



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

Re: 2895604

SUMMIT/HAWTHORN RIDGE#156/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: I47385478 thru I47385558

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

Missouri COA: Engineering 001193



August 11,2021

Sevier, Scott

,Engineer

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

Job Truss Truss Type Qty Ply SUMMIT/HAWTHORN RIDGE#156/MO 147385478 2895604 Α1 Hip Girder Job Reference (optional)

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

Structural wood sheathing directly applied, except end verticals, and

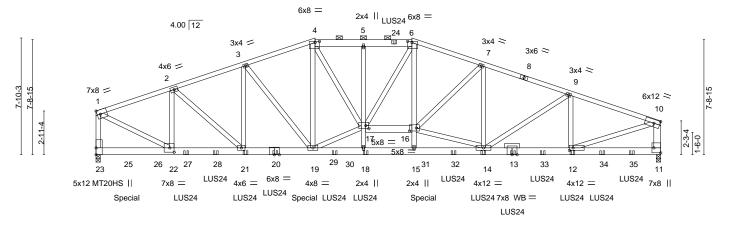
2-0-0 oc purlins (4-8-4 max.): 4-6.

Rigid ceiling directly applied or 10-0-0 oc bracing

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:20 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-2ypnZpoYNc1sMnVUWZg_JXwDilxHqRaKRkR?UXypHzL

26-0-15 30-10-12 21-3-2 4-9-13 4-9-13 3-3-2 3-3-2 4-9-13 4-9-13 1-2-8 5-10-12

Scale = 1:77.5



		5-1-5	9-11-1	14-8-14	18-0-0	1 21-3-2	26-0-15	1	30-10-12	32-1-4	38-0-0	
		5-1-5	4-9-13	4-9-13	3-3-2	3-3-2	4-9-13	- 1	4-9-13	ነ-2-8 ^l	5-10-12	1
Plate Offse	ets (X,Y)	[4:0-3-8,0-1-0], [6:0-3-8,0)-1-0], [11:Edge	e,0-5-8], [12:0-3-0,0)-2-0], [16:	:0-5-8,0-2-8], [17:0-2-8,0-2-8]	, [22:0-3	3-8,0-3-8]			
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.99		Vert(LL)	-0.25 14-15	>999	240		MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.48		Vert(CT)	-0.44 14-15	>999	180		MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB 0.99		Horz(CT)	0.09 11	n/a	n/a			
BCDL	10.0	Code IRC2018/TF	PI2014	Matrix-MS							Weight: 504 lb	FT = 20%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

2x4 SPF No.2 *Except* TOP CHORD 4-6: 2x6 SPF No.2

BOT CHORD 2x6 SP 2400F 2.0E *Except* 13-20,16-17: 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2 *Except*

10-11: 2x6 SPF No.2, 10-12: 2x4 SPF 1650F 1.5E

OTHERS 2x4 SPF No 2

REACTIONS. 23=0-3-8, 11=0-3-8 (size)

Max Horz 23=-55(LC 39)

Max Uplift 23=-1869(LC 4), 11=-1728(LC 5) Max Grav 23=7427(LC 1), 11=6909(LC 1)

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

1-2=-7733/1968, 2-3=-9329/2466, 3-4=-9089/2427, 4-5=-9517/2524, 5-6=-9497/2517, TOP CHORD

6-7=-9758/2585, 7-9=-10487/2753, 9-10=-9701/2458, 1-23=-6362/1637,

10-11=-6206/1595

BOT CHORD 21-22=-1828/7283, 19-21=-2232/8800, 18-19=-1913/7650, 15-18=-1903/7590, 14-15=-1905/7598, 12-14=-2316/9141, 11-12=-121/404, 16-17=-375/1595

2-22=-2184/661, 2-21=-569/2025, 4-19=-395/1243, 15-16=-248/844, 6-16=-627/2174,

 $1\hbox{-}22\hbox{-}-2047/8091, 7\hbox{-}14\hbox{-}-209/589, 9\hbox{-}14\hbox{-}-290/997, }14\hbox{-}16\hbox{-}-636/2379, }7\hbox{-}16\hbox{-}-939/318, }$ 3-19=-407/196, 17-18=-111/631, 5-17=-1104/303, 17-19=-324/1118, 6-17=-230/827,

4-17=-452/1947, 9-12=-1160/402, 10-12=-2317/9222

NOTES-

WEBS

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc, 2x6 - 2 rows staggered at 0-9-0 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.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) Unbalanced roof live loads have been considered for this design.

- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=1869, 11=1728





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Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE#156/MO	
2895604	A1	Hip Girder	1			147385478
200000 :		The Sings		2	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:20 2021 Page 2 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-2ypnZpoYNc1sMnVUWZg_JXwDilxHqRaKRkR?UXypHzL

- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 5-11-0 oc max. starting at 6-0-12 from the left end to 36-0-12 to connect truss(es) to front face of bottom chord.
- 12) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss) or equivalent at 20-0-12 from the left end to connect truss(es) to front face of top chord.
- 13) Fill all nail holes where hanger is in contact with lumber.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 599 lb down and 146 lb up at 0-1-12, 588 lb down and 156 lb up at 2-0-12, 588 lb down and 155 lb up at 4-0-12, and 575 lb down and 209 lb up at 14-0-12, and 575 lb down and 209 lb up at 22-0-12 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: 1-4=-70, 4-6=-70, 6-10=-70, 11-23=-20, 16-17=-20

Concentrated Loads (lb)

Vert: 23=-599(F) 20=-562(F) 21=-562(F) 14=-562(F) 13=-562(F) 18=-562(F) 12=-588(F) 24=-544(F) 25=-588(F) 26=-588(F) 27=-562(F) 28=-562(F) 29=-575(F) 30=-562(F) 31=-575(F) 32=-562(F) 33=-588(F) 34=-588(F) 35=-588(F)

Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385479 2895604 A2 Hip Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:25 2021 Page 1

21-1-5 2-2-10

5-7-12

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-OvcgdWshC8f9SYNSJ7F90bdDxJZuVnV3b09m9lypHzG 38-0-8 42-10-8 48-0-0 5-7-12 5-7-12 5-7-12 4-10-0 5-1-8

Structural wood sheathing directly applied, except end verticals, and

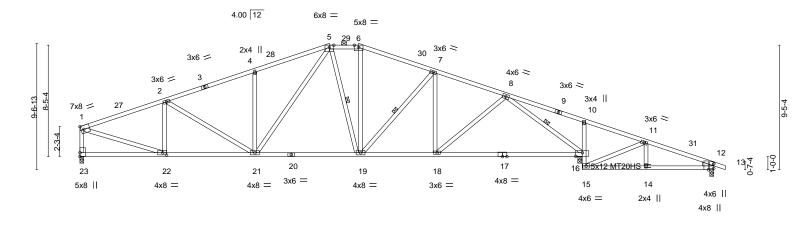
5-19, 7-19, 8-16

2-0-0 oc purlins (4-0-15 max.): 5-6.

Rigid ceiling directly applied.

1 Row at midpt

Scale = 1:87.2



		6-4-15	(-/-4	13-2-15	18-10-11	21-1-5	26-9-0	32-4-12	38-0-0	38-ρ-8 42-10	-8 48	3-0-0
	ı	6-4-15	1-2-5	5-7-12	5-7-12	2-2-10	5-7-12	5-7-12	5-7-4	0-0-8 4-10-	0 5	-1-8
Plate Offs	sets (X,Y)	[12:0-5-6	6.Edge], [16	6:0-6-0,0-3-4], [2	2:0-3-8,0-2-0]							
LOADING	G (psf)	SI	PACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl L	/d I	PLATES	GRIP
TCLL	25.0	PI	late Grip D0	OL 1.15	TC	0.44	Vert(LL)	-0.31 16-18	>999 24	1 0	MT20	197/144
TCDL	10.0	Lu	umber DOL	1.15	BC	0.78	Vert(CT)	-0.65 16-18	>706 18	1 08	MT20HS	148/108
BCLL	0.0	Re	ep Stress Ir	ncr YES	WB	0.69	Horz(CT)	0.09 16	n/a n	/a		
BCDL	10.0	C	ode IRC20	18/TPI2014	Matri	x-AS				\	Weight: 219 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 *Except* 16-17: 2x4 SP 2400F 2.0E

2x4 SPF No.2

6-4-15

5-7-12

WEBS WEDGE

Right: 2x4 SPF No.2

REACTIONS. (size) 23=0-3-8, 12=0-3-8, 16=0-3-8

Max Horz 23=-190(LC 13)

Max Uplift 23=-332(LC 8), 12=-149(LC 9), 16=-403(LC 9) Max Grav 23=1678(LC 1), 12=395(LC 26), 16=2314(LC 1)

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

TOP CHORD 1-2=-2387/583, 2-4=-2488/665, 4-5=-2472/752, 5-6=-1897/624, 6-7=-2066/632, 7-8=-2223/624, 8-10=0/395, 10-11=0/382, 11-12=-402/197, 1-23=-1612/408

BOT CHORD 21-22=-400/2204, 19-21=-274/1910, 18-19=-327/2055, 16-18=-323/1651, 15-16=-41/283,

10-16=-402/180, 14-15=-130/343, 12-14=-130/343

WEBS 4-21=-440/214, 5-19=-275/225, 6-19=-84/349, 7-19=-344/171, 8-18=-6/530, 11-15=-657/162, 8-16=-2480/498, 5-21=-228/739, 2-22=-559/209, 1-22=-490/2210

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 18-10-11, Exterior(2E) 18-10-11 to 21-1-5, Exterior(2R) 21-1-5 to 25-4-3, Interior(1) 25-4-3 to 48-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=332. 12=149. 16=403.
- 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.



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Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385480 2895604 **A3** Roof Special 2 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:27 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-LlkR2CtxklwthsXqRYId50iYU7DJzfKM2KetEdypHzE 42-10-8

6-0-3

32-0-5

6-0-3

38-0-8

6-0-3

Scale = 1:82.8

0-10-8

48-0-0

5-1-8

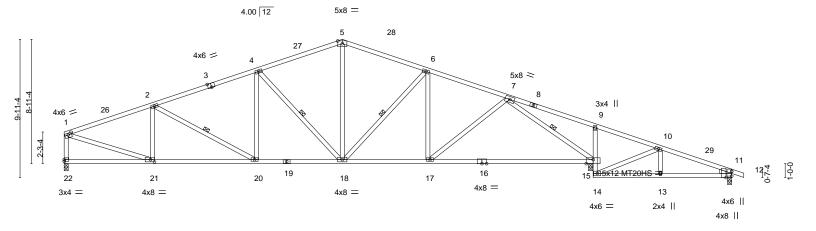
4-10-0

Structural wood sheathing directly applied, except end verticals.

2-20, 4-18, 6-18, 7-15

Rigid ceiling directly applied.

1 Row at midpt



	0-4-2	η-11-11	13-11-13	20-0-0	20-0-3	32-0-3	30-0-0	30-h-0	42-10-0	46-0-0
	6-4-2	1-7-8	6-0-3	6-0-3	6-0-3	6-0-3	5-11-11	0-0-8	4-10-0	5-1-8
Plate Offs	sets (X,Y)	[1:0-3-0,0-1-8],	[3:0-3-0,Edge], [11	:0-5-6,Edge], [15:0-	6-0,Edge], [21:0-3-8,0	-2-0]				
LOADING	G (psf)	SPACIN	IG- 2-0-0	CSI.	DEF	L. in (loc)	I/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Gr	ip DOL 1.15	TC	0.51 Vert	(LL) -0.36 15-17	>999 240		MT20	197/144
TCDL	10.0	Lumber	DOL 1.15	BC	0.91 Vert	(CT) -0.75 15-17	>611 180		MT20HS	148/108
BCLL	0.0	Rep Stre	ess Incr YES	WB	0.74 Horz	(CT) 0.10 15	n/a n/a			
BCDL	10.0	Code IF	RC2018/TPI2014	Matrix-	AS				Weight: 212 lb	FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 *Except*

15-16: 2x4 SP 2400F 2.0E

7-11-11 1-7-8

6-0-3

6-0-3

2x4 SPF No.2 WEBS

WEDGE

Right: 2x4 SPF No.2

REACTIONS. (size) 22=0-3-8, 11=0-3-8, 15=0-3-8

Max Horz 22=-197(LC 13)

Max Uplift 22=-324(LC 8), 11=-151(LC 9), 15=-392(LC 9) Max Grav 22=1678(LC 1), 11=397(LC 26), 15=2314(LC 1)

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

TOP CHORD 1-2=-2390/554, 2-4=-2471/628, 4-5=-1999/589, 5-6=-1995/593, 6-7=-2237/599,

7-9=0/388, 9-10=0/380, 10-11=-404/200, 1-22=-1617/397

BOT CHORD 20-21=-404/2210, 18-20=-335/2266, 17-18=-297/2063, 15-17=-319/1693, 14-15=-40/282,

9-15=-414/185, 13-14=-133/345, 11-13=-133/345

WEBS 4-20=0/276, 4-18=-726/233, 5-18=-193/819, 6-18=-480/197, 7-17=0/474, 10-14=-655/160, 7-15=-2495/474, 2-21=-555/214, 1-21=-479/2228

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 20-0-0, Exterior(2R) 20-0-0 to 23-0-0 , Interior(1) 23-0-0 to 48-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated
- 4) All plates are 3x6 MT20 unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=324, 11=151, 15=392,
- 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.



August 11,2021





Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385481 2895604 A4 Roof Special 3 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:28 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-pUIpFYuaV32kJ061_FpseDFduXcjiBQVH_NQm4ypHzD 36-4-8 0-10-8 19-6-5 25-6-8 35-6-0 6-0-3 1-2-5 4-9-13 6-0-3 4-10-0 5-1-8 Scale: 3/16"=1 5x8 = 4.00 12 20 5x8 = 3x4 < 3 3x4 > 4 3x6 > 5 3x4 II 6-5-4 3x4 > 23 14 42 MT20HS 15 13 3x4 || 3x6 = 4x8 = 3x4 = 3x6 || 11 10 4x8 || 2x4 || 4x6 =17-1-8 7-6-0 8-4-8 4-10-0 Plate Offsets (X,Y)--[1:Edge,0-2-0], [8:0-5-6,Edge], [12:0-6-12,0-2-8] SPACING-L/d **PLATES GRIP** LOADING (psf) CSI. DEFL. in (loc) I/def 197/144 TCLL 25.0 Plate Grip DOL 1.15 TC 0.85 Vert(LL) -0.30 12-13 >999 240 MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.77 Vert(CT) -0.60 12-13 >510 180 MT20HS 148/108 **BCLL** 0.0 Rep Stress Incr YES WB 0.42 Horz(CT) 0.03 n/a 12 n/a Code IRC2018/TPI2014 **BCDL** 10.0 Matrix-AS Weight: 156 lb FT = 20%BRACING-TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied, except end verticals. **BOT CHORD** Rigid ceiling directly applied.

WEBS

1 Row at midpt

2-15, 3-15, 4-12

LUMBER-

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

WEDGE

Right: 2x4 SPF No.2

REACTIONS. (size) 16=0-3-8, 8=0-3-8, 12=0-3-8

Max Horz 16=-269(LC 8)

Max Uplift 16=-208(LC 9), 8=-154(LC 9), 12=-301(LC 9) Max Grav 16=1122(LC 1), 8=436(LC 26), 12=1686(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-827/307, 2-3=-832/315, 3-4=-1266/375, 7-8=-504/205, 1-16=-1050/335 **BOT CHORD** 15-16=-154/325, 13-15=-91/1159, 12-13=-150/1049, 11-12=-41/281, 6-12=-427/192,

10-11=-136/439, 8-10=-136/439

WEBS 1-15=-265/889, 3-15=-629/237, 7-11=-626/159, 4-12=-1447/225

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph, TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-6-0, Exterior(2R) 7-6-0 to 10-6-0, Interior(1) 10-6-0 to 36-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=208, 8=154, 12=301.
- 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.



August 11,2021





SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385482 2895604 A5 Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:29 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-HgsBSuvCGNAbx9hDYyK5BRosRw_vRZHeWe7_IWypHzC 19-10-12 | 21-11-7 | 2-0-11 35-6-0 25-6-8 30-4-8 36-4-8 0-10-8 6-4-11 2-2-10 5-7-12 2-9-0 3-7-1 4-10-0 5-1-8 Scale: 3/16"=1 4.00 12 6x8 = 5x8 = 3x4 || 22 3x4 > 3x4 > 3x6 > 8-5-1 6 2x4 || 7 3x4 < 8 25 10 1-0-0 1-7-0 15 16 14 4x6 =3x6 =4x8 = 3x4 = 12 11 3x6 || 4x6 = 2x4 || 4x8 || 17-0-0 6-4-11 -2-10 4-10-0 Plate Offsets (X,Y)--[9:0-5-6,Edge] SPACING-L/d **PLATES** LOADING (psf) 2-0-0 CSI. DEFL. in (loc) I/def GRIP Plate Grip DOL TCLL 25.0 1.15 TC 0.60 Vert(LL) -0.14 16-17 >999 240 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.58 Vert(CT) -0.28 16-17 >999 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.71 Horz(CT) 0.04 n/a 13 n/a Code IRC2018/TPI2014 FT = 20% **BCDL** 10.0 Weight: 162 lb Matrix-AS BRACING-LUMBER-TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-9-9 max.): 2-3.

BOT CHORD

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

WEDGE

Right: 2x4 SPF No.2

Rigid ceiling directly applied.

WEBS 1 Row at midpt 3-16, 2-17, 4-16

REACTIONS. (size) 13=0-3-8, 9=0-3-8, 17=0-3-8

Max Horz 17=-275(LC 8)

Max Uplift 13=-315(LC 9), 9=-148(LC 9), 17=-216(LC 8) Max Grav 13=1696(LC 1), 9=429(LC 26), 17=1119(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-812/355, 3-4=-946/335, 4-5=-1300/385, 5-7=0/253, 8-9=-492/193

BOT CHORD 16-17=0/651, 14-16=-133/1198, 13-14=-116/780, 12-13=-46/288, 7-13=-313/140,

11-12=-126/428, 9-11=-126/428

WEBS 2-16=-173/678, 2-17=-1024/340, 4-16=-491/226, 8-12=-651/173, 5-14=-22/523,

5-13=-1407/256

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-4-11, Exterior(2E) 6-4-11 to 8-7-4, Exterior(2R) 8-7-4 to 12-10-3, Interior(1) 12-10-3 to 36-4-8 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) 13=315, 9=148, 17=216.
- 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.



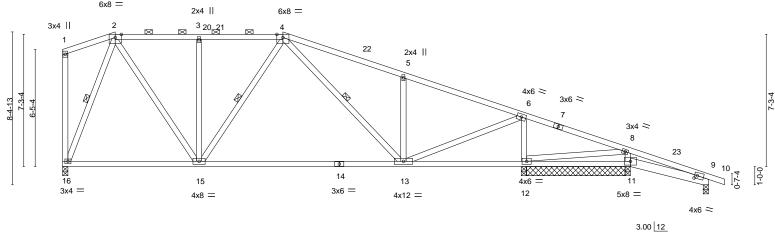
August 11,2021







Job Truss Truss Type Qty Ply SUMMIT/HAWTHORN RIDGE#156/MO 147385483 2895604 A6 Hip Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:32 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-hFXK5vx4YIY9odQoD5too3QQS8yge0d5CcLevrypHz9 25-4-5 35-6-0 36-4-8 0-10-8 4-7-5 6-7-8 6-7-8 5-10-3 4-3-8 Scale = 1:63.3 4.00 12 6x8 =



	2-10-11	4-7-5	4-7-5		6-7-8	6-5-11	0-1-13	5-6-11	0-3-8	4-3-8
Plate Offs	ets (X,Y) [9:0-1-12,0-2-0]								
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl L	./d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.43	Vert(LL)	-0.32 13-15	>944 2	40	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.83	Vert(CT)	-0.66 13-15	>458 1	80		
BCLL	0.0	Rep Stress Incr	YES	WB 0.35	Horz(CT)	0.02 12	n/a r	ı/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix-AS					Weight: 161	lb FT = 20%

TOP CHORD

BOT CHORD

WEBS

LUMBER-BRACING-

2x4 SPF No.2 TOP CHORD **BOT CHORD** 2x4 SPF No.2 *Except*

9-11: 2x6 SPF No.2

WEBS 2x4 SPF No.2

All bearings 5-5-0 except (jt=length) 9=0-3-8, 16=0-3-8.

REACTIONS. Max Horz 16=-290(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 11, 9 except 12=-332(LC 9), 16=-239(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 9 except 11=379(LC 26), 11=378(LC 1), 12=1554(LC 1),

12=1554(LC 1), 16=1098(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-855/321, 3-4=-855/322, 4-5=-1217/400, 5-6=-1215/310, 6-8=-45/309

BOT CHORD 15-16=0/409, 13-15=-52/954

WEBS 2-15=-216/869, 3-15=-372/156, 5-13=-479/232, 6-13=-239/1416, 6-12=-1414/360,

8-11=-258/124, 2-16=-1039/370

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 2-10-11, Exterior(2R) 2-10-11 to 7-1-10, Interior(1) 7-1-10 to 12-1-4, Exterior(2R) 12-1-4 to 16-4-3, Interior(1) 16-4-3 to 36-4-8 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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 9 except (jt=lb) 12=332, 16=239.
- 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.



Structural wood sheathing directly applied, except end verticals, and

4-15, 2-16, 4-13

2-0-0 oc purlins (6-0-0 max.): 2-4.

Rigid ceiling directly applied.

1 Row at midpt

August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385484 2895604 Α7 Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:34 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-def4WbzK4vot1xZALWwGuUVfFxbn6naOfwql_jypHz7

21-9-0

6-1-11

Scale = 1:62.2

0-10-8

35-6-0

4-3-8

31-2-8

4-2-8

Structural wood sheathing directly applied, except end verticals, and

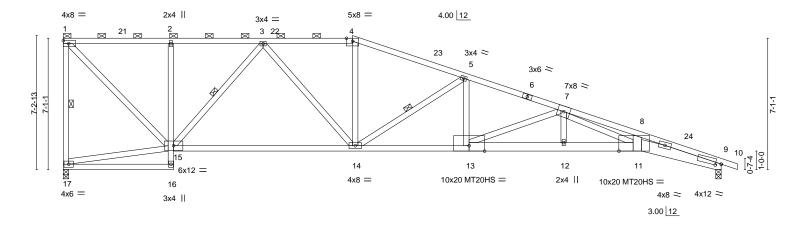
1-17, 3-15, 5-14

5-3-0

2-0-0 oc purlins (3-6-15 max.): 1-4.

Rigid ceiling directly applied.

1 Row at midpt



	-11-7 -11-7	15-7-5 9-7-14		21-9-0 6-1-11	27-0-0 5-3-0	30-8-15 3-8-15		-6-0 -3-8
Plate Offsets (X,Y)	[9:0-3-10,0-1-8], [11:5-6	-4,Edge]						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/T	2-0-0 1.15 1.15 YES PI2014	CSI. TC 0.86 BC 0.98 WB 0.96 Matrix-AS	- '\ /	in (loc) I/defl -0.45 11-12 >951 -0.80 11-12 >528 0.29 9 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 177 lb	GRIP 197/144 148/108 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

5-11-7

6-10: 2x4 SPF 1650F 1.5E 2x4 SPF No.2 *Except*

BOT CHORD 9-11: 2x8 SP 2400F 2.0E, 11-13: 2x6 SPF 2100F 1.8E

2x4 SPF No.2 *Except* **WEBS**

8-11: 2x6 SPF No.2

REACTIONS. (size) 17=0-3-8, 9=0-3-8

Max Horz 17=-303(LC 10)

Max Uplift 17=-373(LC 9), 9=-386(LC 9) Max Grav 17=1590(LC 1), 9=1653(LC 1)

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

TOP CHORD 1-17=-1541/361, 1-2=-1349/375, 2-3=-1355/373, 3-4=-2419/624, 4-5=-2618/630,

10-9-6

4-9-15

4-9-15

5-7=-3746/846, 7-8=-6985/1523, 8-9=-7049/1495

BOT CHORD 2-15=-407/178, 14-15=-292/2039, 13-14=-624/3476, 12-13=-1005/5123,

11-12=-1006/5138, 9-11=-1360/6720

WEBS 15-17=-125/328, 1-15=-393/1906, 3-15=-1050/321, 3-14=-159/580, 4-14=-38/438, 5-14=-1250/353, 5-13=-99/659, 7-13=-1763/411, 7-12=-54/552, 7-11=-376/1669

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 15-7-5, Exterior(2R) 15-7-5 to 19-10-3, Interior(1) 19-10-3 to 36-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=373, 9=386,
- 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.



August 11,2021





Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385485 2895604 **A8** Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:37 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-2DLD8d?DNqASuOII0eTzV778L9dJJESqLu3Pb2ypHz4

6-6-15

25-1-14

6-0-10

31-2-8

6-0-10

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (2-5-11 max.): 1-5.

Rigid ceiling directly applied.

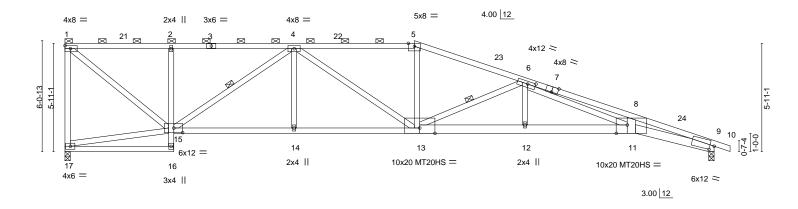
1 Row at midpt

Scale = 1:63.0

0-10-8

35-6-0

4-3-8



	L	5-11-7	12-6-6	19-1-5		25-1-14		31-2-		35-6-0
	<u>'</u>	5-11-7	6-6-15	6-6-15	<u>'</u>	6-0-10		6-0-1	0 '	4-3-8
Plate Offs	ets (X,Y)	[6:0-5-2,0-1-12], [7:0)-4-0,Edge], [9:0-2-	12,0-2-14], [11:0-7-4,Edg	e], [15:0-5-12,0-	3-0]				
LOADING	i (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DC	DL 1.15	TC 0.93	Vert(LL)	-0.52 11-12	>816	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.93	Vert(CT)	-0.94 11-12	>451	180	MT20HS	148/108
BCLL	0.0	Rep Stress In	ncr YES	WB 0.57	Horz(CT) 0.33 9	n/a	n/a		
BCDL	10.0	Code IRC20	18/TPI2014	Matrix-AS					Weight: 169	lb FT = 20%

TOP CHORD

BOT CHORD

WEBS

LUMBER-BRACING-

6-6-15

2x4 SPF No.2 *Except* 5-7: 2x4 SPF 1650F 1.5E, 7-10: 2x4 SP 2400F 2.0E

2x4 SPF No.2 *Except*

BOT CHORD 9-11,11-13: 2x6 SPF 2100F 1.8E

5-11-7

WEBS 2x4 SPF No.2 *Except* 8-11: 2x6 SPF No.2

REACTIONS. (size) 17=0-3-8, 9=0-3-8

Max Horz 17=-251(LC 10)

Max Uplift 17=-369(LC 9), 9=-390(LC 9) Max Grav 17=1590(LC 1), 9=1653(LC 1)

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

TOP CHORD 1-17=-1527/364, 1-2=-1678/431, 2-4=-1695/433, 4-5=-3023/753, 5-6=-3285/770,

6-8=-7032/1581, 8-9=-7106/1526 2-15=-457/195, 14-15=-472/2836, 13-14=-472/2836, 12-13=-891/4550, 11-12=-891/4558,

BOT CHORD 9-11=-1395/6730

15-17=-147/257, 1-15=-457/2140, 4-15=-1386/347, 4-14=0/289, 5-13=-71/618, 6-13=-1657/420, 6-12=-24/456, 6-11=-537/2305

WEBS

TOP CHORD

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 19-1-5, Exterior(2R) 19-1-5 to 23-4-3 , Interior(1) 23-4-3 to 36-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) The Fabrication Tolerance at joint 11 = 0%, joint 11 = 0%
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=369, 9=390. 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1. 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385486 2895604 A9 Half Hip Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:38 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-WPvbLy0r88IJWYtyaL_C2KgLLZ_X2bZzaYoy7UypHz3 35-6-0 22-7-5 28-0-14 31-2-8

7-3-3

5-5-9

3-1-10

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (2-2-0 max.): 1-6.

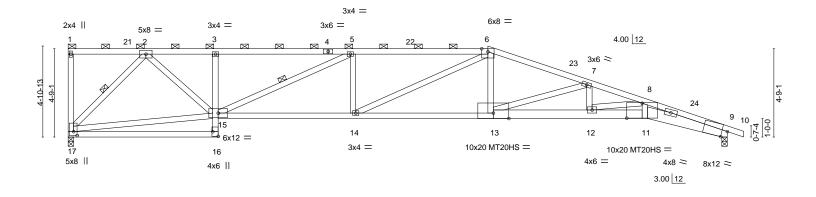
Rigid ceiling directly applied.

1 Row at midpt

4-3-8

Scale = 1:62.0

0-10-8



		8-0-15	1	5-4-2	22-7-5	1	28-0-14	1	31-2-8	35-6-0	J
	1	8-0-15		7-3-3	7-3-3	ı	5-5-9	ı	3-1-10	4-3-8	1
Plate Offs	ets (X,Y)	[9:0-3-6,0-4-4], [11:0-10-	0,0-9-10], [16:E	Edge,0-3-8], [17:0-2	2-8,0-2-4]						
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl L/	t	PLATES	GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC 0.78	Vert(LL)	-0.46 13-14	>915 24)	MT20	197/144	Į.
TCDL	10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.87 13-14	>489 18)	MT20HS	148/108	}
BCLL	0.0	Rep Stress Incr	YES	WB 0.96	Horz(CT)	0.33 9	n/a n/	a			
BCDL	10.0	Code IRC2018/T	PI2014	Matrix-AS					Weight:	164 lb FT = 2	20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x4 SPF 1650F 1.5E *Except* TOP CHORD

1-4: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 *Except*

13-15: 2x4 SPF 1650F 1.5E, 9-11: 2x8 SP 2400F 2.0E

11-13: 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2

REACTIONS. (size) 17=0-3-8, 9=0-3-8

Max Horz 17=-199(LC 10)

Max Uplift 17=-366(LC 9), 9=-393(LC 9) Max Grav 17=1590(LC 1), 9=1653(LC 1)

3-10-12

7-3-3

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

TOP CHORD 2-3=-2791/657, 3-5=-2872/674, 5-6=-4096/961, 6-7=-4053/922, 7-8=-5796/1289,

8-9=-7630/1664

BOT CHORD 3-15=-396/165, 14-15=-773/4093, 13-14=-713/3755, 12-13=-1132/5500,

11-12=-1497/7169, 9-11=-1524/7290

2-17=-2071/488, 15-17=-175/1211, 2-15=-383/1874, 5-15=-1349/336, 6-14=-129/651, WEBS 6-13=-77/655, 8-11=-211/1088, 7-12=-124/803, 7-13=-1788/448, 8-12=-1714/376

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 22-7-5, Exterior(2R) 22-7-5 to 26-10-3, Interior(1) 26-10-3 to 36-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=366, 9=393,
- 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.



August 11,2021



Job Truss Truss Type Qty Ply SUMMIT/HAWTHORN RIDGE#156/MO 147385487 2895604 A10 Half Hip Girder 2 Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:23 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-SXVwCqqRqXPRDED3CiDhxAYnHWwz1sCm7igf5sypHzI

4-6-1

21-7-3

4-6-1

Scale = 1:62.0

0-10-8

28-10-0

2-8-11

31-2-8

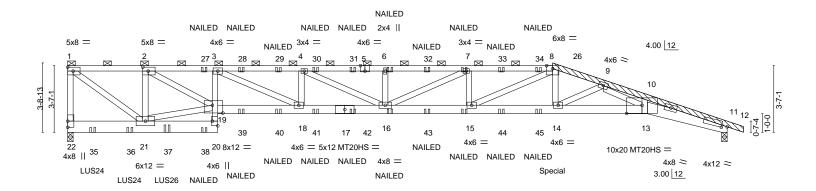
2-4-8

35-6-0

4-3-8

26-1-5

4-6-1



_	4-2-4	8-0-15	12-7-0	17-1-2	21-7-3	26-1-5	28-10-0	31-2-8 3	5-6-0
	4-2-4	3-10-12	4-6-1	4-6-1	4-6-1	4-6-1	2-8-11	2-4-8	4-3-8
Plate Offset	ts (X,Y)	[2:0-3-8,0-2-8], [5:0-3-0,1	Edge], [11:0-3-1	0,0-1-4], [13:0-10-0,0-5-4], [19:0-6-12,0-5-0], [20:Edge,0-3-8]			
LOADING	(psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.77	Vert(LL) 0	.70 15-16 >608	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.68	Vert(CT) -1.	.24 15-16 >343	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB 0.74	Horz(CT) 0.	.35 11 n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix-MS				Weight: 403 I	b FT = 20%

BOT CHORD

LUMBER-BRACING-TOP CHORD

2x4 SPF 1650F 1.5E *Except* TOP CHORD 8-12: 2x4 SP 2400F 2.0E

BOT CHORD 2x8 SP 2400F 2.0E *Except*

3-20: 2x4 SPF No.2, 17-19,13-17: 2x6 SPF 2100F 1.8E

3-10-12

4-6-1

WEBS 2x4 SPF No.2

2x4 SP 2400F 2.0E **OTHERS**

LBR SCAB 8-12 2x4 SP 2400F 2.0E one side

REACTIONS. (size) 22=0-3-8, 11=0-3-8

Max Horz 22=-143(LC 6)

Max Uplift 22=-1248(LC 5), 11=-932(LC 5) Max Grav 22=4128(LC 1), 11=2837(LC 1)

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

TOP CHORD 1-22=-3593/1126, 1-2=-4357/1381, 2-3=-9770/3183, 3-4=-11919/3979, 4-6=-12578/4251,

6-7=-12578/4251, 7-8=-11993/4089, 8-9=-10352/3510, 9-10=-13892/4561,

10-11=-14301/4669

BOT CHORD 20-21=-280/909, 19-20=-85/386, 3-19=-1376/581, 18-19=-3125/10016,

16-18=-3841/11919, 15-16=-3949/11988, 14-15=-3195/9761, 13-14=-3627/11112,

11-13=-4370/13590

1-21=-1709/5520, 2-21=-3284/1115, 19-21=-1042/3703, 2-19=-2017/6063, **WEBS** 3-18=-794/2111, 4-18=-983/440, 4-16=-304/734, 6-16=-589/274, 7-16=-210/790,

7-15=-1178/458. 8-15=-871/2630. 8-14=-521/1676. 10-13=-367/1194. 9-14=-1427/458.

9-13=-778/2616

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Attached 10-11-0 scab 8 to 12, front face(s) 2x4 SP 2400F 2.0E with 1 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-4 from end at joint 8, nail 1 row(s) at 7" o.c. for 3-10-1; starting at 4-2-10 from end at joint 8, nail 2 row(s) at 4" o.c. for 3-5-11.
- 4) Unbalanced roof live loads have been considered for this design.
- 5) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated

Continuetuse page en designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



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Structural wood sheathing directly applied or 5-3-8 oc purlins,

except end verticals, and 2-0-0 oc purlins (3-5-15 max.): 1-8.

Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE#156/MO	
2895604	A10	Half Hip Girder	1	_		147385487
2000004	7110	Tian Tip Olidor	ļ ·	2	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:23 2021 Page 2 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-SXVwCqqRgXPRDED3CiDhxAYnHWwz1sCm7igf5sypHzI

9) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 22=1248, 11=932.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) 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 1-4-3 from the left end to 3-4-3 to connect truss(es) to front face of bottom chord.
- 14) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 5-4-3 from the left end to connect truss(es) to front face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber.
- 16) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 17) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 511 lb down and 244 lb up at 26-1-5 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

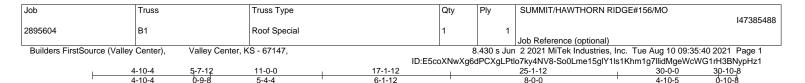
Uniform Loads (plf)

Vert: 1-8=-70, 8-12=-70, 20-22=-20, 13-19=-20, 13-23=-20

Concentrated Loads (lb)

Vert: 6=-138(F) 7=-138(F) 14=-511(F) 27=-75(F) 28=-138(F) 29=-138(F) 30=-138(F) 31=-138(F) 32=-138(F) 33=-138(F) 34=-138(F) 35=-554(F) 36=-554(F) 36=-554(37=-751(F) 38=-35(F)





8-0-0

25-1-12

Structural wood sheathing directly applied, except

2-0-0 oc purlins (3-0-12 max.): 5-6.

Rigid ceiling directly applied.

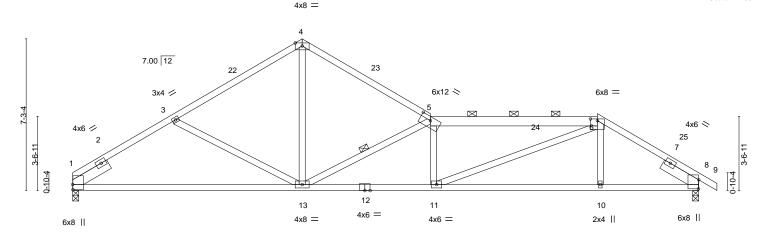
1 Row at midpt

6-1-12

Scale = 1:55.2

4-10-5

30-0-0



		8-8-10	2-3-6	6-1-12	2	1	8-0-0		4-10-5	1
Plate Off	sets (X,Y)	[1:0-3-0,0-0-2], [5:0-6-0,0-2-2],	6:0-4-0,0-1-0], [8:0-	5-3,0-0-2]						
LOADIN	G (nsf)	SPACING- 2-0-	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.1		0.73	Vert(LL)	-0.25 13-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL 1.1	BC BC	0.89	Vert(CT)	-0.52 13-16	>697	180		
BCLL	0.0	Rep Stress Incr YES	S WB	0.48	Horz(CT)	0.11 8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matr	ix-AS					Weight: 125 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

17-1-12

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

5-6: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 WEBS 2x4 SPF No.2

SLIDER Left 2x6 SPF No.2 2-0-0, Right 2x6 SPF No.2 2-0-0

REACTIONS. (size) 1=0-3-8, 8=0-3-8

Max Horz 1=-176(LC 8)

4-10-4

5-4-4

Max Uplift 1=-186(LC 12), 8=-277(LC 13) Max Grav 1=1349(LC 1), 8=1412(LC 1)

8-8-10

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

TOP CHORD $1\hbox{-}3\hbox{--}1973/344, 3\hbox{-}4\hbox{--}1713/328, 4\hbox{-}5\hbox{--}1729/319, 5\hbox{-}6\hbox{--}3053/572, 6\hbox{-}8\hbox{--}2019/389}$ **BOT CHORD** 1-13=-297/1633, 11-13=-447/3072, 10-11=-247/1668, 8-10=-244/1671

WEBS 5-11=-437/137, 6-11=-214/1502, 4-13=-171/1187, 5-13=-1907/468, 3-13=-349/220

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 25-1-12, Exterior(2R) 25-1-12 to 28-1-12, Interior(1) 28-1-12 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

11-0-0

- 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) 1=186, 8=277
- 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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SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385489 2895604 B2 Roof Special Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:43 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-tNiUOg4_zgxbcJlvNvaNlONCyaizjxMikpWjoiypHz_

3-10-5

8-0-0

24-0-0

Structural wood sheathing directly applied, except

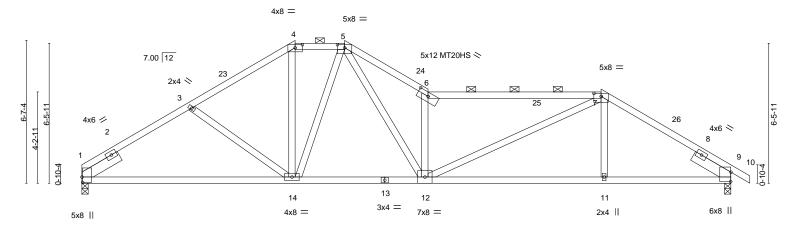
2-0-0 oc purlins (3-4-2 max.): 4-5, 6-7.

Rigid ceiling directly applied.

30-10-8 0-10-8 Scale = 1:53.3

30-0-0

6-0-0



	3-10-3	12-1-12	10-0-0	24-0-0	30-0-0
ı	9-10-5	2-3-7	3-10-5	8-0-0	6-0-0
Plate Offsets (X,Y)	[1:0-3-0,0-0-6], [4:0-4-0,0-1-11], [5:0-4-0	0,0-1-11], [6:0-6-0,0-2-2]	, [7:0-4-0,0-1-11]	, [9:0-5-3,0-0-2]	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.79	Vert(LL)	-0.19 11-12 >999 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.78	Vert(CT)	-0.43 11-12 >831 180	MT20HS 148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.60	Horz(CT) 0.10 9 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS			Weight: 131 lb FT = 20%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

4-9-6

2-3-7

2x4 SPF No.2 *Except* TOP CHORD 6-7: 2x4 SP 2400F 2.0E

2x4 SPF No.2

5-0-14

BOT CHORD WEBS 2x4 SPF No.2

SLIDER Left 2x6 SPF No.2 2-0-0, Right 2x6 SPF No.2 2-0-0

REACTIONS. (size) 1=0-3-8, 9=0-3-8

Max Horz 1=-157(LC 8)

Max Uplift 1=-176(LC 12), 9=-272(LC 13) Max Grav 1=1349(LC 1), 9=1412(LC 1)

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

9-10-5

TOP CHORD 1-3=-1965/353, 3-4=-1748/334, 4-5=-1455/329, 5-6=-3047/607, 6-7=-2623/477,

7-9=-2021/383

BOT CHORD 1-14=-255/1616, 12-14=-139/1567, 11-12=-227/1670, 9-11=-225/1673 WEBS 4-14=-91/526, 6-12=-1961/483, 7-12=-157/1061, 7-11=0/259, 5-14=-422/137,

5-12=-440/1921

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 9-10-5, Exterior(2E) 9-10-5 to 12-1-12, Exterior(2R) 12-1-12 to 15-1-12, Interior(1) 15-1-12 to 24-0-0, Exterior(2R) 24-0-0 to 27-0-0, Interior(1) 27-0-0 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=176, 9=272.
- 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.



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Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385490 2895604 **B**3 Roof Special Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:44 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-LZGsc05ck_3SETK5wc5clbvMjz26SNVsyTFHJ8ypHyz

1-6-14

22-10-5

8-0-0

30-10-8 0-10-8 Scale = 1:53.4

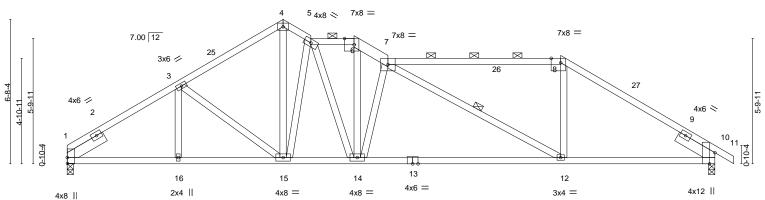
7-1-11



1-3-7

2-0-0

4-10-4



		5-1-12	10-0-0	11-3-7 13-3-7	14-10-5	22-10-5		30-0-0	
		5-1-12	4-10-4	1-3-7 2-0-0	1-6-14	8-0-0	1	7-1-11	1
Plate Offsets	s (X,Y)	[1:0-3-4,0-0-2], [6:0-5	-5,Edge], [8:0-5-5,	Edge], [10:0-6-3,Edge]					
LOADING ((psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOI	_ 1.15	TC 0.86	Vert(LL)	-0.24 12-14 >999	240	MT20	197/144
TCDL 1	10.0	Lumber DOL	1.15	BC 0.79	Vert(CT)	-0.54 12-14 >664	180		
BCLL	0.0	Rep Stress Inc	r YES	WB 0.67	Horz(CT)	0.11 10 n/a	n/a		
BCDL 1	10.0	Code IRC2018	8/TPI2014	Matrix-AS) '			Weight: 139 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

Structural wood sheathing directly applied, except

2-0-0 oc purlins (3-4-13 max.): 5-6, 7-8.

Rigid ceiling directly applied.

1 Row at midpt

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

6-7: 2x6 SPF No.2, 7-8: 2x4 SPF 1650F 1.5E

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

SLIDER Left 2x6 SPF No.2 2-0-0, Right 2x6 SPF No.2 2-0-0

REACTIONS. (size) 1=0-3-8, 10=0-3-8

Max Horz 1=-161(LC 8)

5-1-12

Max Uplift 1=-177(LC 12), 10=-285(LC 13) Max Grav 1=1349(LC 1), 10=1412(LC 1)

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

TOP CHORD $1-3=-1971/325,\ 3-4=-1719/352,\ 4-5=-1627/357,\ 5-6=-1860/394,\ 6-7=-2277/473,$

7-8=-1626/405, 8-10=-1998/399

BOT CHORD 1-16=-243/1617, 15-16=-243/1617, 14-15=-168/1699, 12-14=-295/2265, 10-12=-220/1640

WEBS 5-14=-106/504, 6-14=-204/987, 7-14=-1290/396, 7-12=-736/155, 8-12=0/543,

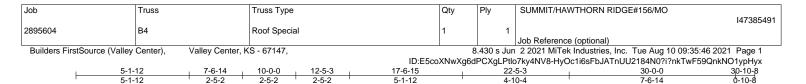
4-15=-279/1319, 5-15=-1153/285, 3-15=-306/165

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-0-0, Exterior(2E) 10-0-0 to 11-3-7 Interior(1) 11-3-7 to 13-3-7, Exterior(2E) 13-3-7 to 14-10-5, Interior(1) 14-10-5 to 22-10-5, Exterior(2R) 22-10-5 to 25-10-5, Interior(1) 25-10-5 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=177, 10=285.
- 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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5-1-12

4-10-4

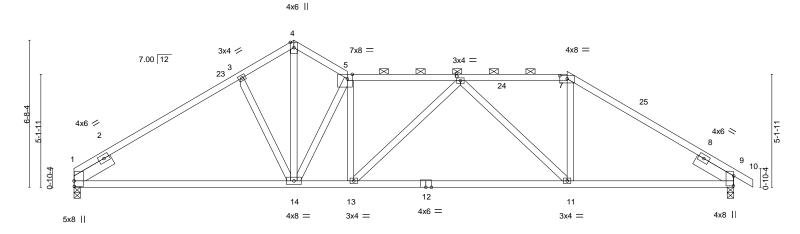
Structural wood sheathing directly applied, except

2-0-0 oc purlins (3-9-2 max.): 5-7.

Rigid ceiling directly applied.

Scale = 1:52.4

7-6-14



-	6-4-5 6-4-5	10-0-0 3-7-11	12-5-3 2-5-2	22-5-3 10-0-0	30-0-0 7-6-14
Plate Offsets (X,Y)	[1:0-3-0,0-0-2], [5:0-2-1	1,Edge], [7:0-4-0	,0-1-11], [9:0-5-7,0-0-2]		
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/1	2-0-0 1.15 1.15 YES FPI2014	CSI. TC 0.87 BC 0.80 WB 0.73 Matrix-AS	DEFL. in (loc) l/defl L/c Vert(LL) -0.26 11-13 >999 240 Vert(CT) -0.58 11-13 >620 180 Horz(CT) 0.09 9 n/a n/a	MT20 197/144

TOP CHORD

BOT CHORD

LUMBER-BRACING-

2-5-2

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

WEBS 2x4 SPF No.2

SLIDER Left 2x6 SPF No.2 2-0-0, Right 2x6 SPF No.2 2-0-0

REACTIONS. (size) 1=0-3-8, 9=0-3-8

5-1-12

Max Horz 1=-161(LC 10)

Max Uplift 1=-177(LC 12), 9=-285(LC 13) Max Grav 1=1349(LC 1), 9=1412(LC 1)

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

TOP CHORD 1-3=-1916/335, 3-4=-1718/354, 4-5=-1725/348, 5-6=-2051/400, 6-7=-1586/398, 7-9=-1972/390

BOT CHORD 1-14=-203/1556, 13-14=-205/2045, 11-13=-280/2033, 9-11=-204/1602

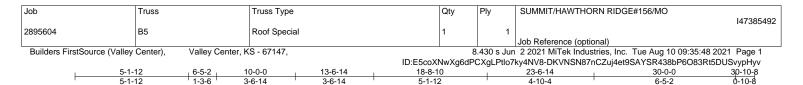
WEBS 6-11=-625/205, 7-11=-46/600, 4-14=-323/1582, 5-14=-1382/329, 3-14=-348/232

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-0-0, Exterior(2E) 10-0-0 to 12-5-3, Interior(1) 12-5-3 to 22-5-3, Exterior(2R) 22-5-3 to 25-5-3, Interior(1) 25-5-3 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 1=177, 9=285
- 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.



August 11,2021





5-1-12

4-10-4

Structural wood sheathing directly applied, except

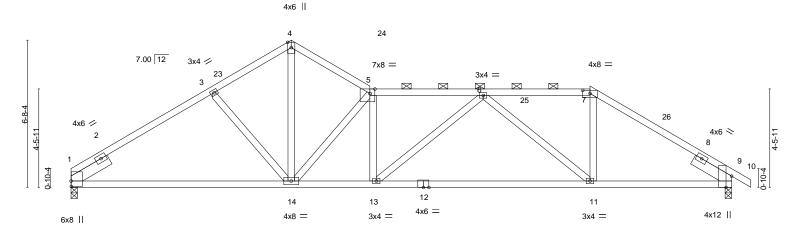
2-0-0 oc purlins (3-5-5 max.): 5-7.

Rigid ceiling directly applied.

3-6-14

Scale = 1:52.3

6-5-2



		0-11-3	10-0-0	13-0-14	23-6-14	30-0-0
	1	6-11-3	3-0-13	3-6-14	10-0-0	6-5-2
Plate Offs	sets (X,Y)	[1:0-3-0,0-0-2], [5:0-2-11,	Edge], [7:0-4-0,	,0-1-11], [9:0-6-3,Edge]		
LOADING	G (psf)	SPACING-	2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.83	Vert(LL) -0.29 11-13 >999 240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.85	Vert(CT) -0.64 11-13 >560 180	
BCLL	0.0	Rep Stress Incr	YES	WB 0.83	Horz(CT) 0.11 9 n/a n/a	
BCDL	10.0	Code IRC2018/TP	12014	Matrix-AS		Weight: 123 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2

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

SLIDER Left 2x6 SPF No.2 2-0-0, Right 2x6 SPF No.2 2-0-0

REACTIONS. (size) 1=0-3-8, 9=0-3-8 Max Horz 1=-161(LC 8)

5-1-12

3-6-14

Max Uplift 1=-177(LC 12), 9=-285(LC 13)

Max Grav 1=1349(LC 1), 9=1412(LC 1)

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

TOP CHORD $1-3 = -1935/333, \ 3-4 = -1720/346, \ 4-5 = -1735/336, \ 5-6 = -2421/458, \ 6-7 = -1619/389,$ 7-9=-2004/393

BOT CHORD 1-14=-227/1582, 13-14=-291/2417, 11-13=-347/2279, 9-11=-223/1641 **WEBS**

6-13=-29/252, 6-11=-862/200, 7-11=-40/693, 4-14=-259/1437, 5-14=-1526/356,

3-14=-294/194

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 23-6-14, Exterior(2R) 23-6-14 to 26-6-14, Interior(1) 26-6-14 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 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.



August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385493 2895604 B6 Roof Special Job Reference (optional)

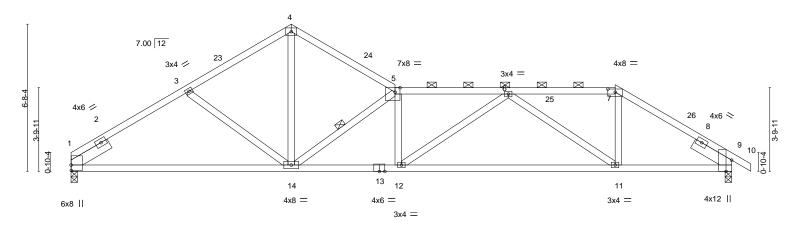
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:50 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-9jd7s39NJqpcyOoFHtC0Xs9PHO3is3YkLPibXoypHyt



4x6 =

10-0-0



		7-6-1	2-5-15	4-8-9	-	10-0-0		5-3-7	1
Plate Off	fsets (X,Y)	[1:0-3-0,0-0-2], [5:0-2-11	,Edge], [7:0-4-0	,0-1-11], [9:0-6-3,Edge]					
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.79	Vert(LL)	-0.30 11-12 >999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.69 11-12 >524	180		
BCLL	0.0	Rep Stress Incr	YES	WB 0.77	Horz(CT)	0.12 9 n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matrix-AS				Weight: 121 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

14-8-9

24-8-9

Structural wood sheathing directly applied, except

2-0-0 oc purlins (3-1-5 max.): 5-7.

Rigid ceiling directly applied.

1 Row at midpt

LUMBER-

2x4 SPF No.2 TOP CHORD 2x4 SPF No.2

BOT CHORD WEBS 2x4 SPF No.2

Left 2x6 SPF No.2 2-0-0, Right 2x6 SPF No.2 2-0-0 SLIDER

7-6-1

REACTIONS. (size) 1=0-3-8, 9=0-3-8 Max Horz 1=-161(LC 8)

Max Uplift 1=-177(LC 12), 9=-285(LC 13) Max Grav 1=1349(LC 1), 9=1412(LC 1)

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

TOP CHORD $1-3 = -1956/336, \ 3-4 = -1723/342, \ 4-5 = -1756/327, \ 5-6 = -2896/537, \ 6-7 = -1639/375,$

7-9=-2027/391

BOT CHORD 1-14=-253/1608, 12-14=-398/2897, 11-12=-427/2583, 9-11=-238/1669

WEBS 6-12=-40/387, 6-11=-1157/234, 7-11=-62/779, 4-14=-218/1334, 5-14=-1825/417,

3-14=-283/187

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 24-8-9, Exterior(2R) 24-8-9 to 27-8-9, Interior(1) 27-8-9 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 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.



30-0-0

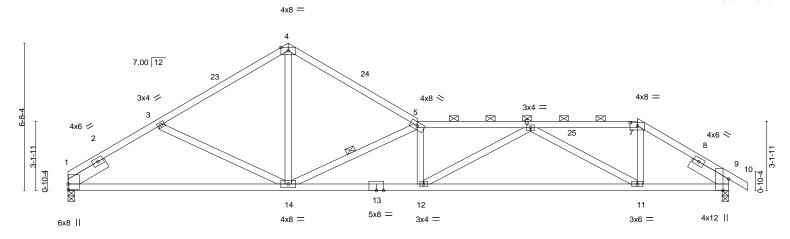
August 11,2021







Scale = 1:52.3



		10-0-0		5-10-5			10-0-0)	4-	1-11
Plate Off	sets (X,Y)	[1:0-3-0,0-0-2], [7:0-4-0,0-1	1-11], [9:0-6-3,	Edge]						
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.74	Vert(LL)	-0.31 11-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.98	Vert(CT)	-0.72 11-12	>497	180		
BCLL	0.0	Rep Stress Incr	YES	WB 0.92	Horz(CT)	0.12 9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	2014	Matrix-AS					Weight: 121 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

25-10-5

Structural wood sheathing directly applied, except

2-0-0 oc purlins (2-8-13 max.): 5-7.

Rigid ceiling directly applied.

1 Row at midpt

15-10-5

LUMBER-

2x4 SPF No.2 TOP CHORD

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

SLIDER Left 2x6 SPF No.2 2-0-0, Right 2x6 SPF No.2 2-0-0

10-0-0

REACTIONS. (size) 1=0-3-8, 9=0-3-8 Max Horz 1=-161(LC 8)

Max Uplift 1=-177(LC 12), 9=-285(LC 13)

Max Grav 1=1349(LC 1), 9=1412(LC 1)

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

TOP CHORD $1-3 = -1974/340, \ 3-4 = -1751/341, \ 4-5 = -1785/320, \ 5-6 = -3550/649, \ 6-7 = -1639/357,$ 7-9=-2035/383

BOT CHORD 1-14=-284/1629, 12-14=-539/3556, 11-12=-526/2988, 9-11=-247/1680 **WEBS**

3-14=-294/197, 4-14=-183/1253, 5-14=-2347/524, 6-12=-55/646, 6-11=-1554/325,

7-11=-78/859

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 25-10-5, Exterior(2R) 25-10-5 to 28-10-5, Interior(1) 28-10-5 to 30-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 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.



30-0-0

August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385495 2895604 **B8** Roof Special Girder Job Reference (optional)

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:53 2021 Page 1

Structural wood sheathing directly applied or 2-9-0 oc purlins, except

5-17

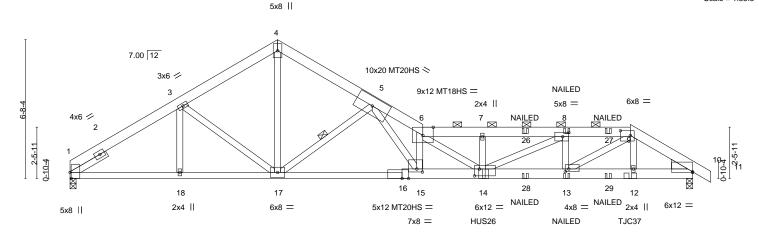
2-0-0 oc purlins (2-9-12 max.): 6-9.

1 Row at midpt

Rigid ceiling directly applied or 7-6-15 oc bracing.

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-alJGV5CFclBBprWqy?mj9Vny1b4M3M1B1NxF87ypHyq 10-0-0 4-10-4 30-0-0 3-0-0 19-10-7 23-10-10 2-10-7 4-0-4

Scale = 1:55.5



		5-1-12	10-0-0	17-	0-0	19-10-7	23-10-10	27-0-0	30-0-0
		5-1-12	4-10-4	7-0	0-0	2-10-7	4-0-4	3-1-6	3-0-0
Plate Offset	ts (X,Y)	[1:0-3-8,Edge], [6:0-6-0	0,Edge], [8:0-3-8,	0-2-8], [9:0-5-12,0-2-12],	, [10:0-0-0,0-0-7],	[13:0-2-0,0-1-8]	, [14:0-2-12,0-4-0], [15:0-3-4,0-1-12], [16:0-3-12,0-0-0]
TCDL	25.0 10.0	SPACING- Plate Grip DOL Lumber DOL	1.15	CSI. TC 0.63 BC 0.97	DEFL. Vert(LL) Vert(CT)	in (loc) -0.45 14-15 -0.80 15-17	l/defl L/d >802 240 >450 180	PLATES MT20 MT20HS	197/144 148/108
BCLL BCDL	0.0 10.0	Rep Stress Incr Code IRC2018/	-	WB 0.97 Matrix-MS	Horz(CT)	0.12 10	n/a n/a	MT18HS Weight:	

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x6 SPF No.2 *Except* TOP CHORD 4-6,6-9: 2x6 SPF 2100F 1.8E

BOT CHORD 2x4 SPF 1650F 1.5E *Except* 10-16: 2x6 SP 2400F 2.0E

WEBS 2x4 SPF No.2 *Except* 5-15: 2x4 SP 2400F 2.0E

WEDGE

Right: 2x6 SP No.2

SLIDER Left 2x4 SPF No.2 2-0-0

REACTIONS. (size) 1=0-3-8, 10=0-3-8

Max Horz 1=-161(LC 4)

Max Uplift 1=-311(LC 8), 10=-662(LC 9) Max Grav 1=1874(LC 1), 10=2800(LC 1)

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

TOP CHORD 1-3=-2921/522, 3-4=-2706/577, 4-5=-2746/559, 5-6=-9884/2035, 6-7=-9416/2025,

7-8=-9414/2024, 8-9=-6975/1592, 9-10=-4314/1018

BOT CHORD 1-18=-437/2405, 17-18=-437/2405, 15-17=-902/4926, 14-15=-1725/8868,

13-14=-1506/6973, 12-13=-811/3655, 10-12=-810/3645

WEBS 3-17=-316/239, 4-17=-463/2299, 6-15=-5410/1203, 5-17=-3344/811, 5-15=-1355/6535, 7-14=-409/153, 8-13=-1773/439, 9-13=-831/3969, 6-14=-587/788, 8-14=-484/2731

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph, TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) 1=311, 10=662,
- 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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 19-11-4 from the left end to connect truss(es) to front face of bottom chord.
- 10) Use Simpson Strong-Tie TJC37 (4 nail 90-150) or equivalent at 27-0-0 from the left end to connect truss(es) to front face of bottom chord, skewed 29.7 deg.to the right, sloping 0.0 deg. down.

Continued on bages where hanger is in contact with lumber.



August 11,2021



Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE#156/MO	
2895604	B8	Roof Special Girder	1	1		147385495
2033004	100	Troof opedial Girder			Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:53 2021 Page 2 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-alJGV5CFclBBprWqy?mj9Vny1b4M3M1B1NxF87ypHyq

12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-6=-70, 6-9=-70, 9-11=-70, 19-23=-20

Concentrated Loads (lb)

Vert: 12=-211(F) 14=-1184(F) 8=-93(F) 13=-80(F) 26=-93(F) 27=-93(F) 28=-80(F) 29=-80(F)



SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385496 2895604 B9 Common 2 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:54 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-2UteiRCtN2J1R?50WiHyiiKCX?VTo?HKF1gogZypHyp 14-9-8 14-10-4 0-0-12 5-1-12 4-10-4 4-9-8 5-0-4 Scale = 1:42.9 4x6 = 7.00 12 2x4 💸 2x4 / 4x6 < 4x6 / 6 0-10-4 5x8 = 5x8 || 4x8 || 19-10-8 10-0-0 Plate Offsets (X,Y)-- [1:0-3-4,0-0-2], [8:0-4-0,0-3-4]

		7- 1/1										
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	0.26	Vert(LL)	-0.12	8-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.25	8-11	>950	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.03	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-AS						Weight: 77 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

WEBS 2x4 SPF No.2 SLIDER Left 2x6 SPF No.2 2-0-0, Right 2x6 SPF No.2 2-0-0

REACTIONS.

(size) 1=0-3-8, 7=Mechanical

Max Horz 1=152(LC 9)

Max Uplift 1=-142(LC 12), 7=-141(LC 13) Max Grav 1=894(LC 1), 7=894(LC 1)

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

1-3=-1188/223, 3-4=-940/199, 4-5=-938/199, 5-7=-1172/221 TOP CHORD

BOT CHORD 1-8=-218/975. 7-8=-124/955

WEBS 3-8=-323/199, 4-8=-65/515, 5-8=-303/195

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0. Interior(1) 3-0-0 to 10-0-0. Exterior(2R) 10-0-0 to 13-0-0. Interior(1) 13-0-0 to 19-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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=142, 7=141.
- 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.



August 11,2021



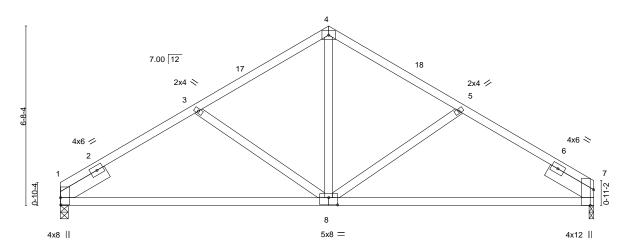
Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385497 2895604 B9A Common Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:55 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-WhQ0wmDW8MRu29gD4QoBEwtNHPriXSXTUhQMC?ypHyo

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

15-0-0 10-0-0 14-9-8 19-10-8 14-10-4 0-0-12 0-1-12 4x6 =



19-10-8

BRACING-

TOP CHORD

BOT CHORD

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

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.26	Vert(LL) -0.12 8-11 >999 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.66	Vert(CT) -0.25 8-11 >950 180	
BCLL 0.0	Rep Stress Incr YES	WB 0.21	Horz(CT) 0.03 7 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 77 lb FT = 20%

LUMBER-

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

SLIDER Left 2x6 SPF No.2 2-0-0, Right 2x6 SPF No.2 2-0-0

REACTIONS. (size) 1=0-3-8, 7=0-2-0 Max Horz 1=152(LC 9)

Max Uplift 1=-142(LC 12), 7=-141(LC 13)

Max Grav 1=894(LC 1), 7=894(LC 1)

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

1-3=-1188/223, 3-4=-940/199, 4-5=-938/199, 5-7=-1172/221 TOP CHORD

BOT CHORD 1-8=-218/975. 7-8=-124/955

WEBS 3-8=-323/199, 4-8=-65/515, 5-8=-303/195

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0. Interior(1) 3-0-0 to 10-0-0. Exterior(2R) 10-0-0 to 13-0-0. Interior(1) 13-0-0 to 19-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=142, 7=141.
- 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.



Scale = 1:42.9

August 11,2021



SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385498 2895604 B10 **GABLE** Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:41 2021 Page 1

4x6 =

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

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-w_ak__2jR3guN?cWFUYvgzI1jmDsF9MPGV1ckpypHz0

4x8 ||

Scale = 1:44.9

20-10-8 0-10-8 10-0-0 10-0-0

8 7.00 12 10 11 5 12 13 14 15 16 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17

	<u> </u>		20-0-0 20-0-0		
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.07 BC 0.06 WB 0.12 Matrix-R	DEFL. in (I Vert(LL) -0.00 Vert(CT) -0.00 Horz(CT) 0.00	loc) l/defl L/d 16 n/r 120 16 n/r 120 17 n/a n/a	PLATES GRIP MT20 197/144 Weight: 105 lb FT = 20%

BOT CHORD

BRACING-LUMBER-

3x4 =

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

OTHERS 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing.

All bearings 20-0-0.

Max Horz 32=-184(LC 8) (lb) -

4x8 ||

Max Uplift All uplift 100 lb or less at joint(s) 32, 17, 25, 26, 27, 28, 30, 23, 22, 21, 20, 19 except 31=-110(LC

12), 18=-100(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 32, 17, 24, 25, 26, 27, 28, 30, 31, 23, 22, 21, 20, 19, 18

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

REACTIONS.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-4-0, Exterior(2N) 3-4-0 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32, 17, 25, 26, 27, 28, 30, 23, 22, 21, 20, 19 except (jt=lb) 31=110, 18=100.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11,2021



SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385499 2895604 C₁ **GABLE** Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:57 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-S3YnKSFmgzhclTqbBrqfJLymhDgy?PXmy?vTHuypHym -0-10-8 0-10-8 6-6-0 6-6-0 Scale = 1:30.1 4x6 = 6 5 7.00 12 21 3 20

13-0-0

15

14

LOADIN	G (psf)	SPACING- 2-	-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1	1.15	TC	0.07	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL 1	1.15	BC	0.04	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0	Rep Stress Incr \	YES	WB	0.05	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20)14	Matri	x-R						Weight: 56 lb	FT = 20%

16

LUMBER-BRACING-

18

17

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2 BOT CHORD 2x4 SPF No.2 WEBS **OTHERS** 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

12

except end verticals.

13

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-0-0.

Max Horz 19=131(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 19, 11, 16, 17, 18, 14, 13, 12 Max Grav All reactions 250 lb or less at joint(s) 19, 11, 15, 16, 17, 18, 14, 13, 12

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.

19

4x8 ||

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 6-6-0, Corner(3R) 6-6-0 to 9-6-0, Exterior(2N) 9-6-0 to 12-10-4 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 11, 16, 17, 18,
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



4x8 II 10

11

August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385500 2895604 C2 Roof Special Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:21 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-lh?rNfXp0LjCA9fCbtGIIPyqfulwdERITkjk7VypHyO -0-10-8 0-10-8 3-9-11 3-9-11 2-8-5

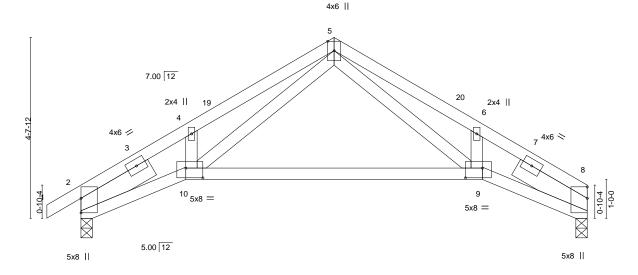


Plate Offsets (X,Y)--[2:Edge,0-0-0], [8:Edge,0-0-0], [9:0-5-4,0-3-0], [10:0-5-4,0-3-0] SPACING-**PLATES** GRIP LOADING (psf) DEFL. (loc) I/def L/d TCLL 25.0 Plate Grip DOL 1.15 TC 0.26 Vert(LL) -0.12 9-10 >999 240 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.46 Vert(CT) -0.28 9-10 >565 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.18 Horz(CT) 0.07 n/a 8 n/a Code IRC2018/TPI2014 FT = 20% **BCDL** 10.0 Weight: 55 lb Matrix-AS

BRACING-

TOP CHORD

BOT CHORD

10-3-11

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

WEBS 2x4 SPF No.2 **SLIDER** Left 2x6 SPF No.2 2-1-11, Right 2x6 SPF No.2 2-1-11

REACTIONS.

(size) 8=0-3-8, 2=0-3-8 Max Horz 2=108(LC 11)

Max Uplift 8=-91(LC 13), 2=-111(LC 12) Max Grav 8=583(LC 1), 2=648(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. $2\text{-}4\text{=-}1365/278,\ 4\text{-}5\text{=-}1289/372,\ 5\text{-}6\text{=-}1307/369,\ 6\text{-}8\text{=-}1381/276}$ TOP CHORD

BOT CHORD 2-10=-233/1182, 9-10=-68/569, 8-9=-194/1183

WEBS 5-9=-188/718, 5-10=-231/753

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-6-0, Exterior(2R) 6-6-0 to 9-6-0, Interior(1) 9-6-0 to 13-0-0 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) Bearing at joint(s) 8, 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 100 lb uplift at joint(s) 8 except (jt=lb)
- 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.



Scale = 1:29.6

August 11,2021



SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385501 2895604 C3 Roof Special Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:23 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-i37coLZ4YyzwPSpbjIImNq1A2hSb57?bw2CrCNypHyM

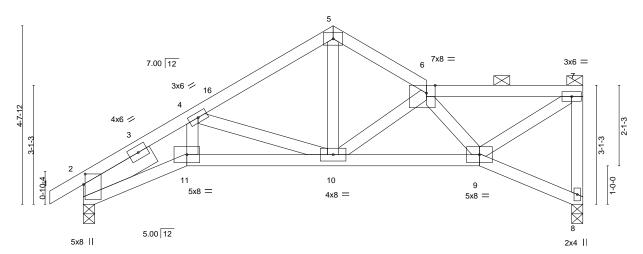
-0-10-8 0-10-8 13-0-0 8-11-2 10-3-11 2-8-5 3-9-11 2-5-2 1-4-9 2-8-5

> Scale = 1:30.0 4x6 =

> > Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 6-7.

Rigid ceiling directly applied.



6-6-0 13-0-0 10-3-11

BRACING-

TOP CHORD

BOT CHORD

Plate Offsets (X,Y)	[2:0-3-4,0-0-8], [6:0-2-11,Edge]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) -0.04 10-11 >999 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.45	Vert(CT) -0.07 10-11 >999 180	
BCLL 0.0	Rep Stress Incr YES	WB 0.17	Horz(CT) 0.05 8 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 58 lb FT = 20%

LUMBER-

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

WEBS 2x4 SPF No.2 **SLIDER** Left 2x6 SPF No.2 2-1-11

REACTIONS. (size) 8=0-3-8, 2=0-3-8 Max Horz 2=154(LC 11)

Max Uplift 8=-107(LC 13), 2=-110(LC 12) Max Grav 8=576(LC 1), 2=642(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-4=-1267/411, 4-5=-720/204, 5-6=-726/220, 6-7=-599/146, 7-8=-552/167 TOP CHORD

BOT CHORD 2-11=-479/1104, 10-11=-443/1016, 9-10=-299/860

WEBS 4-11=-116/346, 7-9=-194/700, 6-9=-439/166, 6-10=-344/120, 5-10=-112/456,

4-10=-473/238

NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-6-0, Exterior(2E) 6-6-0 to 8-11-2, Interior(1) 8-11-2 to 12-10-4 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.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Bearing at joint(s) 8, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=107, 2=110.
- 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.



August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385502 2895604 C4 Roof Special Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:25 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-eSEMD1aK4aDefmz_qjKESF6TaV7cZwyuOMhxGGypHyK -0-10-8 0-10-8 7-9-7 13-8-8 3-9-11 1-3-7 Scale = 1:29.6 4x6 = 5 4x8 <> 3x4 =

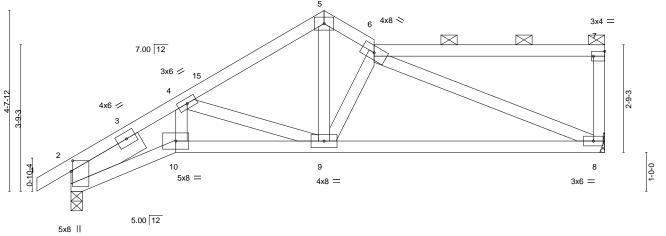


Plate Off	sets (X,Y)	[2:0-3-4,0-0-8], [7:Edge,0-	1-8]									
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.39	Vert(LL)	-0.07	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.48	Vert(CT)	-0.14	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matrix	c-AS						Weight: 59 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2 **SLIDER** Left 2x6 SPF No.2 2-1-11

REACTIONS. (size) 8=Mechanical, 2=0-3-8

Max Horz 2=139(LC 9)

Max Uplift 8=-123(LC 13), 2=-112(LC 12) Max Grav 8=608(LC 1), 2=674(LC 1)

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

2-4=-1345/415, 4-5=-801/188, 5-6=-823/227 TOP CHORD **BOT CHORD** 2-10=-501/1144, 9-10=-459/1062, 8-9=-281/845

WEBS 4-10=-137/340, 6-8=-833/263, 5-9=-143/645, 6-9=-416/160, 4-9=-458/251

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-6-0, Exterior(2E) 6-6-0 to 7-9-7, Interior(1) 7-9-7 to 13-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

6-6-0

- 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 100 lb uplift at joint(s) except (jt=lb) 8=123, 2=112.
- 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.



Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 6-7.

Rigid ceiling directly applied.

August 11,2021



SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385503 2895604 C5 Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:26 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-6eokQNbyqtLVGwYAORrT?SfanvSflM_1c0QVoiypHyJ

7-8-6

1-4-1

6-0-2

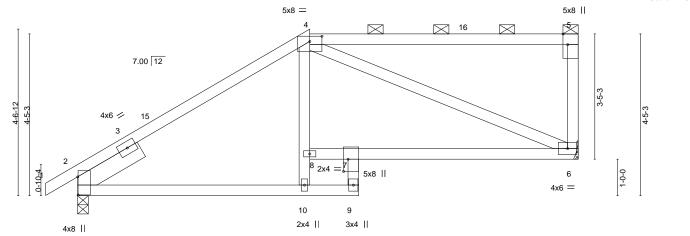
13-8-8

2-0-0 oc purlins (6-0-0 max.): 4-5.

Rigid ceiling directly applied.

Structural wood sheathing directly applied, except end verticals, and

Scale = 1:31.6



		<u> </u>	6-4-	5	1-4-1			6-	0-2	<u> </u>	
Plate Off	sets (X,Y)	[2:0-5-15,0-0-2], [4:0-4-0	,0-1-11], [5:0-3	-8,Edge], [7:0-4-0,0-1-8]							
LOADIN	G (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)	-0.10	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.24	6-7	>692	180		
BCLL	0.0	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.09	6	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix-AS						Weight: 56 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 6=Mechanical, 2=0-3-8

Max Horz 2=144(LC 9)

0-10-8

6-4-5

Max Uplift 6=-136(LC 9), 2=-111(LC 12) Max Grav 6=608(LC 1), 2=674(LC 1)

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

TOP CHORD 2-4=-732/153, 5-6=-264/111

BOT CHORD 2-10=-204/573, 9-10=-152/297, 7-8=-71/358, 6-7=-223/654

WEBS 8-10=0/288, 4-8=0/271, 4-6=-596/184

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-4-5, Exterior(2R) 6-4-5 to 10-7-3, Interior(1) 10-7-3 to 13-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 6=136, 2=111.
- 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.



August 11,2021



SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385504 2895604 C6 Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:27 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-arM6djcabBTMu47My8NiXgBohJqj1tYBrfA2L9ypHyI -0-10-8 0-10-8 9-6-8 13-8-8 2-0-8 4-2-0

7x8 = 4x6 = 5 18 N. 7.00 12 5-1-3 5-1-3 4x6 // 4x8 || 1-0-0 5x8 || 6 3x4 || 10 9

Plate Offsets (X,Y)--[2:0-5-15,0-0-2], [4:0-5-5,Edge], [7:0-4-0,0-1-8] SPACING-L/d **PLATES** LOADING (psf) CSI. (loc) I/def GRIP TCLL 25.0 Plate Grip DOL 1.15 TC 0.48 Vert(LL) 0.09 10-13 >999 240 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.44 Vert(CT) -0.13 10-13 >999 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.39 Horz(CT) 0.06 6 n/a n/a

2x4 ||

3x4 II

13-8-8

BRACING-LUMBER-

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.): 4-5. WEBS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied.

Matrix-AS

REACTIONS. (size) 6=Mechanical, 2=0-3-8

Max Horz 2=170(LC 9)

Left 2x6 SPF No.2 2-0-0

Max Uplift 6=-135(LC 9), 2=-116(LC 12) Max Grav 6=608(LC 1), 2=674(LC 1)

4x8 II

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

Code IRC2018/TPI2014

2-4=-637/144, 4-5=-545/174, 5-6=-500/158 TOP CHORD **BOT CHORD** 2-10=-197/495, 9-10=-157/335, 7-8=-279/108

WEBS 8-10=0/272, 5-8=-190/572

BCDL

SLIDER

10.0

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-6-0, Exterior(2R) 7-6-0 to 11-8-15, Interior(1) 11-8-15 to 13-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 6=135, 2=116.
- 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.



Scale = 1:34.9

FT = 20%

Weight: 58 lb

August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385505 2895604 C7 Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:29 2021 Page 1

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

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-WDUt2Pdq7oj48NGl3ZPAc5H5A6T9VmzUJzf9P1ypHyG 0-10-8 9-6-8 13-8-8 4-5-10 4-2-2 0-10-12 4-2-0

9-6-8

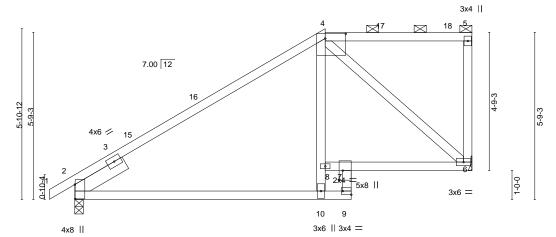
13-8-8

2-0-0 oc purlins (6-0-0 max.): 4-5.

Rigid ceiling directly applied.

Scale = 1:39.8 9x12 MT18HS =

Structural wood sheathing directly applied, except end verticals, and



		Г	4-5-	10		4-2-2	0-10-12	4-2-	0	1	
Plate Offse	ets (X,Y)	[2:0-5-15,0-0-2], [4:0-8	3-8,0-2-0], [7:0-4	-0,0-1-8], [9:Ec	lge,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	0.68	Vert(LL)	0.14 10-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.21 10-13	>769	180	MT18HS	197/144
BCLL	0.0	Rep Stress Inc	YES	WB	0.46	Horz(CT)	0.06 2	n/a	n/a		
BCDL	10.0	Code IRC2018	/TPI2014	Matrix	-AS					Weight: 58 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

8-7-11

LUMBER-

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

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 6=Mechanical, 2=0-3-8

Max Horz 2=197(LC 9)

Max Uplift 6=-133(LC 9), 2=-119(LC 12) Max Grav 6=608(LC 1), 2=674(LC 1)

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

TOP CHORD 2-4=-591/138

BOT CHORD 2-10=-194/439 9-10=-154/331 6-7=-205/458 **WEBS** 8-10=-17/414, 4-8=0/287, 4-6=-592/206

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-7-11, Exterior(2R) 8-7-11 to 12-10-10, Interior(1) 12-10-10 to 13-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

4-5-10

- 3) Provide adequate drainage to prevent water ponding.
- 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) 6=133, 2=119.
- 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.



August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385506 2895604 C8 Half Hip Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:30 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-?P2FGkeTu6sxlXrxdGwP9lpMzWp6EledXdOixUypHyF

3-8-0

3-11-1

1-1-0

Scale = 1:41.4

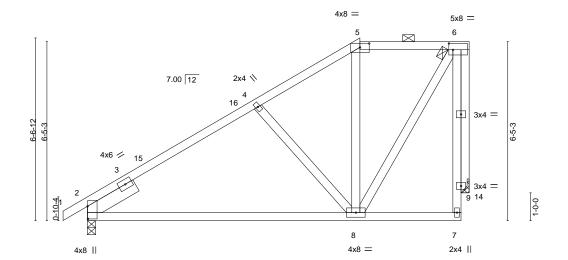


Plate Offsets (X,Y)	[2:0-5-7,0-0-2], [5:0-4-0,0-1-11], [6:0-1-12,0-2-12]	

0-10-8 0-10-8

5-0-7

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.14 8-12 >999 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) -0.30 8-12 >551 180	
BCLL 0.0	Rep Stress Incr YES	WB 0.18	Horz(CT) 0.03 2 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 70 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2 2x4 SPF No.2 **OTHERS**

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 2=0-3-8, 14=Mechanical

Max Horz 2=230(LC 12)

Max Uplift 2=-93(LC 12), 14=-136(LC 12) Max Grav 2=673(LC 1), 14=582(LC 1)

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

TOP CHORD 2-4=-715/88, 4-5=-431/69, 5-6=-306/83

BOT CHORD 2-8=-206/523

WEBS 6-8=-144/530, 4-8=-355/204, 6-14=-583/147

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-9-7, Exterior(2E) 9-9-7 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
- 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)
- 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.



Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 5-6.

Rigid ceiling directly applied.

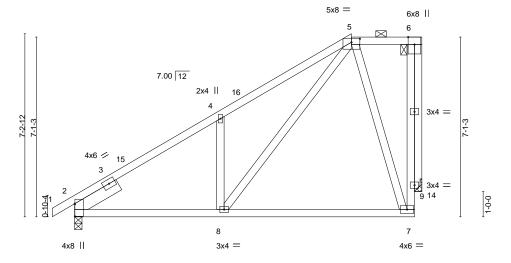
August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385507 2895604 C9 Half Hip Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:31 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-TccdT4f5fQ_oNhQ8B_RehWMYIwCkzh?mmH8GUwypHyE

10-11-2 13-8-8 5-3-13 2-9-6

Scale = 1:45.5



10-11-2

Plate Offsets (X,Y)	[2:0-5-15,0-0-2], [5:0-4-0,0-1-11]

LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.25	DEFL. in Vert(LL) -0.09	7-8	l/defl >999	L/d 240	PLATES MT20	GRIP 197/144
TCDL 10.0 BCLL 0.0 BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.37 WB 0.43 Matrix-AS	Vert(CT) -0.18 Horz(CT) -0.02		>922 n/a	180 n/a	Weight: 73 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2 **OTHERS** SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 2=0-3-8, 14=Mechanical

Max Horz 2=257(LC 12)

Max Uplift 2=-85(LC 12), 14=-164(LC 12) Max Grav 2=673(LC 1), 14=582(LC 1)

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

TOP CHORD 2-4=-731/65, 4-5=-761/224, 7-9=-171/528, 6-9=-171/528 **BOT CHORD** 2-8=-216/593

4-8=-386/257, 5-7=-482/214, 5-8=-265/670, 6-14=-583/165 **WEBS**

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-11-2, Exterior(2E) 10-11-2 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.
- 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)
- 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.



Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 5-6.

Rigid ceiling directly applied.

August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385508 2895604 C10 Half Hip Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:58 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-wF69YoFORHqTvdPolYLusYVtQcxGkkywAfe0pKypHyl

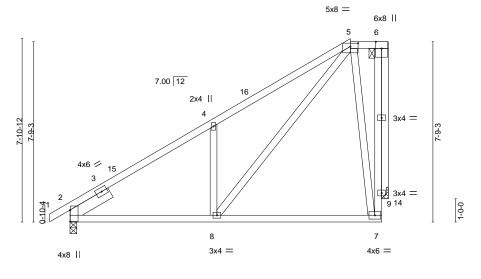
Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 5-6.

Rigid ceiling directly applied.

12-0-14 5-10-11 1-7-10

Scale = 1:49.6



12-0-14

Plate Offsets (X,Y)	[2:0-5-15,0-0-2],	[5:0-4-0,0-1-11]

LOADING (ps	f)	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)	-0.07	7-8	>999	240	MT20	197/144
TCDL 10.	0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.14	7-8	>999	180		
BCLL 0.	0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	-0.02	14	n/a	n/a		
BCDL 10.	0	Code IRC2018/TF	PI2014	Matri	x-AS						Weight: 77 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2 **OTHERS** SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 2=0-3-8, 14=Mechanical

Max Horz 2=284(LC 12)

Max Uplift 2=-74(LC 12), 14=-196(LC 12) Max Grav 2=673(LC 1), 14=582(LC 1)

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

TOP CHORD 2-4=-691/45, 4-5=-759/223, 7-9=-237/607, 6-9=-237/607 **BOT CHORD** 2-8=-221/587

WEBS 4-8=-442/285, 5-7=-548/270, 5-8=-307/750, 6-14=-583/196

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-0-14, Exterior(2E) 12-0-14 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.
- 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)
- 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.



August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385509 2895604 C10A Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:35:59 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-PSgXl8G0BbyKXm__JGs7Om11t0HmTBG3PJOZLnypHyk

13-2-9 -0-10-8 0-10-8 6-5-9

Scale = 1:52.1

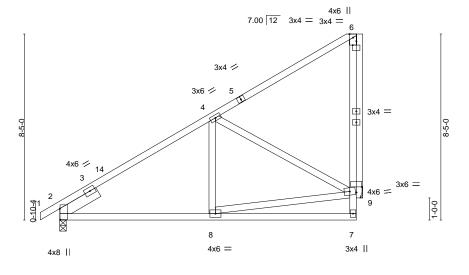


Plate Offsets (X,Y)	[2:0-5-15,0-0-2], [6:0-2-0,0-2-1], [9:0-3-0,0-3-0]	
		=

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL) 0.05 8-12 >999 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.33	Vert(CT) -0.07 8-12 >999 180	
BCLL 0.0	Rep Stress Incr YES	WB 0.54	Horz(CT) -0.02 2 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 75 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 2=0-3-8, 9=Mechanical

Max Horz 2=332(LC 11)

Max Uplift 2=-102(LC 12), 9=-189(LC 12) Max Grav 2=660(LC 1), 9=633(LC 19)

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

TOP CHORD 2-4=-641/145 **BOT CHORD** 2-8=-247/568

8-9=-364/561, 4-9=-594/256 **WEBS**

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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
- 2) 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
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=102, 9=189.
- 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.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

August 11,2021



SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385510 2895604 C₁₀B Jack-Closed Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:00 2021 Page 1

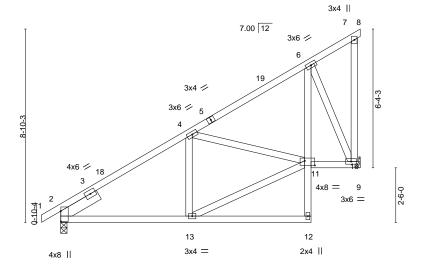
Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-teEvzUHeyu4B9wZAszOMxzaEyQfDCidCez77uDypHyj

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

-0-10-8 0-10-8 11-5-8 13-8-8 5-10-8 5-7-0 2-3-0

Scale = 1:52.7



5-10-8 13-8-8

Plate Offsets (X,Y)	[2:0-5-11,0-0-2], [11:0-5-8,0-2-8]

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.26 BC 0.26	DEFL. in (loc) l/defl L/d Vert(LL) 0.03 13-16 >999 240 Vert(CT) -0.05 12-13 >999 180 Horz(CT) -0.01 2 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	WB 0.28 Matrix-AS	Horz(CT) -0.01 2 n/a n/a	Weight: 75 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 10=Mechanical, 2=0-3-8

Max Horz 2=291(LC 9)

Max Uplift 10=-119(LC 9), 2=-84(LC 12) Max Grav 10=653(LC 19), 2=668(LC 1)

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

2-4=-685/133, 4-6=-403/116 TOP CHORD

BOT CHORD 2-13=-232/601, 6-11=-91/408, 10-11=-157/284 **WEBS** 6-10=-625/220, 11-13=-260/646, 4-11=-317/137

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 13-8-8 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
- 2) 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.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 10=119
- 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.





Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385511 2895604 C11 Jack-Closed 2

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

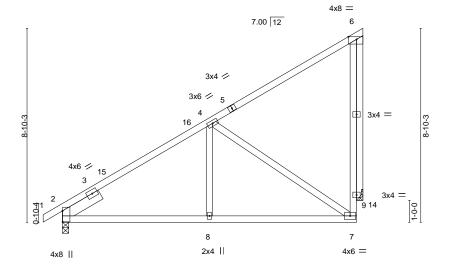
Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:03 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-HDv2bWJXFpSm0OHIY5x4ZcCjideVPz_fKxMnUYypHyg

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

6-10-4 6-10-4

Scale = 1:52.5



6-10-4 13-8-8

Plate Offsets (X,Y)	[2:0-5-15,0-0-2], [6:0-4-8,Eage]			
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.42	DEFL. in (loc) I/defl L/d Vert(LL) -0.05 7-8 >999 240	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0	Lumber DOL 1.15 Rep Stress Incr YES	BC 0.35 WB 0.69	Vert(CT) -0.09 7-8 >999 180 Horz(CT) -0.02 2 n/a n/a	107/111
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 70 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2 **OTHERS** SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 2=0-3-8, 14=Mechanical

Max Horz 2=268(LC 12)

Max Uplift 2=-54(LC 12), 14=-147(LC 12) Max Grav 2=673(LC 1), 14=601(LC 19)

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

TOP CHORD 2-4=-673/7, 7-9=-86/416, 6-9=-86/416 **BOT CHORD** 2-8=-173/572, 7-8=-173/572

WEBS 4-8=0/285, 4-7=-635/205, 6-14=-602/151

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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
- 2) 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
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 14=147.
- 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.





SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385512 2895604 C11A Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:05 2021 Page 1

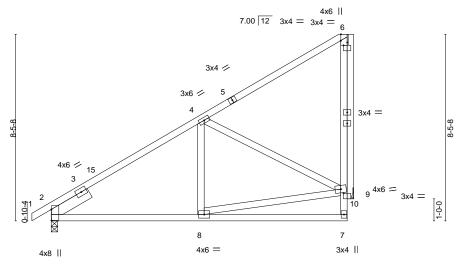
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-Dc1o0BLnnQiUFhR8fWzYe1H3ORK9tu?ynEruZQypHye

13-3-7 6-5-15

Scale = 1:52.2



BRACING-

TOP CHORD

BOT CHORD

Plate Offsets (X,Y)	[2:0-5-15,0-0-2], [6:0-2-0	2:0-5-15,0-0-2], [6:0-2-0,0-1-9], [6:0-3-7,Edge], [9:0-1-8,0-2-4]								
LOADING (f)	CD4 CINC	0.0.0	001							
LOADING (psf)	SPACING-	2-0-0	CSI.							
TCLL 25.0	Plate Grip DOL	1.15	TC 0.41							

TCDL 10.0 Lumber DOL 1.15 BC 0.33 **BCLL** 0.0 Rep Stress Incr YES WB 0.53 **BCDL** Code IRC2018/TPI2014 10.0 Matrix-AS

DEFL. in (loc) I/def L/d Vert(LL) 0.05 8-13 >999 240 Vert(CT) -0.07 7-8 >999 180 Horz(CT) -0.02 n/a n/a

Rigid ceiling directly applied.

PLATES MT20

Structural wood sheathing directly applied, except end verticals.

GRIP 197/144

FT = 20% Weight: 75 lb

LUMBER-

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

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS.

(size) 2=0-3-8, 10=Mechanical

Max Horz 2=332(LC 11)

Max Uplift 2=-102(LC 12), 10=-189(LC 12) Max Grav 2=660(LC 1), 10=633(LC 19)

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

TOP CHORD 2-4=-647/145, 9-10=-550/273

BOT CHORD 2-8=-250/575

WEBS 8-9=-366/632, 4-9=-576/254

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 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
- 2) 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
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=102, 10=189.
- 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.





Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385513 2895604 C12 Half Hip Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:06 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-hobADXMPYkqLtr0KDEVnBEqFNrgBcLt50uaR5typHyd

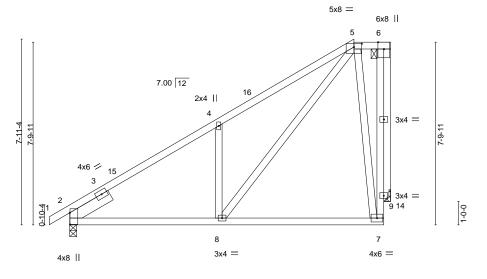
Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 5-6.

Rigid ceiling directly applied.

13-8-8 6-2-10 6-2-10 12-1-11 5-11-2 1-6-13

Scale = 1:49.2



6-2-10

LOADING	(psf)	SPACING- 2-0)-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.	15	TC	0.33	Vert(LL)	-0.06	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL 1.	15	BC	0.35	Vert(CT)	-0.12	7-8	>999	180		
BCLL	0.0	Rep Stress Incr YE	S	WB	0.55	Horz(CT)	-0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI201	4	Matri	x-AS						Weight: 77 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2 2x4 SPF No.2 **OTHERS**

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 2=0-3-8, 14=Mechanical

Max Horz 2=286(LC 12)

Max Uplift 2=-73(LC 12), 14=-198(LC 12) Max Grav 2=673(LC 1), 14=582(LC 1)

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

TOP CHORD 2-4=-683/42, 4-5=-748/220, 7-9=-237/605, 6-9=-237/605 **BOT CHORD** 2-8=-218/577

4-8=-449/287, 5-7=-548/269, 5-8=-310/755, 6-14=-583/198 **WEBS**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 12-1-11, Exterior(2E) 12-1-11 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.
- 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)
- 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.



August 11,2021

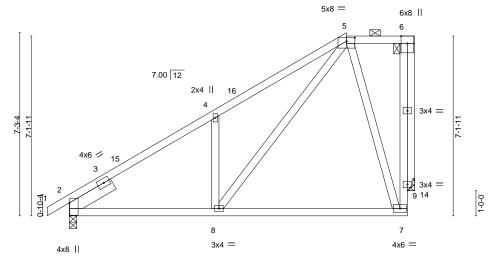


Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385514 2895604 C13 Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:09 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-6NHJsZOIrfCvkJlvuM2UotSnn2hbpkTXisp5iBypHya

5-7-12

11-0-0 13-8-8 5-4-4 2-8-8

Scale = 1:45.7



11-0-0 Plate Offsets (X V)-- [2:0-5-15 0-0-2] [5:0-4-0 0-1-11]

Tidle Offices	Title Offices (X, 1) [2.0 0 10,0 0 2], [0.0 4 0,0 1 11]											
LOADING (ps	sf)	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)	-0.08	7-8	>999	240	MT20	197/144
TCDL 10	.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.17	7-8	>940	180		
BCLL 0	.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	-0.02	14	n/a	n/a		
BCDL 10	.0	Code IRC2018/TF	PI2014	Matri	x-AS						Weight: 74 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2 **OTHERS** SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 2=0-3-8, 14=Mechanical

Max Horz 2=259(LC 12)

Max Uplift 2=-84(LC 12), 14=-166(LC 12) Max Grav 2=673(LC 1), 14=582(LC 25)

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

TOP CHORD 2-4=-730/64, 4-5=-760/224, 7-9=-175/532, 6-9=-175/532 **BOT CHORD** 2-8=-216/592

WEBS 4-8=-390/258, 5-7=-485/217, 5-8=-267/675, 6-14=-583/167

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-0-0, Exterior(2E) 11-0-0 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
- 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)
- 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.



Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 5-6.

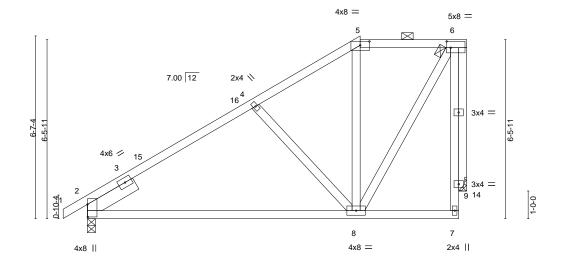
Rigid ceiling directly applied.



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385515 2895604 C14 Half Hip Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:10 2021 Page 1

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-aZqh3vPwczKmMTJ5S3ZjL4_x1S_JYFchxWYfEeypHyZ 0-10-8 0-10-8 9-10-5 6-0-14 3-9-7 3-10-4

Scale = 1:41.6



9-10-5

Plate Offsets (A, f)	[2.0-3-7,0-0-2], [3.0-4-0,0-1-11], [6.0-1-1	2,0-2-12]
		i e

LOADING	(ncf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
LUADING	(h2i)	SFACING-	2-0-0	COI.		DEFE.	111	(IUC)	i/ueii	L/U	FLATES	GKIF
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.15	8-12	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.30	8-12	>537	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-AS						Weight: 71 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2 **OTHERS** SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 2=0-3-8, 14=Mechanical

Max Horz 2=232(LC 12)

Max Uplift 2=-93(LC 12), 14=-138(LC 12) Max Grav 2=673(LC 1), 14=582(LC 1)

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

TOP CHORD 2-4=-728/89, 4-5=-427/66, 5-6=-301/82

BOT CHORD 2-8=-208/526

WEBS 4-8=-357/205, 6-8=-145/533, 6-14=-583/148

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 9-10-5, Exterior(2E) 9-10-5 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
- 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)
- 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.



Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 5-6.

Rigid ceiling directly applied.

August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385516 2895604 C15 Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:12 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-WyySUbQA8aaUbmTUZUbBQV4A?Ggt099_Oq1lJWypHyX

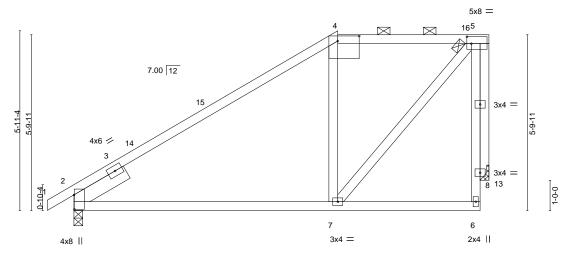
0-10-8 13-8-8 4-6-1 4-2-9 4-11-15

> Scale = 1:38.1 9x12 MT18HS =

> > Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 4-5.

Rigid ceiling directly applied.



8-8-9

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

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.71	Vert(LL) 0.17 7-11 >984 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) -0.25 7-11 >654 180	MT18HS 197/144
BCLL 0.0	Rep Stress Incr YES	WB 0.18	Horz(CT) 0.07 2 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 62 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SPF No.2 **OTHERS** SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 2=0-3-8, 13=Mechanical

Max Horz 2=205(LC 12)

Max Uplift 2=-98(LC 12), 13=-112(LC 12) Max Grav 2=673(LC 1), 13=582(LC 1)

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

TOP CHORD 2-4=-573/66, 4-5=-432/131

BOT CHORD 2-7=-141/424 4-7=-259/170, 5-7=-202/610, 5-13=-584/139 **WEBS**

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 8-8-9, Exterior(2R) 8-8-9 to 12-11-8, Interior(1) 12-11-8 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.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) The Fabrication Tolerance at joint 4 = 16%
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 13=112.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 11,2021



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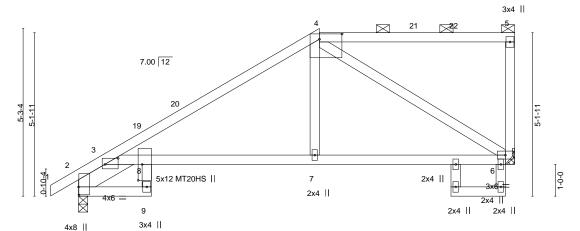
ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385517 2895604 C16 Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:13 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-_8WqhwRouuiLDw2g7C7QzjcNAfv2IU67dUnJrzypHyW 13-8-8 0-10-8 2-3-8 5-3-6 4-1-10 2-0-0

> Scale = 1:36.2 9x12 MT18HS =



		2-3-0	1		7-0-14		- 11	-0-0		13-0-0		
		2-3-8	1		5-3-6		4-	1-10		2-0-0		
Plate Offsets (>	(,Y) [2:0-3-0,0-0-	2], [3:0-5-0,0-2	2-5], [4:0-8-8,	0-2-0], [8:0-6	6-0,0-1-8]							
LOADING (psf	SPAC	ING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL 25.0) Plate	Grip DOL	1.15	TC	0.61	Vert(LL)	0.20	7-8	>823	240	MT20	197/144
TCDL 10.0) Lumb	er DOL	1.15	BC	0.97	Vert(CT)	-0.33	7-8	>490	180	MT20HS	148/108
BCLL 0.0	0 Rep S	tress Incr	YES	WB	0.65	Horz(CT)	0.14	6	n/a	n/a	MT18HS	197/144
BCDL 10.0	Code	IRC2018/TPI2	2014	Matrix	x-AS						Weight: 59 lb	FT = 20%
	1			I								

LUMBER-BRACING-

2-2-0

2x4 SPF No.2 TOP CHORD 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.): 4-5. WEBS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied. 2x4 SPF No.2 **OTHERS**

REACTIONS. (size) 2=0-3-8, 6=Mechanical

Max Horz 2=172(LC 9)

Max Uplift 2=-117(LC 12), 6=-135(LC 9) Max Grav 2=674(LC 25), 6=608(LC 1)

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

TOP CHORD 3-14=-597/136, 3-4=-796/153

Left 2x6 SPF No.2 1-10-5

BOT CHORD 2-9=-205/349, 3-8=-51/317, 7-8=-254/639, 6-7=-253/630

WEBS 4-7=-3/342, 4-6=-717/252

NOTES-

SLIDER

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-6-14, Exterior(2R) 7-6-14 to 11-9-12, Interior(1) 11-9-12 to 13-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 2=117, 6=135.
- 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.



August 11,2021



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AMSI/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 Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385518 2895604 C17 Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:14 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-TK4CvGSQfBrCq4dshvefVw9Yj3leUvhGs8WsNPypHyV

5-3-6

11-8-8

6-5-2

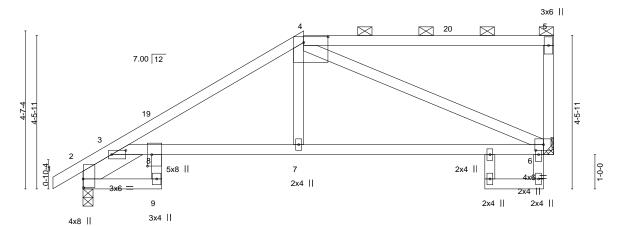
4-1-10

Scale = 1:33.6 9x12 MT18HS =

13-8-8

2-0-0

Structural wood sheathing directly applied, except end verticals, and



		2-3-8		4-1-10		1	5-3-	6		1	2-0-0	1	
Plate Off	fsets (X,Y)	[2:0-3-0,0-0-2], [3:0-5-0,0-	-1-8], [4:0-8-8	,0-2-0], [6:0-	1-8,0-1-0], [8:0	-4-0,0-1-8]							
LOADIN	IG (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	7-8	>999	240		MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.20	7-8	>819	180		MT18HS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.10	6	n/a	n/a			
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-AS							Weight: 58 lb	FT = 20%

LUMBER-BRACING-

2x4 SPF No.2 TOP CHORD TOP CHORD

BOT CHORD 2x4 SPF No.2 2-0-0 oc purlins (6-0-0 max.): 4-5. WEBS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied.

6-5-2

2x4 SPF No.2 SLIDER Left 2x6 SPF No.2 1-10-5

REACTIONS. (size) 2=0-3-8, 6=Mechanical

Max Horz 2=145(LC 9)

0-10-8 0-10-8

2-3-8

Max Uplift 2=-112(LC 12), 6=-136(LC 9) Max Grav 2=674(LC 1), 6=608(LC 1)

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

TOP CHORD 3-14=-568/121, 3-4=-917/168, 5-6=-251/110

BOT CHORD 2-9=-176/308, 3-8=-96/477, 7-8=-266/765, 6-7=-266/755

WEBS 4-7=0/347, 4-6=-748/246

NOTES-

OTHERS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-5-2, Exterior(2R) 6-5-2 to 10-8-1, Interior(1) 10-8-1 to 13-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 2=112, 6=136.
- 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.



August 11,2021



SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385519 2895604 C18 Half Hip Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:16 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-PjCyKyThBp5w4OnFoKg7bLEzPt_KywjZJS?zSHypHyT

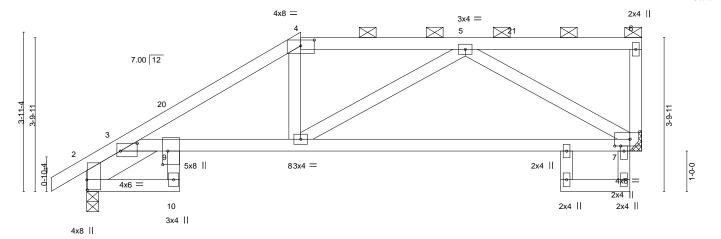
4-0-13

Scale = 1:28.5

13-8-8

2-0-0

2-4-5



2-3-8	2-11									
	2-11	-15	'		6-5-1				2-0-0	
3-0,0-0-2], [3:0-5-0,0	0-2-5], [4:0-4-0,	0-1-11], [7:0-4	1-8,0-2-0], [7	':0-1-8,0-1-0], [9:0	-4-0,0-1	-8]				
SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.12	7-8	>999	240	MT20	197/144
Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.23	7-8	>703	180		
Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.07	7	n/a	n/a		
Code IRC2018/TI	PI2014	Matrix-	-AS	` '					Weight: 59 lb	FT = 20%
3	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	SPACING- 2-0-0 CSI. Plate Grip DOL 1.15 TC Lumber DOL 1.15 BC Rep Stress Incr YES WB	SPACING- 2-0-0 CSI. Plate Grip DOL 1.15 TC 0.29 Lumber DOL 1.15 BC 0.74 Rep Stress Incr YES WB 0.33	SPACING- 2-0-0 CSI. DEFL. Plate Grip DOL 1.15 TC 0.29 Vert(LL) Lumber DOL 1.15 BC 0.74 Vert(CT) Rep Stress Incr YES WB 0.33 Horz(CT)	SPACING- 2-0-0 CSI. DEFL. in Plate Grip DOL 1.15 TC 0.29 Vert(LL) -0.12 Lumber DOL 1.15 BC 0.74 Vert(CT) -0.23 Rep Stress Incr YES WB 0.33 Horz(CT) 0.07	Plate Grip DOL 1.15 TC 0.29 Vert(LL) -0.12 7-8 Lumber DOL 1.15 BC 0.74 Vert(CT) -0.23 7-8 Rep Stress Incr YES WB 0.33 Horz(CT) 0.07 7	SPACING- 2-0-0 CSI. DEFL. in (loc) I/defl Plate Grip DOL 1.15 TC 0.29 Vert(LL) -0.12 7-8 >999 Lumber DOL 1.15 BC 0.74 Vert(CT) -0.23 7-8 >703 Rep Stress Incr YES WB 0.33 Horz(CT) 0.07 7 n/a	SPACING- 2-0-0 CSI. DEFL. in (loc) I/defl L/d Plate Grip DOL 1.15 TC 0.29 Vert(LL) -0.12 7-8 >999 240 Lumber DOL 1.15 BC 0.74 Vert(CT) -0.23 7-8 >703 180 Rep Stress Incr YES WB 0.33 Horz(CT) 0.07 7 n/a n/a	SPACING- 2-0-0 CSI. DEFL. in (loc) l/defl L/d PLATES Plate Grip DOL 1.15 TC 0.29 Vert(LL) -0.12 7-8 >999 240 MT20 Lumber DOL 1.15 BC 0.74 Vert(CT) -0.23 7-8 >703 180 Rep Stress Incr YES WB 0.33 Horz(CT) 0.07 7 n/a n/a n/a

LUMBER-BRACING-

2-11-15

2x4 SPF No.2 TOP CHORD 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.): 4-6. WEBS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied. 2x4 SPF No.2 **OTHERS**

SLIDER Left 2x6 SPF No.2 1-10-5

-0-10-8 0-10-8

REACTIONS. (size) 2=0-3-8, 7=Mechanical Max Horz 2=119(LC 9)

Max Uplift 2=-104(LC 12), 7=-137(LC 9) Max Grav 2=674(LC 1), 7=608(LC 1)

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

TOP CHORD 3-15=-564/116, 3-4=-1037/186, 4-5=-865/209 **BOT CHORD** 2-10=-154/283, 3-9=-108/591, 8-9=-262/874, 7-8=-215/715

WEBS 4-8=0/260, 5-7=-774/235

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-3-7, Exterior(2R) 5-3-7 to 9-4-3, Interior(1) 9-4-3 to 13-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 2=104, 7=137
- 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.



August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385520 2895604 C19 Half Hip Girder Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:19 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-plt5y_WZUkTUxrVqUSDqC_sLB4_U9Fz??QEd3cypHyQ

4-9-6

14-0-0 2-3-8

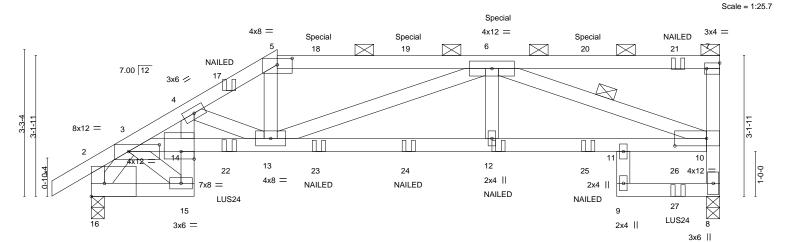
2-9-6

Structural wood sheathing directly applied or 2-9-9 oc purlins,

except end verticals, and 2-0-0 oc purlins (2-8-6 max.): 5-7.

Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Row at midpt



		2-3-8	4-1-11		8-11-2	I I		11-8-8	14-0-	0
		2-3-8	1-10-3	1	4-9-6			2-9-6	2-3-8	3
Plate Offs	sets (X,Y)-	 [2:Edge,0-3-8], [3:0-8-4 	,0-1-13], [5:0-4-	0,0-1-11], [7:Edge,0-1-8],	[10:0-8-8,0-2-0],	[14:0-3-8,0-2-0]				
LOADING	3 (nsf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.84	Vert(LL)	-0.10 12-13	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.19 12-13	>880	180		
BCLL	0.0	Rep Stress Incr	NO	WB 0.49	Horz(CT)	0.16 8	n/a	n/a		
BCDL	10.0	Code IRC2018/	TPI2014	Matrix-MS					Weight: 63 lb	FT = 20%

TOP CHORD

BOT CHORD

WEBS

LUMBER-BRACING-

1-10-3

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 *Except*

3-10: 2x4 SPF 1650F 1.5E 2x4 SPF No.2

Max Horz 16=116(LC 7)

2-3-8

0-10-8

REACTIONS. (size) 8=0-3-8, 16=0-3-8

> Max Uplift 8=-433(LC 5), 16=-397(LC 8) Max Grav 8=1563(LC 1), 16=1492(LC 1)

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

TOP CHORD $3-4 = -3554/1084,\ 4-5 = -2860/799,\ 5-6 = -2473/718,\ 8-10 = -1513/438,\ 7-10 = -270/119$ **BOT CHORD** 15-16=-338/936, 14-15=-292/821, 3-14=-962/2889, 13-14=-997/3015, 12-13=-836/2862,

11-12=-836/2862, 10-11=-839/2856

5-13=-175/829, 6-13=-468/159, 6-12=0/418, 6-10=-2876/808, 4-14=-296/690, WFBS

4-13=-524/255, 2-16=-259/110, 3-15=-1122/424, 3-16=-1542/379

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) 8=433, 16=397
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 10-0-0 oc max. starting at 3-0-14 from the left end to 13-0-14 to connect truss(es) to back face of bottom chord.
- 9) Fill all nail holes where hanger is in contact with lumber.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 219 lb down and 130 lb up at 5-0-14, 218 lb down and 130 lb up at 7-0-14, and 218 lb down and 130 lb up at 9-0-14, and 218 lb down and 130 lb up at 11-0-14 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



August 11,2021





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AMSI/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	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE#156/MO
					147385520
2895604	C19	Half Hip Girder	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:19 2021 Page 2 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-plt5y_WZUkTUxrVqUSDqC_sLB4_U9Fz??QEd3cypHyQ

LOAD CASE(S) Standard

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

Vert: 1-5=-70, 5-7=-70, 15-16=-20, 11-14=-20, 8-9=-20

Concentrated Loads (lb)

Vert: 12=-42(B) 6=-218(B) 18=-218(B) 19=-218(B) 20=-218(B) 21=-53(B) 22=-438(B) 23=-42(B) 24=-42(B) 25=-42(B) 26=-221(B)



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385521 2895604 CJ1 Diagonal Hip Girder Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:32 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-xo9?hQgjQj6e?r?KkhytEjvjFKZgiEEw?xtp0MypHyD 5-10-3

4-4-13

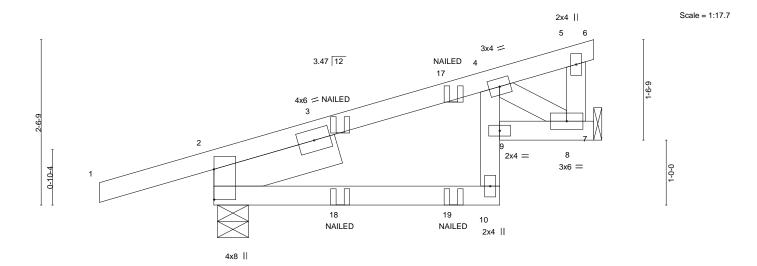
1-5-6

5-10-3

Structural wood sheathing directly applied or 5-10-3 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



			0-0-10		4-4-2			1-5-6		
Plate Off	sets (X,Y)	[2:Edge,0-0-0]								
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl L	./d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC 0.24	Vert(LL)	-0.01 10-15	>999 2	40	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.26	Vert(CT)	-0.02 10-15	>999 1	80		
BCLL	0.0	Rep Stress Incr	NO	WB 0.04	Horz(CT)	0.01 8	n/a r	ı/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matrix-MP					Weight: 24 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2 SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 8=Mechanical, 2=0-5-12

Max Horz 2=76(LC 5)

Max Uplift 8=-79(LC 8), 2=-156(LC 4) Max Grav 8=224(LC 1), 2=423(LC 1)

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

1-9-3

BOT CHORD 8-9=-115/279 WFBS 4-8=-325/148

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

0-0-10

- 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) 8 except (jt=lb) 2 = 156
- 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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-5=-70, 5-6=-20, 10-11=-20, 7-9=-20

Concentrated Loads (lb) Vert: 18=-11(B)



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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

AMSI/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 Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385522 2895604 CJ₂ Diagonal Hip Girder Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:33 2021 Page 1

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

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-P_iOumhLB1EVc?aWIPU6nxRq9jrtReg3DbdMYoypHyC

8-5-3 9-8-13 1-9-3 4-4-5 4-0-13 1-3-10

Scale = 1:25.2 4x8 = 5 6 NAILED 17 NAILED 3.47 12 Special 16 NAII FD 2-8-15 4x6 = 3 9 0-10-4 19 5x8 = 2x4 || 10 18 NAII FD NAILED 2x4 || NAILED 1.49 12 5x8 ||

4-4-5	8-5-3	9-8-13
4-4-5	4-0-13	1-3-10

Plate Offsets (X,Y	Plate Offsets (X,Y) [2:0-2-7,0-0-1]												
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP									
TCLL 25.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.04 9-10 >999 240	MT20 197/144									
TCDL 10.0	Lumber DOL 1.15	BC 0.52	Vert(CT) -0.07 9-10 >999 180										
BCLL 0.0	Rep Stress Incr NO	WB 0.22	Horz(CT) 0.01 8 n/a n/a										
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS		Weight: 39 lb FT = 20%									

LUMBER-BRACING-

2x4 SPF No.2 TOP CHORD TOP CHORD Structural wood sheathing directly applied or 5-6-1 oc purlins, **BOT CHORD** 2x4 SPF No.2 except end verticals.

WEBS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 9-9-6 oc bracing.

SLIDER Left 2x6 SPF No.2 2-0-0

Max Horz 2=113(LC 22)

(size) 8=Mechanical, 2=0-4-7 Max Uplift 8=-204(LC 8), 2=-209(LC 4)

Max Grav 8=551(LC 1), 2=608(LC 1)

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

2-4=-969/324, 4-5=-315/96, 5-8=-520/198 TOP CHORD

BOT CHORD 2-10=-354/907 9-10=-358/918 **WEBS** 5-9=-110/368, 4-9=-679/288

REACTIONS.

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 100 lb uplift at joint(s) except (jt=lb) 8=204, 2=209.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 94 lb down and 114 lb up at 5-10-3 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-5=-70, 5-6=-20, 9-11=-20, 7-9=-20 Concentrated Loads (lb)

Vert: 9=-32(B) 15=-6(B) 16=-88(F=-85, B=-3) 17=-42(B) 18=-1(B) 19=-5(B)



August 11,2021



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

AMSI/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 Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385523 2895604 CJ3 Diagonal Hip Girder Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:34 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-tBHm56hzyLMME99is6?LJ8_3k7GsA8mDSFMw4FypHyB 5-10-13 1-9-3 2-11-7 2-11-7 Scale = 1:17.8 2x4 || 5 6 NAILED 3.47 12 NAILED 3x4 = 16 4x6 = 3 0-10-4 17 NAILED 9 8 NAILED 2x4 || 3x6 =4x8 || 0-0₇10 0-0-10 2-11-7 5-10-13 2-10-12 2-11-7 Plate Offsets (X,Y)--[2:0-5-6,0-0-4] SPACING-LOADING (psf) 2-0-0 CSI DEFL. in (loc) I/def L/d **PLATES** GRIP Plate Grip DOL TCLL 25.0 1.15 TC 0.24 Vert(LL) 0.01 8-9 >999 240 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.15 Vert(CT) -0.01 8-9 >999 180 **BCLL** 0.0 Rep Stress Incr NO WB 0.04 Horz(CT) 0.00 8 n/a n/a

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

BCDL

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

10.0

WEBS 2x4 SPF No.2

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 8=Mechanical, 2=0-5-12

Max Horz 2=99(LC 7)

Max Uplift 8=-85(LC 8), 2=-156(LC 4) Max Grav 8=234(LC 1), 2=424(LC 1)

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

Code IRC2018/TPI2014

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-MP

- 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) 8 except (jt=lb) 2=156.
- 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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-70, 5-6=-20, 7-10=-20

Concentrated Loads (lb)

Vert: 16=-0(B) 17=-17(B)



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FT = 20%

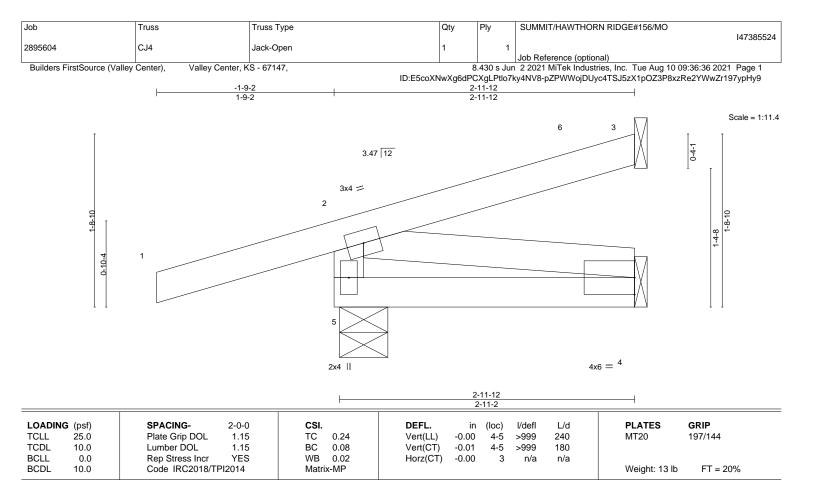
Weight: 26 lb

Structural wood sheathing directly applied or 5-10-13 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x4 SPF No.2

> 5=0-5-12, 3=Mechanical, 4=Mechanical (size) Max Horz 5=53(LC 8)

Max Uplift 5=-122(LC 8), 3=-28(LC 12) Max Grav 5=305(LC 1), 3=51(LC 1), 4=57(LC 3)

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

TOP CHORD 2-5=-276/279

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-9-2 to 2-5-13, Exterior(2R) 2-5-13 to 2-11-0 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
- 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) 3 except (jt=lb) 5=122.
- 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.



Structural wood sheathing directly applied or 2-11-12 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385525 2895604 D1 Roof Special Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:37 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-Hmzuk8ksFGkx5cuHXEY2xncSwLCINTZf8DbahaypHy8

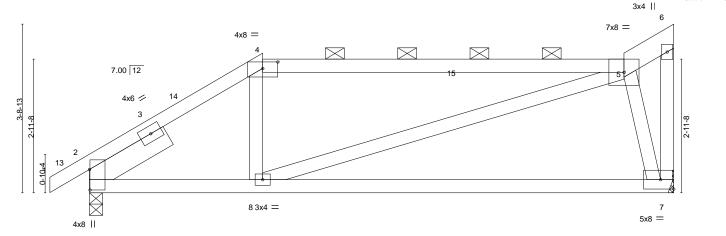
11-10-1

8-0-0

Scale = 1:25.5

12-11-4

1-1-4



	3-10-1 3-10-1	-	11-10-1 8-0-0	12-11-4		
Plate Offsets (X,Y)	[2:0-5-7,0-0-2], [4:0-4-0,0-1-11]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.75 BC 0.52 WB 0.17 Matrix-AS	DEFL. in (loc) l/defl L/d Vert(LL) -0.17 7-8 >895 240 Vert(CT) -0.35 7-8 >433 180 Horz(CT) -0.01 2 n/a n/a	PLATES GRIP MT20 197/144 Weight: 55 lb FT = 20%		

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD 5-6: 2x6 SPF No.2

-0-10-8 0-10-8

3-10-1

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

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 7=Mechanical, 2=0-3-8

Max Horz 2=132(LC 11)

Max Uplift 7=-138(LC 12), 2=-143(LC 12) Max Grav 7=574(LC 1), 2=639(LC 1)

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

TOP CHORD 2-4=-793/163, 4-5=-670/187, 6-7=-157/300

BOT CHORD 2-8=-211/669, 7-8=-97/320 5-8=-126/366, 5-7=-830/315 **WEBS**

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-10-1, Exterior(2R) 3-10-1 to 8-0-15, Interior(1) 8-0-15 to 12-9-8 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
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) 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) 7=138, 2=143.
- 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.



Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (4-6-8 max.): 4-5.

Rigid ceiling directly applied.



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385526 2895604 D2 Roof Special Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:38 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-myXHxUkU0ZsojmSU5y3HU_9cnkWA6w7oNtK7D0ypHy7

10-8-5 8-0-0

Scale = 1:25.5

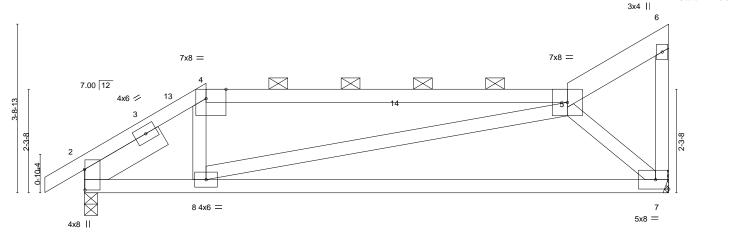
12-11-4

2-2-15

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (3-9-8 max.): 4-5.

Rigid ceiling directly applied.



		2-8-5			6-8-5				10-8-5		12-11-4	
		2-8-5			4-0-0	'			4-0-0		2-2-15	<u>'</u>
Plate Offse	ets (X,Y)	[2:0-5-7,0-0-2], [4:0-5-5,Ed	ge]									
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)	-0.25	7-8	>608	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.70	Vert(CT)	-0.52	7-8	>296	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	x-AS						Weight: 55 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD 5-6: 2x6 SPF No.2

-0-10-8 0-10-8

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

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 7=Mechanical, 2=0-3-8

Max Horz 2=132(LC 11)

Max Uplift 7=-138(LC 12), 2=-143(LC 12) Max Grav 7=574(LC 1), 2=639(LC 1)

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

TOP CHORD 2-4=-879/175, 4-5=-751/174 **BOT CHORD** 2-8=-211/756, 7-8=-167/632 4-8=0/348, 5-7=-816/295 **WEBS**

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-8-5, Exterior(2R) 2-8-5 to 6-11-4, Interior(1) 6-11-4 to 12-9-8 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
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) 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) 7=138, 2=143.
- 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.





Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385527 2895604 D3 Roof Special Girder Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:40 2021 Page 1

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

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-iLe1M9mkXB6Wy4csCN6iZPE15Y9ramY5qBpEluypHy5

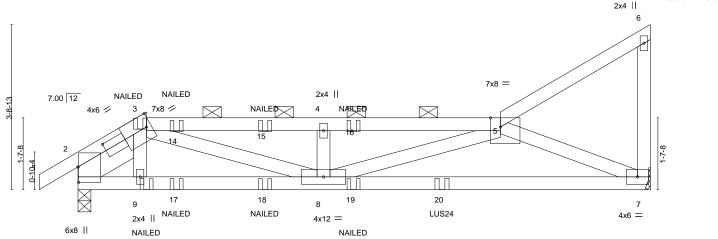
Structural wood sheathing directly applied or 5-11-12 oc purlins,

except end verticals, and 2-0-0 oc purlins (3-7-12 max.): 3-5.

Rigid ceiling directly applied or 10-0-0 oc bracing.

-0-10-8 0-10-8 12-11-4 1-6-10 4-0-0 4-0-0 3-4-10

Scale = 1:26.0



		1-6-10		5-6-10	1	9-6-10		1	12-11-4	
		1-6-10		4-0-0	ı	4-0-0		1	3-4-10	l
Plate Offse	ets (X,Y)	[2:0-8-13,0-2-0], [2:0-4-3,	0-0-2], [3:0-1-4	1,Edge], [5:0-2-11,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 0.44	Vert(LL)	-0.16 7-8	>984	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC 0.88	Vert(CT)	-0.33 7-8	>463	180		
BCLL	0.0	Rep Stress Incr	NO	WB 0.34	Horz(CT)	0.02 7	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matrix-MS					Weight: 54 lb	FT = 20%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

2x4 SPF No.2 TOP CHORD **BOT CHORD** 2x4 SPF 1650F 1.5E WEBS 2x4 SPF No.2

SLIDER Left 2x6 SPF No.2 1-6-14

REACTIONS. (size) 7=Mechanical, 2=0-3-8

Max Horz 2=135(LC 7)

Max Uplift 7=-184(LC 8), 2=-211(LC 8) Max Grav 7=771(LC 1), 2=834(LC 1)

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

 $2-3=-971/266,\ 3-4=-2205/485,\ 4-5=-2194/490$ TOP CHORD **BOT CHORD** 2-9=-275/880, 8-9=-275/880, 7-8=-330/1329 **WEBS** 3-8=-251/1357, 5-8=-198/913, 5-7=-1397/390

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) The Fabrication Tolerance at joint 3 = 4%
- 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) 7=184, 2=211.
- 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) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 8-2-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.
- 10) Fill all nail holes where hanger is in contact with lumber.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-3=-70, 3-5=-70, 5-6=-70, 7-10=-20



August 11,2021





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 chorembers 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

AMSI/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	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE#156/MO	
0005004	D2	Doof Consider Circles	_			147385527
2895604	D3	Roof Special Girder	1	1	Job Reference (optional)	
					Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:40 2021 Page 2 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-iLe1M9mkXB6Wy4csCN6lZPE15Y9ramY5qBpEluypHy5

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-5(F) 14=-17(F) 15=-17(F) 16=-17(F) 17=-38(F) 18=-38(F) 19=-38(F) 20=-221(F)



SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385528 2895604 G1 Jack-Closed Girder Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:41 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

Structural wood sheathing directly applied or 4-2-1 oc purlins,

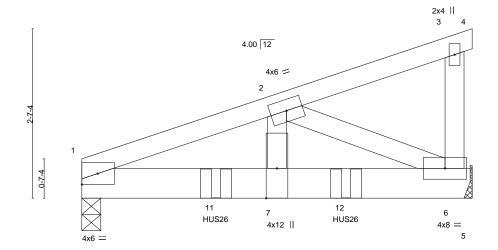
Rigid ceiling directly applied or 10-0-0 oc bracing.

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-AXCPZVnMIUENaEB3m4d_5dnGHyVZJDbF3rZoqLypHy4 6-0-0 3-0-0 3-0-0

6.0.0

except end verticals.

Scale = 1:17.7



	-	3-0-0	-	+			
TCLL 25.0 Plate TCDL 10.0 Lumb BCLL 0.0 Rep 3	CING- 2-0-0 Grip DOL 1.15 Der DOL 1.15 Stress Incr NO	CSI. TC 0.15 BC 0.78 WB 0.35 Matrix-MP	Vert(CT) -0.	in (loc) I/defl 02 6-7 >999 04 6-7 >999 01 6 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 24 lb	GRIP 197/144 FT = 20%

BOT CHORD

LUMBER-BRACING-TOP CHORD

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

> (size) 1=0-3-8, 6=Mechanical Max Horz 1=93(LC 7)

Max Uplift 1=-188(LC 4), 6=-231(LC 8) Max Grav 1=1071(LC 1), 6=1204(LC 1)

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

TOP CHORD 1-2=-1913/334

BOT CHORD 1-7=-327/1786, 6-7=-327/1786 WEBS 2-7=-179/1217, 2-6=-1957/382

NOTES-

REACTIONS.

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3 0 0

- 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) except (jt=lb) 1=188, 6=231
- 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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 4-0-12 to connect truss(es) to back face of bottom chord.
- 7) Fill all nail holes where hanger is in contact with lumber.
- 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=-70, 3-4=-20, 5-8=-20 Concentrated Loads (lb)

Vert: 11=-874(B) 12=-874(B)



August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385529 2895604 G2 Jack-Closed Girder Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:42 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-ejmnnrn_3oMEBNmFKo8DegJRHM_z2lNOIVILNnypHy3 3-5-9 Scale = 1:11.6 3 2x4 || 4.00 12 0-7-4 9 5 NAILED 2x4 || LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL Vert(LL) -0.01 >999 240 197/144 **TCLL** 1.15 TC 0.14 5-8 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.20 Vert(CT) -0.01 >999 180 5-8

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

n/a

except end verticals.

n/a

Structural wood sheathing directly applied or 3-5-9 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 12 lb

FT = 20%

LUMBER-

BCLL

BCDL

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

BOT CHORD WEBS 2x4 SPF No.2

0.0

10.0

REACTIONS. (size) 1=0-5-8, 5=Mechanical Max Horz 1=56(LC 7)

Max Uplift 1=-7(LC 4), 5=-25(LC 8) Max Grav 1=237(LC 1), 5=241(LC 1)

Rep Stress Incr

Code IRC2018/TPI2014

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-MP

0.00

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

NO

- 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) 1, 5.
- 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) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) 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: 1-2=-70, 2-3=-20, 4-6=-20

Concentrated Loads (lb) Vert: 9=-180(F)

OF MISS SCOTT M. SEVIER NUMBER PE-2001018807 SSIONAL

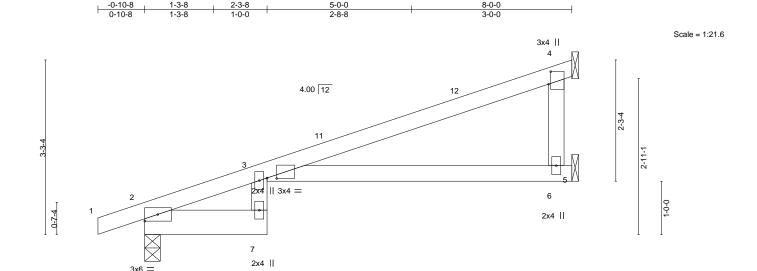








2-8-8



8-0-0

3-0-0

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

Plate Offsets (X,	[3:0-2-3,0-0-2], [4:0-2-13,0-0-8]	· · · · · · · · · · · · · · · · · · ·	5-8-8	
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.64	Vert(LL) 0.25 7 >365 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.33	Vert(CT) -0.40 7 >230 180	I
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.18 6 n/a n/a	I
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 27 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 *Except*

2-7: 2x6 SPF No.2

WEBS 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 4=Mechanical, 6=Mechanical

Max Horz 2=121(LC 8)

Max Uplift 2=-97(LC 8), 4=-121(LC 8)

Max Grav 2=411(LC 1), 4=288(LC 1), 6=123(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 7-8-8 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
- 2) 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.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 4=121.
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



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Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385531 2895604 J2 Jack-Open 3 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:52 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-LeNZtGvGjtdpOwXAvuJZ2xk6COPTOHrsb2jtiCypHxv 6-0-0 0-10-8 6-0-0 Scale = 1:17.0 4.00 12 0-7-4

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

I/defI

>999

>999

n/a

Rigid ceiling directly applied.

(loc)

3

-0.03

-0.05

0.01

L/d

240

180

n/a

Structural wood sheathing directly applied.

PLATES

Weight: 19 lb

MT20

GRIP

197/144

FT = 20%

LUMBER-

REACTIONS.

TCLL

TCDL

BCLL

BCDL

LOADING (psf)

25.0

10.0

0.0

10.0

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

2x6 SPF No.2

3=Mechanical, 2=0-3-8, 4=Mechanical Max Horz 2=97(LC 8)

Code IRC2018/TPI2014

SPACING-

Plate Grip DOL

Rep Stress Incr

Lumber DOL

Max Uplift 3=-75(LC 12), 2=-84(LC 8), 4=-1(LC 12) Max Grav 3=163(LC 1), 2=333(LC 1), 4=123(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

CSI.

TC

ВС

WB

Matrix-AS

0.37

0.25

0.00

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

2-0-0

1.15

1.15

YES

- 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) 3, 2, 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.
- 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.







Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385532 2895604 J3 Jack-Open 9 Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

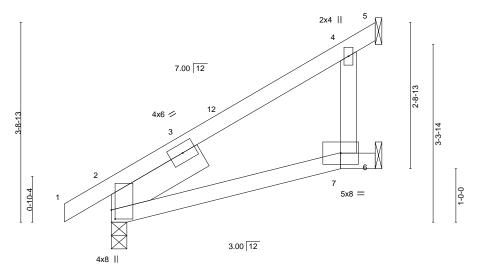
8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:53 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-prxy5cwuUAlg046MTbqob8Glinkg7km0qiTQEeypHxu

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

0-7-12 0-10-8 4-3-8

Scale = 1:21.6



4-11-4 0-7-12

BRACING-

TOP CHORD

BOT CHORD

Plate Offsets (X,Y)	[2:0-2-0,0-0-14]
LOADING (pef)	SDACING

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.32	Vert(LL) 0.05 7-10 >999 240	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) -0.06 7-10 >957 180	
BCLL	0.0	Rep Stress Incr YES	WB 0.02	Horz(CT) 0.03 2 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 19 lb FT = 20%

LUMBER-

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

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 6=Mechanical

Max Horz 2=134(LC 12)

Max Uplift 5=-100(LC 12), 2=-22(LC 12) Max Grav 5=218(LC 19), 2=286(LC 1), 6=12(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 100 lb uplift at joint(s) 5, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385533 2895604 J4 Jack-Open Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:54 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-I1VKlyxWEUtXdDhY1JM17MpTtB4nsBL92MC_n5ypHxt 4-7-12 Scale = 1:21.6 7.00 12 2x4 | 1-0-5 3 3x4 =

4-7-12

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

I/defI

>999

>999

n/a

Rigid ceiling directly applied.

(loc)

3-4

3-4

2

0.03

-0.04

-0.03

L/d

240

180

n/a

PLATES

Weight: 12 lb

MT20

Structural wood sheathing directly applied, except end verticals.

GRIP

197/144

FT = 20%

LUMBER-

REACTIONS.

TCLL

TCDL

BCLL

BCDL

LOADING (psf)

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

25.0

10.0

0.0

10.0

WEBS 2x4 SPF No.2

> 4=Mechanical, 2=Mechanical, 3=Mechanical (size)

Max Horz 4=94(LC 12)

Max Uplift 2=-93(LC 12), 3=-1(LC 12)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Grav 4=200(LC 1), 2=152(LC 19), 3=84(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-7-0 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

CSI.

TC

ВС

WB

Matrix-AS

0.29

0.20

0.00

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

2-0-0

1.15

1.15

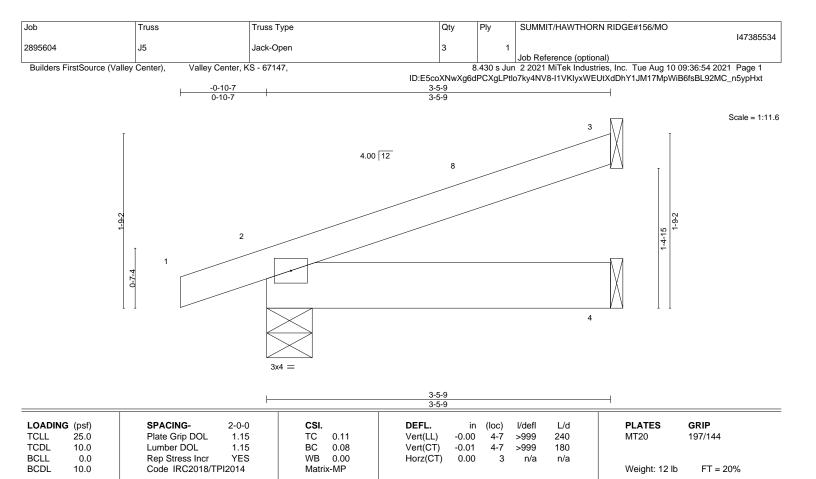
YES

- 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, 3.
- 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.









LUMBER-

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

BRACING-

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 3-5-9 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. 3=Mechanical, 2=0-5-8, 4=Mechanical

Max Horz 2=62(LC 8)

Max Uplift 3=-40(LC 12), 2=-65(LC 8), 4=-3(LC 12) Max Grav 3=87(LC 1), 2=222(LC 1), 4=71(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-7 to 2-1-9, Interior(1) 2-1-9 to 3-4-13 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) 3, 2, 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.







SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385535 2895604 J6 Jack-Partial Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:55 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-mD2iWIy8?o?OFNGlb0tGgZMcdbM2bc?JH0yXJXypHxs 0-10-8 4-0-0 Scale = 1:20.4 0-4-3 4.00 12 2x4 > 10 5x8 II 3x4 =8-0-0 Plate Offsets (X,Y)--[2:0-3-8,Edge] SPACING-DEFL. **PLATES** GRIP LOADING (psf) (loc) I/def L/d Plate Grip DOL TCLL 25.0 1.15 TC 0.35 Vert(LL) -0.10 6-9 >958 240 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.45 Vert(CT) -0.206-9 >467 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.17 Horz(CT) 0.01 n/a n/a Code IRC2018/TPI2014 FT = 20% **BCDL** 10.0 Weight: 26 lb Matrix-AS

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

WEDGE

Left: 2x4 SPF No.2

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 2=0-3-8

Max Horz 2=124(LC 8)

Max Uplift 4=-60(LC 8), 5=-41(LC 8), 2=-98(LC 8) Max Grav 4=115(LC 1), 5=239(LC 1), 2=422(LC 1)

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

TOP CHORD 2-3=-504/218 **BOT CHORD** 2-6=-333/474 **WEBS** 3-6=-510/359

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8. Interior(1) 2-1-8 to 7-11-4 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.
- Refer to girder(s) for truss to truss connections.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and
- 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.



August 11,2021

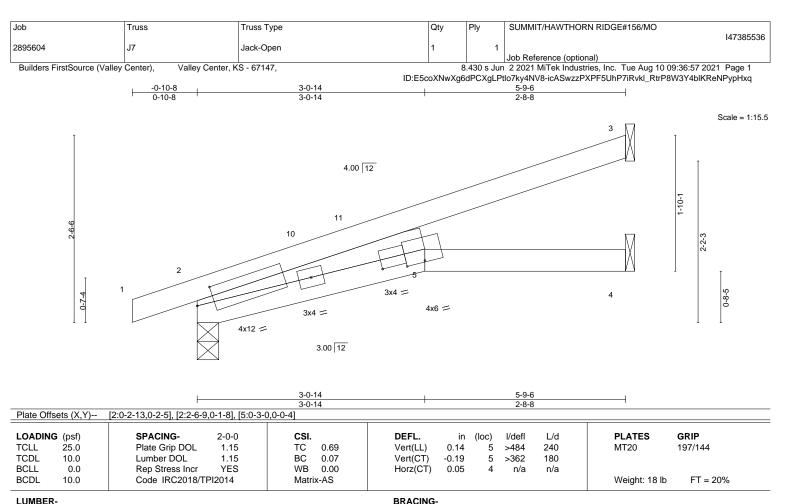


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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 chorembers 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

SLIDER Left 2x4 SPF No.2 3-2-0

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=94(LC 8)

Max Uplift 3=-86(LC 12), 2=-80(LC 8)

Max Grav 3=226(LC 1), 2=323(LC 1), 4=53(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 5-8-10 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
- 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 100 lb uplift at joint(s) 3, 2.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 11,2021





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

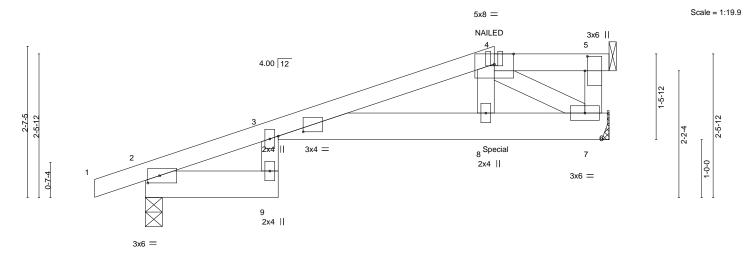
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chorembers 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385537 2895604 J8 Half Hip Girder Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:58 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-Aokq8J_1IjNy6r_KG9QzIC_?JoR0o_klz_ABwsypHxp 6-0-4 0-10-8 2-3-8 3-8-12 1-11-12



	2-3-8 2-3-8		6-0-4 3-8-12		8-0-0 1-11-1		
Plate Offsets (X,Y)	[2:0-2-7,0-1-8], [3:0-5-3,0-0-14], [5:0-3-	0,0-0-8]					
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.84 BC 0.30 WB 0.10	DEFL. Vert(LL) -0. Vert(CT) -0. Horz(CT) 0.	21 9 >4 35 9 >2	defl L/d .51 240 .64 180 n/a n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP				Weight: 32 lb	FT = 20%

LUMBER-BRACING-

TOP CHORD 2x4 SP 2400F 2.0E *Except* TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except

4-5: 2x4 SPF No.2 2-0-0 oc purlins: 4-5.

BOT CHORD 2x6 SPF No.2 *Except* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 3-9: 2x4 SPF No.2

WEBS 2x4 SPF No.2

REACTIONS. (size) 2=0-3-8, 5=Mechanical, 7=Mechanical Max Horz 2=93(LC 4)

Max Uplift 2=-139(LC 4), 5=-25(LC 4), 7=-165(LC 4) Max Grav 2=466(LC 1), 5=60(LC 1), 7=458(LC 1)

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

TOP CHORD 3-4=-651/214

BOT CHORD 3-8=-238/629, 7-8=-227/598 **WEBS** 4-8=-92/256, 4-7=-723/274

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb)
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 218 lb down and 165 lb up at 6-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



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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

AMSI/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	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE#156/MO
2005604	10	Light Liip Cirdor			147385537
2895604	J8	Half Hip Girder	1	1	Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:58 2021 Page 2 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-Aokq8J_1ljNy6r_KG9QzlC_?JoR0o_klz_ABwsypHxp

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-70, 3-4=-70, 4-5=-70, 9-10=-20, 3-6=-20 Concentrated Loads (lb) Vert: 4=-4(F) 8=-218(F)



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385538 2895604 J9 Jack-Open Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:59 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-e?IDLf?f30Vpk?ZWqsxCqPWK_CpWXRauCewlSlypHxo

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

Scale = 1:19.2

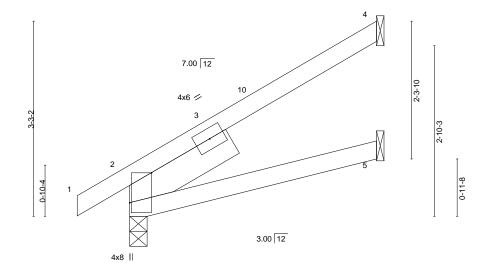


Plate Off	sets (X,Y)	[2:0-6-0,Edge]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.02	5-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.03	5-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	I2014	Matri	x-AS						Weight: 15 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical

Max Horz 2=114(LC 12)

Max Uplift 4=-76(LC 12), 2=-19(LC 12), 5=-8(LC 12) Max Grav 4=128(LC 19), 2=250(LC 1), 5=71(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 100 lb uplift at joint(s) 4, 2, 5.

-0-10-8 0-10-8

- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) 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.









Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385539 2895604 J10 Jack-Open Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:44 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-a6uYCXpFbPcxRhwdRCAhjFPmu9hqWfthlpnSRgypHy1 4-1-8 0-10-8 4-1-8 Scale = 1:12.7 4.00 12 2 3x6 II 4x6 || 4-1-8 Plate Offsets (X,Y)--[2:0-3-14,0-5-6] SPACING-DEFL. **PLATES** GRIP LOADING (psf) 2-0-0 CSI. in (loc) I/defI L/d Plate Grip DOL 240 TCLL 25.0 1.15 TC 0.20 Vert(LL) 0.02 4-7 >999 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.17 Vert(CT) -0.03 4-7 >999 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.01 n/a n/a Code IRC2018/TPI2014 FT = 20% **BCDL** 10.0 Matrix-AS Weight: 12 lb

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

WEDGE

Left: 2x4 SPF No.2

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 2=0-3-8

Max Horz 2=71(LC 8)

Max Uplift 3=-52(LC 12), 4=-1(LC 12), 2=-69(LC 8) Max Grav 3=119(LC 1), 4=72(LC 3), 2=251(LC 1)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-0-12 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) 3, 4, 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.







Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385540 2895604 J11 Jack-Open Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:45 2021 Page 1

Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-2ISwPtqtMjko2rVq?whwGSxz6Z2XF6mq_TX?z6ypHy0

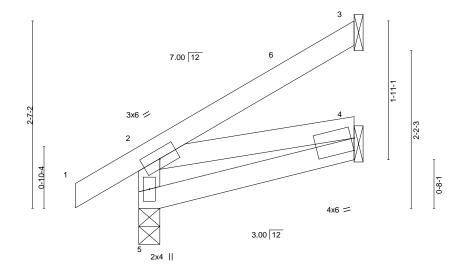
Structural wood sheathing directly applied or 2-11-12 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

2-11-12 0-10-8 2-11-12

Scale: 3/4"=1"



LOADING ((psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL 1	10.0	Lumber DOL	1.15	BC	80.0	Vert(CT)	-0.01	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 1	10.0	Code IRC2018/TF	PI2014	Matri	x-MP						Weight: 13 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x4 SPF No.2

> 5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=78(LC 12)

Max Uplift 5=-20(LC 12), 3=-53(LC 12), 4=-7(LC 12) Max Grav 5=210(LC 1), 3=88(LC 19), 4=57(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-11-0 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
- 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 100 lb uplift at joint(s) 5, 3, 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.



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Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE#156/MO
0005004	140				I47385541
2895604	J12	Jack-Open	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

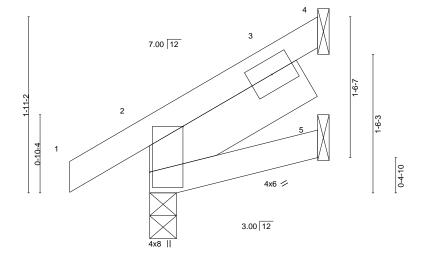
8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:47 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-?hZgqYr7uK?Wl9eC7LkOLt0KLNk3j0c7Rn062_ypHy_

Structural wood sheathing directly applied or 1-10-0 oc purlins.

Rigid ceiling directly applied or 6-0-0 oc bracing.



Scale = 1:12.6



LOADING (psf) SPACING- 2-0-0 CSI. DEFL. in (loc) I/defl L/d TCLL 25.0 Plate Grip DOL 1.15 TC 0.05 Vert(LL) -0.00 8 >999 240	PLATES GRIP
TCLL 25.0 Plate Grip DOL 1.15 TC 0.05 Vert(LL) -0.00 8 >999 240 TCDL 10.0 Lumber DOL 1.15 BC 0.01 Vert(CT) -0.00 8 >999 180	MT20 197/144
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: 10 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

SLIDER Left 2x6 SPF No.2 2-0-0

REACTIONS. (size) 2=0-3-8, 5=Mechanical, 3=Mechanical

Max Horz 2=60(LC 12)

Max Uplift 2=-1(LC 12), 3=-55(LC 12)

Max Grav 2=141(LC 1), 5=21(LC 3), 3=80(LC 19)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 100 lb uplift at joint(s) 2, 3.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385542 2895604 J13 Jack-Open Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:48 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-Tt732uslfe7NvIDPg2Fdu5ZUfm3OSTsHgRlfZRypHxz

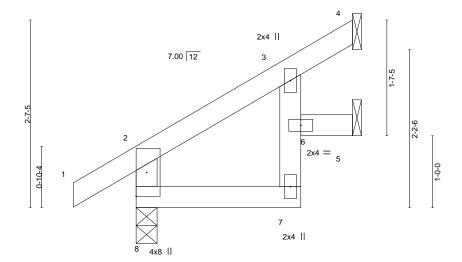
Structural wood sheathing directly applied or 3-0-2 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

3-0-2 2-3-8 2-3-8 0-10-8 0-8-10

Scale: 3/4"=1"



3-0-2 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL 1.15 TC Vert(LL) -0.00 240 197/144 **TCLL** 0.08 6 >999 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.07 Vert(CT) -0.00 >999 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 5 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-MR Weight: 11 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x4 SPF No.2

> (size) 8=0-3-8, 4=Mechanical, 5=Mechanical Max Horz 8=79(LC 12)

Max Uplift 8=-20(LC 12), 4=-28(LC 12), 5=-33(LC 12) Max Grav 8=211(LC 1), 4=61(LC 19), 5=62(LC 19)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-14, Interior(1) 2-0-14 to 2-11-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- 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) 8, 4, 5.
- 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.





Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385543 2895604 J14 Jack-Open

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:48 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-Tt732uslfe7NvIDPg2Fdu5ZUpm43STaHgRlfZRypHxz

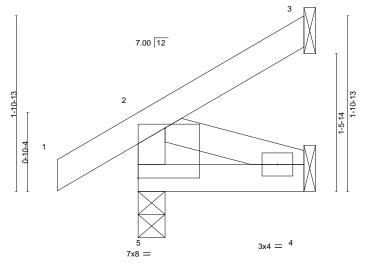
Structural wood sheathing directly applied or 1-9-9 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



Scale = 1:12.5



- 1	1-9-9
	1_0_0

BRACING-

TOP CHORD

BOT CHORD

Plate Offsets (X,Y)	[5:Edge,0-6-8]										
LOADING (ps	,	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	5	>999	240	MT20	197/144
TCDL 10	.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL 0	.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10	.0	Code IRC2018/TF	PI2014	Matri	x-MP						Weight: 8 lb	FT = 20%

LUMBER-

REACTIONS.

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

WEBS 2x4 SPF No.2

(size) 5=0-3-8, 3=Mechanical, 4=Mechanical

Max Horz 5=51(LC 12)

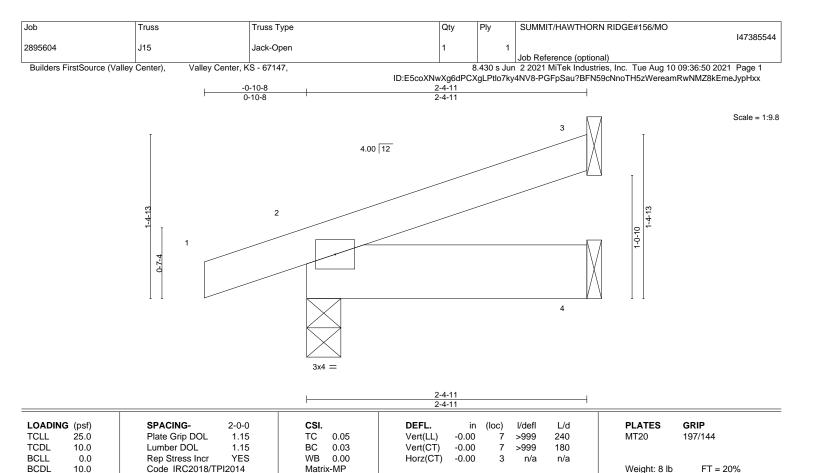
Max Uplift 5=-19(LC 12), 3=-24(LC 12), 4=-14(LC 12) Max Grav 5=168(LC 1), 3=38(LC 19), 4=33(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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) 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.







BRACING-

TOP CHORD

BOT CHORD

LUMBER-

BCDL

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

10.0

REACTIONS. 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=48(LC 8)

Max Uplift 3=-26(LC 12), 2=-59(LC 8), 4=-2(LC 12) Max Grav 3=56(LC 1), 2=178(LC 1), 4=48(LC 3)

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-MP

- 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) 3, 2, 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.



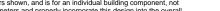
Weight: 8 lb

Structural wood sheathing directly applied or 2-4-11 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

FT = 20%







Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385545 2895604 J17 Jack-Open Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:36:51 2021 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

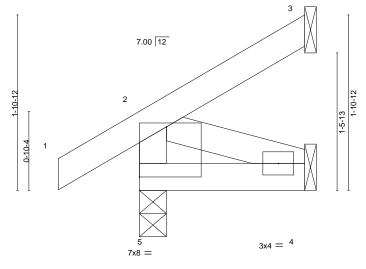
ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-tSpBgwueyZVymmy_MBoKVjB?3_6mfqHjMO_JAmypHxw

Structural wood sheathing directly applied or 1-9-7 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

1-9-7 0-10-8 1-9-7

Scale = 1:12.4



BRACING-

TOP CHORD

BOT CHORD

Plate Off	sets (X,Y)	[5:Edge,0-6-8]			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00 5 >999 240	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT) -0.00 5 >999 180	
BCLL	0.0	Rep Stress Incr YES	WB 0.02	Horz(CT) -0.00 3 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 8 lb FT = 20%

LUMBER-

REACTIONS.

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

(size) 3=Mechanical, 5=0-3-8, 4=Mechanical

Max Horz 5=60(LC 12)

Max Uplift 3=-24(LC 12), 5=-17(LC 12), 4=-16(LC 12) Max Grav 3=38(LC 19), 5=167(LC 1), 4=33(LC 3)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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) 3, 5, 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.





Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385546 2895604 L1 **GABLE**

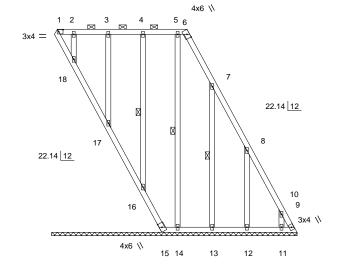
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:00 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-6BsbZ??HqKdgM88iNaTRNd3WWc9wGsL2Rlfl_kypHxn



Scale = 1:66.5



1-5-0	6-4-4	14-2-0
1-5-0	4-11-4	7-9-12

Plate Offsets (X,Y)	[1:0-2-14,0-1-8]		
LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.15 BC 0.08	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) n/a - n/a 999 MT20 197/144 Vert(CT) n/a - n/a 999
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.16 Matrix-S	Horz(CT) 0.02 10 n/a n/a Weight: 95 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.): 1-6. WEBS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. **OTHERS** 2x4 SPF No.2 **WEBS** 7-13, 5-14, 4-16 1 Row at midpt

REACTIONS. All bearings 14-2-0.

Max Horz 1=-449(LC 13) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 16, 17, 18 except 1=-133(LC 11), 10=-205(LC 11), 15=-408(LC 13),

11=-256(LC 13), 12=-356(LC 13), 13=-222(LC 13), 14=-113(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 15, 11, 13, 16, 17, 18 except 1=301(LC 13), 10=427(LC 13), 12=305(LC 20), 14=276(LC 13)

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

TOP CHORD 1-2=-222/252, 6-7=-319/374, 9-10=-487/397

BOT CHORD 1-18=-390/481, 17-18=-403/495, 16-17=-401/495, 15-16=-386/490 9-11=-268/272, 8-12=-372/387, 7-13=-255/246, 5-14=-268/200 **WEBS**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(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
- Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 1, 10, 15, 11, 12, 13, 14, 16, 17, 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 17, 18 except (jt=lb) 1=133, 10=205, 15=408, 11=256, 12=356, 13=222, 14=113.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 16, 17, 18.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 11,2021



SUMMIT/HAWTHORN RIDGE#156/MO Job Truss Truss Type Qty 147385547 2895604 L2 **GABLE** Job Reference (optional)

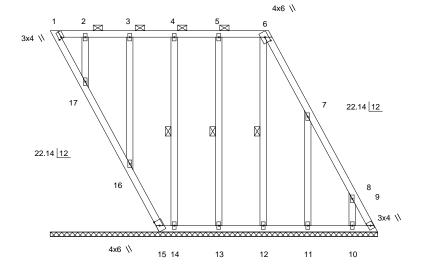
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:02 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-3ZzL_h1XMxuObSl5V_VvS28tYQswkmrLuc8P3dypHxl

1-8-10 8-1-2 4-10-14

Scale = 1:51.8



4-10-14 1-8-10 14-8-10

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

LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Page Street last 1.25	CSI. TC 0.12 BC 0.05	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Vert(CT) 0 0 0 0 0	PLATES GRIP MT20 197/144
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.16 Matrix-S	Horz(CT) 0.01 9 n/a n/a	Weight: 91 lb FT = 20%

LUMBER-BRACING-

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

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 1-6. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **WEBS** 6-12, 5-13, 4-14 1 Row at midpt

REACTIONS. All bearings 14-8-10.

2x4 SPF No.2

Max Horz 1=-357(LC 13) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 12, 13, 14, 16, 17 except 1=-115(LC 11), 9=-103(LC 11),

15=-239(LC 13), 10=-274(LC 13), 11=-322(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 9, 15, 10, 12, 13, 14, 16, 17 except 11=294(LC 20)

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

TOP CHORD 6-7=-296/350, 8-9=-264/220

BOT CHORD 1-17=-239/284, 16-17=-242/290, 15-16=-230/287

WEBS 8-10=-285/292, 7-11=-342/345

NOTES-

OTHERS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(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
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 1, 9, 15, 10, 11, 12, 13, 14, 16, 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 13, 14, 16, 17 except (it=lb) 1=115, 9=103, 15=239, 10=274, 11=322.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 16, 17.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 11,2021

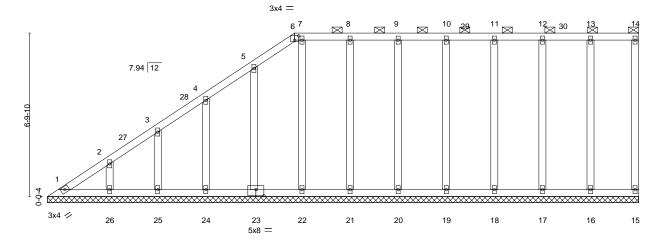


Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385548 2895604 L3 **GABLE** Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:03 2021 Page 1

Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-XmXjB1297F0FDctH3i08_Fh0epBDTEtU7Guyb3ypHxk

10-3-6 14-3-11

Scale: 1/4"=1



24-7-1

Plate Offsets (X,Y)	[6:0-2-0,0-2-3], [23:0-4-0,0-3-0]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP	
TCLL 25.0	Plate Grip DOL 1.15	TC 0.22	Vert(LL) n/a - n/a 999 MT20 197/144	
TCDL 10.0	Lumber DOL 1.15	BC 0.11	Vert(CT) n/a - n/a 999	
BCLL 0.0	Rep Stress Incr YES	WB 0.11	Horz(CT) -0.00 15 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Weight: 129 lb FT = 20%	

LUMBER-BRACING-

2x4 SPF No.2 TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** 2x4 SPF No.2 except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-14. **WEBS** 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 24-7-1.

Max Horz 1=259(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 Max Grav All reactions 250 lb or less at joint(s) 1, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26

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

TOP CHORD 1-2=-297/210, 2-3=-256/179

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-13 to 3-5-13, Interior(1) 3-5-13 to 10-3-6, Exterior(2R) 10-3-6 to 14-7-1 , Interior(1) 14-7-1 to 24-5-5 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) Provide adequate drainage to prevent water ponding.
- 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 100 lb uplift at joint(s) 1, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26.
- 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.



August 11,2021



Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE#156/MO
					147385549
2895604	L4	GABLE	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:04 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-?y56OM3ouZ86qmSTcPXNXTEB?DYoCfzdMwdV7VypHxj

Structural wood sheathing directly applied or 4-9-1 oc purlins,

7-8

6-9, 5-10

Rigid ceiling directly applied or 10-0-0 oc bracing.

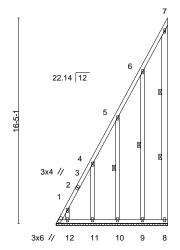
except end verticals.

1 Row at midpt

2 Rows at 1/3 pts

8-10-13 8-10-13

Scale = 1:92.1



8-10-13

TOP CHORD

BOT CHORD

WEBS

LOADIN	\(\(\)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL)	n/a -	n/a	999	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.02	Vert(CT)	n/a -	n/a	999	
BCLL	0.0	Rep Stress Incr YES	WB 0.25	Horz(CT)	0.00	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 89 lb FT = 20%

LUMBER-BRACING-

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

OTHERS 2x4 SPF No.2

REACTIONS.

All bearings 8-10-13. Max Horz 1=634(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) except 8=-113(LC 12), 1=-573(LC 10), 9=-327(LC 12), 10=-319(LC

12), 11=-327(LC 12), 12=-266(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 8, 12 except 1=1179(LC 12), 9=295(LC 19), 10=284(LC 19),

11=293(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-1533/1198, 2-4=-1243/971, 4-5=-872/683, 5-6=-510/404 **WEBS** 6-9=-368/398, 5-10=-357/387, 4-11=-367/398, 2-12=-299/323

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left 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 113 lb uplift at joint 8, 573 lb uplift at joint 1, 327 lb uplift at joint 9, 319 lb uplift at joint 10, 327 lb uplift at joint 11 and 266 lb uplift at joint 12.
- 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.



August 11,2021



Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE#156/MO
	l				147385550
2895604	L5	GABLE	1	1	Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:05 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-T8fUci3QfsGzSw1gA72c4gmLYduix0xnaaN3gyypHxi



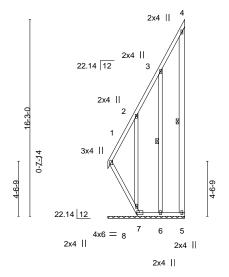


Plate Off	fsets (X,Y)	[1:0-0-0,0-0-5]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.Ó	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a		n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.58	Horz(CT)	-0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TI	PI2014	Matri	x-P						Weight: 76 lb	FT = 20%

LUMBER-**BRACING-**

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

2x4 SPF No.2

TOP CHORD **BOT CHORD**

Structural wood sheathing directly applied or 5-3-14 oc purlins, except end verticals.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 1-8. **WEBS** 4-5, 3-6 1 Row at midpt

REACTIONS. All bearings 6-4-2.

Max Horz 1=460(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 7 except 5=-115(LC 12), 1=-355(LC 10), 6=-311(LC 12),

8=-497(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 5 except 1=816(LC 12), 6=288(LC 19), 8=400(LC 19)

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

TOP CHORD 1-2=-1142/876, 2-3=-535/411 **WEBS** 3-6=-368/412, 2-8=-559/656

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left 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) 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) Bearing at joint(s) 5, 1, 7, 6, 8 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 100 lb uplift at joint(s) 7 except (jt=lb) 5=115, 1=355, 6=311, 8=497.
- 6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385551 2895604 L6 **GABLE** Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:06 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-xLDsp242QAOq43bskqZrcuJZ41DtgccwpE6cCOypHxh

> 7.94 12 17 16 18 8 J-9-1

> > 12

10

3x4 N

3x4 =

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

LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.08 BC 0.05 WB 0.05	DEFL. in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 9 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	11012(01) 0.00 9 11/4 11/4	Weight: 56 lb FT = 20%

13

LUMBER-BRACING-

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

REACTIONS. All bearings 15-3-11.

(lb) -Max Horz 1=-128(LC 8)

3x4 /

Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 11, 12, 13, 14 except 15=-109(LC 12) Max Grav All reactions 250 lb or less at joint(s) 1, 9, 10, 11, 12, 13, 14 except 15=272(LC 19)

7-10-7

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

NOTES-

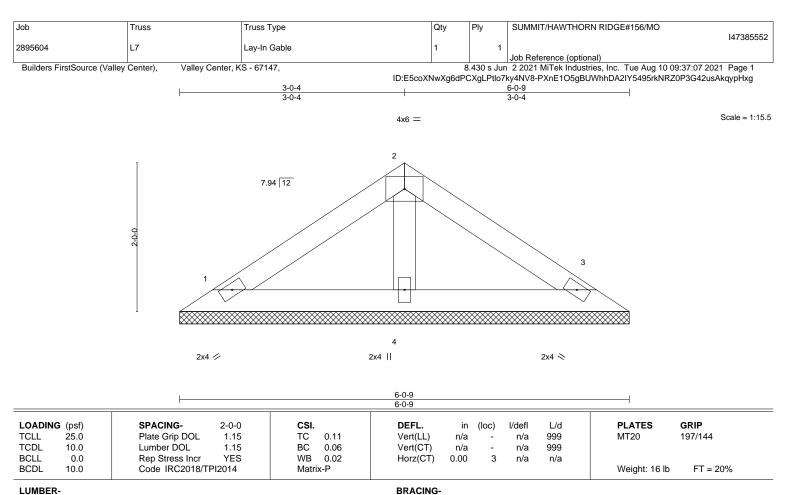
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-13 to 3-3-11, Interior(1) 3-3-11 to 7-10-7, Exterior(2R) 7-10-7 to 10-10-7, Interior(1) 10-10-7 to 15-1-15 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 100 lb uplift at joint(s) 1, 10, 11, 12, 13, 14 except (it=lb) 15=109.
- 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.



Scale = 1:32.7

August 11,2021





TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

1=6-0-9, 3=6-0-9, 4=6-0-9 (size)

Max Horz 1=-44(LC 8)

Max Uplift 1=-31(LC 12), 3=-36(LC 13), 4=-10(LC 12) Max Grav 1=123(LC 1), 3=123(LC 1), 4=210(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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, 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.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

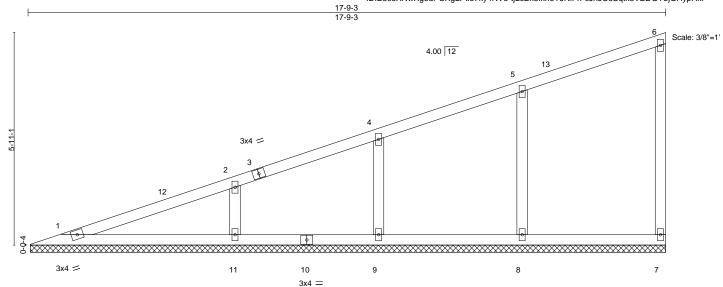
Rigid ceiling directly applied or 10-0-0 oc bracing.



Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE#156/MO	
2895604	V1	Vallev	1	1		147385553
				-	Job Reference (optional)	

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:08 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-tjLcEk6lxneYJNIFrFcJhJOsSqtk8VEDGYbjGHypHxf



	17-9-3 17-9-3											
LOADING (p	osf) 5.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.28	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 197/144
TCDL 10	0.0 0.0	Lumber DOL Rep Stress Incr	1.15 YES	ВС	0.15 0.10	Vert(CT) Horz(CT)	n/a -0.00	- 7	n/a n/a	999 n/a	WITZO	101/111
	0.0	Code IRC2018/TP		Matrix		1.0.2(0.1)	0.00	•	.,,	.,,	Weight: 56 lb	FT = 20%

LUMBER-BRACING-

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

2x4 SPF No.2 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 17-8-7.

(lb) -Max Horz 1=248(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 7, 9 except 8=-109(LC 8), 11=-130(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 7, 1 except 8=395(LC 1), 9=321(LC 1), 11=467(LC 1)

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

TOP CHORD 1-2=-276/166

WEBS 5-8=-307/162, 4-9=-253/124, 2-11=-352/166

NOTES-

OTHERS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 17-7-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 9 except (jt=lb) 8=109, 11=130,
- 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.



August 11,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385554 2895604 V2 Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:09 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-Lwv?S46wi5mOxXKRPz7YEWx0FEDPtzEMVCLGpjypHxe 14-3-3 Scale = 1:28.8 2x4 ||

1-9-7	1	4.00 12 2x4 2	2x4 9 3	4
	3x4 =	7 2x4	6 2x4	5 2x4

LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL . ir	ı (loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.34	Vert(LL) n/a	ı `-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.19	Vert(CT) n/a	۱ -	n/a	999		
BCLL	0.0	Rep Stress Incr YES	WB 0.05	Horz(CT) -0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	, ,				Weight: 42 lb	FT = 20%

LUMBER-BRACING-TOP CHORD

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

WEBS **OTHERS** 2x4 SPF No.2

2x4 SPF No.2 BOT CHORD

REACTIONS. All bearings 14-2-7. Max Horz 1=196(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 6 except 7=-138(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=338(LC 1), 7=497(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 3-6=-268/157, 2-7=-374/197 WEBS

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 14-1-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 5, 6 except (jt=lb) 7=138.
- 5) This fruss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385555 2895604 V3 Valley

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:10 2021 Page 1 ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-q6SNfQ7YTPuFYhvdzgennkTAoeY0cQOWks4qL9ypHxd

2x4 ||

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

Scale = 1:22.4

10-9-3

2x4 || 3 4.00 12 2x4 || 2x4 =

LOADING (psf)	SPACING- 2-0-0	CSI.	(/	/defl L/d	PLATES GRIP
TCLL 25.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.42 BC 0.23	Vert(LL) n/a - Vert(CT) n/a -	n/a 999 n/a 999	MT20 197/144
BCLL 0.0	Rep Stress Incr YES	WB 0.06	Horz(CT) -0.00 4	n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S			Weight: 29 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2 2x4 SPF No.2

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

REACTIONS. (size) 1=10-8-7, 4=10-8-7, 5=10-8-7

Max Horz 1=144(LC 9)

Max Uplift 1=-30(LC 12), 4=-21(LC 9), 5=-155(LC 8) Max Grav 1=212(LC 1), 4=98(LC 1), 5=560(LC 1)

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

WEBS 2-5=-422/296

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 10-7-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 4 except (jt=lb) 5=155.
- 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.



August 11,2021



GRIP 197/144	PLATES MT20	L/d 999	l/defl n/a	n (loc)	n,	DEFL. Vert(LL)	CSI. TC 0.76	2-0-0 1.15		OADING (psf)
	ł									
	3 2x4							2x4 =	2x4 =	
	***************************************	***********	*****	******	*****	***************************************	***************************************	***************************************		Ó
	*******	******	·····	******	····	**********	***************************************	***********		0-0-4-
									1	
							4 _			2-5-1
						5				
						4.00 12				
		6				4.00 100				
Scale = 1:16.5	2x4 2									
01- 4.40.5						7-3-3			ľ	
0FI2rNLtYfzWqNtbypHxc					5coXN	7-3-3	,	Contor, NO OT	Contory, Valley Conto	sundere i notecuree (vand
10 09:37:11 2021 Page 1	nal)	ference (option	Job Re	1 8 430 s Ju	1			Valley Center, KS - 671	Center) Valley Cent	95604 Builders FirstSource (Valle
147385556	RN RIDGE#156/MO	IIT/HAWTHOR		Ply	Qty		**	Truss	Truss	b
			10	ls.	<u> </u>		_	1=	I=	

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

-0.00

999

n/a

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 18 lb

FT = 20%

n/a

n/a

except end verticals.

3

LUMBER-TOP CHORD BOT CHORD

TCDL

BCLL

BCDL

2x4 SPF No.2 2x4 SPF No.2

WEBS 2x4 SPF No.2

10.0

0.0

10.0

REACTIONS. 1=7-2-7, 3=7-2-7 (size) Max Horz 1=92(LC 9)

Max Uplift 1=-56(LC 8), 3=-70(LC 8) Max Grav 1=278(LC 1), 3=278(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-11-5 to 3-11-5, Interior(1) 3-11-5 to 7-1-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate

вс

WB

Matrix-P

0.41

0.00

- 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.

1.15

YES

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.











Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385557 2895604 V5 Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:11 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-II0lsm8BEi06ArUqXN90Jx0PC2wmLtYfzWqNtbypHxc Scale = 1:9.0 2x4 || 4.00 12 0-0-4 3 2x4 = 2x4 II LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) Plate Grip DOL 1.15 TC Vert(LL) 999 197/144 **TCLL** 0.12 n/a n/a MT20

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

0.00

n/a

n/a

except end verticals.

3

999

n/a

Structural wood sheathing directly applied or 3-9-3 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 8 lb

FT = 20%

LUMBER-

TCDL

BCLL

BCDL

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

10.0

0.0

10.0

WEBS 2x4 SPF No.2

REACTIONS. 1=3-8-7, 3=3-8-7 (size) Max Horz 1=40(LC 9)

Max Uplift 1=-24(LC 8), 3=-31(LC 12) Max Grav 1=120(LC 1), 3=120(LC 1)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.

1.15

YES

ВС

WB

Matrix-P

0.07

0.00

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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.







Job Truss Truss Type Qty SUMMIT/HAWTHORN RIDGE#156/MO 147385558 2895604 V8 Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 10 09:37:12 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:E5coXNwXg6dPCXgLPtlo7ky4NV8-mVa7469p?08zo_3045gFs9Za1SF24KopBAZxP2ypHxb 3-8-9 Scale = 1:8.9 2x4 || 4.00 12 0-0-4 3 2x4 = 2x4 || OADING (nef)

LUADIN	J (psi)	SFACING-	2-0-0	Coi.		DEFE.	111	(100)	i/ueii	L/U	FLAILS	GKIF
TCLL	25.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	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/TI	PI2014	Matrix-P							Weight: 8 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x4 SPF No.2

> 1=3-7-13, 3=3-7-13 (size) Max Horz 1=40(LC 9)

Max Uplift 1=-24(LC 8), 3=-30(LC 12) Max Grav 1=118(LC 1), 3=118(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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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, 3.
- 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.



Structural wood sheathing directly applied or 3-8-9 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



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- $\frac{1}{16}$ 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 × 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.

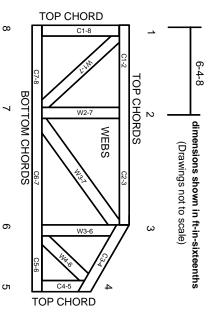
Min size shown is for crushing only

Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.
Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

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- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber

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- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- 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.