(LC 16)
 Max Uplift 1=34(LC 12), 3=39(LC 13), 4=12(LC 12)
 Max Grav 1=200(LC 1), 3=200(LC 1), 4=375(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-286/145

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 3-8-0, Exterior(2R) 3-8-0 to 6-8-0, Interior(1) 6-8-0 to 7-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



February 12, 2021

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job 2643945	Truss V08	Truss Type Valley	Qty 1	Ply 1	summit/woodside ridge #36/MO 144773725
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Builders FirstSource (Valley Center),

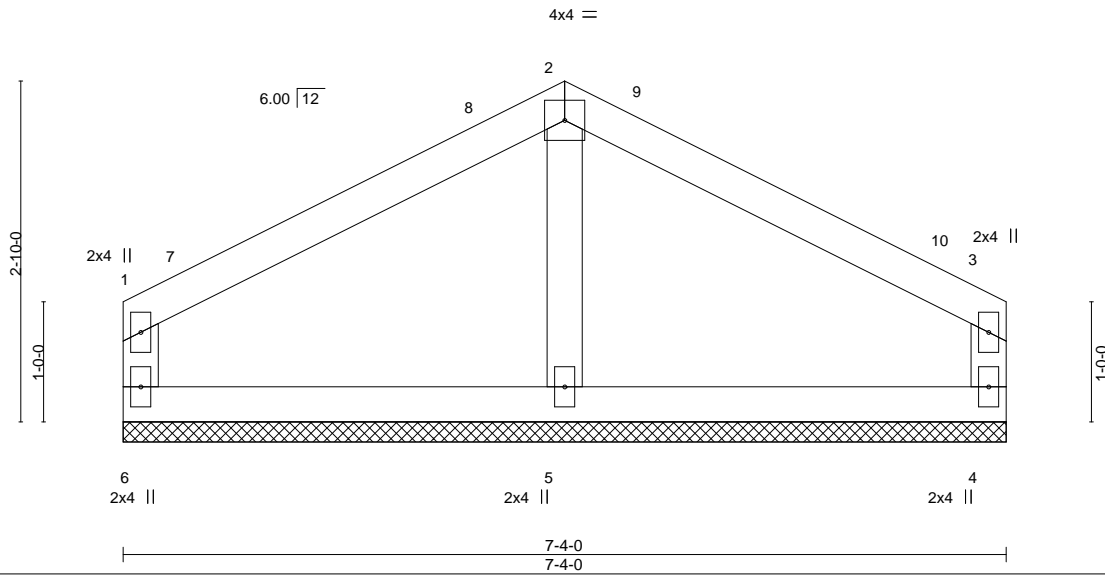
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Feb 11 10:09:59 2021 Page 1

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Scale = 1:19.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 20.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 22 lb	FT = 20%

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

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

REACTIONS. (size) 6=7-4-0, 4=7-4-0, 5=7-4-0
Max Horz 6=-46(LC 8)
Max Uplift 6=-43(LC 12), 4=-43(LC 13)
Max Grav 6=224(LC 1), 4=224(LC 1), 5=327(LC 1)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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 3-8-0, Exterior(2R) 3-8-0 to 6-8-0, Interior(1) 6-8-0 to 7-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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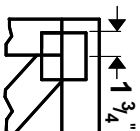
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



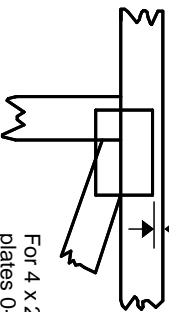
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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.

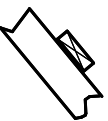
* Plate location details available in **MITek 20/20 software** or upon request.

PLATE SIZE

4 X 4

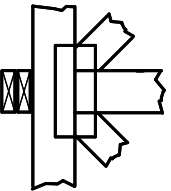
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



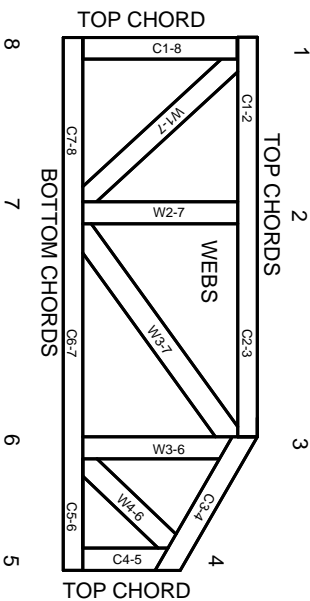
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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.

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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 T or 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.



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