

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

Re: 2335469

Summit/61 Hawthorn Ridge

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: I41172641 thru I41172721

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

Missouri COA: Engineering 001193



May 4,2020

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.

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

06/01/2020

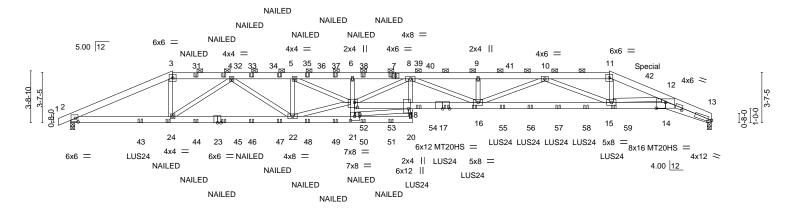
Job Truss Truss Type Qty Ply Summit/61 Hawthorn Ridge 141172641 2335469 A01 HIP GIRDER Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:14:51 2020 Page 1

Structural wood sheathing directly applied or 5-7-14 oc purlins,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Pa?q2DJfzbBJF8Kslyl1OAjwWx9utE9bJwlFQuzKpgo 42-8-8 29-3-1 34-0-7 3-9-11 3-6-3 4-2-12 4-4-8 4-3-10 4-3-10 4-8-9 4-9-7 4-7-11 4-0-6 3-3-8

Scale = 1:82.7



		5-11-3 20-2-14	24-6-8	29-3-1	34-0-7	38-8-2	42-8-8 46-0-0	4
3-9-11 3-	-6-3 ' 4-2-12 ' 4	4-4-8 4-3-10	4-3-10	4-8-9	4-9-7	4-7-11	4-0-6 3-3-8	
Plate Offsets (X,Y) [2:0-2-4,0)-3-0], [13:2-3-1,0-0-3], [13:0	0-2-13,0-1-13], [14:0-	8-0,0-5-0], [18:0)-4-0,0-1-12], [19:0	-2-8,0-4-4], [21:0)-3-8,0-3-8]		
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI2	1-0-0 CS 1.15 TO 1.15 BC NO W 1014 Ma	0.69 0.73	DEFL. Vert(LL) Vert(CT) Horz(CT)	-0.78 16-18	l/defl L/d >709 240 >420 180 n/a n/a	PLATES MT20 MT20HS Weight: 734 lb	GRIP 197/144 148/108 FT = 20%

TOP CHORD

LUMBER-**BRACING-**

TOP CHORD 2x6 SPF No.2 **BOT CHORD** 2x6 SPF 2100F 1.8E *Except*

2-23,20-23: 2x6 SPF No.2, 8-18: 2x4 SPF No.2

2-0-0 oc purlins (5-9-0 max.): 3-11. **WEBS** 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 20-21.

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

Max Horz 2=18(LC 58)

Max Uplift 2=-329(LC 8), 13=-576(LC 8) Max Grav 2=3377(LC 34), 13=3484(LC 34)

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

2-3=-7806/760, 3-4=-7060/697, 4-5=-12770/1393, 5-6=-15884/1843, 6-8=-15914/1842, 8-9=-19684/2501, 9-10=-19684/2501, 10-11=-11709/1775, 11-12=-12388/1919, TOP CHORD

12-13=-16071/2730

2-24=-680/7187, 22-24=-1111/10339, 21-22=-1082/9580, 8-18=-283/2710, **BOT CHORD**

18-19=-1365/10969, 16-18=-2466/20613, 15-16=-2129/15852, 14-15=-2396/13909,

13-14=-2529/14918

WEBS 3-24=-241/2839, 4-24=-4043/545, 4-22=-315/2994, 5-22=-2108/352, 19-22=-291/3269, 19-21=-2428/341, 6-19=-481/122, 8-16=-1058/0, 10-16=-378/4201, 10-15=-4579/423,

11-15=-506/3940, 8-19=-5506/756, 18-21=-1148/10118, 5-19=-500/3459,

12-14=-410/2871, 12-15=-2391/673

NOTES-

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are MT20 plates unless otherwise indicated.

Clontifibischossphage been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads



OF MISSO

SCOTT M.

SEVIER

NUMBER

PE-2001018807

M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge	
2335469	A01	HIP GIRDER	1	_		l41172641
				3	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:14:51 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Pa?q2DJfzbBJF8Kslyl1OAjwWx9utE9bJwlFQuzKpgo

- 11) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=329, 13=576.
- 13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 15) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 20-0-0 oc max. starting at 5-0-0 from the left end to 37-0-0 to connect truss(es) to front face of bottom chord.
- 16) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 39-0-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- 17) Fill all nail holes where hanger is in contact with lumber.
- 18) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 19) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 295 lb down and 263 lb up at 41-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-25, 3-11=-30, 11-13=-25, 20-25=-10, 14-18=-10, 14-28=-10

Concentrated Loads (lb)

Vert: 17=-285(F) 24=-61(F) 16=-285(F) 31=-176(F) 32=-176(F) 33=-176(F) 35=-176(F) 36=-176(F) 37=-176(F) 38=-176(F) 39=-176(F) 42=-279(F) 43=-498(F) 44=-61(F) 45=-61(F) 46=-61(F) 47=-61(F) 47=-61(F) 48=-61(F) 49=-61(F) 50=-61(F) 51=-61(F) 54=-285(F) 55=-285(F) 56=-285(F) 57=-285(F) 58=-285(F) 59=-264(F)



Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge	I41172642
2335469	A02	HIP	1	1	Job Reference (optional)	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,	8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:14:54 2020 Page 1					
ID:tinOHGeVPJTyi41JASwyTKzhfUX-p9hzgFLXGWat6c3RQ4Jk0oLMB87z4ey1?uzv1DzKpgl						

5-9-2

24-6-8

3-0-0

30-3-2

5-8-10

6-0-2

Structural wood sheathing directly applied, except

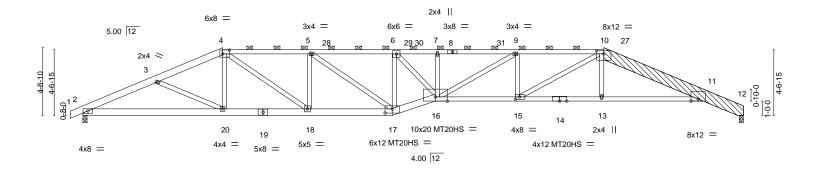
2-0-0 oc purlins: 4-10.

Rigid ceiling directly applied.

Scale = 1:80.2

46-0-0

9-8-11



	9-8-	11	15-9-6	1 21-6-8	24-6-8	30-3-2	2 ₁	36-3-5	1	42-8-8 4	6-0-0 _I
	9-8-	11	6-0-10	5-9-2	3-0-0	5-8-10) '	6-0-2	1	6-5-3	3-3-8
Plate Offsets	(X,Y) [4:0-5-12	,0-3-4], [10:0-6-0	,0-2-11], [15:0-3-8,0-2	-0], [17:0-6-0,0-3-8]							
LOADING (p TCLL (roof) Snow (Pf/Pg) TCDL BCLL BCDL	25.0	SPACING Plate Grip Lumber Do Rep Stress Code IRC	DOL 1.15 DL 1.15	CSI. TC 0.98 BC 0.90 WB 0.63 Matrix-AS		DEFL. Vert(LL) Vert(CT) Horz(CT)	in (lo -0.76 15-1 -1.35 15-1 0.37	6 >728	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 268	GRIP 197/144 148/108 b FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

1-4: 2x6 SPF 2100F 1.8E, 10-12: 2x10 SP 2400F 2.0E

4-6-3

6-0-10

BOT CHORD 2x6 SPF 2100F 1.8E *Except*

14-16: 2x4 SP 2400F 2.0E, 11-14: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

OTHERS 2x10 SP 2400F 2.0E

LBR SCAB 10-12 2x10 SP 2400F 2.0E one side

REACTIONS. (size) 2=0-3-8, 12=0-3-8

Max Horz 2=44(LC 14)

Max Uplift 2=-67(LC 8), 12=-52(LC 8) Max Grav 2=2125(LC 2), 12=2067(LC 2)

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

TOP CHORD 2-3=-4368/170, 3-4=-4139/176, 4-5=-5278/258, 5-6=-5850/284, 6-7=-7436/339,

7-9=-7449/341, 9-10=-6728/305, 10-11=-5109/207, 11-12=-786/41

BOT CHORD 2-20=-121/3941, 18-20=-96/3812, 17-18=-182/5278, 15-16=-227/6728, 13-15=-127/4835, 11-13=-129/4829, 16-17=-224/6193

3-20=-366/152, 4-20=0/332, 5-18=-958/107, 10-13=0/258, 4-18=-107/1833,

10-15=-116/2214, 9-15=-941/106, 7-16=-296/51, 9-16=-42/841, 6-17=-2106/117,

5-17=-34/717, 6-16=-77/2307

NOTES-

WEBS

- 1) Attached 10-9-8 scab 10 to 12, front face(s) 2x10 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except: starting at 0-0-10 from end at joint 10, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 5-8-14 from end at joint 10, nail 2 row(s) at 2" o.c. for 2-9-2
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are MT20 plates unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Odhtifitæddanpedeanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12



16023 Swingley Ridge Rd Chesterfield, MO 63017

OF MISS

SCOTT M.

SEVIER

PE-2001018807

May 4,2020

🛕 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge	
2335469	A02	 HIP	1	1		141172642
2000-100	7.02	""			Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:14:54 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-p9hzgFLXGWat6c3RQ4Jk0oLMB87z4ey1?uzv1DzKpgl

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



Job Truss Truss Type Summit/61 Hawthorn Ridge 141172643 HIP 2335469 A03 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:14:56 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

Structural wood sheathing directly applied, except

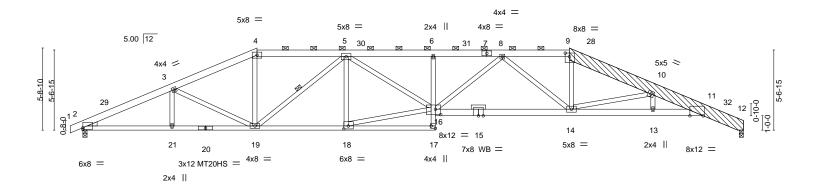
2-0-0 oc purlins (2-8-15 max.): 4-9.

Rigid ceiling directly applied.

1 Row at midpt

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-mYpj5xMno7qbMwDqXVLC5DQoPyraYVVKTCS056zKpgj 29-2-8 33-10-8 39-8-6 5-11-0 6-2-8 6-2-8 4-8-0 4-8-0 5-9-14 6-3-10

Scale = 1:80.2



6-2-8	12-1-8	18-4-0	24-6-8	33-10-8	39-8-6	42-8-8 46-0-	
6-2-8	5-11-0	6-2-8	6-2-8	9-4-0	5-9-14	3-0-2 3-3-8	В '
Plate Offsets (X,Y) [2:0-0-0,0-1	-9], [9:0-3-8,0-3-0], [11:	0-11-2,0-0-0], [16:0-4-	8,0-4-8], [17:Edge,0-	-3-8], [18:0-3-12,0-2-8]			
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI	1.15 T 1.15 B YES V	SI. C 0.61 C 0.83 /B 0.82 latrix-AS	DEFL. in (loc) l/de Vert(LL) -0.47 14-16 >99 Vert(CT) -0.87 14-16 >63 Horz(CT) 0.35 12 n/	9 240 0 180	PLATES MT20 MT20HS Weight: 308 lb	GRIP 197/144 148/108 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

BOT CHORD

2x6 SPF No.2 *Except* TOP CHORD

9-12: 2x10 SP 2400F 2.0E 2x4 SPF 1650F 1.5E *Except*

6-17: 2x4 SPF No.2, 15-16,11-15: 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2 *Except*

16-18: 2x4 SPF 1650F 1.5E **OTHERS** 2x10 SP 2400F 2.0E *Except*

15-15: 2x4 SPF No.2

LBR SCAB 9-12 2x10 SP 2400F 2.0E one side

WEDGE

Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 12=0-3-8

Max Horz 2=54(LC 14)

Max Uplift 2=-51(LC 8), 12=-36(LC 8) Max Grav 2=2125(LC 2), 12=2067(LC 2)

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

2-3=-4260/116, 3-4=-3885/157, 4-5=-3538/156, 5-6=-5671/241, 6-8=-5708/238, TOP CHORD

8-9=-4523/162, 9-10=-4881/161, 10-11=-5830/151, 11-12=-786/35

2-21=-68/3808, 19-21=-68/3808, 18-19=-112/4403, 17-18=-21/346, 6-16=-445/71, BOT CHORD

14-16=-141/5276, 13-14=-101/5579, 11-13=-101/5579

WEBS 3-19=-499/95, 4-19=0/983, 5-19=-1317/68, 5-18=-623/73, 16-18=-92/4122, 5-16=-45/1546, 8-16=-4/690, 8-14=-1199/101, 9-14=-1/1226, 10-14=-1169/96

NOTES-

- 1) Attached 13-4-11 scab 9 to 12, front face(s) 2x10 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-4 from end at joint 9, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 7-10-14 from end at joint 9, nail 2 row(s) at 2" o.c. for 4-4-10.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are MT20 plates unless otherwise indicated.

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



May 4,2020

M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge	
2335469	A03	 HIP	1	1	14	41172643
2333409	A03		['	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:14:56 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-mYpj5xMno7qbMwDqXVLC5DQoPyraYVVKTCS056zKpgj

- 10) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 11) Provide mechanical connection (by others) of truss to bearing states.
 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172644 HIP 2335469 A04 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:14:58 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-ixxUWcO2Jk4JbDNCfwNgAeW44IUV0MIdwWx7A?zKpgh

10-0-3

Scale = 1:81.6

46-0-0

3-3-8

37-1-2

5-7-6

Structural wood sheathing directly applied, except

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

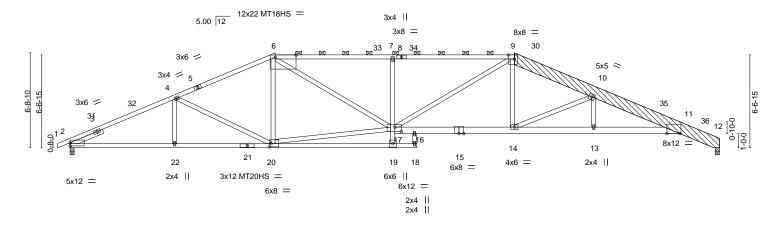
10-0-0 oc bracing: 11-13

Rigid ceiling directly applied. Except:

6-11-3

42-8-8

5-7-6



1 7-4-	14 _I 14-6-	·5 _I	2	4-6-8	1 31	-5-11	1 37-	1-2	42-8-8	46-0-0 ₁
7-4-	14 7-1-6	6	1	0-0-3	6-	11-3	5-7	'-6	5-7-6	3-3-8
Plate Offsets (X,Y) [2:0-0-0),0-2-11], [6:1-5-12,0-2-0],	[9:0-5-4,Edge],	[11:0-11-2,	Edge], [17:0-5-8,0-	3-12], [20:0-	1-8,0-2-12]				
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TF	2-0-0 1.15 1.15 YES PI2014	CSI. TC BC WB Matrix	0.86 0.99 0.99 k-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (lo -0.43 14-1 -0.78 14-1 0.32	6 >999	L/d 240 180 n/a	PLATES MT20 MT20HS MT18HS Weight: 31	GRIP 197/144 148/108 197/144 0 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

6-8,8-9: 2x4 SP 2400F 2.0E, 9-12: 2x10 SP 2400F 2.0E

BOT CHORD 2x4 SPF No.2 *Except*

-0₇10₇8 0-10-8

7-4-14

2-21: 2x4 SPF 1650F 1.5E, 15-17: 2x6 SPF No.2

11-15: 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2 **OTHERS** 2x10 SP 2400F 2.0E

LBR SCAB 9-12 2x10 SP 2400F 2.0E one side SLIDER Left 2x4 SPF No.2 2-6-0

REACTIONS. (size) 2=0-3-8, 12=0-3-8

Max Horz 2=62(LC 14)

Max Uplift 2=-35(LC 8), 12=-20(LC 8) Max Grav 2=2125(LC 2), 12=2067(LC 2)

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

TOP CHORD 2-4=-4123/87, 4-6=-3649/128, 6-7=-4570/178, 7-9=-4596/177, 9-10=-4379/138,

10-11=-5488/108, 11-12=-786/29

BOT CHORD 2-22=-32/3722, 20-22=-32/3722, 19-20=-4/433, 17-19=0/266, 7-17=-809/126, 16-17=-22/4015, 14-16=-22/4015, 13-14=-42/5222, 11-13=-42/5222

4-20=-681/113, 17-20=-15/2890, 6-17=-55/1610, 9-17=-47/903, 9-14=0/845,

WEBS

10-14=-1478/96

NOTES-

- 1) Attached 15-11-14 scab 9 to 12, front face(s) 2x10 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 5-1-0 from end at joint 9, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 9-9-10 from end at joint 9, nail 2 row(s) at 2" o.c. for
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are MT20 plates unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify Continue city plage azing surface.



May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge	
0005400		Lup	_			l41172644
2335469	A04	HIP	1	1	Job Reference (optional)	
					Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:14:58 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-ixxUWcO2Jk4JbDNCfwNgAeW44IUV0MldwWx7A?zKpgh

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



Job Truss Truss Type Summit/61 Hawthorn Ridge 141172645 2335469 A05 Hip Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:00 2020 Page 1 Builders FirstSource (Valley Center) Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-eJ2ExIQIrMK1qXWbmLP8F3bUMZAPULXwOqQDEtzKpgf

29-0-14

4-6-6

35-10-11

6-9-13

Structural wood sheathing directly applied, except

2-0-0 oc purlins (3-3-1 max.): 6-8.

Rigid ceiling directly applied.

1 Row at midpt

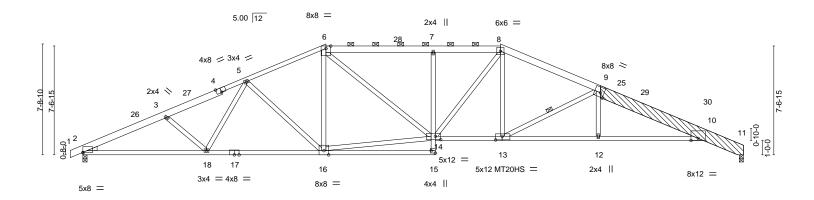
42-8-8

6-9-13

Scale = 1:80.2

46-0-0

3-3-8



8-7-5	16-11-2	24-6-8	29-0-14	35-10-11	42-8-8 46-	-0-0 _I
8-7-5	8-3-13	7-7-6	4-6-6	6-9-13	6-9-13 3-3	3-8
Plate Offsets (X,Y) [2:0-0-0,0)-0-4], [4:0-4-0,Edge], [9:0-3-0,0-3-8], [1	3:0-5-8,0-3-0], [14:0-4-8,0-2	2-12], [15:Edge,0-3-8]		
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 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 0.62 BC 0.90 WB 0.69	Vert(LL) -0.3	8 13-14 >999 24 8 13-14 >806 18	80 MT20HS n/a	GRIP 197/144 148/108
BCDI 10.0	Code IRC2018/TPI2014	Matrix-AS			Weight: 291 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*

4-6: 2x4 SP 2400F 2.0E, 9-11: 2x10 SP 2400F 2.0E

BOT CHORD 2x4 SP 2400F 2.0E *Except*

5-10-1

5-6-9

5-6-9

7-15: 2x4 SPF No.2, 15-17,10-13: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

OTHERS 2x10 SP 2400F 2.0E

LBR SCAB 9-11 2x10 SP 2400F 2.0E one side

WEDGE Left: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 11=0-3-8

Max Horz 2=73(LC 14)

Max Uplift 2=-33(LC 12), 11=-23(LC 13) Max Grav 2=2125(LC 2), 11=2067(LC 2)

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

TOP CHORD 2-3=-4261/68, 3-5=-4000/61, 5-6=-3366/105, 6-7=-3812/130, 7-8=-3819/126,

8-9=-3940/100, 9-10=-5017/63, 10-11=-786/30

BOT CHORD 2-18=-84/3810, 16-18=-11/3472, 15-16=0/270, 7-14=-680/96, 13-14=0/3546, 12-13=0/4738, 10-12=0/4732

> 3-18=-274/101, 5-18=0/385, 5-16=-711/104, 6-16=-8/340, 14-16=0/2801, 6-14=-31/1120, 8-14=-40/668, 8-13=0/793, 9-13=-1436/110, 9-12=0/274

NOTES-

WEBS

- 1) Attached 11-0-9 scab 9 to 11, front face(s) 2x10 SP 2400F 2.0E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-12 from end at joint 9, nail 2 row(s) at 7" o.c. for 3-9-4; starting at 5-5-1 from end at joint 9, nail 2 row(s) at 2" o.c. for 3-4-0.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are MT20 plates unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

Odhti Treviden page pical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11.



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 permanent. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

16023 Swingley Ridge Rd Chesterfield, MO 63017

OF MISS

SCOTT M.

SEVIER

PE-2001018807

May 4,2020

Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge	
						I41172645
2335469	A05	Hip	1	1		
					Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:00 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-eJ2ExIQIrMK1qXWbmLP8F3bUMZAPULXwOqQDEtzKpgf

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



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172646 2335469 B01 Hip Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:02 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-aiA_L_RYNzal4rgzulScLUgnxNtoyAGDr8vKJmzKpgd 34-8-8 24-0-4 29-4-6 38-0-0 38-10₁8

5-4-2

5-4-2

5-4-2

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (3-5-15 max.): 3-4.

Rigid ceiling directly applied.

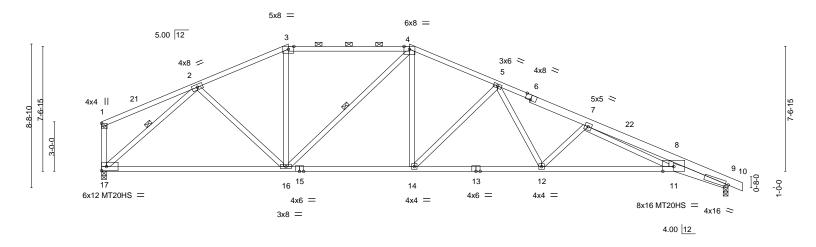
1 Row at midpt

7-4-3

Scale = 1:69.9

0-10-8

3-3-8



	3-3-11	11-5-14		10-0-2		20-0-0	, ,		37-0-0	30-0-0	
	5-9-11	5-6-3		7-4-3	1	8-0-3	1		8-0-3	3-3-8	7
Plate Offsets (X,Y)	[6:0-4-0,Edge],	[8:0-1-12,0-0-12], [9:	0-2-1,0-1-13								
LOADING (psf) TCLL (roof) Snow (Pf/Pg) 20 TCDL BCLL BCDL	25.0 4/20.0 10.0 0.0 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI2	2-0-0 1.15 1.15 YES 2014	BC 0.	.80 .84 .99 S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.35 16-17 -0.74 16-17 0.26 9	l/defl >999 >612 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 175 lb	GRIP 197/144 148/108 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

5-9-11

5-6-3

3-4: 2x4 SPF 1650F 1.5E, 6-10: 2x6 SPF 2100F 1.8E

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

9-11: 2x6 SPF 2100F 1.8E, 13-15: 2x4 SPF No.2

WEBS 2x4 SPF No.2

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

Max Horz 17=-103(LC 8)

Max Uplift 17=-5(LC 12), 9=-55(LC 13) Max Grav 17=1709(LC 35), 9=1765(LC 2)

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

TOP CHORD 2-3=-2093/69, 3-4=-1870/75, 4-5=-2480/77, 5-7=-3768/103, 7-8=-6649/187,

8-9=-7110/126, 1-17=-260/32

BOT CHORD 16-17=0/1608, 14-16=0/2230, 12-14=0/2900, 11-12=-34/4074, 9-11=-80/6566 **WEBS**

2-16=0/504, 3-16=0/393, 4-16=-629/61, 4-14=-18/872, 5-14=-1050/105, 5-12=-12/1021,

7-12=-1002/115, 7-11=-69/2384, 8-11=0/797, 2-17=-2036/53

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Bearing at joint(s) 9 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) 17, 9.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172647 2335469 B02 Hip Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:04 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-X4IImgTpvaqTJ8qM?AU4Qvm9hAZoQ9DVISOROezKpgb 22-5-1 28-6-12 38-0-0 38-10₁8

6-1-12

6-1-12

6-1-12

Structural wood sheathing directly applied, except end verticals, and

2-15, 4-15, 5-14

2-0-0 oc purlins (3-10-12 max.): 3-4.

Rigid ceiling directly applied.

1 Row at midpt

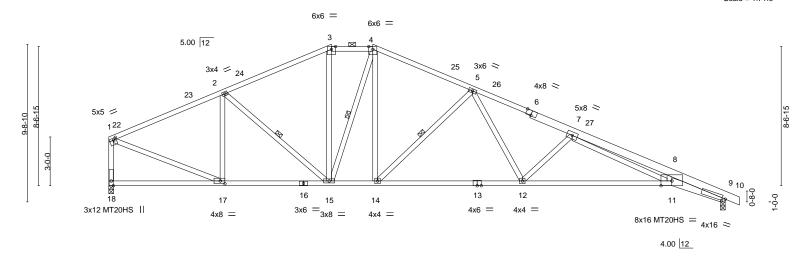
2-6-10

Scale = 1:71.0

0-10-8

3-3-8

38-0-0



'	7-0-2	6-8-10	' 2-6-10 '	9-2-10	,	9-2-10	3-3-8
Plate Offsets (X,Y) [1:0-2-0,	0-1-8], [6:0-4-0,Edge], [8:0-	1-12,0-0-12],	[9:0-2-5,0-1-13], [17:0-3-8	3,0-2-0]			
CADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCDL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/TPI2	2-0-0 1.15 1.15 YES 2014	CSI. TC 0.66 BC 0.87 WB 0.65 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.39 11-12 -0.82 11-12 0.25 9	l/defl L/d >999 240 >556 180 n/a n/a	PLATES GRIP MT20 197/144 MT20HS 148/108 Weight: 187 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

16-3-5

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

6-10: 2x6 SPF 2100F 1.8E

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

9-11: 2x6 SPF 2100F 1.8E, 13-16: 2x4 SPF No.2

7-0-2

7-0-2

6-8-10

13-8-11

WEBS 2x4 SPF No.2

REACTIONS. 18=0-3-8, 9=0-3-8 (size)

Max Horz 18=-111(LC 13)

Max Uplift 18=-18(LC 12), 9=-63(LC 13) Max Grav 18=1830(LC 35), 9=1765(LC 2)

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

TOP CHORD 1-2=-2157/37, 2-3=-2157/90, 3-4=-1878/89, 4-5=-2279/95, 5-7=-3724/125,

7-8=-6696/227, 8-9=-7131/153, 1-18=-1761/42

15-17=0/1908, 14-15=0/2001, 12-14=0/2840, 11-12=-52/3987, 9-11=-107/6583 **BOT CHORD** 2-17=-595/61, 3-15=-19/481, 4-15=-560/49, 4-14=-28/919, 5-14=-1150/121, **WEBS** 5-12=-13/1041, 7-12=-985/132, 8-11=0/827, 1-17=0/1966, 7-11=-83/2629

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Bearing at joint(s) 9 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) 18, 9.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Summit/61 Hawthorn Ridge 141172648 2335469 B03 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:05 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-?Hs7_0TRguyKxIPYZu?Jy7Ilpauv9b1fX68_w5zKpga , 34-8-8 28-1-11 38-0-0 38-10-8 6-8-10 6-6-13 6-6-13 6-6-13 3-3-8 0-10-8 Scale = 1:68.5 6x6 = 5.00 12 3x4 = 22 3x6 > 2 3 4x8 = 4x8 > 6 8x16 MT20HS = 6x8 < 15 13 12 16 14 11 3x12 MT18HS || 3x6 = 4x6 =4x4 = 3x8 = 4x8 = 8x16 MT20HS = 4.00 12 15-0-0 24-10-4 38-0-0 9-10-4 6-8-10 Plate Offsets (X,Y)--[1:0-3-0,0-1-8], [2:0-4-0,Edge], [6:0-4-0,Edge], [8:0-1-12,0-0-12], [9:0-2-5,0-1-13], [16:0-3-8,0-1-8] LOADING (psf) GRIP SPACING-2-0-0 DEFL. (loc) I/defl L/d **PLATES** TCLL (roof) 25.0Plate Grip DOL 1.15 TC 0.76 Vert(LL) -0.41 11-12 >999 240 MT20 197/144 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.88 Vert(CT) -0.89 11-12 >509 180 MT20HS 148/108 **TCDL** 10.0 Rep Stress Incr YES WB 0.67 Horz(CT) 0.25 MT18HS 197/144 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Weight: 173 lb FT = 20%Matrix-AS BCDL 10.0 LUMBER-**BRACING-**2x4 SPF No.2 *Except* TOP CHORD TOP CHORD Structural wood sheathing directly applied, except end verticals. **BOT CHORD** Rigid ceiling directly applied

WEBS

1 Row at midpt

3-14, 5-14

6-10: 2x6 SPF 2100F 1.8E 2x4 SPF 1650F 1.5E *Except*

9-11: 2x6 SPF 2100F 1.8E, 13-15: 2x4 SPF No.2

WEBS 2x4 SPF No.2

BOT CHORD

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

Max Horz 17=-116(LC 13)

Max Uplift 17=-24(LC 12), 9=-67(LC 13) Max Grav 17=1703(LC 2), 9=1765(LC 2)

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

TOP CHORD 1-3=-2098/57, 3-4=-1997/113, 4-5=-1984/101, 5-7=-3447/134, 7-8=-6720/245,

8-9=-7148/164, 1-17=-1618/56

BOT CHORD 14-16=0/1843, 12-14=0/2571, 11-12=-59/3769, 9-11=-117/6596

3-16=-444/60, 3-14=-301/127, 4-14=-18/1020, 5-14=-1129/131, 5-12=-13/1059, **WEBS**

7-12=-994/141, 8-11=0/746, 1-16=0/1824, 7-11=-90/2740

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 9.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



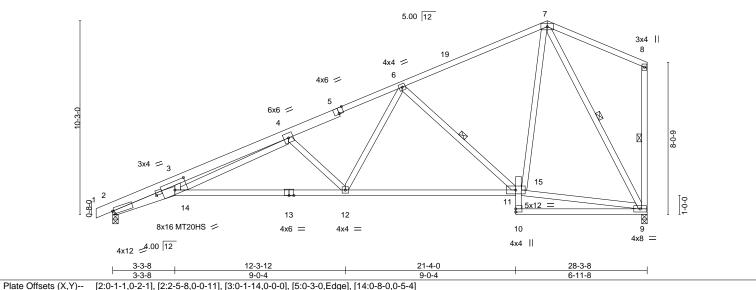
May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Summit/61 Hawthorn Ridge 141172649 2335469 C01 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:06 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-TTPVBLU3RC4AZS_I7bWYVKrSa_Ddu1AommtYSXzKpgZ 23-0-0 6-0-3 6-0-3 6-0-3 1-8-0 5-3-8 Scale = 1:61.0 4x8 =



DEEL

1 /4

Structural wood sheathing directly applied, except end verticals.

6-11, 8-9, 7-9

Rigid ceiling directly applied

1 Row at midpt

DI ATES

CDID

LOADING (psf) SPACING 2-0-0

TCLL (roof)	25.0	31 ACING- 2-0-0	001.	DELE. III (IOC) I/dell L/d	ILAILO	GIVII
TCLL (TOOI)	25.0	Plate Grip DOL 1.15	TC 0.82	Vert(LL) -0.29 12-14 >999 240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0			, , , , , , , , , , , , , , , , , , , ,		
		Lumber DOL 1.15	BC 0.91	Vert(CT) -0.62 12-14 >541 180	MT20HS	148/108
TCDL	10.0			- (-)	WITZOITO	1 10/ 100
		Rep Stress Incr YES	WB 0.74	Horz(CT) 0.23 9 n/a n/a		
BCLL	0.0	OI- ID00040/TD10044	M-4-1 AO	. (- /	M/-: 4 40 II-	FT 000/
DODI	10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 149 lb	FT = 20%
BCDL	10.0				=	

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

1-5: 2x6 SPF No.2 2x4 SPF No.2 *Except*

BOT CHORD 2-14: 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2

REACTIONS.

(size) 2=0-3-8, 9=0-3-8

Max Horz 2=238(LC 11)

Max Uplift 2=-56(LC 12), 9=-47(LC 12) Max Grav 2=1329(LC 2), 9=1266(LC 2)

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

TOP CHORD 2-3=-5230/273, 3-4=-4922/336, 4-6=-2270/130, 6-7=-940/93

BOT CHORD 2-14=-333/4833, 12-14=-174/2587, 11-12=-100/1576

WEBS 3-14=0/562, 4-12=-833/134, 6-12=-16/919, 6-11=-1109/145, 7-11=-32/1004,

9-11=-63/607, 7-9=-1284/53, 4-14=-186/2210

- 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172650 2335469 C02 Hip Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:08 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-PsXFc1WJzpKuom87E0Z0alwoAnv4M_i5D4MfXPzKpgX 29-2-0 12-9-12 18-10-14 25-0-0 28-3-8 2-10-3 6-1-2 6-1-2 6-1-2 3-3-8 5.00 12 Scale = 1:60.9 6x6 = 6x6 = Ш 4x4 20 4x6 > 4x6 < 6 21 3x4 > 10 8x8 12 11 4x4 = 4x4 = 8x16 MT20HS > 4x12 || 4x12 > 4x4 || 4.00 12 3-10-6 15-11-12 28-3-8 6-11-8 25-0-0 3-10-6 3-1-2 9-0-4 3-3-8 Plate Offsets (X,Y)--[3:0-3-0,Edge], [7:0-1-14,0-0-0], [8:2-5-8,0-0-11], [8:0-0-13,0-2-1], [10:0-8-0,0-5-4], [13:0-2-12,Edge], [14:Edge,0-3-8]

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 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 0.82 BC 0.91 WB 0.55	DEFL. in (loc) I/defl L/d Vert(LL) -0.28 10-11 >999 240 Vert(CT) -0.61 10-11 >554 180 Horz(CT) 0.19 8 n/a n/a	PLATES GRIP MT20 197/144 MT20HS 148/108
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 162 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

3-5,5-9: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 *Except*

8-10: 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2

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

Max Horz 15=-238(LC 10)

Max Uplift 15=-34(LC 13), 8=-55(LC 13)

Max Grav 15=1294(LC 35), 8=1329(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-805/85, 3-4=-990/72, 4-6=-2370/100, 6-7=-4875/200, 7-8=-5206/124

BOT CHORD 11-13=0/1643, 10-11=-27/2656, 8-10=-80/4805

13-15=0/436, 2-13=-29/1008, 4-13=-1145/124, 4-11=-7/951, 6-11=-856/124, **WEBS**

6-10=-83/2123, 7-10=0/617, 2-15=-1225/39

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Bearing at joint(s) 8 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) 15, 8.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied, except end verticals, and

4-13, 1-15, 2-15

3-13

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

1 Row at midpt

1 Row at midpt

Rigid ceiling directly applied. Except:

May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

6-10: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2 *Except*

9-11: 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2

REACTIONS.

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

Max Horz 17=-238(LC 10)

Max Uplift 9=-52(LC 13), 17=-51(LC 8) Max Grav 9=1329(LC 2), 17=1266(LC 2)

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

TOP CHORD 2-3=-901/71, 3-4=-898/70, 4-5=-1235/69, 5-7=-2463/95, 7-8=-4874/178, 8-9=-5202/115

BOT CHORD 3-15=-395/59, 14-15=0/1063, 12-14=0/1748, 11-12=-26/2777, 9-11=-71/4807 **WEBS** 2-15=-18/1172, 4-15=-719/38, 4-14=-14/842, 5-14=-1023/106, 5-12=-11/910,

7-12=-869/114, 7-11=-68/2002, 8-11=0/583, 2-17=-1234/113

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Bearing at joint(s) 9 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) 9, 17.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied, except end verticals, and

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

Rigid ceiling directly applied.

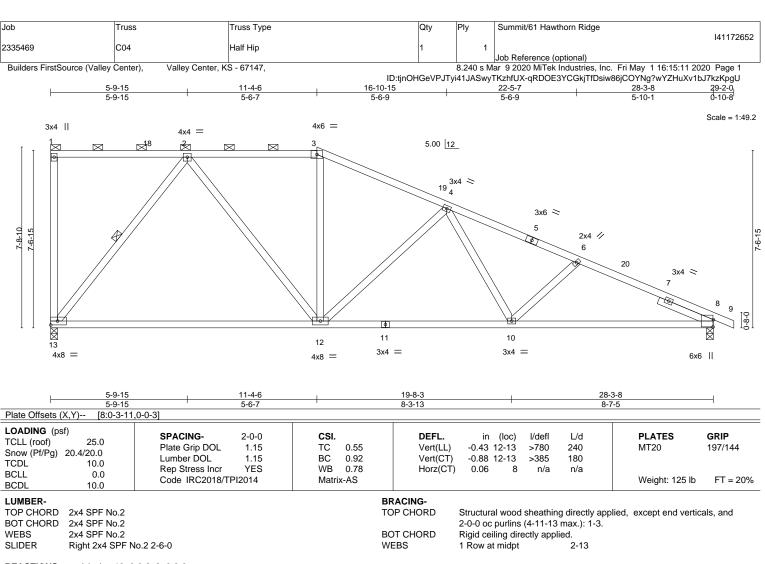
1 Row at midpt

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REACTIONS. (size) 13=0-3-8, 8=0-3-8 Max Horz 13=-221(LC 10)

Max Uplift 13=-67(LC 8), 8=-47(LC 13)

Max Grav 13=1266(LC 2), 8=1329(LC 2)

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

2-3=-1217/78, 3-4=-1393/68, 4-6=-2115/90, 6-8=-2329/100 TOP CHORD

BOT CHORD 12-13=0/796. 10-12=0/1712. 8-10=-40/2100

WEBS 2-13=-1249/107, 2-12=-16/764, 4-12=-801/111, 4-10=-1/389, 6-10=-315/91

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









Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172653 2335469 C05 Half Hip Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:13 2020 Page 1

5-9-14

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

5-9-14

Structural wood sheathing directly applied, except end verticals, and

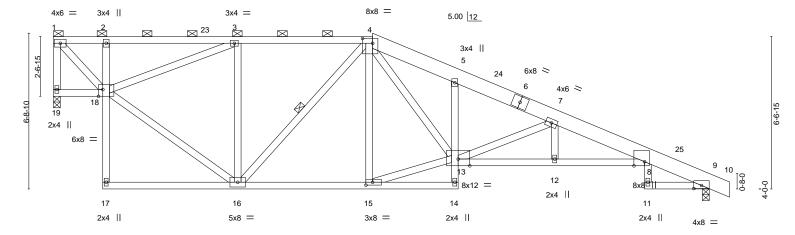
2-0-0 oc purlins (5-0-10 max.): 1-4.

Rigid ceiling directly applied.

1 Row at midpt

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-mpL8flaSnLzBuX051Z8BHpdhMod31FMqNL4PCdzKpgS 23-3-5 24-4-8 25-6-0 1-9-9 1-1-3 1-1-8 17-5-8 21-5-12 28-3-8 3-8-5 4-0-4 2-9-8 0-10-8

Scale = 1:49.7



2-1-8	7-11-6 5-9-14		3-9-3 9-14	17-5-8 3-8-5	21-5-12 4-0-4		25-6-0 4-0-4	28-3-8 2-9-8	1
	0-2-8], [8:0-2-2,Edge], [9:				4-0-4		4-0-4	2-9-0	
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC 0.66 BC 0.86 WB 0.52	Vert(CT)	in (loc) -0.26 8-12 -0.47 8-12 0.16 9	l/defl >999 >722 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/Ti	PI2014	Matrix-AS					Weight: 173 lb	FT = 20%

BRACING-TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

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

8-13: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

REACTIONS. (size) 19=0-3-8, 9=0-3-8

Max Horz 19=-146(LC 8)

Max Uplift 19=-45(LC 8), 9=-55(LC 13) Max Grav 19=1266(LC 2), 9=1329(LC 2)

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

TOP CHORD 1-19=-1200/50, 1-2=-1091/56, 2-3=-1127/64, 3-4=-1178/113, 4-5=-2396/139,

5-7=-2494/97, 7-8=-3452/118, 8-9=-485/44

BOT CHORD 2-18=-343/60, 15-16=0/1444, 12-13=-52/3403, 8-12=-53/3411

1-18=-62/1567, 16-18=0/1418, 3-16=-522/63, 4-16=-495/20, 4-15=-272/33, **WEBS**

13-15=0/1392, 4-13=-66/1409, 7-13=-1374/81

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 9.
- 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.



May 4,2020



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172654 2335469 C06 Half Hip Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:15 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-iCSv4QbiJzDv8qAT9_BfMEj1ocK0V587qfZWGVzKpgQ

3-5-0

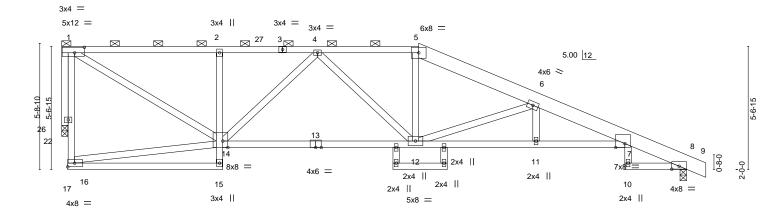
4-3-8

Scale = 1:52.2

29-2-0 0-10-8

28-3-8

2-9-8



16-2-0 17-5-8 1-2-0 1-3-8

21-5-12

4-0-4

25-6-0

4-0-4

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (3-5-13 max.): 1-5.

Rigid ceiling directly applied.

0-3-4	7-3-8	15-0-0	16-2-0 17-5-8	21-5-12	25-6-0	28-3-8	I
0-3-4	7-0-4	7-8-8	1-2-0 1-3-8	4-0-4	4-0-4	2-9-8	l
Plate Offsets (X,Y) [1:0-5-4,	0-3-0], [7:0-5-0,Edge], [8:0-4-0,0-1-9], [14:0-2-12,Edge]					
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.67 BC 0.83 WB 0.82 Matrix-AS	(/	in (loc) l/defl -0.28 7-11 >999 -0.50 7-11 >671 0.26 8 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 157 lb	GRIP 197/144 FT = 20%

BOT CHORD

LUMBER-**BRACING-**

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

5-9: 2x8 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 *Except*

7-13: 2x4 SPF 1650F 1.5E 2x4 SPF No.2

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

REACTIONS. (size) 8=0-3-8, 26=0-3-4

Max Horz 26=-122(LC 8)

Max Uplift 8=-32(LC 13), 26=-54(LC 9) Max Grav 8=1329(LC 2), 26=1296(LC 31)

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

TOP CHORD $1-2 = -1650/93, \ 2-4 = -1640/86, \ 4-5 = -2088/77, \ 5-6 = -2327/74, \ 6-7 = -3373/57, \ 7-8 = -485/34$

2-14=-517/78, 12-14=-11/2003, 11-12=-2/3317, 7-11=-3/3324 **BOT CHORD**

5-12=0/546, 6-12=-1432/100, 4-12=-84/306, 4-14=-534/38, 1-14=-62/1802, **WEBS**

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads
- 5) Provide adequate drainage to prevent water ponding.
- 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) 26 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) 8, 26.
- 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.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172655 2335469 C07 Half Hip Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:16 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-AO0HHmcK4GLml_lgiiiuvRFCE0frEZSH3Jl4pyzKpgP

2-2-10

5-5-14

18-6-13 1-1-5

6-11-3

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (2-10-4 max.): 1-5.

Rigid ceiling directly applied.

17-5-8

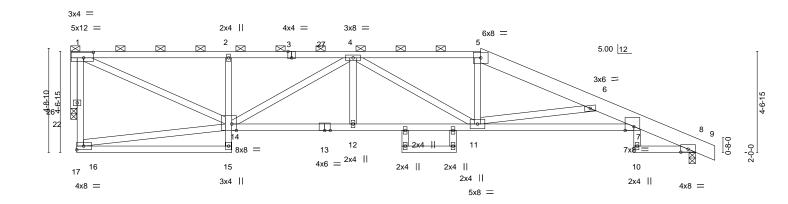
2-5-8

Scale = 1:52.2

29-2-0 0-10-8

28-3-8

2-9-8



0-3-4	7-3-8	12-9-6	15-0-0 ₁ 17-5-8	18-6-13	25	5-6-0	1 28-3-8	1
0-3-4	7-0-4	5-5-14	2-2-10 2-5-8	1-1-5	6-	11-3	2-9-8	1
Plate Offsets (X,Y) [1:0-5-4,	.0-3-0], [3:0-2-0,Edge], [7:0-4-12,Edg	e], [8:0-4-0,0-1-9], [14:	:0-2-8,Edge]					
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.69 BC 0.85 WB 0.76 Matrix-AS	Vert(CT)	-0.34 -0.66	(loc) l/defl 7-11 >985 7-11 >512 8 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 149 lb	GRIP 197/144 FT = 20%

BOT CHORD

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x4 SPF No.2 *Except*

5-9: 2x8 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 *Except*

7-13: 2x4 SPF 1650F 1.5E

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

REACTIONS. (size) 8=0-3-8, 26=0-3-4

Max Horz 26=-103(LC 8)

Max Uplift 8=-32(LC 9), 26=-58(LC 9) Max Grav 8=1329(LC 2), 26=1347(LC 31)

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

TOP CHORD 1-2=-2239/131, 2-4=-2239/126, 4-5=-2556/104, 5-6=-2700/102, 6-7=-4009/104,

7-8=-485/35

BOT CHORD 2-14=-553/86, 12-14=-59/2822, 11-12=-59/2822, 7-11=-57/4003 WFBS

5-11=0/440, 6-11=-1532/87, 4-11=-442/93, 4-14=-736/19, 1-14=-96/2306,

1-26=-1363/60

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 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) 26 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) 8, 26.
- 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.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172656 2335469 C08 Half Hip Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:18 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-6n81iSebcubT?lu2q7kM_sLVZpKYiQOZWdnAtqzKpgN 20-11-10 25-6-0

15-0-0₁

1-0-3

17-5-8

2-5-8

3-6-2

13-11-13

6-8-5

Scale = 1:52.2

29-2-0 0-10-8

28-3-8

2-9-8

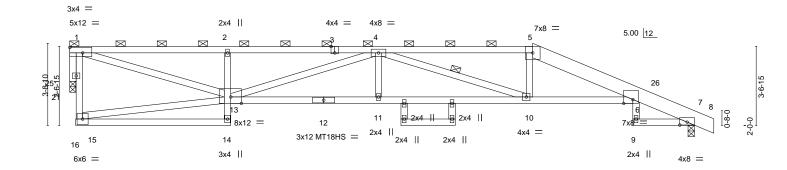
4-6-6

Structural wood sheathing directly applied, except end verticals, and

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

Rigid ceiling directly applied.

1 Row at midpt



0-3-4	7-3-8	13-11-13	1:	5-0-0 ₁ 17-5-8	20-11-10	1	25-6-0	28-3-8	1
0-3-4	7-0-4	6-8-5	4	-0-3 2-5-8	3-6-2		4-6-6	2-9-8	<u> </u>
Plate Offsets (X,Y) [1:Edge,	0-3-0], [3:0-2-0,Edge], [6:0-5	5-0,Edge], [7:0-4-0,0-	1-9], [13:0-5-12,	Edge]					
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	Plate Grip DOL Lumber DOL	1.15 To 1.15 B YES W		DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.44 11 -0.77 11-13 0.28 7	I/defI >774 >440 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 133 lb	GRIP 197/144 197/144 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

5-8: 2x8 SP 2400F 2.0E, 3-5: 2x4 SPF 1650F 1.5E

BOT CHORD 2x4 SPF No.2 *Except*

12-13,6-12: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

2x4 SPF No.2 **OTHERS**

REACTIONS. (size) 7=0-3-8, 25=0-3-4

Max Horz 25=-84(LC 8)

Max Uplift 7=-45(LC 9), 25=-62(LC 9) Max Grav 7=1329(LC 2), 25=1387(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-3294/190, 2-4=-3371/186, 4-5=-3193/141, 5-6=-3236/138, 6-7=-485/40 2-13=-595/94, 11-13=-152/4340, 10-11=-152/4340, 6-10=-80/3174 **BOT CHORD** 5-10=0/378, 4-11=0/281, 4-10=-1210/79, 4-13=-1022/33, 1-13=-148/3239, **WEBS**

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) 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) Bearing at joint(s) 25 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 25.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172657 2335469 C09 Half Hip Girder Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:22 2020 Page 1 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-?YNYYqh5g65vTvCp3ypl9iVBaQgBeEd9RFlO0bzKpgJ

3-5-12

16-2-12 17-5-8

1-2-12 1-2-12

19-8-11

2-3-3

3-7-11

Scale = 1:49.5

0-10-8

25-6-0

2-1-10

Structural wood sheathing directly applied or 6-0-0 oc purlins,

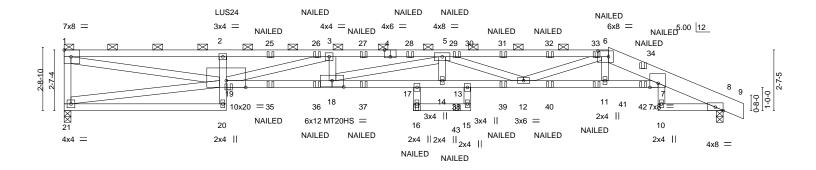
except end verticals, and 2-0-0 oc purlins (4-1-0 max.): 1-6.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-8-4 oc bracing: 18-19

8-4-3 oc bracing: 17-18 8-4-12 oc bracing: 12-13. 28-3-8

2-9-8



3-7-8	6-11-8	11-6-4	15-0-0	16-2-12 17-5-8	19-8-11	23-4-6	25-6-0		4
3-7-8	3-4-0	4-6-12	3-5-12	'1-2-12 '1-2-12 '	2-3-3	3-7-11	' 2-1-10	2-9-8	<u>'</u>
Plate Offsets (X,Y) [4:0-3-	0,Edge], [6:0-5-8,0-3	-0], [7:0-4-4,Edge], [8	3:Edge,0-1-13], [18:0-6-0	,0-3-4]					
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip I Lumber DO Rep Stress Code IRC2	L 1.15	CSI. TC 0.82 BC 0.98 WB 0.90 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) 0.76 17-18 -1.12 17-18 0.38 8	>301	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 267 lb	GRIP 197/144 148/108 FT = 20%

BOT CHORD

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x4 SPF 1650F 1.5E *Except* 6-9: 2x8 SP 2400F 2.0E, 4-6: 2x4 SP 2400F 2.0E

2x4 SPF No.2 *Except*

3-4-0

4-6-12

BOT CHORD

18-19: 2x4 SPF 1650F 1.5E, 7-18: 2x4 SP 2400F 2.0E **WEBS** 2x4 SPF No.2

REACTIONS. (size) 21=0-3-8, 8=0-3-8

Max Horz 21=-73(LC 47)

Max Uplift 21=-731(LC 8), 8=-583(LC 9) Max Grav 21=1988(LC 67), 8=1881(LC 59)

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

TOP CHORD 1-21=-1819/705, 1-2=-8114/3324, 2-3=-8828/3698, 3-5=-11910/5403, 5-6=-9105/3466, 6-7=-6249/2123, 7-8=-722/263

BOT CHORD 20-21=-314/789, 2-19=-765/243, 18-19=-5349/11928, 17-18=-4643/11482,

14-17=-4564/11299, 13-14=-4568/11249, 12-13=-4647/11432, 11-12=-2099/6344,

7-11=-2121/6409

WEBS 19-21=-647/347, 1-19=-3344/8130, 3-19=-3207/1777, 3-18=0/495, 5-18=-733/720,

5-12=-2501/1330, 6-11=-342/145, 5-14=0/357, 6-12=-1406/2952

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. 2x8 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 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) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are MT20 plates unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=731, 8=583.





OF MISS

SCOTT M.

SEVIER

NUMBER

PE-2001018807

May 4,2020

🗥 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge	
						I41172657
2335469	C09	Half Hip Girder	1	2		
					Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:23 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Tkxwl9hjRQDm53n0dgKXhw2MKq0QNgtlgvVxY2zKpgl

- 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 at 7-0-12 from the left end to connect truss(es) to back face of top chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) "NAILED" indicates 3-10d ($\bar{0}$.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-6=-61, 6-9=-51, 20-21=-20, 17-19=-20, 7-13=-20, 15-16=-20, 10-22=-20

Concentrated Loads (lb)

Vert: 2=-251(B) 17=-17(B) 25=-75(B) 26=-75(B) 27=-75(B) 28=-75(B) 30=-68(B) 31=-36(B) 32=-36(B) 33=-38(B) 34=-75(B) 35=-17(B) 36=-17(B) 37=-17(B) 38=-25(B) 39=-57(B) 40=-57(B) 41=-57(B) 42=-107(B)



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172658 2335469 D01 GABLE Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:24 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-xxVJzViLCkLdjDMCANrmE7bisEac6J9SvZEV5UzKpgH -0-10-8 0-10-8 14-0-0 6-0-0

4x4 = 6.00 12 10 11 5x5 🥢 12 24 8 25 13 4-9-0 3x4 / 3x6 | 23 22 21 20 19 18 17 16 15 14 5x5 =

20-0-0 [2:0-4-1 0-0-5] [8:0-2-8 0-3-0] [20:0-2-8 0-3-0]

Plate Offsets (X,Y) [2:0-4-1,0-0-5], [8:0-2-8,0-3-0], [20:0-2-8,0-3-0]										
LOADING (psf) TCLL (roof) 25.0 Snow (Pt/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0	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 0.03 WB 0.13 Matrix-S	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 1 n/r 120 Vert(CT) -0.00 1 n/r 120 Horz(CT) -0.00 14 n/a n/a	PLATES GRIP MT20 197/144 Weight: 103 lb FT = 20%						
BCDL 10.0	000002010/11 12011			1.0.g 100 10 11 = 2070						

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2 TOP CHORD

BOT CHORD 2x4 SPF No.2 except end verticals. WEBS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing **OTHERS** 2x4 SPF No.2

SLIDER Left 2x4 SPF No.2 1-7-3

REACTIONS. All bearings 20-0-0.

Max Horz 2=163(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 14, 2, 17, 18, 19, 20, 21, 22, 23, 16, 15 Max Grav All reactions 250 lb or less at joint(s) 14, 2, 17, 18, 19, 20, 21, 22, 23, 16, 15

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 2, 17, 18, 19, 20, 21, 22, 23, 16, 15.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

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Scale: 1/4"=1'



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172659 2335469 D02 Common Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:25 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-P73hArj_z1UUKNxOk5M0mL7nAelGrkgb7D_2dwzKpgG -<u>0-10-8</u> 14-0-0 6-10-4 6-0-0 Scale = 1:45.2 5x8 = 6.00 12 6 3x4 / 16 3x4 || 5 2x4 \\ \otimes 10 9 3x4 = 3x4 = 4x8 || 3x8 = 10-0-0 20-0-0 Plate Offsets (X,Y)--[2:0-5-1,Edge] LOADING (psf) SPACING-DEFL. GRIP 2-0-0 in (loc) I/defl L/d **PLATES** 25.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.48 Vert(LL) -0.20 8-10 >999 240 MT20 197/144 Snow (Pf/Pg) 15.4/20.0 Lumber DOL ВС 0.77 Vert(CT) -0.40 >597 180

8-10

8

Rigid ceiling directly applied.

n/a

n/a

Structural wood sheathing directly applied, except end verticals.

0.03

1 Row at midpt

Horz(CT)

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

TCDL

BCLL

BCDL

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

WEBS 2x4 SPF No.2 **SLIDER** Left 2x4 SPF No.2 2-6-0

10.0

10.0

0.0

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

Max Horz 2=165(LC 11)

Max Uplift 2=-36(LC 12), 8=-18(LC 12) Max Grav 2=956(LC 2), 8=892(LC 2)

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

Rep Stress Incr

Code IRC2018/TPI2014

2-4=-1125/74, 4-6=-1026/88 TOP CHORD 2-10=-73/1082, 8-10=-29/508 BOT CHORD

WEBS 4-10=-466/134, 6-10=-25/667, 6-8=-753/32

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

1.15

YES

WB

Matrix-AS

0.31

- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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FT = 20%

Weight: 82 lb



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172660 2335469 D03 Common Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:26 2020 Page 1 Builders FirstSource (Valley Center) Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-tJd3OBkcjLcLyXWblotFJYgyq25waBylMtjb9NzKpgF 13-10-8 6-9-8 6-0-0 Scale = 1:45.2 5x8 = 6.00 12 14 3x4 || 13 2x4 \ 3 0-9-12 \aleph 8 7 3x4 = 3x4 = 4x8 || 3x8 = 19-10-8 9-11-4 Plate Offsets (X,Y)-- [1:0-3-8,Edge] LOADING (psf) SPACING-DEFL. GRIP 2-0-0 in (loc) I/defl L/d **PLATES** 25.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.49 Vert(LL) -0.20 6-8 >999 240 MT20 197/144 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.74 Vert(CT) -0.40 6-8 >599 180 **TCDL** 10.0 Rep Stress Incr YES WB 0.31 Horz(CT) 0.02 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 20% Weight: 83 lb Matrix-AS BCDL 10.0 LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied, except end verticals. **BOT CHORD** 2x4 SPF No.2 Rigid ceiling directly applied. **WEBS** 2x4 SPF No.2 **WEBS** 1 Row at midpt **SLIDER** Left 2x6 SPF No.2 2-6-0

BOT CHORD

REACTIONS.

(size) 1=Mechanical, 6=0-3-8

Max Horz 1=159(LC 11)

Max Uplift 1=-28(LC 12), 6=-18(LC 12) Max Grav 1=888(LC 2), 6=888(LC 2)

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

1-3=-1104/73, 3-4=-1009/87 TOP CHORD BOT CHORD 1-8=-71/1061, 6-8=-29/505

WEBS 3-8=-456/132, 4-8=-25/654, 4-6=-748/31

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172661 2335469 D04 ROOF SPECIAL GIRDER

Builders FirstSource (Valley Center), Valley Center, KS - 67147, Job Reference (optional)

Structural wood sheathing directly applied or 6-0-0 oc purlins,

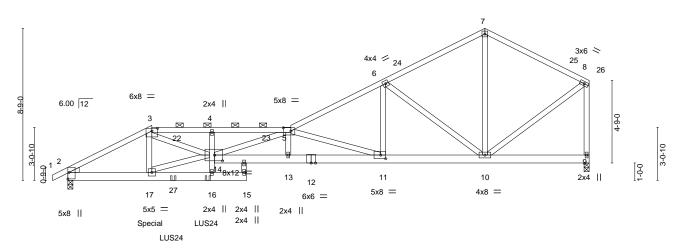
except end verticals, and 2-0-0 oc purlins (4-1-9 max.): 3-5.

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:29 2020 Page 1 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-IuIC0DmU0G_wp_E9zwRyxBIRNF5tnSOB2ryGmizKpgC

10-3-8 12-10-0 18-1-12 20-3-5 24-0-0 26-10-4 4-10-0 3-5-8 2-0-0 2-6-8 5-3-12 2-1-10 3-8-11 2-10-4

> Scale = 1:66.3 4x4 =



	4-10-0	3-6 10-3-6	12-10-0	10-1-12	1 20-3-3	24	-0-0		30-0-0		
	4-10-0 3-	5-8 2-0-0	2-6-8	5-3-12	2-1-10	3-8	B-11	ı	6-0-0	ı	
Plate Offsets (X,Y) [2:Edge,	0-0-13], [2:0-0-7,0-5-8],	[2:0-0-3,0-0-7],	3:0-4-0,0-1-1	5], [5:0-5-4,0-	2-4], [11:0-3-8,0	-2-8], [14	4:0-5-8,	0-4-0]			
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/		BC	0.59 0.85 0.65 -MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.29 -0.52 0.11	(loc) 15 15 9	l/defl >999 >686 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 312 lb	GRIP 197/144 FT = 20%

BOT CHORD

LUMBER-**BRACING-**TOP CHORD

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

WEBS 2x4 SPF No.2 WEDGE

Left: 2x4 SPF No.2

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

Max Horz 2=178(LC 59)

Max Uplift 2=-157(LC 12), 9=-61(LC 12) Max Grav 2=2127(LC 2), 9=1532(LC 2)

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

TOP CHORD 2-3=-3637/290, 3-4=-7113/536, 4-5=-7252/544, 5-6=-3117/190, 6-7=-1254/105,

7-8=-1243/116, 8-9=-1475/83

2-17=-309/3190, 16-17=-27/365, 13-14=-499/7416, 11-13=-504/7421, 10-11=-162/2729 BOT CHORD 3-17=-468/142, 14-17=-294/2948, 3-14=-288/4318, 5-14=-876/378, 5-11=-4931/360, **WEBS**

6-11=-69/1717, 6-10=-2165/196, 7-10=-38/688, 8-10=-45/1260, 14-16=-26/583,

NOTES-

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

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads
- 8) Provide adequate drainage to prevent water ponding.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb)
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Continuiere naestasia 12 dard ANSI/TPI 1.



May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge	
	D					l41172661
2335469	D04	ROOF SPECIAL GIRDER	1	2	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:29 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-lulC0DmU0G_wp_E9zwRyxBIRNF5tnSOB2ryGmizKpgC

NOTES-

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 6-0-12 from the left end to 8-0-12 to connect truss(es) to front face of bottom chord.
- 14) Fill all nail holes where hanger is in contact with lumber.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 420 lb down and 65 lb up at 4-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-51, 3-5=-61, 5-7=-51, 7-8=-51, 15-19=-20, 9-14=-20

Concentrated Loads (lb)

Vert: 17=-420(F) 16=-280(F) 27=-280(F)





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

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Structural wood sheathing directly applied, except end verticals, and

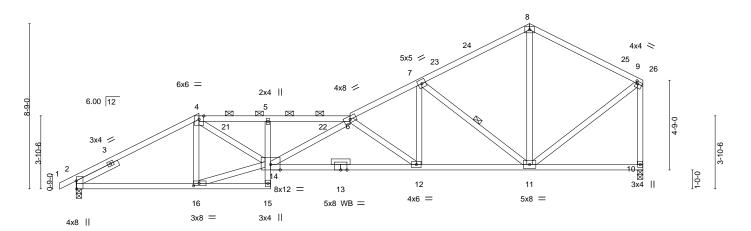
2-0-0 oc purlins (2-9-5 max.): 4-6.

Rigid ceiling directly applied.

1 Row at midpt

18-3-10 3-9-8 4-2-8 3-9-10 5-8-7

> Scale = 1:61.0 4x6 =



	1	6-6-0	10-3-8 ₁	14-6-0	1	18-3-10 _i	24-0-0	1	30-0-0	1	
		6-6-0	3-9-8	4-2-8	1	3-9-10	5-8-7	- 1	6-0-0		
Plate Offsets (X,Y)	[2:0-5-1,E	dge], [9:0-1-0,0-1-8]	, [16:0-3-8,0-1-8]								
Snow (Pf/Pg) 20.4/2	10.0	SPACING- Plate Grip DOI Lumber DOL Rep Stress Inc	1.15	CSI. TC BC WB	0.52 0.71 0.74	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.24 12-14 -0.52 12-14 0.13 10	I/defl >999 >687 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
	0.0	Code IRC201	8/TPI2014	Matri	x-AS					Weight: 138 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x4 SPF No.2 TOP CHORD

BOT CHORD 2x4 SPF No.2 *Except*

13-14,10-13: 2x4 SPF 1650F 1.5E

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

Left 2x4 SPF No.2 2-6-0 SLIDER

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

Max Horz 2=179(LC 9)

Max Uplift 2=-66(LC 12), 10=-39(LC 12) Max Grav 2=1406(LC 2), 10=1343(LC 2)

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

TOP CHORD 2-4=-2179/115, 4-5=-3474/188, 5-6=-3553/190, 6-7=-2482/122, 7-8=-1073/86,

8-9=-1068/99, 9-10=-1285/63

BOT CHORD 2-16=-139/1886, 5-14=-490/62, 12-14=-214/3784, 11-12=-93/2166

4-16=-416/66, 14-16=-114/1804, 4-14=-74/1933, 6-14=-404/12, 7-11=-1626/131, WFBS

8-11=-18/513, 9-11=-27/1071, 7-12=-24/1311, 6-12=-1992/148

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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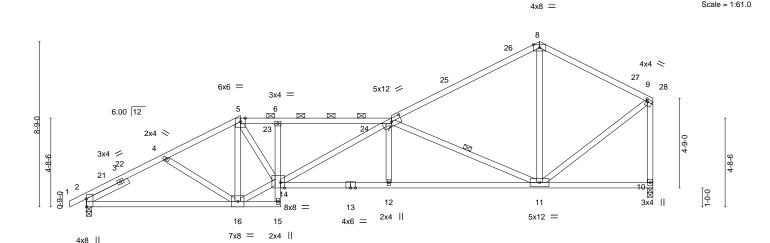


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.





ID:tjnOHGeVPJTyi41JASwyTKzhfUX-AgYisap?4VULlbYxCmVu51S1LsTojEunzTwTvTzKpg8 4-2-12 3-11-4 2-1-8 5-10-8 7-10-0 6-0-0



1	8-2-0 10-3-8	16-2-0	24-0-0	30-0-0	1
	8-2-0 2-1-8	5-10-8	7-10-0	6-0-0	<u> </u>
Plate Offsets (X,Y) [2:0-5-1,	Edge], [7:0-6-0,0-2-1], [9:0-1-0,0-1-8], [1	4:0-2-8,Edge]			
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 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 0.98 BC 0.79 WB 0.81	DEFL. in (loc) l/de Vert(LL) -0.20 12-14 >98 Vert(CT) -0.37 11-12 >97 Horz(CT) 0.12 10 n.	99 240 74 180	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS			Weight: 138 lb FT = 20%

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied, except end verticals, and **BOT CHORD** 2x4 SPF No.2 2-0-0 oc purlins (3-0-6 max.): 5-7. **WEBS** 2x4 SPF No.2 **BOT CHORD**

Rigid ceiling directly applied. **SLIDER** Left 2x4 SPF No.2 2-6-0 **WEBS** 1 Row at midpt

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

Max Horz 2=179(LC 9)

Max Uplift 2=-66(LC 12), 10=-39(LC 12) Max Grav 2=1406(LC 2), 10=1343(LC 2)

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

 $2-4=-2164/129,\ 4-5=-2051/116,\ 5-6=-2630/166,\ 6-7=-2685/170,\ 7-8=-1127/77,$ TOP CHORD

8-9=-1080/98 9-10=-1295/60

BOT CHORD 2-16=-168/1868, 6-14=-493/77, 12-14=-147/2962, 11-12=-150/2956 **WEBS** 5-16=-694/69, 14-16=-96/1894, 5-14=-87/1593, 7-14=-430/0, 7-12=0/297,

7-11=-2252/174, 8-11=0/460, 9-11=-29/1100

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



May 4,2020

Scale = 1:61.0



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172664 2335469 D07 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:35 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-72gTHGrFc6k3XviJKBYMASYQygAIBD93RmPa_LzKpg6 9-10-0 17-10-0 24-0-0 10₋3₋8 0-5-8 5-0-12 7-6-8 6-2-0 5-11-8

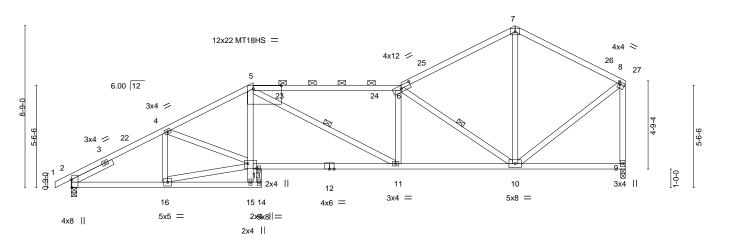
> Scale = 1:62.3 4x6 =

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (3-8-2 max.): 5-6.

Rigid ceiling directly applied

1 Row at midpt



17-10-0 24-0-0 9-10-0 5-0-12 4-9-4 7-6-8 Plate Offsets (X,Y)--[2:0-5-1,Edge], [5:1-6-4,0-2-0], [6:0-6-8,0-2-0], [8:0-1-0,0-1-8], [13:0-5-12,0-3-0] LOADING (psf) SPACING-2-0-0 DEFL. in (loc) I/defl L/d **PLATES** GRIP 25.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.78 Vert(LL) -0.18 11-13 >999 240 MT20 197/144 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 ВС 0.72 Vert(CT) -0.42 11-13 >861 180 MT18HS 197/144 TCDL 10.0 Rep Stress Incr YES WB 0.50 Horz(CT) 0.09 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Weight: 143 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

Matrix-AS

LUMBER-

BCDL

TOP CHORD 2x4 SPF No.2 *Except*

10.0

5-6: 2x4 SP 2400F 2.0E

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

WEBS SLIDER Left 2x4 SPF No.2 2-6-0

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

Max Horz 2=180(LC 9)

Max Uplift 2=-63(LC 12), 9=-38(LC 12) Max Grav 2=1410(LC 2), 9=1344(LC 2)

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

TOP CHORD 2-4=-2183/108, 4-5=-2386/151, 5-6=-2325/126, 6-7=-1086/84, 7-8=-1063/98,

8-9=-1286/62

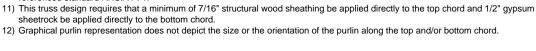
BOT CHORD 2-16=-146/1885, 11-13=-127/2128, 10-11=-99/2324

4-16=-339/72, 4-13=-20/362, 5-11=-9/313, 6-10=-1765/134, 7-10=-14/518, **WEBS**

8-10=-26/1071, 5-13=0/477, 13-16=-148/1863

NOTES-

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





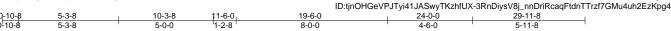
May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.







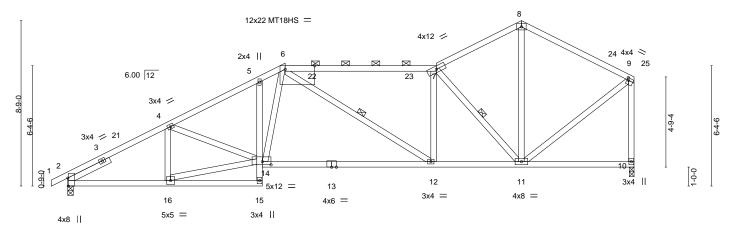
Scale = 1:60.9 4x6 =

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (4-11-0 max.): 6-7.

Rigid ceiling directly applied.

1 Row at midpt



			-6-0 ₁	19-6-0		24-0-0		29-11-8		
5-3	3-8	5-0-0 ['] 1	-2-8 '	8-0-0	ı	4-6-0	1	5-11-8	'	
Plate Offsets (X,Y) [2:0-5-1,E	dge], [6:1-6-12,0-2-4],	[9:0-1-0,0-1-8],	[14:0-5-8,0-2	2-0]						
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/	2-0-0 1.15 1.15 YES TPI2014	CSI. TC BC WB Matri	0.65 0.71 0.46 ix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.20 12-14 -0.45 12-14 0.08 10	l/defl >999 >789 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 154 lb	GRIP 197/144 197/144 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E *Except*

7-8,8-9: 2x4 SPF No.2

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

SLIDER Left 2x4 SPF No.2 2-6-0

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

Max Horz 2=180(LC 9)

Max Uplift 2=-65(LC 12), 10=-39(LC 12) Max Grav 2=1404(LC 2), 10=1341(LC 2)

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

TOP CHORD 2-4=-2176/115, 4-5=-2306/145, 5-6=-2173/156, 6-7=-1830/114, 7-8=-1051/92,

8-9=-1054/99, 9-10=-1278/65

2-16=-150/1880, 12-14=-107/1899, 11-12=-65/1825 **BOT CHORD**

4-16=-342/68, 14-16=-123/1876, 7-12=0/322, 7-11=-1457/116, 8-11=-36/590, **WEBS**

9-11=-26/1052, 6-14=-3/746

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- sheetrock be applied directly to the bottom chord. 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172666 2335469 D09 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:39 2020 Page 1

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

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-?pvz6eumgLEV0X?4Z1clLli8gHWm71pfMONo76zKpg2

Structural wood sheathing directly applied, except end verticals, and

6-12, 7-11

2-0-0 oc purlins (4-5-15 max.): 6-7.

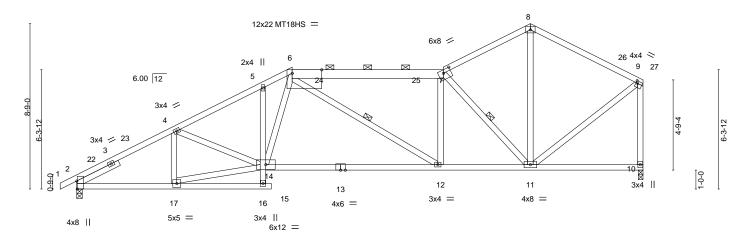
10-0-0 oc bracing: 14-16

1 Row at midpt

Rigid ceiling directly applied. Except:

5-1-12 4-10-4 1-4-12 8-0-0 4-7-4 5-11-8

> Scale = 1:60.9 4x6 =



H	5-1-12 5-1-12	10-0-0 4-10-4	11-4-12 1-4-12	19-4-12 8-0-0	+	24-0-0 4-7-4	-	29-11-8 5-11-8		
Plate Offsets (X,Y)	[2:0-5-1,Edge], [6:1-6	-12,0-2-4], [7:0-4-12,0-	2-0], [9:0-1-0,0)-1-8]						
Snow (Pf/Pg) 20.4/2 TCDL 1 BCLL	0.0 Plate 0.0 Lumb 0.0 Rep 9	CING- 2-0-0 Grip DOL 1.15 er DOL 1.15 Stress Incr YES IRC2018/TPI2014	CS TC BC WE Ma	0.61 0.82	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.22 12-14 -0.49 12-14 0.08 10	l/defl >999 >725 n/a	L/d 240 180 n/a	PLATES MT20 MT18HS Weight: 151 lb	GRIP 197/144 197/144 FT = 20%

BRACING-TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

6-7: 2x6 SPF No.2 **BOT CHORD** 2x4 SPF No.2

WEBS 2x4 SPF No.2 SLIDER Left 2x4 SPF No.2 2-6-0

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

Max Horz 2=180(LC 9)

Max Uplift 2=-63(LC 12), 10=-38(LC 12) Max Grav 2=1410(LC 2), 10=1344(LC 2)

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

TOP CHORD 2-4=-2182/110, 4-5=-2360/140, 5-6=-2261/157, 6-7=-1855/111, 7-8=-1050/90,

8-9=-1057/98, 9-10=-1281/64

2-17=-147/1888, 12-14=-102/1902, 11-12=-63/1849 **BOT CHORD**

7-12=0/324, 7-11=-1461/112, 8-11=-32/575, 9-11=-25/1057, 4-17=-373/66, **WEBS**

14-17=-119/1865, 4-14=0/261, 6-14=-13/790

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.





8-0-0

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-xC1kXJv0ByVDFq9TgSfmQjoTC5DebwTypisuB?zKpg0 24-0-0

6-3-4

Scale = 1:59.0 5x5 =

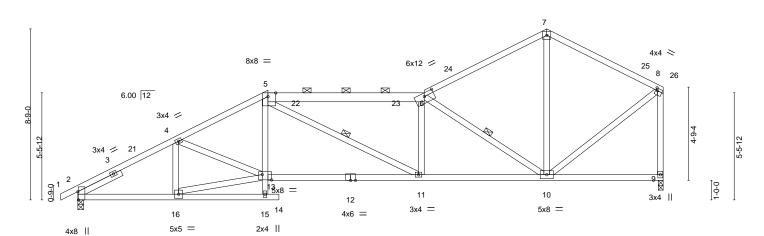
5-11-8

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (3-9-12 max.): 5-6.

Rigid ceiling directly applied.

1 Row at midpt



17-8-12 24-0-0 5-0-2 10,000 4-8-10 7-8-12 5-11-8 Plate Offsets (X,Y)--[2:0-5-1,Edge], [5:0-4-12,Edge], [6:0-6-0,0-2-1], [8:0-1-0,0-1-8], [13:0-5-12,0-3-4] LOADING (psf) SPACING-DEFL. in (loc) I/defl L/d **PLATES** GRIP 25.0Plate Grip DOL 1.15 TC 0.67 Vert(LL) -0.19 11-13 >999 240 MT20 197/144 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 ВС 0.73 Vert(CT) -0.42 11-13 >849 180 10.0 Rep Stress Incr YES WB 0.51 Horz(CT) 0.10 n/a n/a 0.0 Code IRC2018/TPI2014 Weight: 144 lb FT = 20%Matrix-AS

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TCLL (roof)

TCDL

BCLL

BCDL

TOP CHORD 2x4 SPF No.2 *Except*

10.0

-0-10-8 0-10-8

5-0-2

4-8-10

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

WEBS 2x4 SPF No.2 SLIDER Left 2x4 SPF No.2 2-6-0

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

Max Horz 2=180(LC 9)

Max Uplift 2=-61(LC 12), 9=-37(LC 12) Max Grav 2=1413(LC 2), 9=1345(LC 2)

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

TOP CHORD 2-4=-2191/106, 4-5=-2432/148, 5-6=-2355/124, 6-7=-1087/83, 7-8=-1066/97,

8-9=-1289/62

BOT CHORD 2-16=-144/1893, 11-13=-125/2150, 10-11=-99/2353

5-11=-11/328, 4-16=-374/73, 5-13=0/497, 13-16=-144/1888, 4-13=-9/371, 7-10=-12/509, **WEBS**

8-10=-26/1076, 6-10=-1780/133

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) 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.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 Design Valid for use only with release controlled in the controlle



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172668 D11 2335469 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:43 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

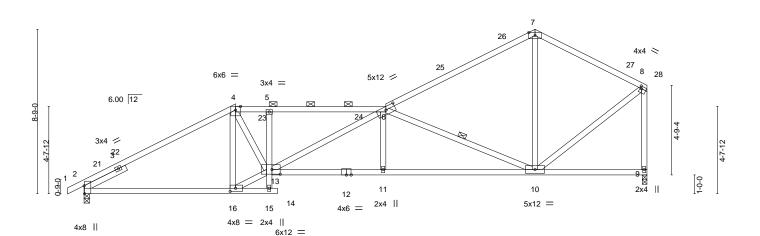
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-ub9Uy?xGjZlwV8JsothEV8toAutu3ktFG0L?GuzKpg_

4x8 =

Structural wood sheathing directly applied, except end verticals, and

Scale = 1:61.3

3-10-10 1-11-4 6-0-12 7-11-4 5-11-8



		10-0-0 1-11-4	16-0-12 6-0-12	24-0-0 7-11-4	29-11-8 5-11-8	
Plate Offsets (X,Y) [2:0-	5-1,Edge], [6:0-6-0,0-2-1], [8:0-1-0),0-1-8], [<u>13:0-5-4,0-3-0], [16:0-3-8,0</u>	-2-0]		
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	Plate Grip DOL 1. Lumber DOL 1.	0-0 .15 .15 ES	CSI. TC 0.77 BC 0.81 WB 0.84	DEFL. in (loc) Vert(LL) -0.20 11-13 Vert(CT) -0.37 10-11 Horz(CT) 0.13 9	l/defl L/d >999 240 >960 180 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI201	14	Matrix-AS	,		Weight: 133 lb FT = 20%

LUMBER-**BRACING-**

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

6-7: 2x4 SPF 1650F 1.5E 2-0-0 oc purlins (2-11-4 max.): 4-6. **BOT CHORD** 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied. Except:

WEBS 2x4 SPF No.2 6-0-0 oc bracing: 13-15 SLIDER Left 2x4 SPF No.2 2-6-0 **WEBS** 6-10

1 Row at midpt

REACTIONS. (size) 2=0-3-8, 9=0-3-0 Max Horz 2=180(LC 9)

Max Uplift 2=-63(LC 12), 9=-38(LC 12) Max Grav 2=1410(LC 2), 9=1344(LC 2)

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

TOP CHORD 2-4=-2050/113, 4-5=-2642/155, 5-6=-2705/163, 6-7=-1125/75, 7-8=-1075/96,

8-9=-1297/59

BOT CHORD 2-16=-124/1842, 5-13=-542/86, 11-13=-145/3017, 10-11=-148/3010 4-16=-801/91, 13-16=-113/1961, 4-13=-48/1657, 6-13=-456/0, 6-11=0/302, **WEBS**

6-10=-2304/172, 7-10=0/460, 8-10=-27/1103

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 9.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) 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.



May 4,2020

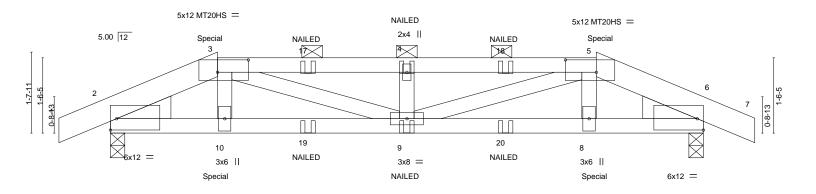


MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172669 D12 2335469 Hip Girder Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:45 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-qzGFNhyXFB?ekSTEvHjiaZy5HidLXmDYkKq6JmzKpfy 12-0-0 13-0-8 1-0-8 2-2-0 3-10-0 3-10-0 2-2-0 1-0-8

Scale = 1:23.3



	2-2-0	₁ 6-0)-O		9-10-0		1	12-0-0	
	2-2-0	3-1	0-0		3-10-0		I	2-2-0	
Plate Offsets (X,Y) [2:Ed	Plate Offsets (X,Y) [2:Edge,0-2-12], [2:0-7-2,0-0-10], [2:0-0-12,0-0-5], [3:0-7-8,0-3-0], [5:0-7-8,0-3-0], [6:0-0-12,0-0-5], [6:0-7-2,0-0-10], [6:Edge,0-2-12]								
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACIN Plate Gri Lumber Rep Stre Code IR	p DOL 1.15 DOL 1.15	CSI. TC 0.92 BC 0.55 WB 0.33 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	-0.25) I/defl 9 >633 9 >573 6 n/a	L/d 240 180 n/a	PLATES MT20 MT20HS Weight: 55 lb	GRIP 197/144 148/108 FT = 20%

LUMBER-**BRACING-**

TOP CHORD 2x6 SPF 2100F 1.8E *Except* TOP CHORD Structural wood sheathing directly applied or 4-0-12 oc purlins,

3-5: 2x4 SPF No.2

BOT CHORD 2x4 SP 2400F 2.0E 2-0-0 oc purlins (2-3-13 max.): 3-5. 2x4 SPF No.2 **BOT CHORD**

WEBS Rigid ceiling directly applied or 3-9-11 oc bracing WEDGE

Left: 2x6 SPF No.2, Right: 2x6 SPF No.2

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

Max Horz 2=-12(LC 13)

Max Uplift 2=-2566(LC 8), 6=-2566(LC 9) Max Grav 2=2814(LC 61), 6=2814(LC 60)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $2-3=-5291/4871,\ 3-4=-5331/4501,\ 4-5=-5331/4501,\ 5-6=-5291/4871$ **BOT CHORD** 2-10=-4317/4740, 9-10=-4318/4963, 8-9=-4323/4958, 6-8=-4322/4735 3-10=-46/1899, 3-9=-169/675, 4-9=-346/69, 5-9=-168/675, 5-8=-46/1899 **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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=2566 6=2566
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 382 lb down and 2197 lb up at 2-2-0, and 382 lb down and 2197 lb up at 9-10-0 on top chord, and 2212 lb down and 354 lb up at 2-2-0, and 2212 lb down and 354 lb up at 9-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



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Continued on page 2 LOAD CASE(S) Standard

🛕 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge
	D. ()				I41172669
2335469	D12	Hip Girder	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:46 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-IAqda1z90U7VMb1RT?Ex7mVG16zaGDThz_ZfsCzKpfx

LOAD CASE(S) Standard

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

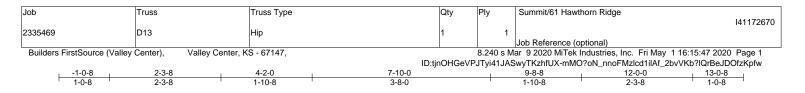
Uniform Loads (plf)

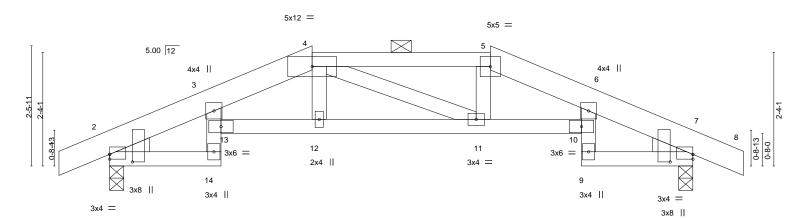
Vert: 1-3=-51, 3-5=-61, 5-7=-51, 11-14=-20

Concentrated Loads (lb)

Vert: 10=0(F) 9=0(F) 8=0(F) 19=0(F) 20=0(F)







2-3-8 2-3-8	4-2-0 1-10-8	7-10-0 3-8-0	9-8-8 1-10-8	12-0-0 2-3-8	
	[2:0-1-14,0-5-10], [7:0-0-0,0-1-3]		1-10-6	2-3-0	
TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. DEF TC 0.27 Vertt BC 0.50 Vertt WB 0.03 Horz Matrix-AS Horz	LL) -0.04 12 >999 CT) -0.07 11-12 >999	L/d PLATES 240 MT20 180 n/a Weight: 49 lb	GRIP 197/144 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied, except

2-0-0 oc purlins (5-5-11 max.): 4-5.

Rigid ceiling directly applied.

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*

4-5: 2x4 SPF No.2

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

WEDGE

Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

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

Max Horz 2=-20(LC 13)

Max Uplift 2=-23(LC 8), 7=-23(LC 9) Max Grav 2=613(LC 2), 7=613(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-696/18, 3-4=-1147/24, 4-5=-1098/27, 5-6=-1148/26, 6-7=-696/17 **BOT CHORD** 2-14=-0/522, 12-13=0/1087, 11-12=0/1097, 10-11=0/1088, 7-9=0/522

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



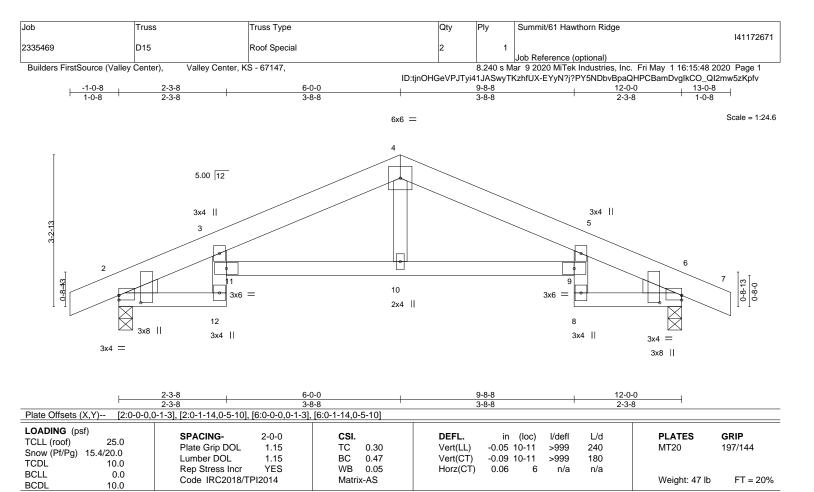
May 4,2020

Scale = 1:23.7



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.





BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

WEDGE

Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

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

Max Horz 2=28(LC 12)

Max Uplift 2=-22(LC 12), 6=-22(LC 13) Max Grav 2=613(LC 2), 6=613(LC 2)

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

TOP CHORD 2-3=-673/20, 3-4=-953/19, 4-5=-953/29, 5-6=-673/25 **BOT CHORD** 2-12=-18/495, 10-11=0/882, 9-10=0/882, 6-8=0/495

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

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172672 D16 2335469 Common Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:50 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Bx48QO0f4jdxqDLCirJtHcg5GjOoC6qHtcXt?_zKpft 13-0-8 1-0-8 6-0-0 6-0-0 1-0-8 Scale = 1:22.7 4x6 = 4 5.00 12 3x4 = 5 3x4 > 3 18 6 8 2x4 || 3x6 || 3x6 || 12-0-0

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

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

		1		1							
LOADING (psf) TCLL (roof) Snow (Pf/Pg) 1:	25.0 5.4/20.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI.	0.33	DEFL. Vert(LL)	in -0.04		l/defl >999	L/d 240	PLATES MT20
TCDL BCLL	10.0 0.0	Lumber DOL Rep Stress Incr Code IRC2018/Ti	1.15 YES	BC WB	0.28 0.05 x-AS	Vert(CT) Horz(CT)	-0.06 0.02	8-15 2	>999 n/a	180 n/a	Weight: 40 lb
BCDL	10.0	Code IRC2016/11	712014	IVIALIT	X-AS						Weight. 40 lb

LUMBER-

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

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=-28(LC 13)

Max Uplift 2=-22(LC 12), 6=-22(LC 13)

Max Grav 2=613(LC 2), 6=613(LC 2)

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

TOP CHORD 2-4=-664/33, 4-6=-664/33 BOT CHORD 2-8=0/613, 6-8=0/613

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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GRIP

197/144

FT = 20%



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172673 2335469 E01 Roof Special Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:50 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Bx48QO0f4jdxqDLCirJtHcg6qjLBC5PHtcXt?_zKpft 3-8-8 3-3-8 Scale = 1:20.1 2x4 || 5.00 12 3 4x4 = 0-6-3x4 5 3x4 3-3-8 LOADING (psf) SPACING-CSI. DEFL. I/defI L/d **PLATES** GRIP 2-0-0 (loc) TCLL (roof) 25.0 Plate Grip DOL Vert(LL) -0.12 197/144 1.15 TC 0.29 4-5 >663 240 MT20 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 ВС 0.51 Vert(CT) -0.24 4-5 >331 180 TCDI 10.0 Rep Stress Incr YES WB 0.08 Horz(CT) 0.00 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-AS Weight: 28 lb FT = 20% BCDL 10.0 LUMBER-BRACING-TOP CHORD

BOT CHORD

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

WEBS 2x4 SPF No.2

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

Max Horz 5=79(LC 11) Max Uplift 4=-19(LC 12), 5=-16(LC 12)

Max Grav 4=302(LC 2), 5=309(LC 30)

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

BOT CHORD 4-5=-47/269

WEBS 2-4=-296/63, 2-5=-291/52

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 3) Unbalanced snow loads have been considered for this design.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins: 1-2.

Rigid ceiling directly applied.

May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172674 2335469 E02 Monopitch Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:51 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-f7eWek1Hr0loSNwOGYq6qqCBu7iLxY7Q6GHQXQzKpfs -0-10-8 0-10-8 2-8-5 2-7-6 2-11-13 Scale = 1:24.5 2x4 || 5 5.00 12 2x4 > 2x4 || 1-0-0

BRACING-

TOP CHORD

BOT CHORD

LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d (loc) TCLL (roof) 25.0 Plate Grip DOL 1.15 Vert(LL) -0.09 240 TC 0.65 6-7 >999 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.38 Vert(CT) -0.21 6-7 >464 180 TCDI 10.0 Rep Stress Incr YES WB 0.12 Horz(CT) 0.08 6 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-AS BCDL 10.0

3x4 = 4x4 =

5.00 12

8 2x4

Weight: 29 lb FT = 20%

GRIP

197/144

PLATES

MT20

3x4 =

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

LUMBER-

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

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

0-8-0 0-3-10

Max Horz 8=107(LC 9) Max Uplift 6=-31(LC 12), 8=-18(LC 12) Max Grav 6=371(LC 17), 8=436(LC 2)

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

TOP CHORD 2-8=-411/51. 3-4=-501/52 **BOT CHORD** 3-7=0/489. 6-7=-56/489

WEBS 4-6=-545/81

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172675 2335469 E03 Half Hip Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:53 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-bWIG2Q3YNe?Whg4nNzsavFHUQwKaPSdjaamXblzKpfq -0-10-8 0-10-8 8-3-8 2-8-5 2-3-12 2-3-13 0-11-10 Scale = 1:22.8 4x4 = 2x4 || 5 6 2x4 < 5.00 12 2x4 || 8 0-8-0 3x4 = 2x4 | |2x4 0-3-10 3x4 = 10 5.00 12 4-7-10 0-11-10 Plate Offsets (X,Y)-- [9:0-2-4,0-2-13] LOADING (psf) DEFL. SPACING-2-0-0 CSI in (loc) I/defl L/d **PLATES** GRIP 25.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.78 Vert(LL) -0.16 8-13 >596 240 MT20 197/144 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 ВС 0.66 Vert(CT) -0.30 8-13 >318 180 TCDL 10.0 Rep Stress Incr YES WB 0.12 Horz(CT) 0.16 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 20% Weight: 31 lb Matrix-AS BCDL 10.0 LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied, except end verticals, and **BOT CHORD** 2x4 SPF No.2 2-0-0 oc purlins: 5-6. **WEBS BOT CHORD** Rigid ceiling directly applied.

2x4 SPF No.2

REACTIONS. (size) 7=0-3-8, 10=0-3-8 Max Horz 10=99(LC 9)

Max Uplift 7=-24(LC 12), 10=-30(LC 12) Max Grav 7=366(LC 32), 10=480(LC 32)

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

2-10=-480/30, 3-4=-565/54 TOP CHORD

BOT CHORD 3-8=-61/567 WFBS 4-8=-637/82

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- 8) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 10.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172676 2335469 E04 Half Hip Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:54 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-3iJeGm3A7x7NJqfzxgNpSSqdNKeM8t5soEV48lzKpfp

2-2-13

Scale = 1:19.6

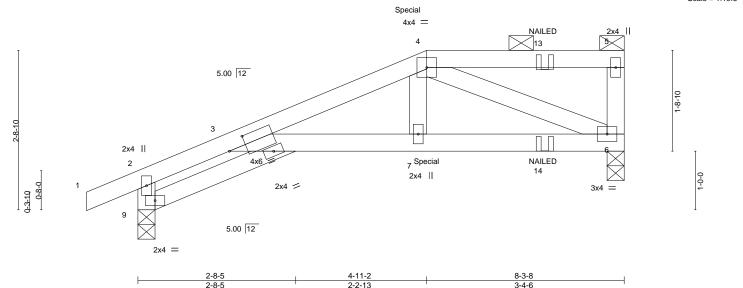


Plate Offsets (X,Y)-- [3:0-3-9,0-1-14] LOADING (psf) SPACING-2-0-0 CSI DEFL. in (loc) I/defl L/d **PLATES** GRIP 25.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.96 Vert(LL) -0.11 7-12 >863 240 MT20 197/144 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 ВС 0.81 Vert(CT) -0.18 7-12 >531 180 TCDL 10.0 Rep Stress Incr YES WB 0.23 Horz(CT) 0.15 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Weight: 29 lb FT = 20%Matrix-AS BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

2-0-0 oc purlins: 4-5.

Rigid ceiling directly applied.

LUMBER-

TOP CHORD 2x4 SPF No.2

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

REACTIONS. (size) 6=0-3-8, 9=0-3-8 Max Horz 9=69(LC 9)

Max Uplift 6=-59(LC 9), 9=-50(LC 12) Max Grav 6=533(LC 31), 9=564(LC 32)

0-10-8

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

2-9=-564/50, 3-4=-986/97 TOP CHORD **BOT CHORD** 3-7=-102/902, 6-7=-103/866 WFBS 4-7=0/350, 4-6=-947/104

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads
- 8) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 188 lb down and 96 lb up at 4-11-2 on top chord, and 93 lb down and 26 lb up at 4-11-2 on bottom chord. The design/selection of such connection device(s) is
- 15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



Structural wood sheathing directly applied, except end verticals, and

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CAARIGASE(S)geStandard

M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge
		L			I41172676
2335469	E04	Half Hip	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:54 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-3iJeGm3A7x7NJqfzxgNpSSqdNKeM8t5soEV48lzKpfp

LOAD CASE(S) Standard

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

Vert: 1-2=-51, 2-4=-51, 4-5=-61, 6-10=-20 Concentrated Loads (lb)

Vert: 7=-93(F) 4=-148(F) 13=-68(F) 14=-24(F)



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172677 2335469 J01 DIAGONAL HIP GIRDER Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:55 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Xut1T64ouFFDx_E9VOv2_gNtik5NtNR01uFegBzKpfo 1-4-6 3-0-4 3-0-4 Scale = 1:17.6 2x4 || 5 3.84 12 NAILED NAILED 12 3x4 = 3 14 15 NAILED NAILED 6 2x4 || 6-0-8 Plate Offsets (X,Y)-- [2:0-2-4,0-0-6]

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.60 BC 0.38 WB 0.03 Matrix-MP	DEFL. in Vert(LL) -0.06 Vert(CT) -0.12 Horz(CT) 0.03	7-10	l/defl >999 >565 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 21 lb	GRIP 197/144 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 2x4 SPF No.2 2-6-0

REACTIONS. (size) 2=0-4-9, 7=Mechanical

Max Horz 2=65(LC 8)

Max Uplift 2=-41(LC 8), 7=-26(LC 12) Max Grav 2=370(LC 2), 7=294(LC 17)

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

TOP CHORD 2-4=-300/45

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15. Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-51, 6-8=-20

Concentrated Loads (lb)

Vert: 14=-9(B) 15=0(F)



Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

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MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172678 2335469 J02 JACK-OPEN Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:56 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-?5RPhS5QfZN4Y8oM25QHXtvAi8V3cqA9GY_BCdzKpfn

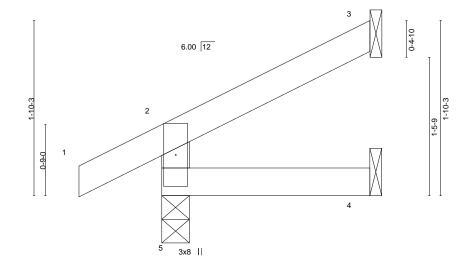
Structural wood sheathing directly applied or 2-2-6 oc purlins,

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

except end verticals.

2-2-6 2-2-6 0-10-8

Scale = 1:12.2



				1		2-2-6		1				
Snow (Pf/Pg) 15.4/20 TCDL 1	5.0 0.0 0.0 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.07 0.03 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 -0.00 -0.00	(loc) 5 4-5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
	0.0	Code IRC2018/TF	PI2014	Matri	x-MR						Weight: 7 lb	FT = 20%

2-2-6

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size)

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

Max Horz 5=33(LC 9)

Max Uplift 5=-2(LC 12), 3=-19(LC 12) Max Grav 5=187(LC 17), 3=56(LC 17), 4=36(LC 7)

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

5=0-3-8, 3=Mechanical, 4=Mechanical

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172679 2335469 J03 JACK-OPEN GIRDER Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:58 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-yTZ9677gBAeooRykAWSlcl?VZx9N4j_SjrTIHWzKpfl 0-10-8 3-11-6 1-11-14 Scale = 1:18.6 NAILED 5x5 = 2x4 | 5 6.00 12 3x4 / 0-6-0

5-11-4

BRACING-

TOP CHORD

BOT CHORD

WB

Matrix-MP

0.11

DEFL.

1 late Offsets (X, 1) [2.0-4-1,0	r-u-uj			
LOADING (psf) TCLL (roof) 25.0	SPACING- Plate Grip DOL	2-0-0 1.15	CSI. TC 0.18	
Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	Lumber DOL	1.15	BC 0.17	

Code IRC2018/TPI2014

Rep Stress Incr

3x6 ||

NO

(loc) Vert(LL) -0.01 7-10 >999 240 Vert(CT) -0.01 7-10 >999 180 Horz(CT) 0.00 n/a n/a

2-0-0 oc purlins: 4-5.

in

7 Special

2x4 ||

6

3x4 =

L/d

Structural wood sheathing directly applied or 5-11-4 oc purlins,

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

I/defl

MT20 197/144

PLATES

FT = 20% Weight: 26 lb

GRIP

LUMBER-

REACTIONS.

BCLL

BCDL

TOP CHORD 2x4 SPF No.2

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

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

0.0

10.0

Left 2x4 SPF No.2 2-6-0

(size) 2=0-3-8, 6=Mechanical Max Horz 2=57(LC 12)

Max Uplift 2=-23(LC 12), 6=-42(LC 9)

Max Grav 2=520(LC 32), 6=508(LC 31)

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

TOP CHORD 2-4=-428/28

BOT CHORD 2-7=-37/388 6-7=-37/362 **WEBS** 4-7=-6/410, 4-6=-587/60

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 331 lb down and 47 lb up at 3-11-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



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Continued on page 2





Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge
					I41172679
2335469	J03	JACK-OPEN GIRDER	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:58 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-yTZ9677gBAeooRykAWSlcl?VZx9N4j_SjrTIHWzKpfl

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-4=-51, 4-5=-61, 6-8=-20 Concentrated Loads (lb) Vert: 4=-93(B) 7=-331(B)



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172680 2335469 J04 HALF HIP Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:58 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-yTZ9677gBAeooRykAWSlcI?PFx7F4kfSjrTIHWzKpfl 0-10-8 Scale = 1:21.4 6.00 12

2-11-10 2-11-10 2-11-10 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL (roof) 25.0 Plate Grip DOL TC Vert(LL) -0.05 240 MT20 197/144 1.15 0.52 4-5 >999 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.30 Vert(CT) -0.11 4-5 >639 180 TCDI 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.04 3 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-AS Weight: 16 lb FT = 20% BCDL 10.0

LUMBER-TOP CHORD

WEBS

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

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

REACTIONS.

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

Max Horz 5=83(LC 12) Max Uplift 3=-51(LC 12)

Max Grav 3=207(LC 17), 5=336(LC 2), 4=107(LC 7)

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

TOP CHORD 2-5=-290/34

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60

3x8

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



May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172681 2335469 J05 JACK-OPEN Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:15:59 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Qg6XJT7JyUmfPbXwkEz_9WXa?LTUpAvcyVDrpyzKpfk

5-11-4

6.00 12

BRACING-

TOP CHORD

BOT CHORD

5-11-4 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** (loc) TCLL (roof) 25.0 4-5 Plate Grip DOL TC Vert(LL) -0.05 240 1.15 0.52 >999 MT20

Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.30 Vert(CT) -0.11 4-5 >639 180 TCDI 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.04 3 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-AS BCDL 10.0

Weight: 16 lb FT = 20%

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

GRIP

197/144

Scale = 1:22.3

LUMBER-

REACTIONS.

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

> 5=0-3-8, 3=Mechanical, 4=Mechanical (size)

Max Horz 5=80(LC 12) Max Uplift 3=-51(LC 12)

Max Grav 5=336(LC 2), 3=207(LC 17), 4=107(LC 7)

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

TOP CHORD 2-5=-290/34

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

0-10-8

3x8 ||

- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 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.



May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172682 2335469 J06 JACK-OPEN Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:00 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-usgwWp8xjnuW1l67HxUDhj4oDlogYdilB9yPLPzKpfj -0-10-8 0-10-8 2-8-5 3-2-15 Scale = 1:22.1 2x4 || 4 5 6.00 12 3x4 / 3 10 8 5x5 = 0-6-0 3x6 =

3-2-15

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

Plate Offsets (X,\	Y)	[8:0-2-8,Ed	ge]

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.36 BC 0.37 WB 0.03	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (lo -0.09 -0.15 0.06	c) l/defl 8 >743 8 >435 7 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	1.0.2(0.1)	0.00	,	.,,	Weight: 22 lb	FT = 20%

5.00 12

LUMBER-

REACTIONS.

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

2x4 SPF No.2

(size) 9=0-3-8, 7=Mechanical

Max Horz 9=83(LC 12) Max Uplift 7=-40(LC 12)

Max Grav 9=326(LC 2), 7=295(LC 17)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- 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) 7.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172683 2335469 J07 HALF HIP Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:01 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-M2EIk99ZU50NfvhJre?SExdzx97cH4xuPpiytrzKpfi

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

0-10-8 2-8-5

Scale = 1:22.2

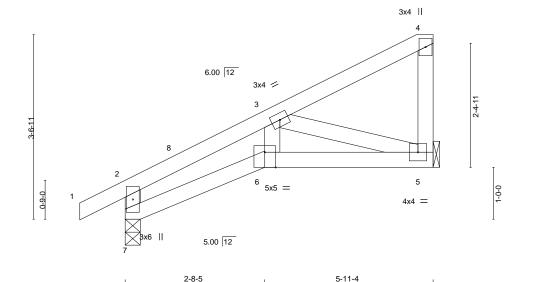


Plate Offsets (X,Y)-- [6:0-2-8,Edge] LOADING (psf) SPACING-DEFL. **PLATES** GRIP 2-0-0 CSI in (loc) I/defl L/d 25.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.36 Vert(LL) -0.09 6 >742 240 MT20 197/144 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.39 Vert(CT) -0.16 6 >437 180 TCDL 10.0 Rep Stress Incr YES WB 0.03 Horz(CT) 0.06 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 20% Weight: 23 lb Matrix-AS

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2 REACTIONS. (size) 5=Mechanical, 7=0-3-8

10.0

Max Horz 7=82(LC 12)

Max Uplift 5=-39(LC 12)

Max Grav 5=274(LC 17), 7=332(LC 2)

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

NOTES-

BCDL

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
- 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.



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Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172684 2335469 J08 Jack-Open Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:02 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-qFogxVABFP8EG3GVPMXhm89DSYYU0Xf2eTRVQHzKpfh 2-6-0 2-6-0 0-10-8 Scale = 1:11.4 5.00 12 2 0-8-0 3x4 = 2-6-0 LOADING (psf)

BCLL BCDL

Snow (Pf/Pg) 15.4/20.0

TCLL (roof)

TCDI

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

25.0

10.0

0.0

10.0

BRACING-

TOP CHORD BOT CHORD

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Structural wood sheathing directly applied or 2-6-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing

L/d

240

180

n/a

PLATES

Weight: 9 lb

MT20

GRIP

197/144

FT = 20%

I/defI

>999

>999

n/a

(loc)

2

-0.00

-0.00

0.00

REACTIONS.

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

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Horz 2=33(LC 12)

Max Uplift 3=-16(LC 12), 2=-11(LC 8)

Max Grav 3=65(LC 17), 2=187(LC 17), 4=50(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

2-0-0

1.15

1.15

YES

CSI.

0.06

0.03

0.00

TC

ВС

WB

Matrix-MP

- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 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.



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MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172685 2335469 J09 Half Hip Girder Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:03 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-IRM29rAp0iG5uDriz32wJMiJDypHI_HBt7B3yjzKpfg 3-11-6 0-10-8 2-8-5 1-3-1 1-11-14 Scale = 1:18.0 Special 4x4 2x4 || 6.00 12 3 4x4 || 2 6 6x6 = 2x4 || 1-0-0 3x4 = 0-3-12 5.00 12 1-11-14 Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [5:Edge,0-1-8], [6:Edge,0-1-8] LOADING (psf) SPACING-DEFL. CSI. in (loc) I/defl L/d **PLATES** GRIP 25.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.37 Vert(LL) 0.09 8 >776 240 MT20 197/144 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.38 Vert(CT) -0.09 8 >719 180

BCLL BCDL

TCDL

LUMBER-

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

WEBS 2x4 SPF No.2 REACTIONS.

10.0

10.0

0.0

(size) 6=Mechanical, 9=0-3-8

Max Horz 9=63(LC 9)

Max Uplift 6=-256(LC 9), 9=-129(LC 12) Max Grav 6=305(LC 2), 9=421(LC 32)

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

Rep Stress Incr

Code IRC2018/TPI2014

TOP CHORD 2-3=-367/236, 2-9=-437/183

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.

NO

WB

Matrix-MR

0.04

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.04

6

n/a

except end verticals, and 2-0-0 oc purlins: 4-5.

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

n/a

Structural wood sheathing directly applied or 5-11-4 oc purlins,

- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=256, 9=129.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 140 lb down and 382 lb up at 3-11-6 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



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FT = 20%

Weight: 19 lb



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge
					I41172685
2335469	J09	Half Hip Girder	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:03 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-IRM29rAp0iG5uDriz32wJMiJDypHI_HBt7B3yjzKpfg

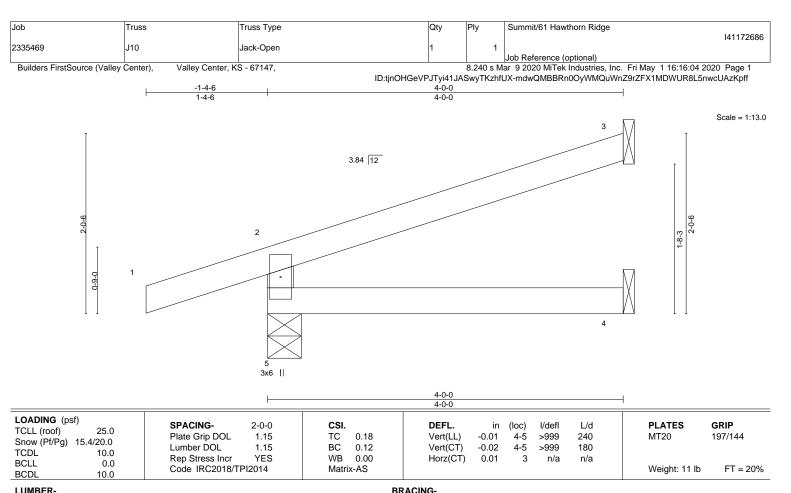
LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-51, 2-4=-51, 4-5=-61, 8-9=-20, 6-8=-20 Concentrated Loads (lb)

Vert: 4=-120(F)





TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

BOT CHORD WEBS 2x4 SPF No.2

> 5=0-4-9, 3=Mechanical, 4=Mechanical (size) Max Horz 5=44(LC 8) Max Uplift 5=-46(LC 8), 3=-27(LC 12)

Max Grav 5=312(LC 17), 3=117(LC 17), 4=69(LC 7)

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

TOP CHORD 2-5=-275/66

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



Structural wood sheathing directly applied, except end verticals.

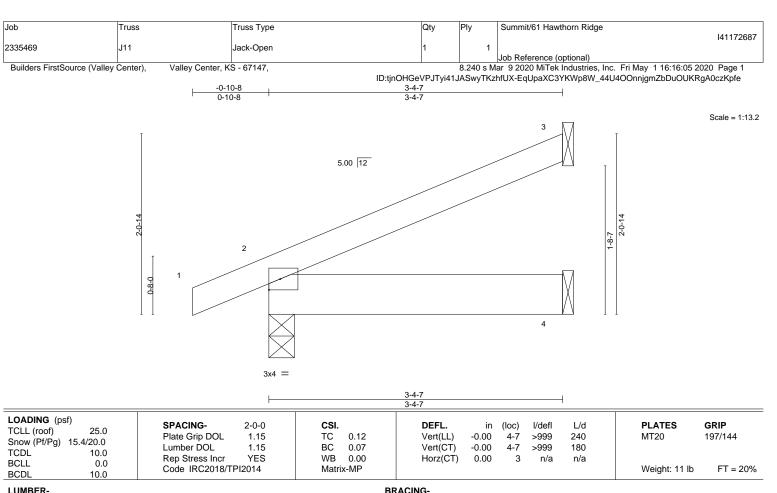
Rigid ceiling directly applied.

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MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.





TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size)

Max Horz 2=43(LC 12)

Max Uplift 3=-22(LC 12), 2=-8(LC 8)

Max Grav 3=95(LC 17), 2=231(LC 17), 4=68(LC 7)

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

3=Mechanical, 2=0-3-8, 4=Mechanical

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-4-7 oc purlins.

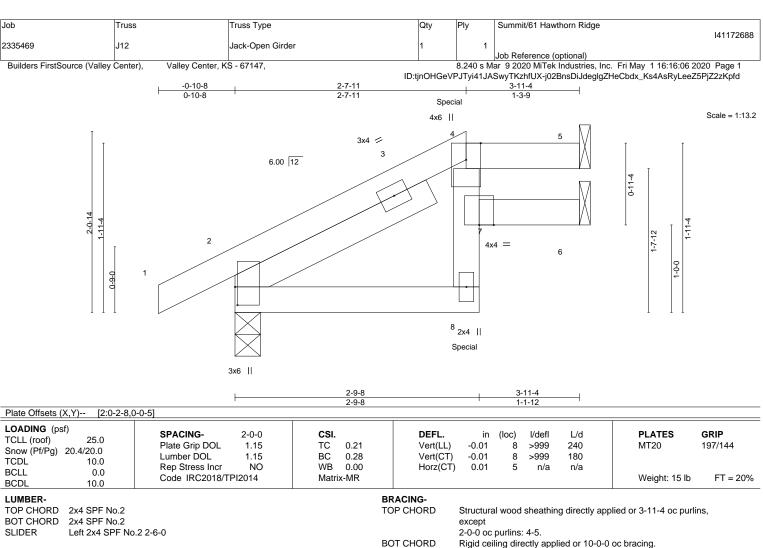
Rigid ceiling directly applied or 10-0-0 oc bracing

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MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.





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

Max Horz 2=40(LC 53)

Max Uplift 5=-13(LC 9), 2=-12(LC 12), 6=-10(LC 12) Max Grav 5=126(LC 31), 2=323(LC 32), 6=127(LC 32)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 119 lb down and 72 lb up at 2-7-11 on top chord, and 61 lb down at 2-7-12 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-4=-51, 4-5=-61, 8-9=-20, 6-7=-20

Concentrated Loads (lb)

Vert: 8=-47(B) 4=-85(B)



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Summit/61 Hawthorn Ridge 141172689 2335469 J13 Jack-Open Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:07 2020 Page 1

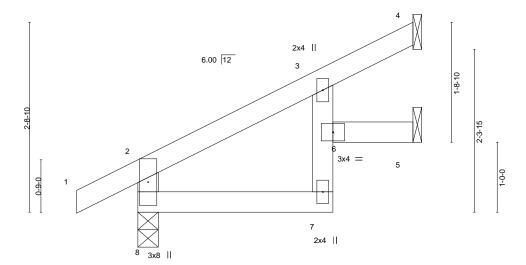
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-BCbZ?CDK4xmXNq8TCv6sTCt3BZEqhounol9G5VzKpfc

-0-10-8 0-10-8 2-9-8 1-1-12

Scale = 1:16.5



2-9-8	3-11-4	ı
2-9-8	1-1-12	٦_

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d
TCLL (roof) 25.0				in -0.01	(100)		240
Snow (Pf/Pg) 15.4/20.0		TC 0.12	Vert(LL)		О	>999	
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(CT)	-0.01	7	>999	180
	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.01	5	n/a	n/a
BCLL 0.0	Code IRC2018/TPI2014	Matrix-MR	(,				
BCDI 10.0	0006 INO2010/1F12014	IVIALI IA-IVIIX					

Weight: 13 lb FT = 20%

GRIP

197/144

PLATES

MT20

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins,

except end verticals.

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

REACTIONS.

8=0-3-8, 4=Mechanical, 5=Mechanical (size) Max Horz 8=55(LC 12) Max Uplift 4=-17(LC 12), 5=-10(LC 12)

Max Grav 8=276(LC 17), 4=96(LC 17), 5=77(LC 17)

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

TOP CHORD 2-8=-251/17

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 4,2020





Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172690 2335469 J14 Jack-Open Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:08 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-fO9xCYEyqFuN?_jflde50PPBNzbPQF8w0PuqdxzKpfb 0-10-8 3-11-4 Scale = 1:16.5 6.00 12 2-3-15 2

3-11-4 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL (roof) 25.0 Plate Grip DOL Vert(LL) -0.01 240 197/144 1.15 TC 0.22 4-5 >999 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.12 Vert(CT) -0.02 4-5 >999 180 TCDI 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.01 3 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-MR Weight: 11 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

2x4 SPF No.2 2x4 SPF No.2

BOT CHORD WEBS 2x4 SPF No.2

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

Max Horz 5=55(LC 12)

Max Uplift 3=-34(LC 12)

Max Grav 5=276(LC 17), 3=128(LC 17), 4=70(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-11-4 oc purlins,

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

except end verticals.

May 4,2020

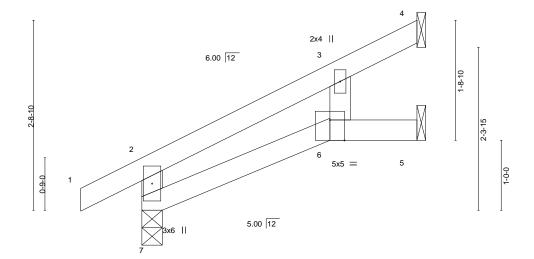


Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172691 2335469 J15 Jack-Open Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:09 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-7bjJPuFabY0Ec8lrJK9KYdyJYNrL9iu4F3eNANzKpfa

-0-10-8 0-10-8 2-8-5 1-2-15

Scale = 1:16.5



BRACING-TOP CHORD

BOT CHORD

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

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.39 BC 0.40 WB 0.03	Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.08 -0.73	(loc) 6-7 6-7 4	l/defl >639 >595 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	` ′					Weight: 12 lb	FT = 20%

LUMBER-

REACTIONS.

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

2x4 SPF No.2

(size) 4=Mechanical, 7=0-3-8, 5=Mechanical Max Horz 7=58(LC 12)

Max Uplift 4=-261(LC 12), 5=-10(LC 28)

Max Grav 4=136(LC 17), 7=276(LC 17), 5=232(LC 12)

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

3-6=-346/41 WEBS

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections
- 7) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb)
- 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.



Structural wood sheathing directly applied or 3-11-4 oc purlins.

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

May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172692 2335469 J16 Monopitch Girder Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:10 2020 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-bnHidEGCMs85EHt2t1gZ5qVYTnD2u7JDUjNxipzKpfZ

Structural wood sheathing directly applied or 3-11-4 oc purlins.

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

3-11-4

Scale = 1:16.5

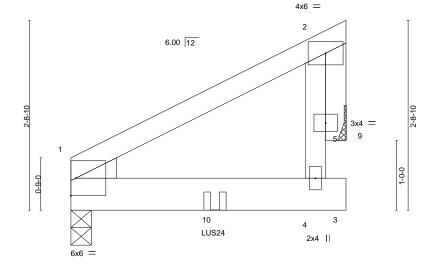


Plate Offsets (X,Y)-- [1:0-0-7,0-0-3], [1:0-5-8,0-0-7]

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.18 BC 0.30 WB 0.15	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 4-8 >999 240 Vert(CT) -0.02 4-8 >999 180 Horz(CT) 0.01 1 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	, ,	Weight: 17 lb FT = 20%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Left: 2x4 SPF No.2

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

Max Horz 1=45(LC 33)

Max Uplift 1=-7(LC 12), 9=-31(LC 12) Max Grav 1=318(LC 16), 9=312(LC 16)

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

WEBS 2-9=-324/33

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) 1, 9.
- 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) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 2-0-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
- 9) Fill all nail holes where hanger is in contact with lumber.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-51, 3-6=-20 Concentrated Loads (lb) Vert: 10=-289(F)

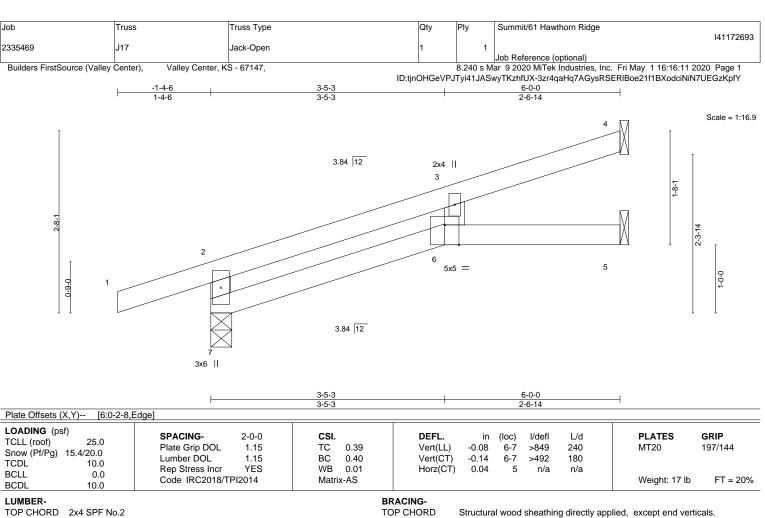


May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.





BOT CHORD

Rigid ceiling directly applied.

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

REACTIONS.

(size) 7=0-3-11, 4=Mechanical, 5=Mechanical

Max Horz 7=59(LC 8)

Max Uplift 7=-46(LC 8), 4=-25(LC 12), 5=-1(LC 12) Max Grav 7=380(LC 2), 4=162(LC 17), 5=100(LC 17)

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

TOP CHORD 2-7=-290/54

NOTES-

WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 4, 5.
- 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.



May 4,2020



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172694 2335469 J18 Jack-Open Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:12 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-XAPS2wHSuTOpTb1Q_Si1AFatKayVM37Wx1s1mizKpfX -0-10-8 2-3-8 0-10-8 1-7-12 Scale = 1:16.5 6.00 12 φ. 3x4 = 0-0-1 0-6-0 6.00 12 3x6 || 1-7-12 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL (roof) 25.0 Plate Grip DOL TC Vert(LL) -0.01 240 197/144 1.15 0.22 5 >999 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.11 Vert(CT) -0.02 >999 180 5 TCDI 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.01 3 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-MR Weight: 12 lb FT = 20% BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2

REACTIONS.

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

Max Horz 6=54(LC 12) Max Uplift 3=-35(LC 12)

Max Grav 6=276(LC 17), 3=129(LC 17), 4=70(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
- 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.



Structural wood sheathing directly applied or 3-11-4 oc purlins,

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

except end verticals.

May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172695 2335469 J19 Jack-Open Job Reference (optional)

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

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:12 2020 Page 1 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-XAPS2wHSuTOpTb1Q_Si1AFav0ayBM37Wx1s1mizKpfX

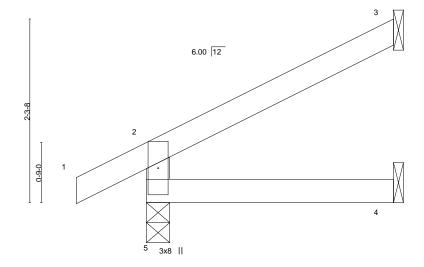
Structural wood sheathing directly applied or 3-1-0 oc purlins,

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

except end verticals.

3-1-0 3-1-0 0-10-8

Scale = 1:14.4



			3-1-0		1			
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 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 0.11 BC 0.07 WB 0.00	()	in (loc) -0.00 4-5 -0.01 4-5 0.00 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR					Weight: 9 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

3-1-0

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=44(LC 12)

Max Uplift 5=-1(LC 12), 3=-27(LC 12)

Max Grav 5=230(LC 17), 3=93(LC 17), 4=54(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 4,2020



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172696 2335469 J20 Jack-Open

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:13 2020 Page 1 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-?MzqFGl5fnXg5lcdYADGjT64S_JE4WNfAhcbJ8zKpfW

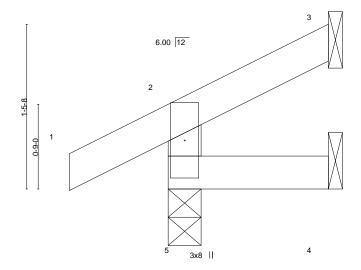
Structural wood sheathing directly applied or 1-5-0 oc purlins,

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

except end verticals.



Scale = 1:10.2



LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 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 0.07 BC 0.02 WB 0.00	DEFL. in (loc) I/defl L/d Vert(LL) 0.00 5 >999 240 Vert(CT) -0.00 5 >999 180 Horz(CT) -0.00 3 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR		Weight: 5 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

1-5-0

LUMBER-

REACTIONS.

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

BOT CHORD 2x4 SPF No.2

WEBS

5=0-3-8, 3=Mechanical, 4=Mechanical (size) Max Horz 5=27(LC 9)

Max Uplift 5=-3(LC 12), 3=-12(LC 12)

Max Grav 5=158(LC 17), 3=22(LC 17), 4=22(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 4,2020



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172697 2335469 J21 Diagonal Hip Girder Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:14 2020 Page 1 Builders FirstSource (Valley Center) Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-UYWCTcJjQ5fXjvAp6tkVFgfC9OcwpyepPLL8rbzKpfV 1-4-6 3-8-9 3-8-9

> Scale = 1:20.3 2x4 ||

> > GRIP 197/144

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

FT = 20%

NAILED 17 NAILED 3.84 12 16 3x4 = NAILED NAII FD 3x4 = 18 19 20 21 9 8 NAILED NAILED NAILED NAILED 2x4 || 3x6 = 73x6 ||

BRACING-

TOP CHORD

BOT CHORD

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

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.27 BC 0.24	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 8-9 >999 240 Vert(CT) -0.02 8-9 >999 180	PLATES MT20
TCDL 10.0 BCLL 0.0	Rep Stress Incr NO	WB 0.13	Horz(CT) 0.00 8 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP		Weight: 30 lb

LUMBER-

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

SLIDER Left 2x4 SPF No.2 2-6-0

REACTIONS. (size) 2=0-4-9, 8=Mechanical

Max Horz 2=77(LC 8)

Max Uplift 2=-45(LC 8), 8=-39(LC 12) Max Grav 2=444(LC 2), 8=446(LC 17)

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

TOP CHORD 2-4=-447/13

2-9=-51/440, 8-9=-51/440 BOT CHORD

WEBS 4-8=-488/56

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-6=-51, 7-10=-20

Concentrated Loads (lb) Vert: 16=-27(B) 17=-77(F) 18=1(B) 19=-9(F) 20=-6(B) 21=-55(F)

OF MISSO SCOTT M. **SEVIER** NUMBER PE-2001018807 N SSIONAL

May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172698 2335469 J22 Jack-Open Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:15 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-yl4agxKLBOnOK3l?gbGkouCNkoyLYQtyd?5hN1zKpfU 4-10-13 0-10-8 4-10-13 Scale = 1:16.3 5.00 12 0-8-0 4x4 = 4-10-13 4-10-13 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL (roof) 25.0 Plate Grip DOL TC Vert(LL) -0.01 240 MT20 197/144 1.15 0.28 4-7 >999 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.17 Vert(CT) -0.02 4-7 >999 180 TCDI 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.01 3 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-AS Weight: 16 lb FT = 20% BCDL 10.0

BRACING-

Structural wood sheathing directly applied.

Rigid ceiling directly applied

LUMBER-

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

TOP CHORD BOT CHORD

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

Max Horz 2=59(LC 12) Max Uplift 3=-33(LC 12), 2=-6(LC 12)

Max Grav 3=148(LC 17), 2=285(LC 2), 4=100(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172699 2335469 J23 Jack-Open Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:16 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-QxeztHKzyivFyCKCDInzL5kWkCHZHtc6sfqFvTzKpfT -0-10-8 0-10-8 6-0-0 6-0-0 Scale = 1:20.2 2x4 || 3 5.00 12 6 4x6 2x4 П 6-0-0 Plate Offsets (X,Y)-- [2:0-0-0,0-1-2]

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.39 BC 0.23 WB 0.03 Matrix-AS	DEFL. in Vert(LL) -0.02 Vert(CT) -0.04 Horz(CT) 0.01	(loc) 6-9 6-9 2	I/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 23 lb	GRIP 197/144 FT = 20%
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BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

WEBS WEDGE

Left: 2x4 SP No.3

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

Max Horz 2=71(LC 12)

Max Uplift 2=-6(LC 12), 6=-31(LC 12) Max Grav 2=323(LC 2), 6=300(LC 17)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172700 2335469 J24 Jack-Open Girder Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

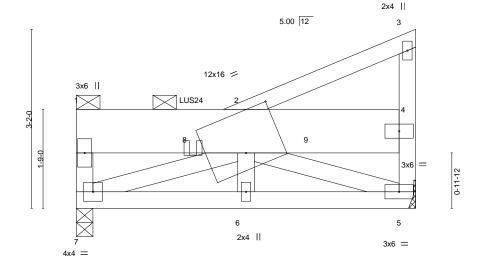
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:17 2020 Page 1 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-u7CL5dLbj016aMvOn0ICtJHkKbcV0HDF5JaoSvzKpfS

Structural wood sheathing directly applied or 6-0-0 oc purlins, except

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

3-0-0 3-0-0

Scale = 1:20.4



	3-0-0	6-0-0
Ī	3-0-0	3-0-0

		3-0-0	3-0-0		
Plate Offsets (X,Y) [2:0-8-0,	0-8-8]				
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 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 0.21 BC 0.32 WB 0.20	DEFL. in (loc) Vert(LL) -0.01 6 Vert(CT) -0.02 6 Horz(CT) 0.01 5	l/defl L/d >999 240 >999 180 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP			Weight: 44 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

2-0-0 oc purlins: 1-4.

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF No.2 *Except*

1-4: 2x10 SP 2400F 2.0E

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

(size) 5=Mechanical, 7=0-3-8

Max Horz 7=40(LC 12)

Max Uplift 5=-64(LC 12), 7=-22(LC 12) Max Grav 5=1069(LC 2), 7=1018(LC 2)

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

BOT CHORD 6-7=-47/997, 5-6=-47/998

WFBS 1-7=-554/28, 4-5=-618/53, 2-5=-1066/50, 2-7=-1085/10

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 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) 5, 7.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) 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-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent at 2-0-12 from the left end to connect truss(es) to front face of top chord.
- 12) Fill all nail holes where hanger is in contact with lumber.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge
					I41172700
2335469	J24	Jack-Open Girder	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center),

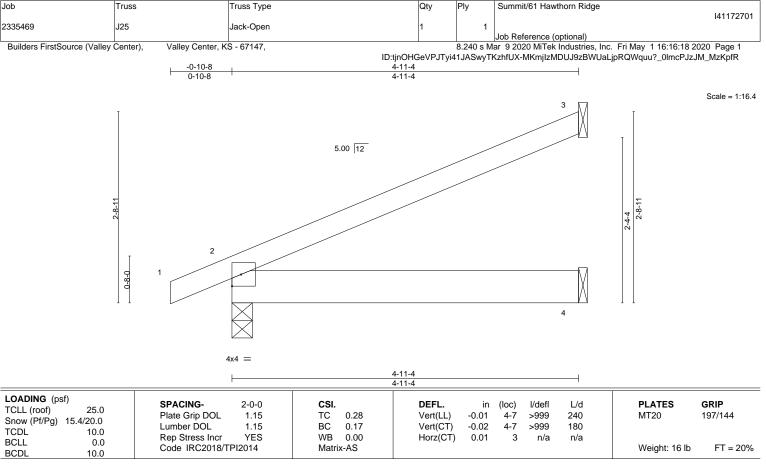
Valley Center, KS - 67147,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:17 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-u7CL5dLbj016aMvOn0ICtJHkKbcV0HDF5JaoSvzKpfS

LOAD CASE(S) Standard

Uniform Loads (plf) Vert: 2-3=-51, 5-7=-20, 1-2=-61 Concentrated Loads (lb) Vert: 8=-638(F) 9=-678(F)





LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied.

Rigid ceiling directly applied

REACTIONS.

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

Max Horz 2=59(LC 12)

Max Uplift 3=-34(LC 12), 2=-6(LC 12)

Max Grav 3=149(LC 17), 2=286(LC 2), 4=101(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172702 2335469 J26 Jack-Open Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:19 2020 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-qWK5WJNrFdHqpg3mvQKgykM6uPMRUDsYYd3vWozKpfQ

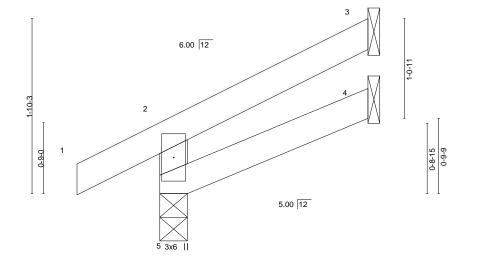
Structural wood sheathing directly applied or 2-2-6 oc purlins,

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

except end verticals.

2-2-6 2-2-6 0-10-8

Scale = 1:12.2



LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 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 0.07 BC 0.03 WB 0.00	Vert(LL) -0.00 5	l/defl L/d >999 240 >999 180 n/a n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-MR			Weight: 7 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

2x4 SPF No.2 2x4 SPF No.2

BOT CHORD WEBS 2x4 SPF No.2

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

Max Horz 5=34(LC 9) Max Uplift 5=-1(LC 12), 3=-20(LC 12)

Max Grav 5=187(LC 17), 3=56(LC 17), 4=36(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge I41172703 2335469 J27 JACK-OPEN

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

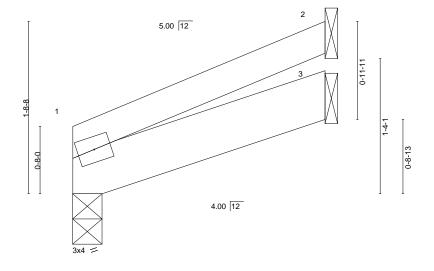
Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:20 2020 Page 1 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-liuTjfOU0xPgRqezS8rvVxvlypiPDg6hnHoS2EzKpfP

Structural wood sheathing directly applied or 2-6-0 oc purlins.

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

2-6-0

Scale = 1:11.4



LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.05 BC 0.05 WB 0.00	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 6 >999 240 Vert(CT) -0.00 6 >999 180 Horz(CT) 0.00 1 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	, ,	Weight: 8 lb FT = 20%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF No.2 BOT CHORD

2x6 SPF No.2

(size) 1=0-3-8, 2=Mechanical, 3=Mechanical

Max Horz 1=26(LC 12)

Max Uplift 2=-16(LC 12)

Max Grav 1=110(LC 2), 2=63(LC 2), 3=52(LC 7)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for 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) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- 8) This truss 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 Summit/61 Hawthorn Ridge 141172704 2335469 J28 MONOPITCH Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:20 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-liuTjfOU0xPgRqezS8rvVxvFPpgGDg6hnHoS2EzKpfP 4-10-13 3-3-8 3-3-8 1-7-5 Scale = 1:16.3 3x4 5.00 12 3 4x4 = 1-0-0 3x4 || 0-8-0 4.00 12 3x4 = LOADING (psf)

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

I/defI

>999

>999

n/a

(loc)

4-7

4-7

3

Rigid ceiling directly applied.

-0.01

-0.02

0.00

L/d

240

180

n/a

Structural wood sheathing directly applied, except end verticals.

PLATES

Weight: 16 lb

MT20

GRIP

197/144

FT = 20%

LUMBER-

TCLL (roof)

TCDI

BCLL

BCDL

TOP CHORD 2x4 SPF No.2

25.0

10.0

0.0

10.0

2x4 SPF No.2 *Except* BOT CHORD 1-4: 2x6 SPF No.2 **WEBS** 2x4 SPF No.2

Snow (Pf/Pg) 15.4/20.0

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

Max Horz 1=53(LC 9)

Max Uplift 1=-4(LC 12), 3=-20(LC 12) Max Grav 1=229(LC 16), 3=229(LC 16)

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

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

2-0-0

1.15

1.15

YES

CSI.

TC

ВС

WB

Matrix-AS

0.22

0.18

0.00

- 3) Unbalanced snow loads have been considered for this design.
- 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) 1 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) 1, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172705 2335469 J29 Jack-Open Girder Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:22 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-F5?E8LPkXYfOg7oLaZuNaM_RicLyha4_EaHZ77zKpfN 6-0-8 1-4-6 4-0-10 1-11-13 Scale = 1:17.0 3x4 II 0-4-2 2x4 || 3.84 12 NAILED 3 NAILED -8-3 10 2-4-1 2x4 || NAILED NAILED 6 5x5 = 0-0-I 0-6-0 2x4 || 3.20 12 4-0-10 6-0-8 4-0-10 Plate Offsets (X,Y)-- [4:0-2-13,0-0-8] LOADING (psf) SPACING-2-0-0 CSI DEFL. in (loc) I/defl L/d **PLATES** GRIP 25.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.87 Vert(LL) -0.16 >430 240 MT20 197/144 15.4/20.0 Snow (Pf/Pg) Lumber DOL 1.15 ВС 0.17 Vert(CT) -0.25>274 180 TCDL 10.0 Rep Stress Incr NO WB 0.03 Horz(CT) 0.07 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 20% Matrix-MP Weight: 18 lb BCDL 10.0 **BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2

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

REACTIONS. (size) 8=0-3-11, 6=Mechanical, 4=Mechanical

Max Horz 8=60(LC 34) Max Uplift 8=-62(LC 8), 6=-12(LC 28), 4=-347(LC 8) Max Grav 8=389(LC 2), 6=363(LC 34), 4=192(LC 17)

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

TOP CHORD 2-8=-346/95 WEBS 4-6=-360/22

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) N/A
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Bearing at joint(s) 8 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) 8, 6 except (it=lb) 4=347
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 13) "NAILED" indicates 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 14) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-51, 2-4=-51, 7-8=-20, 5-7=-20



Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals

May 4,2020







Job	Truss	Truss Type	Qty	Ply	Summit/61 Hawthorn Ridge
					l41172705
2335469	J29	Jack-Open Girder	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

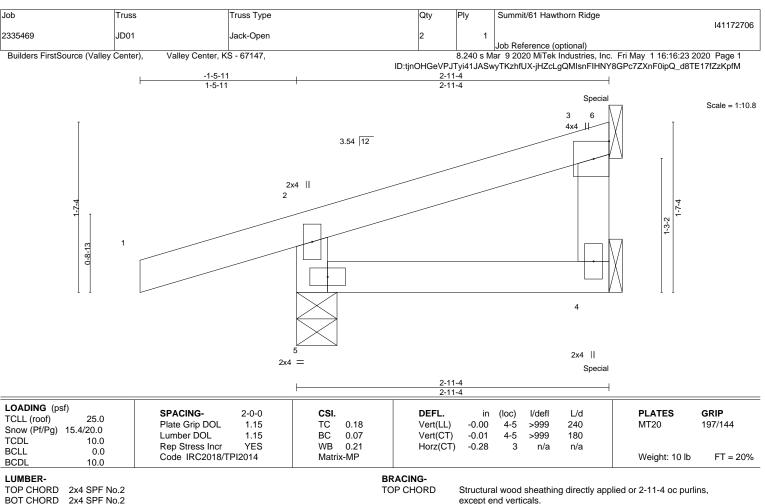
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:22 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-F5?E8LPkXYfOg7oLaZuNaM_RicLyha4_EaHZ77zKpfN

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 12=-17(F) 13=0(B)







BOT CHORD

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

BOT CHORD WEBS 2x4 SPF No.2

REACTIONS. (size) 5=0-4-9, 3=Mechanical, 4=Mechanical

Max Horz 5=33(LC 8)

Max Uplift 5=-70(LC 8), 3=-2195(LC 8), 4=-343(LC 28) Max Grav 5=273(LC 17), 3=370(LC 46), 4=2216(LC 30)

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

WEBS 3-4=-2195/354

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 3=2195, 4=343.
- 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 32 lb down and 17 lb up at 2-11-4 on top chord, and 10 lb down and 5 lb up at 2-9-8 on bottom 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

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

Vert: 1-2=-51, 2-3=-51, 4-5=-20

Concentrated Loads (lb) Vert: 3=-0(F) 4=1(F)

OF MISS SCOTT M. SEVIER NUMBER PE-2001018807

May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172707 2335469 JD02 Jack-Open Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:23 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-jHZcLgQMIsnFIHNY8GPc7ZXoZ0jTQ1r8TE17fZzKpfM 1-10-3 1-0-8 1-10-3 Scale = 1:10.4 5.00 12 2x4 || 2 -6-1 1-6-1 0-3-10 2x4 = 1-10-3 1-10-3 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc)

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

-0.00

-0.00

-0.00

5 >999

5

3

except end verticals.

>999

n/a

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

240

180

n/a

Structural wood sheathing directly applied or 1-10-3 oc purlins,

LUMBER-

TCLL (roof)

TCDI

BCLL

BCDL

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

25.0

10.0

0.0

10.0

WEBS 2x4 SPF No.2

Snow (Pf/Pg) 15.4/20.0

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8 Max Horz 5=28(LC 9)

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Uplift 3=-14(LC 12), 5=-21(LC 8) Max Grav 3=37(LC 17), 4=29(LC 7), 5=190(LC 17)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

1.15

1.15

YES

TC

ВС

WB

Matrix-MR

0.09

0.02

0.00

- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5.
- 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.



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197/144

FT = 20%

MT20

Weight: 6 lb



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172708 2335469 JD03 Jack-Open Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:24 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-BT7_Z0R_39v6vRxkh_wrfn4yHQ3e9U5HiumgB?zKpfL 2-2-0 2-2-0 1-0-8 Scale = 1:11.1 5.00 12 2x4 || 2 0-3-10 2x4 = LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL (roof) 25.0

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

-0.00

-0.00

-0.00

5 >999

3

>999

n/a

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

4-5

except end verticals.

240

180

n/a

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

LUMBER-

TCDI

BCLL

BCDL

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

10.0

0.0

10.0

BOT CHORD WEBS 2x4 SPF No.2

Snow (Pf/Pg) 15.4/20.0

REACTIONS.

3=Mechanical, 4=Mechanical, 5=0-3-8 (size) Max Horz 5=30(LC 9)

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Uplift 3=-16(LC 12), 5=-19(LC 8)

Max Grav 3=49(LC 17), 4=35(LC 7), 5=201(LC 17)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

1.15

1.15

YES

TC

ВС

WB

Matrix-MR

0.10

0.03

0.00

- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5.
- 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.



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197/144

FT = 20%

MT20

Weight: 7 lb

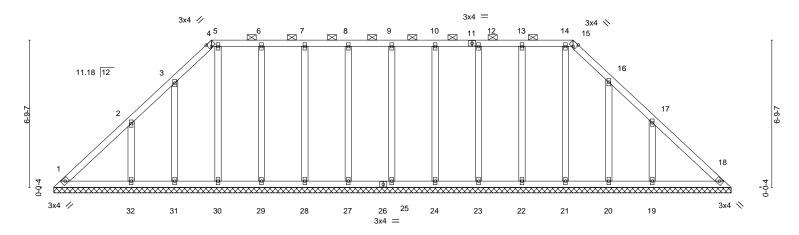


M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.





Scale = 1:53.1



0-0-4 0-0-4 31-2-9

Plate Offsets (X,Y) [4:0-1-10	,Eagej, [15:0-1-10,Eagej			
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 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 0.12 BC 0.07 WB 0.11	DEFL. in (loc) l/defl L/d PLATES Vert(LL) n/a - n/a 999 MT20 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 18 n/a n/a	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Weight: 157 lb	FT = 20%

LUMBER-**BRACING-**

TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except **BOT CHORD** 2x4 SPF No.2 2-0-0 oc purlins (6-0-0 max.): 4-15.

OTHERS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing

REACTIONS. All bearings 31-2-5. (lb) -

Max Horz 1=-122(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 32, 31, 30, 29, 28, 27, 25, 24, 23, 22, 20, 19

Max Grav All reactions 250 lb or less at joint(s) 1, 18, 31, 30, 29, 28, 27, 25, 24, 23, 22, 21, 20 except

32=307(LC 19), 19=312(LC 20)

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

NOTES-

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



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172710 2335469 LG2 GABLE

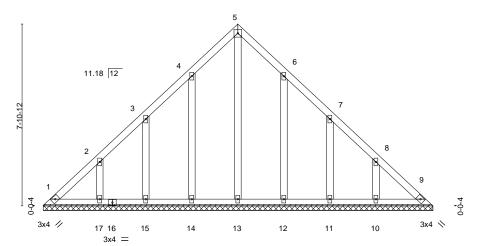
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:27 2020 Page 1 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-b2p7B2TtM4HhmvgJN6TYHPiU8d5HMqAjOs?KoKzKpfl

8-5-11 8-5-11

> Scale = 1:50.0 4x4 =



16-11-6

Plate Offsets (X,Y)-- [6:0-0-0,0-0-0], [7:0-0-0,0-0-0], [8:0-0-0,0-0-0]

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 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 0.06 BC 0.03 WB 0.11	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 9	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 78 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2 **BRACING-**

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS. All bearings 16-11-2.

(lb) -Max Horz 1=-142(LC 6)

Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 17, 15, 14, 12, 11, 10 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 17, 15, 14, 13, 12, 11, 10

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 17, 15, 14, 12. 11. 10.
- 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.



May 4,2020



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172711 2335469 LG3 GABLE Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:29 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-XRwtckV7uiYP0CqhUXW0MqnnZRIOqj20rAURtDzKpfG 23-0-6 13-4-2 3x4 // 3x4 || Scale = 1:54.4 1314 区 12 🖂 8 10 11 6 \bowtie \boxtimes \boxtimes \bowtie \bowtie 5 11.18 12 X M Ø X Ø

23-0-6

22

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

4-0-0

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.25 BC 0.12 WB 0.15	Vert(LL) n	in (loc) n/a - n/a - 00 15	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	H012(C1) -0.0	00 15	n/a	n/a	Weight: 153 lb	FT = 20%

21

20

19

18

17

1615

3x4 ||

LUMBER-**BRACING-**

26

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

25 24

3x4 =

23

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-14. Rigid ceiling directly applied or 10-0-0 oc bracing. 14-15, 7-22, 8-21, 9-20, 10-19, 11-18, 1 Row at midpt 12-17, 13-16

REACTIONS. All bearings 23-0-2.

Max Horz 1=253(LC 7) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 27, 26, 25, 23, 22, 21, 20, 19, 18, 17, 16 except

15=-113(LC 9)

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

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

27

TOP CHORD 1-2=-265/173

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 27, 26, 25, 23, 22, 21, 20, 19, 18, 17, 16 except (jt=lb) 15=113.
- 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.



May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172712 2335469 LG4 GABLE Job Reference (optional)
8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:30 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-0dUFp4VIf?gGdMPu2E1Fv2K_?r6tZAQA4qE_PfzKpfF 13-5-11 8-5-11 5-0-0

> Scale = 1:46.2 3x4 =

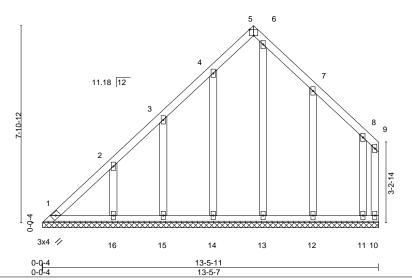


Plate Offsets (X,Y)-- [5:0-2-0,Edge] LOADING (psf) SPACING-DEFL. **PLATES** GRIP 2-0-0 CSI in (loc) I/defI L/d 25.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.08 Vert(LL) 999 MT20 197/144 n/a n/a Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.04 Vert(CT) n/a n/a 999 **TCDL** 10.0 Rep Stress Incr YES WB 0.14 Horz(CT) -0.00 10 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 20% Weight: 70 lb Matrix-S 10.0 BCDL

LUMBER-**BRACING-**

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

REACTIONS. All bearings 13-5-7.

Max Horz 1=173(LC 7) (lb) -

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 16, 15, 14, 13, 12, 11 All reactions 250 lb or less at joint(s) 1, 10, 16, 15, 14, 13, 12, 11

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

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 16, 15, 14,
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge I41172713 2335469 LG5 GABLE Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:31 2020 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Uq2e1QWNQJo7FW_4cyYUSFsADFS8le4JJUzYx6zKpfE

5-6-10

Scale = 1:41.4

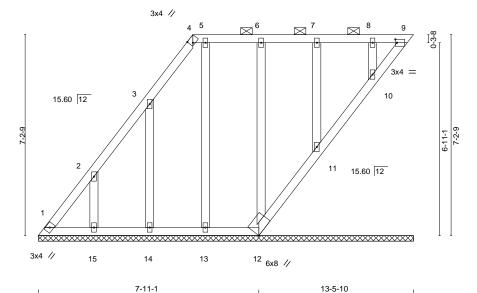


Plate Offsets (X,Y)-- [4:0-1-4,Edge], [9:0-0-12,0-1-8]

TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.05 BC 0.04 WB 0.11	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - - 9	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	, ,					Weight: 67 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2 **BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 4-9.

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

REACTIONS. All bearings 13-5-10.

(lb) -Max Horz 1=178(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 12, 14, 11, 10 except 15=-102(LC 10)

Max Grav All reactions 250 lb or less at joint(s) 1, 9, 12, 15, 14, 13, 11, 10

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 12, 14, 11, 10 except (jt=lb) 15=102.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 10.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



May 4,2020



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172714 2335469 LG6 GABLE Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:32 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:tjnOHGeVPJTyi41JASwyTKzhfUX-y0c0EIX?BdwztgZG9f3j_TPLveoO14nSY8j5UYzKpfD 7-11-1

3x4 // 6 5 \square \boxtimes 15.60 12 15.60 12 3x4 / 17 16 15

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

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 20.4/20.0 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 0.05 BC 0.04 WB 0.15	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 10 n/a n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 84 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

2x4 SPF No.2

REACTIONS. All bearings 15-4-9. (lb) -Max Horz 1=241(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 14, 17, 15, 13, 12, 11 except 16=-101(LC 10)

7-11-1

Max Grav All reactions 250 lb or less at joint(s) 1, 10, 14, 17, 16, 15, 13, 12, 11

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

TOP CHORD 1-2=-289/152

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 14, 17, 15, 13, 12, 11 except (jt=lb) 16=101.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10, 13, 12, 11.
- 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.



Structural wood sheathing directly applied or 6-0-0 oc purlins, except

6-14

2-0-0 oc purlins (6-0-0 max.): 5-10.

1 Row at midpt

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

May 4,2020

Scale = 1:53.1



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge I41172715 2335469 LG7 GABLE Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:33 2020 Page 1 Valley Center, KS - 67147,

Builders FirstSource (Valley Center),

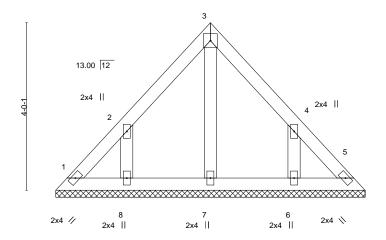
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-QCAOS5Ydyw2qVq7TjNayXgyWn28nmZ1cmoSe0_zKpfC

7-4-12 3-8-6 3-8-6

> Scale = 1:27.5 4x4 =

> > Structural wood sheathing directly applied or 6-0-0 oc purlins.

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



7-4-12

BRACING-TOP CHORD

BOT CHORD

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 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 0.05 BC 0.03 WB 0.02	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) n/a - n/a - 0.00 5	I/defI n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 27 lb	FT = 2

LUMBER-

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

REACTIONS. All bearings 7-4-12.

(lb) - Max Horz 1=70(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



= 20%



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge I41172716 R1 Flat Girder 2335469 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:34 2020 Page 1 Builders FirstSource (Valley Center) Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-uPkmfRYGjEAh6zifH45B3uUccSPVV_jl?SCCYQzKpfB 3-0-12 3-0-12 Scale = 1:14.1 4x8 2 ⁵2x4 || LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL (roof) 25.0 Plate Grip DOL 1.15 Vert(LL) -0.01 197/144 TC 0.36 5 >999 240 MT20

LUMBER-

TCDI

BCLL

BCDL

WEBS

Snow (Pf/Pg) 20.4/20.0

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

10.0

0.0

10.0

REACTIONS.

6=0-3-8, 4=0-3-8 (size) Max Horz 6=42(LC 29) Max Uplift 6=-98(LC 6), 4=-78(LC 7) Max Grav 6=2407(LC 1), 4=1923(LC 1)

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

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

1.15

NO

BC

WB

Matrix-MP

0.31

0.18

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

-0.02

0.01

5 >999

4

n/a

2-0-0 oc purlins: 1-3, except end verticals.

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

180

n/a

TOP CHORD 1-6=-1115/54, 3-4=-631/33 **BOT CHORD** 5-6=-103/2242, 4-5=-103/2242 **WEBS** 2-4=-2536/107, 2-6=-2536/109

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 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) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1339 lb down and 65 lb up at 0-9-0, and 1287 lb down and 63 lb up at 2-9-0, and 1236 lb down and 59 lb up at 4-9-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Vert: 1-3=-61, 4-6=-20



Weight: 64 lb

FT = 20%

May 4,2020



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Qty Job Truss Truss Type Summit/61 Hawthorn Ridge I41172716 R1 Flat Girder 2335469

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

| 2 | Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:35 2020 Page 2 ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Mbl8tnZuUYIYk7HrmdQc51nMslkERyvE6xl4tzKpfA

LOAD CASE(S) Standard

Concentrated Loads (lb) Vert: 7=-1338 8=-1286 9=-1235



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172717 2335469 V01 Valley Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:35 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-Mbl8tnZuUYIYk7HrrndQc51ppso2ETBvE6xl4tzKpfA Scale = 1:20.1 2x4 || 3 5.00 12 2x4 || 2 0-0-4 2x4 = 2x4 || 2x4 ||

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Dep Stress lear VFS	CSI. TC 0.20 BC 0.10	DEFL. Vert(LL) Vert(CT)	n/a n/a	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.04 Matrix-P	Horz(CT)	-0.00	4	n/a	n/a	Weight: 22 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=7-8-8, 4=7-8-8, 5=7-8-8

Max Horz 1=86(LC 9) Max Uplift 4=-10(LC 9), 5=-41(LC 12)

Max Grav 1=89(LC 2), 4=151(LC 16), 5=403(LC 16)

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

2-5=-317/78 **WEBS**

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

May 4,2020







Job Truss Truss Type Summit/61 Hawthorn Ridge I41172718 2335469 V02 Valley Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:36 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-qnsX47aWErQPMHs2OV8f8JZxuG6Tzv32SmhJdJzKpf9 Scale = 1:14.7 2x4 || 5.00 12 9-0-0 3 2x4 = 2x4 || LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP TCLL (roof) 25.0 Plate Grip DOL TC 0.44 Vert(LL) 999 MT20 197/144 1.15 n/a n/a Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 вс 0.22 Vert(CT) n/a 999 n/a TCDI 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a

BRACING-

TOP CHORD

BOT CHORD

Matrix-P

LUMBER-

BCLL

BCDL

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

0.0

10.0

WEBS 2x4 SPF No.2

REACTIONS. 1=5-5-8, 3=5-5-8 (size) Max Horz 1=58(LC 11)

Max Uplift 1=-7(LC 12), 3=-17(LC 12) Max Grav 1=221(LC 16), 3=221(LC 16)

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

Code IRC2018/TPI2014

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Weight: 14 lb

Structural wood sheathing directly applied or 5-6-2 oc purlins,

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

except end verticals.

FT = 20%

May 4,2020







Job Truss Truss Type Summit/61 Hawthorn Ridge I41172719 2335469 V03 Valley Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:37 2020 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

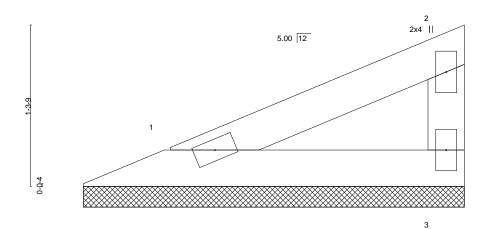
ID:tjnOHGeVPJTyi41JASwyTKzhfUX-I_PvHTb8?9YGzRREyCfuhW6BDfVQiMJChQQs9IzKpf8

Structural wood sheathing directly applied or 3-1-5 oc purlins,

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

except end verticals.

Scale = 1:9.2



2x4 = 2x4 ||

BRACING-

TOP CHORD

BOT CHORD

LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 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 0.04 WB 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 7 lb	FT = 20%

LUMBER-

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

WEBS 2x4 SPF No.2

REACTIONS. 1=3-0-11, 3=3-0-11 (size) Max Horz 1=28(LC 11)

Max Uplift 1=-3(LC 12), 3=-8(LC 12) Max Grav 1=99(LC 2), 3=99(LC 2)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 4,2020



Job Truss Truss Type Qty Summit/61 Hawthorn Ridge 141172720 2335469 V04 Valley Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:38 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-nAzHVpbmmTg7bb0QWwA7EkfH?3oyRplLw4APhCzKpf7 5-10-8 5-10-8 Scale = 1:18.7 4x6 = 2 5.00 12 3x4 / 3x4 > 2x4 || 0-0<u>-10</u> 0-0-10 11-9-0 11-8-6 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP 25.0

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

n/a

0.00

999

999

n/a

Structural wood sheathing directly applied or 6-0-0 oc purlins.

n/a

n/a

n/a

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

3

MT20

Weight: 28 lb

197/144

FT = 20%

LUMBER-

TCLL (roof)

TCDL

BCLL

BCDL

Snow (Pf/Pg) 15.4/20.0

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

10.0

0.0

10.0

OTHERS 2x4 SPF No.2

REACTIONS. 1=11-7-13, 3=11-7-13, 4=11-7-13 (size) Max Horz 1=20(LC 12)

Max Uplift 1=-15(LC 12), 3=-18(LC 13)

Max Grav 1=225(LC 16), 3=225(LC 17), 4=516(LC 2)

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

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

2-4=-361/40 **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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

TC

вс

WB

Matrix-S

0.40

0.22

0.05

3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

1.15

1.15

YES

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



May 4,2020



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.



Job Truss Truss Type Summit/61 Hawthorn Ridge I41172721 Valley 2335469 V05 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Fri May 1 16:16:39 2020 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:tjnOHGeVPJTyi41JASwyTKzhfUX-FMXfi9cOXmo_Dlbc4dhMmxBWDTAHAGPU9kvzDezKpf6 3-10-8 Scale = 1:14.2 4x4 = 2 5.00 12

0-0 <u>-10</u> 0-0-10	3-10-8 3-9-14	+	7-9-0 3-10-8	
LOADING (psf) TCLL (roof) 25.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.18 BC 0.08 WB 0.03 Matrix-P	DEFL. in (loc) l/defl L/d PLATES Vert(LL) n/a - n/a 999 MT20 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a Weight: 18 lb	GRIP 197/144 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

2x4 ||

LUMBER-

REACTIONS.

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

WEBS 2x4 SPF No.2

> 1=7-7-13, 3=7-7-13, 4=7-7-13 (size)

Max Horz 1=12(LC 12)

2x4 /

Max Uplift 1=-12(LC 12), 3=-14(LC 13)

Max Grav 1=140(LC 16), 3=140(LC 17), 4=283(LC 2)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=25.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



2x4 >

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

May 4,2020

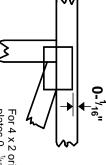


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 × 4

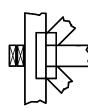
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



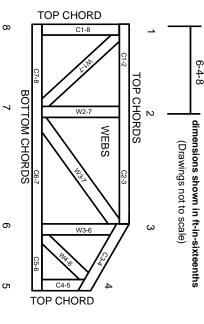
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

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. 10/03/2015

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.
- 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.
- 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.
- 18. 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.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.