

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

Re: 2888681

Summit/11 Hawthorn

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: I47354455 thru I47354513

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

Missouri COA: Engineering 001193



August 9,2021

Sevier, Scott

,Engineer

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

Job Truss Truss Type Qty Summit/11 Hawthorn 147354455 **GABLE** 2888681 Α1 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:58:50 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-Y5jM70xUA0D1i5d2b1Msm9QSHgrkQcbgdH?yr0yqUzJ 31-4-8 8-1-0 20-6-0 6.00 12 4x6 = Scale = 1:67.6 4x6 = 51 ⁴ 5 6 ⊠⁷52 ⊠ 9 10 3x6 || 11 12 13 ¹⁴ 53 15 16 17

Ø

3x6 =31-4-8

3938 37

36 35 34 33 32 31 30 29 28 27

Plate Offsets (X,Y) [25:Edge,0-3-8]								
LOADING (psf) TCLL 20.0 (Roof Snow=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 0.44 BC 0.23 WB 0.15 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	n/a n/a	oc) l/defl - n/a - n/a 26 n/a	L/d 999 999 n/a	PLATES GRIP MT20 197/144 Weight: 268 lb FT = 20%	

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

Ø Ø Ø

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

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-9. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 47-48,46-47,45-46,44-45,43-44,42-43.

WEBS 1-50, 9-42, 8-43, 7-44, 6-45, 5-46, 4-47, 1 Row at midpt

18 54 19 3x6 ×

20

21₂₂

23

24 4x8 ||

26

<u>-</u>6-0

3-48, 2-49, 10-41, 11-40, 12-39

REACTIONS. All bearings 31-4-8.

1-0-0

М

50 49 48 47 46 45 44 43 42 41 40

3x4 =

Max Horz 50=-351(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 50, 26, 42, 43, 44, 45, 46, 47, 48, 49, 41, 40, 39, 37, 36, 35,

34, 33, 32, 31, 30, 29 except 27=-144(LC 10)

All reactions 250 lb or less at joint(s) 50, 26, 42, 43, 44, 45, 46, 47, 48, 49, 41, 40, 39, 37, 36, Max Grav 35, 34, 33, 32, 31, 30, 29, 28, 27

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

17-18=-256/178, 18-19=-286/188, 19-21=-316/199, 21-22=-346/209, 22-23=-378/221, 23-24=-394/222, 24-25=-478/264

BOT CHORD 49-50=-231/425, 48-49=-231/425, 47-48=-231/425, 46-47=-231/425, 45-46=-231/425, 44-45=-231/425, 43-44=-231/425, 42-43=-231/425, 41-42=-231/425, 40-41=-231/425,

39-40=-231/425, 37-39=-231/425, 36-37=-231/425, 35-36=-231/425, 34-35=-231/425,

 $33-34 = -231/425,\ 32-33 = -231/425,\ 31-32 = -231/425,\ 30-31 = -231/425,\ 29-30 = -231/425,$

28-29=-231/425, 27-28=-231/425, 26-27=-231/425

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) 7-10-4 to 10-6-0, Corner(3R) 10-6-0 to 13-2-8, Exterior(2N) 13-2-8 to 18-7-0, Corner(3R) 18-7-0 to 21-7-0, Exterior(2N) 21-7-0 to 38-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For study exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding. 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing
- 8) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 9) Gable studs spaced at 1-4-0 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) 50, 26, 42, 43, 44, 45, 46, 47, 48, 49, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31, 30, 29 except (jt=lb) 27=144.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and

Continuiere naestagia 12 dard ANSI/TPI 1



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



Job	Truss	Truss Type	Qty	Ply	Summit/11 Hawthorn
					147354455
2888681	A1	GABLE	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:58:51 2021 Page 2 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-0HHkKMy6xKLuKFCF9lt5JNzd14Bz93rqrxlVNSyqUzl

13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job Truss Truss Type Qty Summit/11 Hawthorn 147354456 2888681 A2 Piggyback Base Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:58:59 2021 Page 1

Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-nqmm05272nLlHUpndQ0ze3lzillA1VI?hAhwf?yqUzA

Scale = 1:71.5

28-3-0 31-4-8 1-3-8 3-1-8 10-10-8 21-3-4 26-11-8 4-0-8 4-0-8 4-8-8 5-8-4 5-8-4

6.00 12 4x6 = 5x8 = 4x6 = 2 25 3 26 27 28 5x8 / 2x4 || 29 3x6 <> 6 3x4 > 11-0-0 5x8 < 4x6 < 8 3x4 < 10 15 6x12 = 8x12 =20 4x6 =19 18 17 13 12 3x4 = 4x8 II

	1 2-9-8	10-10-8	15-7-0	21-3-4	1 26-11-8	28-3-Q	31-4-8	1	
	2-9-8	8-1-0	4-8-8	5-8-4	5-8-4	1-3-8	3-1-8	7	
s (X,Y)	[1:0-3-0,0-1-8],	[4:0-4-8,0-1-12], [11:0-5-1	Edge], [12:0-3-8,0-3-0], [[14:0-7-8,0-7-0], [16:0-5-	12,0-3-0]				
ncf)									_

4x8 =

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl	L/d	PLATES GRIP
TCLL 20.0			()		1
(Roof Snow=20.0)	Plate Grip DOL 1.15	TC 0.52	Vert(LL) -0.19 14-15 >999	240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.91	Vert(CT) -0.34 14-15 >999	180	
	Rep Stress Incr YES	WB 0.96	Horz(CT) 0.15 11 n/a	n/a	
BCLL 0.0	Code IRC2018/TPI2014	Matrix-AS	. (-)		Weight: 201 lb FT = 20%
BCDL 10.0	Code 11(C2010/11 12014	Wattix-A5			Weight. 201 ib 11 = 2070

2x4 |

LUMBER-

Plate Offsets

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

WEBS 2x4 SPF No.2

SLIDER Right 2x4 SPF No.2 2-0-0 BRACING-TOP CHORD

Structural wood sheathing directly applied, except end verticals, and

3x4 || 6x8 =

2-0-0 oc purlins (5-10-2 max.): 2-4. **BOT CHORD** Rigid ceiling directly applied.

WEBS 2-19, 3-19, 4-18, 1-20 1 Row at midpt

REACTIONS. (size) 20=Mechanical, 11=Mechanical

Max Horz 20=-348(LC 12)

Max Uplift 20=-121(LC 14), 11=-107(LC 14) Max Grav 20=1414(LC 32), 11=1492(LC 32)

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

6x8 =

1-2=-456/230, 2-3=-355/199, 3-4=-976/259, 4-5=-1995/356, 5-7=-2023/276, TOP CHORD 7-8=-2868/303. 8-9=-3840/393. 9-11=-2341/255. 1-20=-1404/217

19-20=-220/336, 18-19=0/694, 5-16=-553/145, 15-16=-146/2501, 14-15=-318/3613,

8-14=-13/408, 12-13=-41/250, 11-12=-184/1987

WEBS 1-19=-220/1156, 3-19=-1012/208, 3-18=-125/883, 4-18=-883/139, 16-18=0/944,

4-16=-183/1600, 7-16=-1021/139, 7-15=0/470, 8-15=-1152/178, 9-12=-1746/162,

12-14=-190/2306, 9-14=-153/2009

NOTES-

BOT CHORD

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 7-10-4 to 10-6-0, Exterior(2R) 10-6-0 to 14-6-8, Interior(1) 14-6-8 to 18-7-0, Exterior(2R) 18-7-0 to 22-9-15, Interior(1) 22-9-15 to 39-1-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) 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) except (jt=lb) 20=121, 11=107,
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



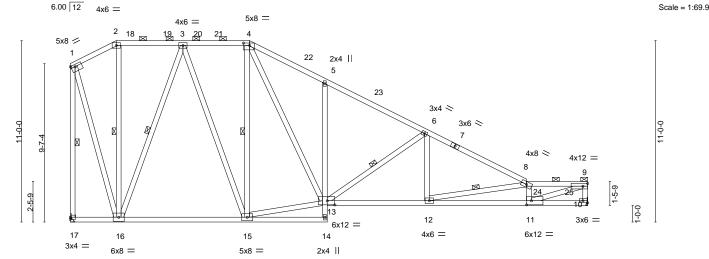
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ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-kCuWRn4NaOcTWnzAkr3RjUNGc6SVVOEI9UA1ktyqUz8 31-4-8 2-9-8 2-9-8 10-10-8 21-7-8

4-0-8 4-0-8 4-8-8 6-0-8 6-0-8 3-8-8



	2-9-0	10-10-0	13-7-0	21-7-0	21-0-0	J 31-4-0	
	2-9-8	8-1-0	4-8-8	6-0-8	6-0-8	3-8-8	
Plate Offsets (X,Y) [1:	0-3-0,0-1-8], [4:0-4-8,0-	·1-12], [10:Edge,0-1-8],	[11:0-3-8,0-3-0], [13	3:0-5-8,0-3-0]			
LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0 BCLL 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/	1.15 1.15 YES	CSI. TC 0.75 BC 0.79 WB 0.99 Matrix-AS	DEFL. in (lowerty labeled) Vert(LL) -0.25 11-10-10-10-10-10-10-10-10-10-10-10-10-1	12 >999 240	PLATES MT20 Weight: 196 lb	GRIP 197/144 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x4 SPF No.2 TOP CHORD

BOT CHORD 2x4 SPF No.2 *Except*

10-13: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

REACTIONS. (size) 10=Mechanical, 17=Mechanical

Max Horz 17=-339(LC 12)

Max Uplift 10=-107(LC 14), 17=-120(LC 14) Max Grav 10=1532(LC 34), 17=1432(LC 34)

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

1-2=-460/236, 2-3=-359/208, 3-4=-994/267, 4-5=-2037/373, 5-6=-2079/292, TOP CHORD

6-8=-3084/320, 8-9=-3970/380, 9-10=-1440/168, 1-17=-1422/231 **BOT CHORD** 16-17=-220/326, 15-16=-28/696, 5-13=-559/149, 12-13=-246/2668, 11-12=-419/4124

WEBS 1-16=-238/1172, 3-16=-1031/216, 3-15=-132/902, 4-15=-903/149, 13-15=-20/958,

4-13=-198/1645, 6-13=-1144/142, 6-12=0/468, 8-12=-1486/177, 8-11=-1315/181,

10-10-8

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 7-10-4 to 10-6-0, Exterior(2R) 10-6-0 to 13-6-0, Interior(1) 13-6-0 to 18-7-0, Exterior(2R) 18-7-0 to 21-7-0, Interior(1) 21-7-0 to 38-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) 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) except (jt=lb) 10=107, 17=120.
- 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

2-16, 3-16, 4-15, 6-13, 8-12, 1-17

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

Rigid ceiling directly applied.

1 Row at midpt

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Job Truss Truss Type Qty Summit/11 Hawthorn 147354458 2888681 A4 Piggyback Base Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:03 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-gb?GsT5e60sBm57YsG5vovSaSw7bzLTbcof8omyqUz6 31-4-8 4-0-8 4-0-8 8-0-0 6-9-8 5-8-8 6.00 12 4x6 = Scale = 1:69.9 8x12 > 4x6 =

$\begin{array}{cccccccccccccccccccccccccccccccccccc$
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	2-9-8	8-1-0	8-0	0-0	6-9-8		5-8-8		
Plate Offsets (X,Y) [1:0-3-0,0-1-8], [4:0-7-4,0-1-8], [9:Edge,0-1-8], [10:0-3-8,0-3-0], [12:Edge,0-3-8]									
TCLL 20.0 (Roof Snow=20.0)	Plate Grip Lumber D Rep Stres	DOL 1.15	TC 0.79	Vert(LL)	-0.23 10-11 >	>999 240		197/144	

18-10-8

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

4-6: 2x4 SPF 1650F 1.5E

2-9-8

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2 BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (2-3-11 max.): 2-4, 7-8.

BOT CHORD Rigid ceiling directly applied.

WEBS 2-15, 3-15, 4-13, 7-11, 1-16 1 Row at midpt

REACTIONS.

(size) 9=Mechanical, 16=Mechanical

Max Horz 16=-337(LC 12)

Max Uplift 9=-108(LC 14), 16=-119(LC 14) Max Grav 9=1414(LC 34), 16=1411(LC 34)

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

1-2=-455/235, 2-3=-355/208, 3-4=-990/265, 4-5=-2621/432, 5-7=-2577/301, TOP CHORD

7-8=-3151/312, 8-9=-1353/185, 1-16=-1398/229

BOT CHORD 15-16=-233/327, 13-15=-69/685, 5-11=-835/211, 10-11=-358/3223

1-15=-241/1154, 3-15=-1002/210, 3-13=-143/938, 4-13=-824/189, 11-13=-87/908, **WEBS**

10-10-8

4-11=-243/1839, 7-11=-1095/126, 7-10=-1125/189, 8-10=-338/3329

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 7-10-4 to 10-6-0, Exterior(2R) 10-6-0 to 13-6-0, Interior(1) 13-6-0 to 18-7-0, Exterior(2R) 18-7-0 to 21-7-0, Interior(1) 21-7-0 to 38-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) 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) except (jt=lb) 9=108, 16=119.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

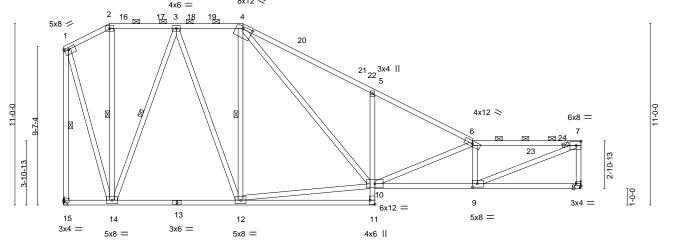


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	2-3-0	0-1-0	0-0	-0	J-11-C		0-1-0		
Plate Offsets (X,Y)	[1:0-3-0,0-1-8], [4:0-7-4,0	-1-8], [8:Edge,0-	1-8], [9:0-3-8,0-2-8], [11:E	Edge,0-3-8]					
LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0 BCLL 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/		CSI. TC 0.79 BC 0.77 WB 0.75 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.21 9-10 -0.37 9-10 0.07 8	l/defl L/d >999 240 >999 180 n/a n/a	N	PLATES MT20 Weight: 194 lb	GRIP 197/144
BCDL 10.0	0000 11(02010)		Width 710					Wolgin. 10 1 lb	1 1 = 2070

18-10-8

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

4-6,6-7: 2x4 SPF 1650F 1.5E

2-9-8

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2 BRACING-

TOP CHORD

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (2-10-4 max.): 2-4, 6-7.

BOT CHORD Rigid ceiling directly applied. **WEBS** 2-14, 3-14, 4-12, 1-15 1 Row at midpt

REACTIONS.

(size) 8=Mechanical, 15=Mechanical

Max Horz 15=-336(LC 12)

Max Uplift 8=-108(LC 14), 15=-119(LC 14) Max Grav 8=1365(LC 34), 15=1400(LC 34)

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

TOP CHORD $1-2=-453/234,\ 2-3=-353/207,\ 3-4=-979/263,\ 4-5=-2569/427,\ 5-6=-2496/299,\ 3-4=-979/263,\ 4-5=-2569/427,\ 5-6=-2496/299,\$

6-7=-2883/295, 7-8=-1297/193, 1-15=-1386/227

BOT CHORD 14-15=-238/327, 12-14=-87/679, 5-10=-789/199, 9-10=-346/2940

WEBS 1-14=-241/1143, 3-14=-988/210, 3-12=-144/928, 4-12=-811/191, 10-12=-113/885,

10-10-8

4-10=-239/1785, 6-10=-938/108, 6-9=-1047/187, 7-9=-326/3055

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 7-10-4 to 10-6-0, Exterior(2R) 10-6-0 to 13-6-0, Interior(1) 13-6-0 to 18-7-0, Exterior(2R) 18-7-0 to 21-7-0, Interior(1) 21-7-0 to 38-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) 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) except (jt=lb) 8=108, 15=119.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job Truss Truss Type Qty Summit/11 Hawthorn 147354460 2888681 A5 Piggyback Base Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:07 2021 Page 1 Builders FirstSource (Valley Center) Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-YMFnhq989EMdEiQJ56AryldKkXYVvBXAXQdLxXyqUz2 29-3-13 31-4-8 2-6-5 2-0-11 4-0-8 Scale = 1:67.3 6.00 12 4x6 = 5x8 = 4x6 =2 19 🖂 3 20 21 22 5x8 / 23 3x4 ≈ 5 25 4x6 < 9-7-4 5x8 =2x4 || 4x8 = 1-10-13 2-10-13 1-0-0 12-0-11 15 $_{12}6x12 =$ 18 17 16 14 13 3x4 3x6 = 6x8 = 5x8 = 3x4 = 4x8 = 2x4 29-3-13 28-11-0 31-4-8 2-1-8 0-4-13 2-0-11 Plate Offsets (X,Y)--[1:0-3-0,0-1-8], [4:0-6-0,0-2-8], [7:0-2-12,0-2-12], [10:Edge,0-1-8], [11:0-5-8,0-3-4], [13:0-3-8,0-2-0] LOADING (psf) SPACING-CSI (loc) I/defl L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.52 Vert(LL) -0.12 13-14 >999 240 MT20 197/144 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.69 Vert(CT) -0.25 13-14 >999 180 TCDL 10.0 Rep Stress Incr YES WB 0.62 Horz(CT) 0.05 10 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Weight: 199 lb FT = 20%Matrix-AS BCDL LUMBER-BRACING-2x4 SPF No.2 *Except* TOP CHORD Structural wood sheathing directly applied, except end verticals, and TOP CHORD 4-6,6-7: 2x6 SPF No.2 2-0-0 oc purlins (4-3-11 max.): 2-4, 7-9. **BOT CHORD** 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied. WEBS 2x4 SPF No.2 **WEBS** 2-17, 3-17, 5-16, 7-14, 1-18 1 Row at midpt REACTIONS. (size) 10=Mechanical, 18=Mechanical

Max Horz 18=-339(LC 12)

Max Uplift 10=-107(LC 14), 18=-120(LC 14) Max Grav 10=1480(LC 34), 18=1424(LC 34)

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

TOP CHORD $1-2=-458/235,\ 2-3=-358/208,\ 3-4=-998/267,\ 4-5=-1338/262,\ 5-7=-2341/265,$

7-8=-1705/169, 8-9=-1728/174, 9-10=-1385/167, 1-18=-1412/231 17-18=-226/327, 16-17=-46/692, 14-16=-192/1958, 13-14=-241/2387

BOT CHORD WEBS 1-17=-240/1165, 3-17=-1018/213, 3-16=-135/918, 5-16=-1240/192, 5-14=0/434,

7-14=-451/88, 7-13=-795/148, 11-13=-235/2427, 7-11=-876/66, 9-11=-228/2112

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 7-10-4 to 10-6-0, Exterior(2R) 10-6-0 to 13-6-0, Interior(1) 13-6-0 to 18-7-0. Exterior(2R) 18-7-0 to 21-7-0. Interior(1) 21-7-0 to 38-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) 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) except (jt=lb) 10=107, 18=120.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job Truss Truss Type Qty Summit/11 Hawthorn 147354461 2888681 A5A Piggyback Base Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:09 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-VINX6WAOhscKU0aiCXCJ2AifpKEAN5MT_k6S0QyqUz0 31-4-8 4-0-8 4-0-8 2-8-8 Scale = 1:65.2 6.00 12 4x6 = 4x6 =4x6 =19___ ⊠20 ⊠_3 5x8 / 21 4x8 > 5 3x6 < 2x4 || 6 11-0-0 23 10x20 MT20HS < ¹⁰8x12 = 16 14 18 15 13 12 11 3x4 = 3x6 = 3x6 =6x8 = 5x8 =4x6 =2x4 || 4x6 || 31-4-8 9₁3₁13 0-4-13 2-0-11 Plate Offsets (X,Y)--[1:0-3-0,0-1-8], [4:0-3-8,0-2-4], [5:0-3-5,0-1-12], [8:0-9-0,0-2-12], [11:Edge,0-3-8] LOADING (psf) SPACING-2-0-0 CSI 31-4-8**DEFL** in (loc) I/defl L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.15 0.61 Vert(LL) -0.23 12-13 >999 240 197/144 TC MT20 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.61 Vert(CT) -0.39 12-13 >971 180 MT20HS 148/108 **TCDL** 10.0

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

WEBS

0.06

9

1 Row at midpt

n/a

2-0-0 oc purlins (5-8-1 max.): 2-4.

Rigid ceiling directly applied.

n/a

Weight: 215 lb

Structural wood sheathing directly applied, except end verticals, and

2-17, 3-17, 5-15, 1-18

FT = 20%

LUMBER-

BCLL

BCDL

2x4 SPF No.2 TOP CHORD

0.0

BOT CHORD 2x4 SPF No.2 *Except*

9-10: 2x10 SP 2400F 2.0E

WEBS 2x4 SPF No.2

REACTIONS. (size) 18=Mechanical, 9=Mechanical

Max Horz 18=-343(LC 12)

Max Uplift 18=-118(LC 14), 9=-61(LC 14) Max Grav 18=1408(LC 32), 9=1408(LC 32)

Rep Stress Incr

Code IRC2018/TPI2014

YES

WB

Matrix-AS

0.60

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $1\hbox{-}2\hbox{-}456/240, 2\hbox{-}3\hbox{-}357/212, 3\hbox{-}4\hbox{-}980/279, 4\hbox{-}5\hbox{-}-1247/283, 5\hbox{-}7\hbox{-}-3253/461,}$

7-8=-3299/366 1-18=-1400/247

BOT CHORD 17-18=-207/323, 15-17=0/686, 13-15=-92/1634, 8-10=-251/2719

WEBS 1-17=-253/1154, 3-17=-997/229, 3-15=-142/896, 5-15=-1061/173, 7-10=-388/141,

10-13=-92/1490, 5-10=-220/1721

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=39ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 7-10-4 to 10-6-0, Exterior(2R) 10-6-0 to 14-6-8, Interior(1) 14-6-8 to 18-7-0, Exterior(2R) 18-7-0 to 22-5-14, Interior(1) 22-5-14 to 36-10-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated
- 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) 9 except (jt=lb) 18=118.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job Truss Truss Type Qty Summit/11 Hawthorn 147354462 2888681 A6 Piggyback Base 1 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:11 2021 Page 1 Builders FirstSource (Valley Center) Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-R7UIXCCfDTs2jKk5KxEn7bo2T8vWr?zmS2bZ4lyqUz_ 31-4-8 10-10-8 24-9-4 4-0-8 4-0-8 7-7-0 6-3-12 6-7-4 6.00 12 Scale = 1:66.7 4x6 = 5x8 = 4x6 =2 21 📈 3 22 23 × 5x8 / 4x6 > 24 25 10-0-0 4x6 > 6 3x4 > 26 4x6 < 8 우 16 15 13 _{5x8} = ^{3x6} = 3x4 = 5x8 = 6x8 = 11 10 4x6 II 4x8 = 10-10-8 2-9-8 8-1-0 7-7-0 6-7-4 Plate Offsets (X,Y)--[1:Edge,0-1-12], [4:0-6-0,0-2-8], [9:0-4-0,0-1-14], [10:0-3-8,0-2-0], [12:0-6-0,0-3-4] LOADING (psf) SPACING-CSI. (loc) I/defl L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.41 Vert(LL) -0.12 12-13 >999 240 MT20 197/144 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.68 Vert(CT) -0.27 12-13 >999 180 **TCDL** 10.0 Rep Stress Incr YES WB 0.59 Horz(CT) 0.08 9 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-AS Weight: 200 lb FT = 20%BCDL LUMBER-BRACING-2x4 SPF No.2 *Except* TOP CHORD Structural wood sheathing directly applied, except end verticals, and TOP CHORD 4-6,6-9: 2x6 SPF No.2 2-0-0 oc purlins (5-4-3 max.): 2-4. **BOT CHORD** 2x4 SPF No.2 *Except* **BOT CHORD** Rigid ceiling directly applied. 9-11: 2x6 SPF No.2 **WEBS** 1 Row at midpt 2-15, 3-15, 5-13, 1-16 WEBS 2x4 SPF No.2 Right 2x4 SPF No.2 2-0-0 **SLIDER** REACTIONS. (size) 16=0-3-8. 9=Mechanical

Max Horz 16=-323(LC 12)

Max Uplift 16=-119(LC 14), 9=-108(LC 14) Max Grav 16=1408(LC 32), 9=1482(LC 32)

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

TOP CHORD 1-2=-472/210, 2-3=-374/188, 3-4=-1086/254, 4-5=-1422/248, 5-7=-2499/291,

7-9=-2581/277, 1-16=-1394/205

BOT CHORD 15-16=-213/329, 13-15=0/744, 12-13=-104/2182, 5-12=-1/519, 9-10=-175/2248 WFBS 1-15=-206/1143, 3-15=-1016/193, 3-13=-116/918, 5-13=-1357/194, 10-12=-145/2049

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 8-1-12 to 10-9-8, Exterior(2R) 10-9-8 to 14-10-0, Interior(1) 14-10-0 to 18-10-8, Exterior(2R) 18-10-8 to 23-1-7, Interior(1) 23-1-7 to 39-3-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) 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) except (jt=lb) 16=119, 9=108.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job Truss Truss Type Qty Summit/11 Hawthorn 147354463 2888681 A7 PIGGYBACK BASE 2 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:12 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-vK2gkYCH_n_vLUJHtfl0foK4YYAPaTjvgiK6ckyqUyz 28-8-8 31-8-0 32-6-8 2-11-8 0-10-8 6-10-0 4-0-8 4-0-8 7-1-8 3-8-8 6.00 12 Scale = 1:67.7 4x6 =

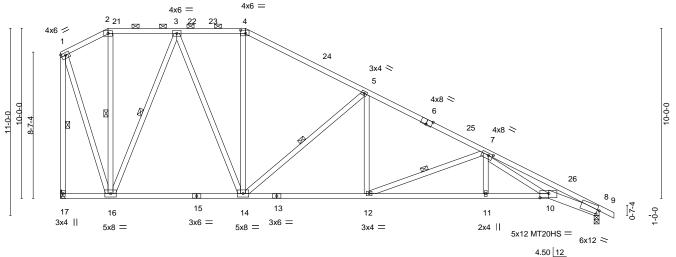


Plate Offsets (X,Y)--[1:Edge,0-1-12], [4:0-3-8,0-2-4], [6:0-4-0,Edge], [7:0-3-5,0-1-8], [8:0-1-5,0-2-15], [10:0-6-4,0-3-0] LOADING (psf) SPACING-CSI (loc) I/defl L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.96 Vert(LL) -0.28 10-11 >999 240 MT20 197/144 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.96 Vert(CT) -0.48 10-11 >787 180 MT20HS 148/108 **TCDL** 10.0 Rep Stress Incr YES WB 0.56 Horz(CT) 0.20 8 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 176 lb FT = 20%BCDL

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SPF No.2

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

8-10: 2x6 SPF 2100F 1.8E, 10-13: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

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

Max Horz 17=-331(LC 12)

Max Uplift 17=-119(LC 14), 8=-137(LC 14) Max Grav 17=1427(LC 33), 8=1555(LC 33)

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

1-2=-475/206, 2-3=-379/188, 3-4=-1106/255, 4-5=-1420/251, 5-7=-2484/281, TOP CHORD

7-8=-5323/464. 1-17=-1419/208

16-17=-222/342, 14-16=0/756, 12-14=-59/2118, 11-12=-208/3241, 10-11=-208/3243, 8-10=-335/4828

10-10-8

WEBS 1-16=-203/1164, 3-16=-1034/197, 3-14=-118/939, 5-14=-1326/182, 5-12=0/559,

7-12=-1200/159, 7-11=0/299, 7-10=-134/1807

NOTES-

BOT CHORD

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 8-1-12 to 10-9-8, Exterior(2R) 10-9-8 to 14-10-0, Interior(1) 14-10-0 to 18-10-8, Exterior(2R) 18-10-8 to 23-1-7, Interior(1) 23-1-7 to 40-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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) 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) except (jt=lb) 17=119, 8=137.
- 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.



Structural wood sheathing directly applied, except end verticals, and

2-16, 3-16, 5-14, 7-12, 1-17

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

2-0-0 oc purlins (5-2-13 max.): 2-4.

2-2-0 oc bracing: 10-11.

1 Row at midpt

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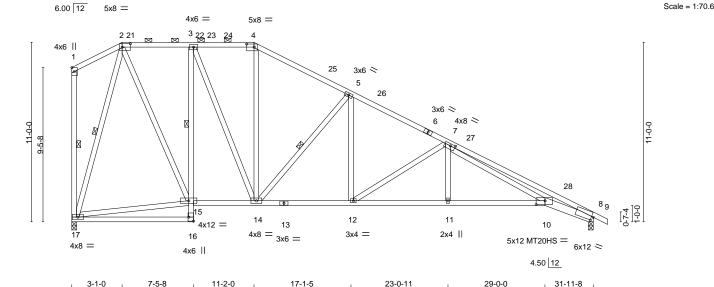


Plate Offsets (X,Y) [2:	0-6-0,0-2-8], [4:0-5-8,0-2-4], [7:0-3-9,0-	·1-8], [8:0-1-5,0-2-11], [10	:0-6-8,0-2-12], [16:Edge,0-3	3-8]			
LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 1.00 BC 0.90 WB 0.93 Matrix-AS	DEFL. in (Vert(LL) -0.35 10 Vert(CT) -0.62 10 Horz(CT) 0.23		L/d 240 180 n/a	MT20 1 MT20HS 1	GRIP 97/144 48/108 FT = 20%

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

6-9: 2x4 SPF 1650F 1.5E **BOT CHORD** 2x4 SPF No.2 *Except*

8-10: 2x6 SPF 2100F 1.8E, 10-13: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2 BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (5-2-6 max.): 2-4. **BOT CHORD** Rigid ceiling directly applied. Except: 1 Row at midpt 3-15

WEBS 5-14, 1-17, 2-17 1 Row at midpt

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

Max Horz 17=-354(LC 12)

Max Uplift 8=-136(LC 14), 17=-122(LC 14) Max Grav 8=1568(LC 33), 17=1449(LC 33)

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

TOP CHORD 2-3=-813/240, 3-4=-1150/262, 4-5=-1441/264, 5-7=-2309/283, 7-8=-5319/466 **BOT CHORD** 3-15=-896/197, 14-15=0/824, 12-14=-34/1946, 11-12=-160/2863, 10-11=-160/2864,

8-10=-321/4794

WEBS 2-15=-122/1137, 3-14=-140/880, 4-14=-19/270, 5-14=-1213/165, 5-12=-29/675, 7-12=-1085/149, 7-11=0/305, 7-10=-160/2134, 2-17=-1323/274, 15-17=-69/339

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-0, Exterior(2R) 3-1-0 to 7-3-12, Interior(1) 7-3-12 to 11-2-0, Exterior(2R) 11-2-0 to 15-4-15, Interior(1) 15-4-15 to 32-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=136, 17=122 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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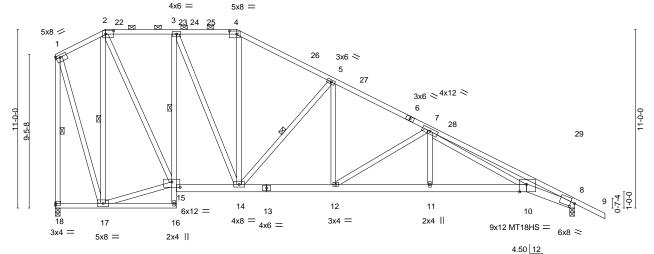


Job Truss Truss Type Qty Summit/11 Hawthorn 147354465 2888681 A9 Piggyback Base 2

Builders FirstSource (Valley Center), Valley Center, KS - 67147, Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:16 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-o5lBavGn2?ULq5c26VqyqeVoE9ccWA4VbKlKlWyqUyv 31-11-8 33-10-0 2-11-8 1-10-8 23-0-11 29-0-0 4-4-8 3-8-8 5-11-5 5-11-5 5-11-5

6.00 12 Scale = 1:70.9 5x8 =



11-2-0 31-11-8 4-4-8 3-8-8 5-11-5 Plate Offsets (X,Y)- [1:Edge,0-1-12], [2:0-6-0,0-2-8], [4:0-5-8,0-2-4], [8:0-2-15,0-3-1], [10:0-5-4,Edge], [15:0-6-0,0-4-0]

- 10110 0110010 (11,11)	[
LOADING (psf) TCLL 20.0 (Roof Snow=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 0.85 BC 0.69 WB 0.98	DEFL. in (loc) l/defl L/d Vert(LL) -0.30 10-11 >999 240 Vert(CT) -0.52 10-11 >736 180 Horz(CT) 0.20 8 n/a n/a	PLATES GRIP MT20 197/144 MT18HS 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 214 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*

6-9: 2x4 SPF 1650F 1.5E **BOT CHORD** 2x4 SPF No.2 *Except*

13-15: 2x6 SPF No.2, 8-10,10-13: 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2 BRACING-TOP CHORD

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (5-2-3 max.): 2-4. **BOT CHORD** Rigid ceiling directly applied. Except:

1 Row at midpt 3-15 **WEBS** 2-17, 5-14, 1-18 1 Row at midpt

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

Max Horz 18=-361(LC 12)

Max Uplift 18=-121(LC 14), 8=-168(LC 14) Max Grav 18=1447(LC 33), 8=1631(LC 33)

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

TOP CHORD 1-2=-464/231, 2-3=-839/231, 3-4=-1157/255, 4-5=-1448/255, 5-7=-2317/270,

7-8=-4717/323, 1-18=-1416/228

BOT CHORD 17-18=-234/355, 3-15=-847/211, 14-15=0/859, 12-14=0/1952, 11-12=-112/2958,

10-11=-112/2960, 8-10=-154/4180

WFBS 2-17=-1133/201, 15-17=-87/435, 2-15=-97/1175, 3-14=-153/824, 4-14=-16/272,

5-14=-1203/164, 5-12=-21/666, 7-12=-1183/136, 7-11=0/428, 1-17=-219/1151,

7-10=-80/1377

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-0, Exterior(2R) 3-1-0 to 7-3-12, Interior(1) 7-3-12 to 11-2-0, Exterior(2R) 11-2-0 to 15-4-15, Interior(1) 15-4-15 to 33-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=121, 8=168. 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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Job Truss Truss Type Qty Summit/11 Hawthorn 147354466 2888681 A10 Piggyback Base Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:58:53 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-zgPUl2_MTxbcZZMdGAwZOo2r4ukpdsW6JFEcSLyqUzG 31-11-8 23-0-11 29-0-0 4-4-8 3-8-8 5-11-5 5-11-5 5-11-5 2-11-8 Scale = 1:69.9 6.00 12 5x8 = 4x6 = 5x8 = 2 21 💌 3 22 23 24 × 5x8 / 25 3x6 < 4x8 > 6 27 4x6 < 13 6x12 =12 11 **⊠** 17 $4x8 = _{3x6} =$ 15 4x6 = 10x20 MT20HS = 3x4 = 4x12 > 5x8 = 2x4 || 4.50 12 31-11-8 11-2-0 4-4-8 3-8-8 8-11-0 Plate Offsets (X,Y)-- [1:Edge,0-1-12], [2:0-6-0,0-2-8], [4:0-5-8,0-2-4], [7:0-3-0,Edge], [9:0-4-8,0-2-0], [10:1-2-0,Edge], [14:0-6-0,0-4-0]

			,. = .,, [= .,= .,,], [= .,,]	
LOADING (psf) TCLL 20.0 (Roof Snow=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 0.92 BC 0.78 WB 0.59	DEFL. in (loc) l/defl L/d Vert(LL) -0.39 10-11 >970 240 Vert(CT) -0.78 10-11 >488 180 Horz(CT) 0.23 9 n/a n/a	PLATES GRIP MT20 197/144 MT20HS 148/108
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 193 lb FT = 20%

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

7-9: 2x4 SPF 1650F 1.5E **BOT CHORD** 2x4 SPF No.2 *Except*

9-10: 2x6 SPF 2100F 1.8E, 10-12: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2 BRACING-TOP CHORD

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (5-2-5 max.): 2-4. **BOT CHORD** Rigid ceiling directly applied. Except: 1 Row at midpt 3-14

WEBS 2-16, 5-13, 1-17 1 Row at midpt

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

Max Horz 17=-347(LC 12)

Max Uplift 17=-123(LC 14), 9=-110(LC 14) Max Grav 17=1450(LC 32), 9=1515(LC 32)

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

TOP CHORD 1-2=-465/232, 2-3=-827/242, 3-4=-1153/263, 4-5=-1444/266, 5-6=-2729/323,

6-8=-5378/600, 8-9=-5523/511, 1-17=-1419/232

BOT CHORD 16-17=-218/333, 3-14=-871/202, 13-14=0/833, 11-13=-71/1941, 10-11=-203/2834,

9-10=-428/4985

WFBS 2-16=-1124/219, 14-16=-72/423, 2-14=-116/1162, 3-13=-143/849, 4-13=-22/271, 5-13=-1202/182, 5-11=-59/929, 6-11=-806/169, 6-10=-272/2325, 1-16=-220/1155

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-0, Exterior(2R) 3-1-0 to 7-3-12, Interior(1) 7-3-12 to 11-2-0, Exterior(2R) 11-2-0 to 15-4-15, Interior(1) 15-4-15 to 31-11-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=123, 9=110,
- 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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					31-11-8 31-11-8						
LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	Plate Grip DOL	-0-0 1.15 1.15 NO 014	CSI. TC BC WB Matri	0.36 0.20 0.15 x-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.01	(loc) - - 25	I/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 269 lb	GRIP 197/144 FT = 20%

38 37

3x6 =

39

LUMBER-BRACING-

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

OTHERS 2x4 SPF No.2 WEDGE

Right: 2x4 SPF No.2

TOP CHORD

 36_{35}

33 32 31 30

34

BOT CHORD

WEBS

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-9. Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 46-47,45-46,44-45,43-44,42-43,41-42.

29

28

1-49, 9-41, 8-42, 7-43, 6-44, 5-45, 4-46, 1 Row at midpt

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

3-47, 2-48, 10-40, 11-39, 12-38

4x6 ||

REACTIONS. All bearings 31-11-8.

Max Horz 49=-350(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 49, 41, 42, 43, 44, 45, 46, 47, 48, 40, 39, 38, 36, 35, 25, 34,

42

41 40

43

33, 32, 31, 30, 29, 28, 27, 26

47

46 45

48

49

3x4 II

All reactions 250 lb or less at joint(s) 49, 41, 42, 43, 44, 45, 46, 47, 48, 40, 39, 38, 36, 35, 25, Max Grav 34, 33, 32, 31, 30, 29, 28, 27, 26

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

TOP CHORD 23-24=-259/150, 24-25=-304/181

BOT CHORD 48-49=-147/264, 47-48=-147/264, 46-47=-148/264, 45-46=-148/264, 44-45=-148/264,

43-44=-148/264, 42-43=-148/264, 41-42=-148/264, 40-41=-147/264, 39-40=-147/264,

38-39=-147/264, 36-38=-147/264, 35-36=-147/264, 34-35=-147/264, 33-34=-147/264,

32-33=-147/264, 31-32=-147/264, 30-31=-147/264, 29-30=-147/264, 28-29=-147/264,

27-28=-147/264, 26-27=-147/264, 25-26=-147/264

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. 3) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 1-4-0 oc. 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 49, 41, 42, 43, 44, 45, 46, 47, 48, 40, 39, 38, 36, 35, 25, 34, 33, 32, 31, 30, 29, 28, 27, 26.
- 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.



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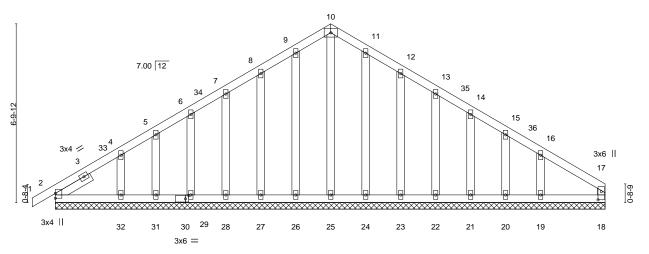




Job Truss Truss Type Qty Summit/11 Hawthorn 147354468 2888681 **B1 GABLE** Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:18 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-kUPx?bH2adl33PmREwsRv3aLDySG_lKo3enRpOyqUyt -0-10-8 0-10-8 10-6-0 10-5-8

> Scale = 1:43.9 4x6 =



20-11-8 Plate Offsets (X V)-- [17:0-3-12 0-1-8] [30:0-1-8 0-1-8]

Tiale Offsets (X, I) [1	7.0-3-12,0-1-0], [30.0-1-0,0-1-0]								
LOADING (psf) TCLL 20.0 (Roof Snow=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 0.06 BC 0.04 WB 0.10 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 1 1 18	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20 Weight: 111 lb	GRIP 197/144 FT = 20%

LUMBER-BRACING-

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

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

REACTIONS. All bearings 20-11-8.

Max Horz 2=139(LC 13) (lb) -

Left 2x4 SPF No.2 1-6-9

Max Uplift All uplift 100 lb or less at joint(s) 2, 26, 27, 28, 29, 31, 32, 24, 23, 22, 21, 20, 19

Max Grav All reactions 250 lb or less at joint(s) 18, 2, 25, 26, 27, 28, 29, 31, 32, 24, 23, 22, 21, 20, 19

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

NOTES-

SLIDER

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 10-6-0, Corner(3R) 10-6-0 to 13-6-0, Exterior(2N) 13-6-0 to 20-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 1-4-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 26, 27, 28, 29, 31, 32, 24, 23, 22, 21, 20, 19.
- 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



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Job Truss Truss Type Qty Ply Summit/11 Hawthorn 147354469 2888681 B2 Common Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:19 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, $ID: VPVqvFnP0P0b1j2tZrlOqezdKbx-CgzJCxlgLwtwhYLdodNgRH7PZMi3jlMxHIX_MryqUys$ 10-6-0 15-7-4 21-0-0 5-4-12 5-1-4 5-4-12 Scale = 1:40.7 4x6 || 7.00 12 21 20 2x4 \\ 22 . 2x4 // 3 6-9-12 3x4 / 3x4 ≥ 6 0-8-4 10 9 8 3x4 = 3x6 =3x4 = 3x6 || 3x6 || 13-10-13 21-0-0 7-1-3 Plate Offsets (X,Y)--[1:0-3-4,0-0-6], [7:0-3-15,0-0-6] LOADING (psf) **PLATES** SPACING-2-0-0 CSI. **DEFL** (loc) I/defl L/d **GRIP** TCLL 20.0 Plate Grip DOL 1.15 TC 0.40 Vert(LL) -0.05 8-10 >999 240 MT20 197/144 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.38 Vert(CT) -0.11 8-10 >999 180

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.03

n/a

Rigid ceiling directly applied.

n/a

Structural wood sheathing directly applied.

LUMBER-

TCDL

BCLL

BCDL

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

10.0

0.0

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

REACTIONS. (size) 1=0-3-8, 7=0-3-8 Max Horz 1=-123(LC 12)

Max Uplift 1=-77(LC 14), 7=-77(LC 14)

Max Grav 1=871(LC 18), 7=871(LC 19)

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

TOP CHORD 1-3=-1157/178, 3-4=-1162/216, 4-5=-1162/216, 5-7=-1157/178

Rep Stress Incr

Code IRC2018/TPI2014

BOT CHORD 1-10=-101/1048, 8-10=-14/688, 7-8=-93/1048

WEBS 4-8=-64/476, 5-8=-329/127, 4-10=-64/476, 3-10=-329/126

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-6-0, Exterior(2R) 10-6-0 to 13-6-0, Interior(1) 13-6-0 to 21-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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.

YES

WB

Matrix-AS

0.12

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 9,2021

FT = 20%

Weight: 81 lb





Job Truss Truss Type Qty Summit/11 Hawthorn 147354470 2888681 **B**3 Common 10 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:20 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-gsXiQHJI6E?mliwpLKvv_UfaJm1ISCc5WyGXuHyqUyr 10-6-0 21-0-0 5-4-12 5-1-4 5-4-12 Scale = 1:40.7 4x6 || 7.00 12 21 20 2x4 \\ 22 . 2x4 // 19 3 6-9-12 3x4 🖊 3x4 ≥ 6 0-8-4 10 9 8 3x4 = 3x6 =3x4 = 3x6 II 3x6 || 13-10-13 21-0-0 7-1-3 Plate Offsets (X,Y)--[1:0-3-4,0-0-6], [7:0-3-15,0-0-6] LOADING (psf) DEFL. **PLATES** SPACING-2-0-0 CSI. (loc) I/defl L/d **GRIP** TCLL 20.0 Plate Grip DOL 1.15 TC 0.40 Vert(LL) -0.05 8-10 >999 240 MT20 197/144 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.38 Vert(CT) -0.11 8-10 >999 180 **TCDL** 10.0

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.03

n/a

Rigid ceiling directly applied.

n/a

Structural wood sheathing directly applied.

LUMBER-

BCLL

BCDL

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

0.0

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

Rep Stress Incr

Code IRC2018/TPI2014

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

Max Horz 1=-123(LC 12)

Max Uplift 1=-77(LC 14), 7=-77(LC 14) Max Grav 1=871(LC 18), 7=871(LC 19)

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

TOP CHORD 1-3=-1157/178, 3-4=-1162/216, 4-5=-1162/216, 5-7=-1157/178

BOT CHORD 1-10=-101/1048, 8-10=-14/688, 7-8=-93/1048

WEBS 4-8=-64/476, 5-8=-329/127, 4-10=-64/476, 3-10=-329/126

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-6-0, Exterior(2R) 10-6-0 to 13-6-0, Interior(1) 13-6-0 to 21-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; 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.

YES

WB

Matrix-AS

0.12

- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 9,2021

FT = 20%

Weight: 81 lb





Job Truss Truss Type Qty Summit/11 Hawthorn 147354471 2888681 C₁ Common Supported Gable

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:21 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-8254ddJwsY7dwsV0v2Q8XiCp_ASBBfdElc05QjyqUyq

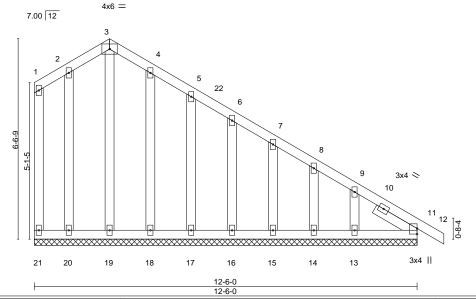
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

12-6-0 10-0-8 0-10-8

Scale = 1:37.6



LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.15 0.09 0.07	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 0.00	(loc) 11 11	l/defl n/r n/r n/a	L/d 120 120 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TF	PI2014	Matri	x-S						Weight: 75 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 **OTHERS** 2x4 SPF No.2

SLIDER Right 2x4 SPF No.2 1-6-9

REACTIONS. All bearings 12-6-0.

Max Horz 21=-199(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 21, 11, 19, 20, 18, 17, 16, 15, 14, 13 Max Grav All reactions 250 lb or less at joint(s) 21, 11, 19, 20, 18, 17, 16, 15, 14, 13

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

TOP CHORD 9-11=-294/210

BOT CHORD 20-21=-183/274, 19-20=-183/274, 18-19=-183/274, 17-18=-183/274, 16-17=-183/274,

15-16=-183/274, 14-15=-183/274, 13-14=-183/274, 11-13=-183/274

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-1-12 to 2-5-8, Corner(3R) 2-5-8 to 5-5-8, Exterior(2N) 5-5-8 to 13-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 1-4-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 11, 19, 20, 18 17 16 15 14 13
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job Truss Truss Type Qty Summit/11 Hawthorn 147354472 2888681 C2 Common 2 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:22 2021 Page 1

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-cFfSrzKYdrFUY04CTlxN3vlz9al_w2fO_Gley9yqUyp

Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.

12-6-0 4-10-8 5-2-0 0-10-8

Scale = 1:38.4

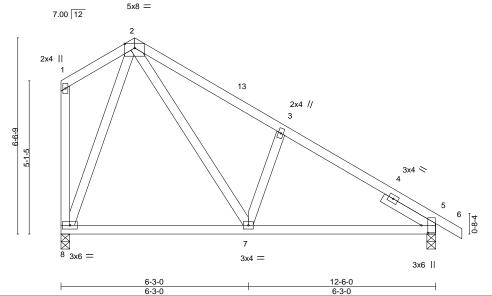


Plate Offsets	(X,Y))	[5:0-3-0,0-2-10]
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LOADING (psf) TCLL 20.0 (Roof Snow=20.0)	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.25	DEFL. in (loc) I/defl Vert(LL) -0.03 7-8 >999	L/d 240	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.31 WB 0.34 Matrix-AS	Vert(CT) -0.07 7-8 >999 Horz(CT) 0.00 5 n/a	180 n/a	Weight: 59 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. (size) 5=0-3-8, 8=0-3-8 Max Horz 8=-201(LC 12)

Max Uplift 5=-68(LC 14), 8=-49(LC 14)

Max Grav 5=568(LC 20), 8=492(LC 1)

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

TOP CHORD 2-3=-578/217, 3-5=-532/152 **BOT CHORD** 5-7=-34/513

WEBS 2-7=-144/486, 3-7=-299/183, 2-8=-455/210

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-5-8, Exterior(2R) 2-5-8 to 5-5-8, Interior(1) 5-5-8 to 13-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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Job Truss Truss Type Qty Summit/11 Hawthorn 147354473 2888681 C3 Common 5 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:23 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-4RDq2JLAO9NL9AeO1TScc7H8tz5BfUuXCvVCVcyqUyo

12-6-0 4-10-8 Scale = 1:38.4 5x8 =

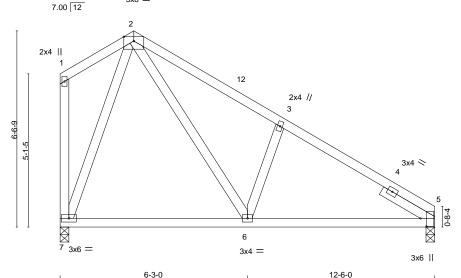


Plate Offsets (X,Y)--[5:0-3-4,0-2-6] LOADING (psf) SPACING-GRIP 2-0-0 CSI. **DEFL** in (loc) I/defl L/d **PLATES** TCLL 20.0 Plate Grip DOL 1.15 TC 0.25 Vert(LL) -0.03 6-7 >999 240 MT20 197/144 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.31 Vert(CT) -0.07 6-7 >999 180 **TCDL** 10.0 Rep Stress Incr YES WB 0.34 Horz(CT) 0.00 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 20% Matrix-AS Weight: 58 lb BCDL

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. (size) 5=0-3-8, 7=0-3-8 Max Horz 7=-194(LC 12)

Max Uplift 5=-40(LC 14), 7=-50(LC 14) Max Grav 5=514(LC 19), 7=494(LC 1)

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

TOP CHORD 2-3=-583/220, 3-5=-536/154 **BOT CHORD** 5-6=-65/518

WEBS 2-6=-147/492, 3-6=-303/184, 2-7=-457/210

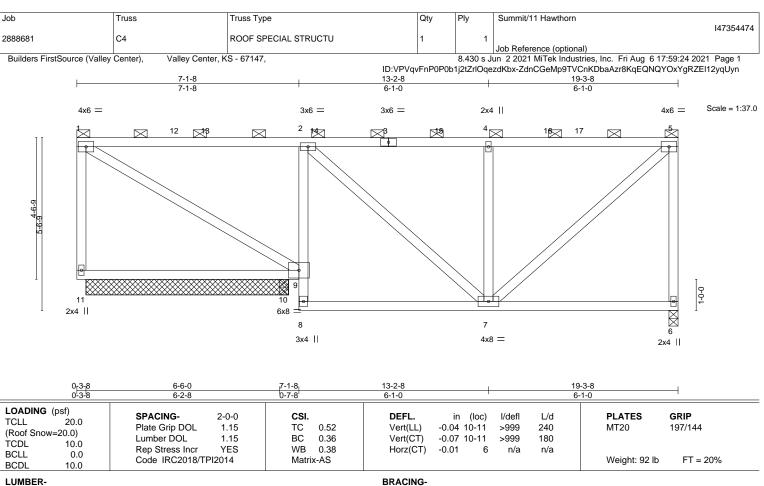
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 2-5-8, Exterior(2R) 2-5-8 to 5-5-8, Interior(1) 5-5-8 to 12-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

Rigid ceiling directly applied.





TOP CHORD

BOT CHORD

2-0-0 oc purlins (6-0-0 max.): 1-5, 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.

11=6-6-0, 6=0-3-8, 10=0-3-8 (size)

Max Horz 11=163(LC 11)

Max Uplift 11=-111(LC 8), 6=-70(LC 12), 10=-72(LC 9) Max Grav 11=360(LC 1), 6=552(LC 1), 10=607(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-11=-310/323, 1-2=-259/256, 2-4=-408/293, 4-5=-408/293, 5-6=-496/319

BOT CHORD 2-9=-576/355

WEBS 1-9=-319/276, 4-7=-367/284, 5-7=-263/507

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 16-1-12, Corner(3) 16-1-12 to 19-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 10 except (it=lb) 11=111.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

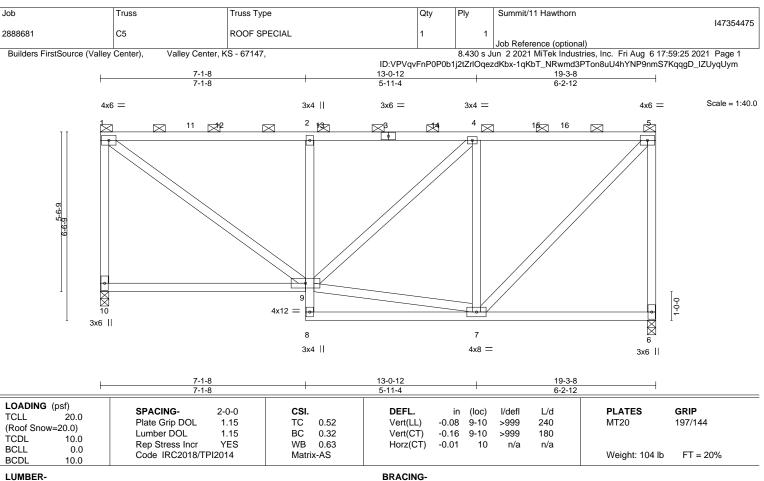


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TOP CHORD

BOT CHORD

2-0-0 oc purlins (6-0-0 max.): 1-5, 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.

10=0-3-8, 6=0-3-8 (size) Max Horz 6=195(LC 11)

Max Uplift 10=-110(LC 8), 6=-110(LC 9) Max Grav 10=760(LC 1), 6=760(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-10=-687/435, 1-2=-705/345, 2-4=-682/332, 4-5=-535/292, 5-6=-704/426

BOT CHORD 2-9=-410/315

WEBS 1-9=-467/832, 7-9=-335/514, 4-7=-499/369, 5-7=-405/748

NOTES-

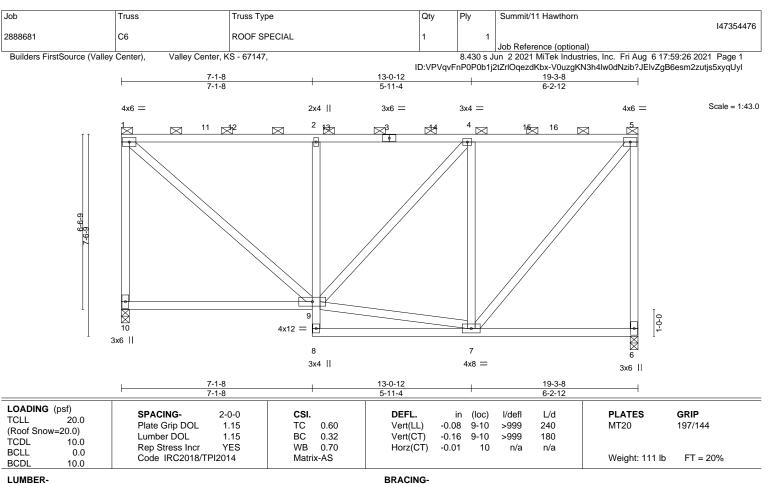
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 16-1-12, Corner(3) 16-1-12 to 19-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=110, 6=110,
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 9,2021







TOP CHORD

BOT CHORD

2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.

Rigid ceiling directly applied.

LUMBER-TOP CHORD BOT CHORD

WEBS

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

REACTIONS.

10=0-3-8, 6=0-3-8 (size) Max Horz 6=228(LC 11)

Max Uplift 10=-121(LC 8), 6=-121(LC 9) Max Grav 10=760(LC 1), 6=760(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-10=-688/451, 1-2=-593/294, 2-4=-576/285, 4-5=-462/267, 5-6=-705/441 TOP CHORD

BOT CHORD 2-9=-413/320, 6-7=-249/257

WEBS 1-9=-449/751, 7-9=-328/468, 4-7=-488/381, 5-7=-403/702

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 16-1-12, Corner(3) 16-1-12 to 19-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=121, 6=121,
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job Truss Truss Type Qty Summit/11 Hawthorn 147354477 2888681 C7 **ROOF SPECIAL** Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:27 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, 13-0-12 5-11-4 6-2-12 Scale = 1:48.5 4x8 = 2x4 || 3x6 = 3x4 = 4x8 = 2 16 <u>5</u> 11 \Rightarrow ² 15 \boxtimes \bowtie × X X 10 1-0-0 4x12 =3x6 || 3x6 II 8 3x4 || 4x8 = 13-0-12 19-3-8 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI **PLATES GRIP** (loc) L/d TCLL 20.0 Plate Grip DOL 1.15 Vert(LL) -0.08 240 197/144 TC 0.67 9-10 >999 (Roof Snow=20.0) Lumber DOL 1.15 ВС 0.33 Vert(CT) -0.16 9-10 >999 180 **TCDL** 10.0 Rep Stress Incr YES WB 0.80 Horz(CT) -0.01 10 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-AS Weight: 118 lb FT = 20% **BCDL** 10.0 LUMBER-BRACING-TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.

BOT CHORD

WEBS

Rigid ceiling directly applied.

5-6, 4-7

1 Row at midpt

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

REACTIONS. 10=0-3-8, 6=0-3-8 (size)

Max Horz 6=260(LC 11) Max Uplift 10=-135(LC 8), 6=-135(LC 9) Max Grav 10=760(LC 1), 6=760(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-10=-688/469, 1-2=-511/263, 2-4=-498/256, 4-5=-407/250, 5-6=-705/458 TOP CHORD

BOT CHORD 2-9=-415/326, 6-7=-290/300

WEBS 1-9=-445/697, 7-9=-328/462, 4-7=-480/397, 5-7=-411/671

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 16-1-12, Corner(3) 16-1-12 to 19-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=135, 6=135,
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 9,2021





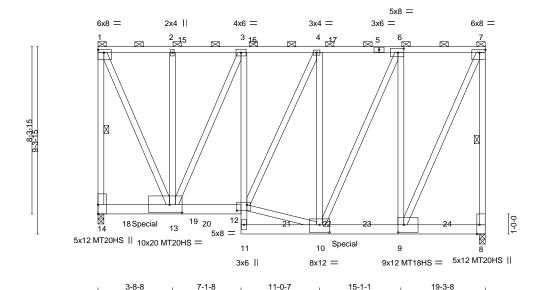
Job Truss Truss Type Qty Ply Summit/11 Hawthorn 147354478 2888681 C8 Roof Special Girder

Builders FirstSource (Valley Center), Valley Center, KS - 67147, Job Reference (optional)
8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:29 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-vba5JMQx_?7Vt56YNjZ0rOX3D06E33hQbryWiFyqUyi 19-3-8

3-5-0 3-10-15 4-0-11 4-2-7

Scale = 1:57.4



	3-0-0	3-3-0	3-10-13	4-0-11	4-2-7			
Plate Offsets (X,Y) [1:Edge,0-1-12]	, [6:0-3-8,0-2-8], [7:Edge,0)-1-12], [8:0-5-8,Edge], [9	9:0-3-8,0-4-8], [10	:0-6-0,0-4-8], [12:	:0-6-0,0-3-8], [13:0-7	-8,0-4-12]		
(Roof Snow=20.0)	ING- 2-0-0 Grip DOL 1.15 er DOL 1.15	CSI. TC 0.65 BC 0.39	DEFL. Vert(LL) Vert(CT)		l/defl L/d >999 240 >999 180	PLATES MT20 MT20HS	GRIP 197/144 148/108	
TCDL 10.0		14/D 0.00	1 1 (O±)	0.00	, ,	NAT4 01 10	407/444	

Horz(CT)

BRACING-

WEBS

TOP CHORD

BOT CHORD

0.03

n/a

1 Row at midpt

n/a

2-0-0 oc purlins (6-0-0 max.): 1-7, except end verticals.

1-14, 7-8

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

WB 0.96

Matrix-MS

3_10_15

BCDL LUMBER-

BCLL

2x4 SPF No.2 TOP CHORD

0.0

BOT CHORD 2x6 SP 2400F 2.0E *Except*

3-11: 2x4 SPF No.2 2x4 SPF No.2 *Except*

WEBS 1-14,7-8: 2x4 SPF 1650F 1.5E

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

Max Uplift 14=-672(LC 4), 8=-633(LC 5) Max Grav 14=7269(LC 1), 8=6823(LC 1)

Rep Stress Incr

Code IRC2018/TPI2014

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

1-14=-6366/603, 1-2=-2819/259, 2-3=-2819/259, 3-4=-4218/387, 4-6=-3945/361, TOP CHORD

NΟ

6-7=-2751/254, 7-8=-6158/588

BOT CHORD 12-13=-389/4235, 11-12=-32/527, 3-12=-240/2894, 10-11=-43/466, 9-10=-254/2751 **WEBS** 1-13=-628/6850, 3-13=-3430/323, 10-12=-332/3628, 4-12=-69/631, 4-10=-791/119,

6-10=-271/2894, 6-9=-2884/313, 7-9=-610/6626

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 0-3-0 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.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=672 8=633
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1407 lb down and 139 lb up at 1-4-4, 1407 lb down and 139 lb up at 3-4-4, 1388 lb down and 139 lb up at 5-4-4, 1388 lb down and 138 lb up at 7-3-4, 1404 lb down and 140 lb up at 9-4-4, 1380 lb down and 139 lb up at 11-4-4, 1391 lb down and 139 lb up at 13-4-4, and 1412 lb down and 140 lb up at 15-4-4, and 1394 lb down and 141 lb up at 17-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



197/144

FT = 20%

MT18HS

Weight: 355 lb

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Continued on page 2



Summit/11 Hawthorn Job Truss Truss Type Qty Ply 147354478 2888681 C8 Roof Special Girder

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional)
8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:29 2021 Page 2 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-vba5JMQx_?7Vt56YNjZ0rOX3D06E33hQbryWiFyqUyi

12) Special hanger(s) or other connection device(s) shall be provided starting at 2-4-4 from the left end to 12-3-12 sufficient to connect truss(es) to front face of bottom chord. The design/selection of such special 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: 1-7=-60, 12-14=-20, 8-11=-20

Concentrated Loads (lb)

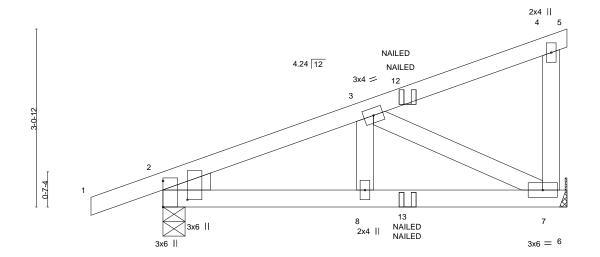
Vert: 12=-1388(F) 9=-1412(F) 18=-1407(F) 19=-1407(F) 20=-1388 21=-1404(F) 22=-1380(F) 23=-1391(F) 24=-1394(F)



Job Truss Truss Type Qty Summit/11 Hawthorn 147354479 2888681 CJ1 Diagonal Hip Girder 2 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:30 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-Nn8UWiQZIJFMVFhkxR4FOb4MEoWmoj4ZpVh3EiyqUyh 1-2-14 3-5-11 3-5-11

Scale = 1:19.8



6-11-6

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

LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.18 BC 0.18 WB 0.12 Matrix-MP	DEFL. in (loc) l/defl L/c Vert(LL) -0.01 7-8 >999 24C Vert(CT) -0.01 7-8 >999 18C Horz(CT) 0.00 7 n/a n/a	PLATES GRIP MT20 197/144 Weight: 27 lb FT = 20%
BCDL 10.0	Code INC2016/1712014	IVIALITX-IVIF		Weight. 27 ib F1 = 20 /6

LUMBER-BRACING-

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

WEBS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WEDGE

Left: 2x4 SPF No.2

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

Max Horz 2=97(LC 9)

Max Uplift 7=-28(LC 7), 2=-62(LC 10) Max Grav 7=402(LC 15), 2=431(LC 15)

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

TOP CHORD 2-3=-518/30

BOT CHORD 2-8=-55/456, 7-8=-55/456

WEBS 3-7=-505/45

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); 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; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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) 7, 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) "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: 1-4=-60, 4-5=-60, 6-9=-20

Concentrated Loads (lb)

Vert: 12=-34(F=-17, B=-17) 13=-31(F=-15, B=-15)



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Job Truss Truss Type Qty Summit/11 Hawthorn 147354480 2888681 CJ₂ Diagonal Hip Girder 2 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:31 2021 Page 1 Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-r_isk2RCWcND7OGxV8bUxpdKcCltX9vi29Rdn8yqUyg

3-11-10

except end verticals.

Structural wood sheathing directly applied or 4-5-15 oc purlins,

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

Scale = 1:21.2

5-4-11 1-2-14 3-8-3 1-8-8 2-3-2

2x4 || 5 6 NAILED NAILED 2x4 ≥ 4.24 12 2x4 || NAILED NAILED 15 3x6 = 8 17 9-0-1 0-7-4 NAILED 3x6 =NAILED 16 10 NAILED 2x4 || NAILED 5x8 II

Plate Offsets (X,Y)--[2:0-3-8,Edge] LOADING (psf) SPACING-CSI. (loc) I/defl L/d **PLATES GRIP** TCLL 20.0 Plate Grip DOL 1.15 TC 0.97 Vert(LL) -0.15 10 >588 240 MT20 197/144 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.64 Vert(CT) -0.2310 >382 180 **TCDL** 10.0 Rep Stress Incr NO WB 0.14 Horz(CT) 0.09 8 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 20% Matrix-MF Weight: 26 lb BCDL

TOP CHORD

BOT CHORD

LUMBER-**BRACING-**

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

WEBS 2x4 SPF No.2 WEDGE Left: 2x4 SPF No.2

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

Max Horz 2=88(LC 7)

Max Uplift 2=-79(LC 10), 8=-62(LC 10) Max Grav 2=494(LC 15), 8=519(LC 15)

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

TOP CHORD 2-3=-399/40. 3-4=-773/105

BOT CHORD 2-10=-35/286, 3-9=-20/277, 8-9=-102/839

WEBS 4-8=-948/139

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); 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; Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.0; 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 16.0 psf or 1.00 times flat roof load of 20.0 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 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=-60, 5-6=-60, 10-11=-20, 7-9=-20

Concentrated Loads (lb) Vert: 16=-7(F=-3, B=-3) 17=-149(F=-75, B=-75)



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Job Truss Truss Type Qty Summit/11 Hawthorn 147354481 2888681 D1 **GABLE** Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:32 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

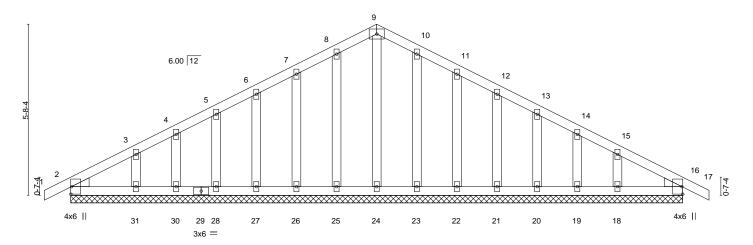
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-KAGExNSqHwW4kYq72s6jT09kvcEhGebsHpAAJayqUyf 21-2-8 0-10-8 0-10-8 0-10-8 10-2-0 10-2-0

4x6 =

Scale = 1:38.3

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

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



20-4-0 LOADING (psf) SPACING-DEFL. **PLATES** GRIP 2-0-0 CSI (loc) I/defl L/d TCLL 20.0 Plate Grip DOL Vert(LL) 197/144 1.15 TC 0.04 0.00 16 n/r 120 MT20 (Roof Snow=20.0) Lumber DOL 1.15 ВС 0.03 Vert(CT) 0.00 16 120 n/r **TCDL** 10.0 Rep Stress Incr YES WB 0.05 Horz(CT) 0.00 16 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 97 lb FT = 20% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

REACTIONS. All bearings 20-4-0.

Max Horz 2=105(LC 13) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 26, 27, 28, 30, 31, 23, 16, 22, 21, 20, 19, 18 All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 28, 30, 31, 23, 16, 22, 21, 20, 19, 18

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) -0-10-8 to 2-2-0, Exterior(2N) 2-2-0 to 10-2-0, Corner(3R) 10-2-0 to 13-2-0, Exterior(2N) 13-2-0 to 21-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For study exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 1-4-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 26, 27, 28, 30, 31, 23, 16, 22, 21, 20, 19, 18.
- 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.



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Job Truss Truss Type Qty Summit/11 Hawthorn 147354482 2888681 D2 Common Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:34 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-GZN_M3T4pXmn_s_WAH9BYRF_oPpnkX39k7fHNTyqUyd 21-2-8 0-10-8 0-10-8 10-2-0 15-2-13 20-4-0 5-0-13 5-0-13 5-1-3 Scale = 1:38.0 4x6 = 6.00 12 2x4 \\ 2x4 // 5 3 20 ф 10 9 8

	-	6-9-7				13-6-9				20-4-0		
(Roof Snow=20.0 TCDL 10 BCLL 0).0))).0).0	6-9-7 SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/T	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.40 0.43 0.12	6-9-2 DEFL. Vert(LL) Vert(CT) Horz(CT)	(loc) 8-10 8-10 6	I/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 74 lb	GRIP 197/144	_
BCDL 10	0.0	Code IRC2018/1	PI2014	iviatri	X-AS					vveignt: 74 ib	F1 = 20%	

BRACING-TOP CHORD

BOT CHORD

3x4 =

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-**BOT CHORD**

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

WEBS 2x4 SPF No.2

4x6 |

WEDGE

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

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

Max Horz 2=-105(LC 12)

Max Uplift 2=-101(LC 14), 6=-101(LC 14) Max Grav 2=903(LC 19), 6=903(LC 20)

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

 $2\hbox{-}3\hbox{-}1401/285,\ 3\hbox{-}4\hbox{-}-1249/299,\ 4\hbox{-}5\hbox{-}-1249/299,\ 5\hbox{-}6\hbox{-}-1401/285$ TOP CHORD

BOT CHORD 2-10=-177/1201, 8-10=-64/774, 6-8=-184/1201

WEBS 4-8=-78/480, 5-8=-341/146, 4-10=-78/480, 3-10=-341/146

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-2-0, Exterior(2R) 10-2-0 to 13-2-0, Interior(1) 13-2-0 to 21-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3x4 =

3x6 =

- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



4x6 ||

August 9,2021



1	5-1-3	10-2-0	15-2-13	20-4-0	ĺ
Г	5-1-3	5-0-13	5-0-13	5-1-3	
ffsets (X,Y)	[1:0-0-0,0-2-1], [5:0-1-0,0-1-12], [8	:0-6-0,0-4-8], [10:0-4-8,0-1-8]			
10 (1)					

8

LUS24

8x12 =

ПΠ

20

LUS24

21

LUS24

ПП

22

LUS24

7

4x8 ||

ПП

23

LUS24

Structural wood sheathing directly applied or 4-1-0 oc purlins.

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

5x8 >

LUS24

ПП

19

LUS24

9

6x8

HUS26

LOADING (psf) SPACING-**PLATES** 2-0-0 CSI. **DEFL** (loc) I/defl L/d GRIP TCLL 20.0 Plate Grip DOL 1.15 TC 0.62 Vert(LL) -0.12 8-10 >999 240 MT20 197/144 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.50 Vert(CT) -0.238-10 >999 180 TCDL 10.0 Rep Stress Incr NO WB 0.60 Horz(CT) 0.05 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS Weight: 193 lb FT = 20%BCDL

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

Plate Off

TOP CHORD 2x4 SPF No.2

0-7-4

6x8 =

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

5-9: 2x6 SP 2400F 2.0E

17

HUS26

18

HUS26

10

3x6 ||

2x4 SPF No.2 WEBS

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. (size) 1=0-3-8, 5=0-3-8

Max Horz 1=-104(LC 8)

Max Uplift 1=-460(LC 10), 5=-563(LC 10) Max Grav 1=4717(LC 15), 5=5552(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-8200/820, 2-3=-5884/626, 3-4=-5884/626, 4-5=-8298/827

BOT CHORD 1-10=-666/7273, 8-10=-666/7273, 7-8=-672/7364, 5-7=-672/7364

3-8=-473/4853, 4-8=-2499/284, 4-7=-153/1936, 2-8=-2395/277, 2-10=-144/1849 **WEBS**

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

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

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); 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; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=460, 5=563
- 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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 6-0-12 to connect truss(es) to back face of bottom chord.
- 11) Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 8-0-12 from the left end to 19-11-10 to connect truss(es) to back face of bottom chord.

Oவிtinileationaipages where hanger is in contact with lumber.



August 9,2021



Job Truss Truss Type Qty Ply Summit/11 Hawthorn 147354483 D3 2888681 Common Girder

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

2 | Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:35 2021 Page 2 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-klxNZPUiZrueb0Zik_gQ5fn5Bp8?TsrlznPqwvyqUyc

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-60, 3-6=-60, 11-14=-20

Concentrated Loads (lb)

Vert: 9=-851(B) 8=-851(B) 16=-858(B) 17=-851(B) 18=-851(B) 19=-851(B) 20=-851(B) 21=-851(B) 22=-851(B) 23=-851(B)



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

ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-g737_5Wy5S8MrJj4rPiuA4sOzdmVxnabQ5ux_oyqUya 9-10-14 12-3-11 15-0-0 2-8-5 2-4-14 2-4-14 2-4-14 2-4-14 2-8-5

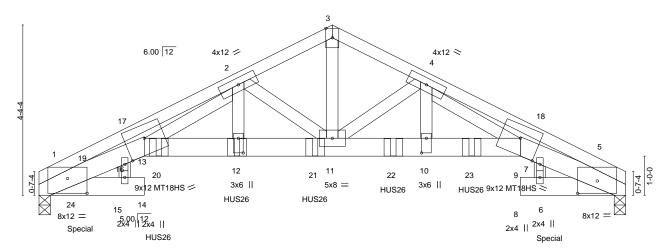
> Scale = 1:29.5 4x6 ||

> > Structural wood sheathing directly applied or 4-5-13 oc purlins.

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

6-0-0 oc bracing: 1-15,5-6.

10-0-0 oc bracing: 13-16, 7-9



<u> </u>	2-2-5 2-8-5 2-2258-5 0-6-0	5-1-2 2-4-14	7-6-0 2-4-14	9-10-14 2-4-14		1-9-11 15-0-0 1-6-0 2-2-5	\dashv
Plate Offsets (X,Y) [1:		3-13], [9:0-6-0,0-5-0	0], [10:0-4-8,0-1-8], [12:0	0-4-8,0-1-8], [13:0-6-0,0-5-0]			
LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2018/T	2-0-0 1.15 1.15 NO PI2014	CSI. TC 0.79 BC 0.75 WB 0.52 Matrix-MS	DEFL. in (loc) Vert(LL) -0.16 9-10 Vert(CT) -0.28 12-13 Horz(CT) 0.15 5	l/defl L/d >999 240 >606 180 n/a n/a	PLATES MT20 MT18HS Weight: 235 lb	GRIP 197/144 197/144 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x6 SP 2400F 2.0E *Except*

9-13: 2x6 SPF 2100F 1.8E, 1-14,5-8: 2x6 SPF No.2

WEBS 2x4 SPF No.2

> (size) 1=0-3-8, 5=0-3-8 Max Horz 1=67(LC 26)

Max Uplift 1=-441(LC 10), 5=-418(LC 10) Max Grav 1=5941(LC 14), 5=5364(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $1\hbox{-}2\hbox{--}14113/1025, 2\hbox{-}3\hbox{--}7402/619, 3\hbox{-}4\hbox{--}7400/619, 4\hbox{-}5\hbox{--}14371/1112}$ **BOT CHORD** 1-16=-882/12668, 13-16=-869/12475, 12-13=-750/10265, 11-12=-749/10245,

 $10\text{-}11\text{=-}778/10336, \, 9\text{-}10\text{=-}780/10356, \, 7\text{-}9\text{=-}964/12939, \, 5\text{-}7\text{=-}950/12768}$ WFBS 3-11=-517/6313, 4-11=-4634/387, 4-10=-262/3754, 2-11=-4519/351, 2-12=-237/3670,

2-13=-154/2876, 4-9=-215/3049, 15-16=-17/288

1) 3-ply truss to be connected together as follows:

Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-4-0 oc.

Bottom chords connected with 10d (0.148"x3") nails as follows: 2x6 - 3 rows staggered at 0-4-0 oc.

Web connected with 10d (0.131"x3") nails 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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); 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; Pf=20.0 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) All plates are MT20 plates unless otherwise indicated.
- 7) The Fabrication Tolerance at joint 13 = 12%, joint 9 = 16%
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Bearing at joint(s) 1, 5 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) 1=441, 5=418. 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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 3-0-12 from the left end to 9-0-12 to connect truss(es) to back face of bottom chord.





August 9,2021



16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek

Job	Truss	Truss Type	Qty	Ply	Summit/11 Hawthorn	
2888681	Г4	ROOF SPECIAL GIRDER	4	_		147354484
2000001	E1	ROOF SPECIAL GIRDER		3	Job Reference (optional)	

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:37 2021 Page 2 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-g737_5Wy5S8MrJj4rPiuA4sOzdmVxnabQ5ux_oyqUya

- 13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent at 11-0-12 from the left end to connect truss(es) to back 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) 1462 lb down and 128 lb up at 1-0-12, and 1472 lb down and 127 lb up at 13-0-12 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=-60, 3-5=-60, 13-16=-20, 9-13=-20, 7-9=-20, 1-14=-20, 5-8=-20

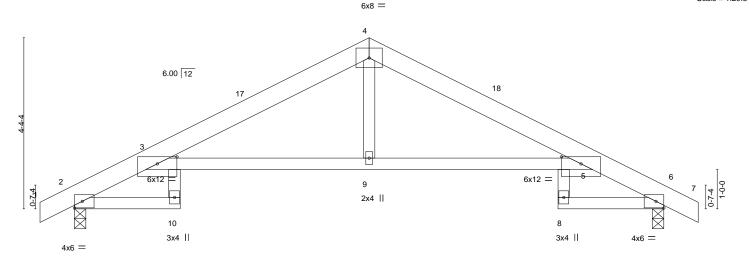
Concentrated Loads (lb)

Vert: 12=-1460(B) 7=-1472(B) 19=-1462(B) 20=-1388(B) 21=-1345(B) 22=-1394(B) 23=-1512(B)

Job Truss Truss Type Qty Summit/11 Hawthorn 147354485 2888681 E2 Roof Special 2 Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:38 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-8KdVCRXbsmGDSTIHP6D7jHPWV03ogMzkfldUXEyqUyZ

-0-10-8 0-10-8 15-0-0 15-10-8 12-3-11 0-10-10 2-8-5 3-11-1 3-11-1 0-10-10 2-8-5 0-10-8

Scale = 1:29.3



7-6-0 Plate Offsets (X,Y)-- [3:0-6-0,0-2-2], [5:0-6-0,0-2-2]

LOADING (psf) TCLL 20.0 (Roof Snow=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 0.99 BC 0.94 WB 0.06 Matrix-AS	DEFL. in Vert(LL) -0.24 Vert(CT) -0.45 Horz(CT) 0.35	3-9 >	/defl L/d -746 240 -404 180 n/a n/a	PLATES MT20 Weight: 58 lb	GRIP 197/144 FT = 20%
BCDL 10.0	Code IRC2016/1712014	IVIAITIX-AS				Weight. 56 ib	F1 = 20%

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

WEBS

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

2x4 SPF No.2 REACTIONS. (size) 2=0-3-8, 6=0-3-8

Max Horz 2=-80(LC 12) Max Uplift 2=-78(LC 14), 6=-78(LC 14) Max Grav 2=731(LC 19), 6=731(LC 20)

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

TOP CHORD 3-12=-326/125, 3-4=-1100/285, 4-5=-1100/284, 5-6=-326/126

BOT CHORD 3-9=-138/988, 5-9=-138/988

WFBS 4-9=0/258

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-6-0, Exterior(2R) 7-6-0 to 10-6-0, Interior(1) 10-6-0 to 15-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

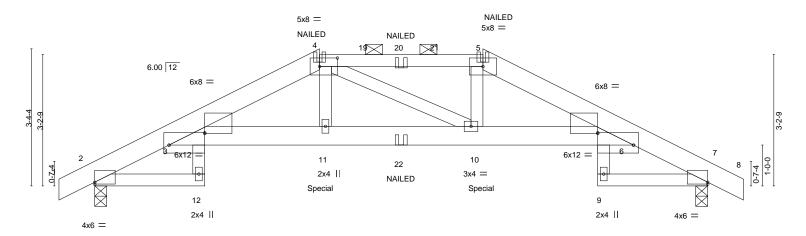


August 9,2021



Job Truss Truss Type Qty Ply Summit/11 Hawthorn 147354486 2888681 E3 HIP GIRDER Job Reference (optional)
8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:40 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-5ikGd7YrONWxinSfWXGboiUvtqpT8EK1636bb7yqUyX 15-10-8 12-3-11 15-0-0 0-10-8 2-8-5 2-9-11 4-0-0 2-9-11 2-8-5 0-10-8

Scale = 1:28.2



<u> </u>	2-8-5	5-6-0	-	9-6-0	12-3-11	15-0-0	
Dieta Officeta (V.V)	2-8-5	2-9-11	0 2 61 [4:0 5 4 0 2 0]	4-0-0	2-9-11	2-8-5	<u>'</u>
Plate Offsets (X,Y)	2:0-0-0,0-0-9], [3:0-10-8	5,0-3-10], [3:0-10-8	,0-3-6], [4:0-5-4,0-2-8],	[6:0-10-8,0-3-10], [6:0-1	0-8,0-3-6], [7:0-0-0,0-0-9]		
LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOI Lumber DOL Rep Stress Inc Code IRC201	1.15 or NO	CSI. TC 0.81 BC 0.61 WB 0.13 Matrix-MS	DEFL. ir Vert(LL) -0.19 Vert(CT) -0.30 Horz(CT) 0.28	6-10 >933 240 6-10 >604 180	PLATES MT20 Weight: 133 lb	GRIP 197/144 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

4-5: 2x4 SPF No.2 **BOT CHORD** 2x4 SPF No.2 *Except* 3-6: 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2

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

Max Horz 2=60(LC 47)

Max Uplift 2=-197(LC 10), 7=-197(LC 10) Max Grav 2=1714(LC 29), 7=1714(LC 29)

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

TOP CHORD 3-14=-782/121, 3-4=-4311/493, 4-5=-4036/476, 5-6=-4268/486, 6-7=-783/121

BOT CHORD 3-11=-379/3968, 10-11=-388/4076, 6-10=-373/3931

WEBS 4-11=-90/1068, 5-10=-85/1034

NOTES-

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

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); 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; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Provide adequate drainage to prevent water ponding.
- 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=197, 7=197
- 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.
- "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) 593 lb down and 111 lb up at 5-6-0, and 593 lb down and 111 lb up at 9-5-4 on bottom chord. The design/selection of such connection device(s) is the



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

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

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

August 9,2021

OF MISS

SCOTT M.

SEVIER

NUMBER

PE-2001018807

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

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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Summit/11 Hawthorn 147354486 E3 HIP GIRDER 2888681

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

| **Z** | Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:40 2021 Page 2 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-5ikGd7YrONWxinSfWXGboiUvtqpT8EK1636bb7yqUyX

LOAD CASE(S) Standard

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

Vert: 1-3=-60, 3-4=-60, 4-5=-60, 5-6=-60, 6-8=-60, 12-13=-20, 3-6=-20, 9-16=-20

Concentrated Loads (lb)

Vert: 4=-128(F) 5=-128(F) 11=-593(F) 10=-593(F) 20=-128(F) 22=-103(F)



Job Truss Truss Type Qty Summit/11 Hawthorn 147354487 F1 2888681 Common 2 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:41 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-ZvleqSZT9heoJx0s4FnqLw17lEBytiaBLjs97ZyqUyW -0-10-8 0-10-8 14-10-8 7-0-0 0-10-8 Scale = 1:27.5 4x8 = 3 6.00 12 15 16 ľ 6 2x4 || 4x6 || 4x6 || 7-0-0 14-0-0 7-0-0 LOADING (psf)

TCDL 10.0 **BCLL** 0.0 **BCDL** 10.0

(Roof Snow=20.0) Lumber DOL Rep Stress Incr Code IRC2018/TPI2014

SPACING-

Plate Grip DOL

2-0-0

1.15

1.15

YES

CSI. TC 0.61 ВС 0.46 WB 0.07 Matrix-AS

DEFL I/defI (loc) L/d Vert(LL) -0.09 240 6-9 >999 Vert(CT) -0.14 6-9 >999 180 Horz(CT) 0.02 2 n/a n/a

BRACING-

TOP CHORD

BOT CHORD

PLATES MT20

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

GRIP 197/144

Weight: 42 lb FT = 20%

LUMBER-

TCLL

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

20.0

WEDGE

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

REACTIONS.

(size) 2=0-3-8, 4=0-3-8 Max Horz 2=-75(LC 12)

Max Uplift 2=-78(LC 14), 4=-78(LC 14) Max Grav 2=681(LC 19), 4=681(LC 20)

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

2-3=-791/246, 3-4=-791/246 TOP CHORD **BOT CHORD** 2-6=-98/606, 4-6=-98/606

WEBS 3-6=0/298

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 14-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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

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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Summit/11 Hawthorn 147354488 2888681 F2 Hip Girder Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:43 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-VHQOF8ajhluWZEAECgplQL6Qz1ofLa5Tp1LFCSyqUyU 0-10-8 5-0-0 4-0-0 5-0-0 0-10-8

Scale = 1:26.1

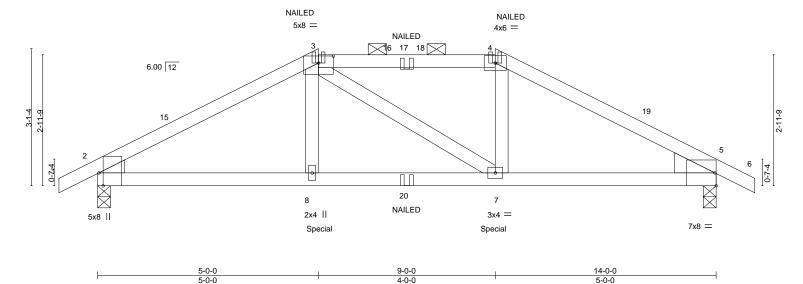


Plate Offsets (X,Y)--[2:0-3-8,Edge], [3:0-4-0,0-1-15] LOADING (psf) SPACING-CSI **DEFL** (loc) I/defl L/d **PLATES** TCLL 20.0 Plate Grip DOL 1.15 TC 0.82 Vert(LL) -0.11 7-8 >999 240 MT20 197/144 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.77 Vert(CT) -0.167-8 >999 180 TCDL 10.0 Rep Stress Incr NO WB 0.13 Horz(CT) 0.05 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MS FT = 20%Weight: 49 lb BCDL

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2

WEDGE

Left: 2x4 SPF No.2, Right: 2x6 SPF No.2

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

Max Horz 2=-55(LC 46)

Max Uplift 2=-141(LC 10), 5=-141(LC 10) Max Grav 2=1475(LC 29), 5=1475(LC 29)

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

TOP CHORD 2-3=-2332/213, 3-4=-1966/210, 4-5=-2333/213 **BOT CHORD** 2-8=-123/1992, 7-8=-124/1965, 5-7=-123/1993

WEBS 3-8=0/516, 4-7=0/530

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional); 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; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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) except (jt=lb) 2=141. 5=141.
- 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) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 430 lb down and 55 lb up at 5-0-0, and 430 lb down and 55 lb up at 8-11-4 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



Structural wood sheathing directly applied or 3-4-1 oc purlins, except

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

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

August 9,2021

Continued on page 2

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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Summit/11 Hawthorn
	F0				147354488
2888681	F2	Hip Girder	1	1	
					Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:43 2021 Page 2 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-VHQOF8ajhluWZEAECgplQL6Qz1ofLa5Tp1LFCSyqUyU

LOAD CASE(S) Standard

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

Vert: 1-3=-60, 3-4=-60, 4-6=-60, 9-12=-20

Concentrated Loads (lb)

Vert: 4=-139(F) 8=-430(F) 7=-430(F) 3=-139(F) 17=-139(F) 20=-56(F)



Job Truss Truss Type Qty Summit/11 Hawthorn 147354489 2888681 J1 Jack-Open 3 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:44 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-zU_mSUbLSc0NBOIRINKXyYfh4RFs43Md1h4pkuyqUyT 0-10-8 5-0-0 Scale = 1:18.6 6.00 12 0-7-4 LOADING (psf) SPACING-2-0-0 DEFL. I/defI L/d **PLATES** GRIP CSI (loc) TCLL 20.0

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

-0.05

-0.08

0.02

240

180

n/a

Structural wood sheathing directly applied.

>999

>735

n/a

Rigid ceiling directly applied.

2

LUMBER-

TCDL

BCLL

BCDL

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

10.0

0.0

10.0

WEDGE Left: 2x4 SPF No.2

(Roof Snow=20.0)

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

Max Horz 2=87(LC 14)

Max Uplift 3=-44(LC 14), 2=-25(LC 14)

Max Grav 3=199(LC 19), 2=337(LC 19), 4=89(LC 5)

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

1.15

1.15

YES

TC

ВС

WB

Matrix-AS

0.41

0.32

0.00

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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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, 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.



197/144

FT = 20%

MT20

Weight: 14 lb

August 9,2021

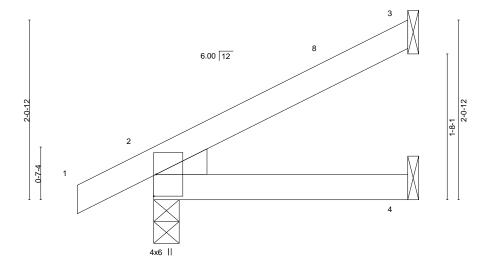


Job Truss Truss Type Qty Summit/11 Hawthorn 147354490 2888681 J2 Jack-Open Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:44 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-zU_mSUbLSc0NBOlRlNKXyYfmpRJT43Md1h4pkuyqUyT

2-10-15 0-10-8 2-10-15

Scale = 1:13.2



2-10-15 2-10-15 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL 20.0 Plate Grip DOL 1.15 Vert(LL) 0.01 240 197/144 TC 0.11 4-7 >999 MT20 (Roof Snow=20.0) Lumber DOL 1.15 ВС 0.09 Vert(CT) -0.01 >999 180 **TCDL** 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 2 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-MP Weight: 9 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

BCDL

TOP CHORD 2x4 SPF No.2

WEDGE Left: 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

10.0

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

Max Horz 2=58(LC 14)

Max Uplift 3=-24(LC 14), 2=-27(LC 14)

Max Grav 3=100(LC 19), 2=245(LC 19), 4=51(LC 5)

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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 2-10-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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 2-10-15 oc purlins.

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

August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354491 2888681 J3 Jack-Open 3 Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:45 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-RgY8gqc_Dv8DoYKdJ4rmVmCtXrYNpWcmGLqMGKyqUyS 0-10-8 2-8-5 Scale = 1:19.9 0-4-11 6.00 12 4x6 || 0-7-4 3x4 II 4x6 || 5-6-0 Plate Offsets (X,Y)--[6:0-3-0,0-0-8] LOADING (psf) SPACING-GRIP 2-0-0 CSI. in (loc) I/defl L/d **PLATES** TCLL 20.0 Plate Grip DOL 1.15 TC 0.37 Vert(LL) -0.07 5-6 >992 240 MT20 197/144 (Roof Snow=20.0) Lumber DOL 1.15 вС 0.56 Vert(CT) -0.11 5-6 >591 180 **TCDL** 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.04 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

BCDL

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

WEDGE Left: 2x4 SPF No.2

REACTIONS.

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

Max Horz 2=94(LC 14)

Max Uplift 4=-37(LC 14), 2=-20(LC 14), 5=-1(LC 14) Max Grav 4=188(LC 19), 2=360(LC 19), 5=123(LC 19)

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

TOP CHORD 3-9=-357/32

2-7=-144/255, 3-6=-255/144 BOT CHORD

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-0-5, Interior(1) 2-0-5 to 5-5-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-AS

- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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, 2, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Weight: 17 lb

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

August 9,2021



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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Summit/11 Hawthorn 147354492 2888681 J4 Jack-Open Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:46 2021 Page 1

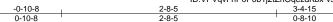
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

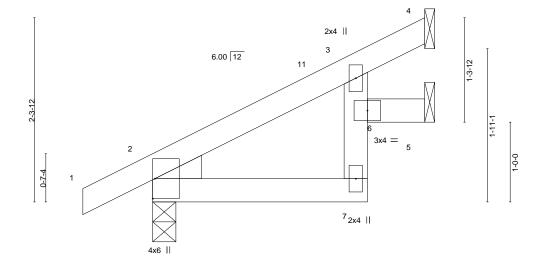
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Structural wood sheathing directly applied or 3-4-15 oc purlins.

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



Scale = 1:14.4



			2-8-5 2-8-5		3-4-15 0-8-10	\dashv	
TCLL 20.0 (Roof Snow=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 0.07 BC 0.14 WB 0.00 Matrix-MR	Vert(CT) -0.	in (loc) .00 7 .00 7 .00 5	l/defl >999 >999 n/a	L/d 240 180 n/a	GRIP 197/144 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE Left: 2x4 SPF No.2

REACTIONS.

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

Max Horz 2=65(LC 14)

Max Uplift 4=-13(LC 14), 2=-26(LC 14), 5=-12(LC 14) Max Grav 4=72(LC 19), 2=276(LC 19), 5=103(LC 19)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-4-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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, 2, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354493 2888681 J5 Jack-Open

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

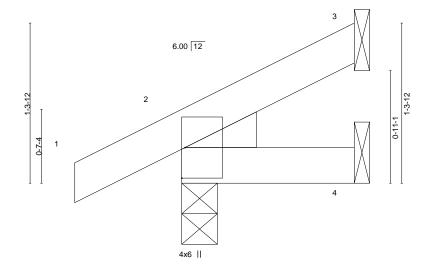
Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:47 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-O3gv5WeEIXOx2sU?RVuEaBHlofLNHQ63jeJTLDyqUyQ

Structural wood sheathing directly applied or 1-4-15 oc purlins.

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



Scale = 1:9.4



1-4-15

LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.06 BC 0.02 WB 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.00 0.00	(loc) 7 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES GRIP MT20 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-MP	11012(01)	0.00	Ü	11/4	TI/U	Weight: 5 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE Left: 2x4 SPF No.2

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

Max Horz 2=38(LC 14)

Max Uplift 3=-8(LC 14), 2=-30(LC 14)

Max Grav 3=34(LC 19), 2=167(LC 19), 4=22(LC 5)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 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.



August 9,2021



Job	Truss		Truss Type	е		Qt	ty	Ply	Summit/11 H	awthorn	147054404
2888681	LG1		GABLE			1		1	Job Reference	e (optional)	147354494
Builders FirstSource (Valley	Center),	Valley Center,	KS - 67147,			ID:VP			un 2 2021 MiT	ek Industries	s, Inc. Fri Aug 6 17:59:48 2021 Page 1 Kof03C_DPT7OqTy2hS0tiDyI20tfyqUyP
									3x6 =		Scale = 1:49.6
	ī	1 2	23 3	1 4	<u>52</u> 4	6_25	<u>7</u>		8 9 10	11	
	8-8-4				X	X		X			
		0		•						-	
	1	*****	*******	····	****	****	×××××	××××××	····	*****	
		22 21		18	17	16	15		14 13	12	
		<u> </u>	3x6 =			-0-0 -0-0					
LOADING (psf)	SPACI	NG- 2	-0-0	CSI.		DEFL.	iı	n (loc)	I/defl L	/d	PLATES GRIP

LUMBER-

TCDL

BCLL

BCDL

(Roof Snow=20.0)

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

10.0

0.0

10.0

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

Vert(LL)

Vert(CT)

Horz(CT)

n/a

n/a

12

0.00

TOP CHORD BOT CHORD **WEBS**

2-0-0 oc purlins (6-0-0 max.): 1-11, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt 1-22, 11-12, 2-21, 3-19, 4-18, 5-17, 6-16,

999

999

n/a

n/a

n/a

n/a

7-15, 8-14, 10-13

MT20

Weight: 133 lb

197/144

FT = 20%

REACTIONS. All bearings 18-0-0.

Max Uplift All uplift 100 lb or less at joint(s) 22, 12, 21, 19, 18, 17, 16, 15, 14, 13 (lb) -Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 19, 18, 17, 16, 15, 14, 13

1.15

1.15

YES

TC

ВС

WB

Matrix-R

0.04

0.03

0.04

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

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

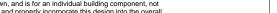
Lumber DOL

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 14-10-4, Corner(3) 14-10-4 to 17-10-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 22, 12, 21, 19, 18, 17, 16, 15, 14, 13.
- 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.



August 9,2021





Job Truss Truss Type Qty Summit/11 Hawthorn 147354495 2888681 PB1 Piggyback 2 Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:49 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-KRnfVCfUG8ffH9eOYwwifcMb5S0plKHMByoaP5yqUyO 4-0-8 4-0-8 Scale = 1:15.5 4x6 = 3 6.00 12 0-4-3

			8-1-0		
LOADING (psf) TCLL 20.0 (Roof Snow=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 0.20 BC 0.08 WB 0.02 Matrix-P	DEFL. in Vert(LL) 0.00 Vert(CT) 0.00 Horz(CT) 0.00	(loc) I/defl L/d 4 n/r 120 5 n/r 120 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 19 lb FT = 20%

BRACING-TOP CHORD

BOT CHORD

6

2x4 =

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

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

2x4 ||

LUMBER-TOP CHORD

OTHERS

REACTIONS.

2x4 SPF No 2 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

> 2=6-2-6, 4=6-2-6, 6=6-2-6 (size)

Max Horz 2=-35(LC 12) Max Uplift 2=-43(LC 14), 4=-43(LC 14)

Max Grav 2=228(LC 19), 4=228(LC 20), 6=240(LC 20)

2x4 =

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

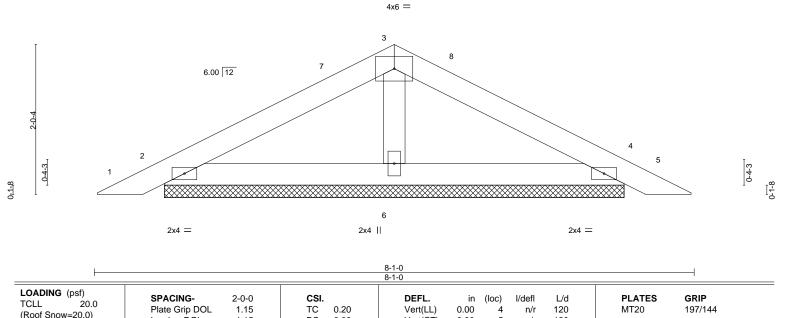
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-3 to 3-4-3, Interior(1) 3-4-3 to 4-0-8, Exterior(2R) 4-0-8 to 7-1-11, Interior(1) 7-1-11 to 7-8-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 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) 2, 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354496 2888681 PB2 Piggyback 19 Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:50 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-oeL1jXg61SnWvJDa6eRxCpvmrsM2UnXVQcX7yYyqUyN 4-0-8 4-0-8 Scale = 1:15.5



Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

0.00

5

4

n/r

n/a

120

n/a

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

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

Weight: 19 lb

FT = 20%

LUMBER-

TCDL

BCLL

BCDL

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

10.0

10.0

0.0

OTHERS 2x4 SPF No.2

REACTIONS. 2=6-2-6, 4=6-2-6, 6=6-2-6 (size)

Max Horz 2=-35(LC 12)

Max Uplift 2=-43(LC 14), 4=-43(LC 14)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

Max Grav 2=228(LC 19), 4=228(LC 20), 6=240(LC 20)

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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-4-3 to 3-4-3, Interior(1) 3-4-3 to 4-0-8, Exterior(2R) 4-0-8 to 7-1-11, Interior(1) 7-1-11 to 7-8-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

ВС

WB

Matrix-P

0.08

0.02

- 2) TCLL: ASCE 7-16; Pf=20.0 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 16.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 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.

1.15

YES

- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354497 2888681 V1 Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:51 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-GqvQwthkolvNWTnngLyAk1SukGhGDBZfeGHgU_yqUyM 16-3-8 Scale = 1:48.5 3x4 || 6 6.00 12 2x4 || ₁₄ 13 2x4 3x6 🖊 2x4 || 3 3x4 / 11 10 9 8 3x6 = 2x4 || 2x4 II 2x4 || 3x4 || LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 20.0 Plate Grip DOL 1.15 Vert(LL) 999 197/144 TC 0.32 n/a n/a MT20 (Roof Snow=20.0)

LUMBER-

TCDL

BCLL

BCDL

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

10.0

0.0

10.0

BOT CHORD 2x4 SPF No.2 WEBS **OTHERS** 2x4 SPF No.2 BRACING-

Vert(CT)

Horz(CT)

n/a

-0.00

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

999

n/a

Weight: 59 lb

FT = 20%

except end verticals.

n/a

n/a

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

WEBS 1 Row at midpt

REACTIONS. All bearings 16-3-0.

(lb) -Max Horz 1=271(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9, 11

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

Max Grav All reactions 250 lb or less at joint(s) 7, 1 except 8=463(LC 18), 9=308(LC 1), 11=346(LC 18)

ВС

WB

Matrix-S

0.15

0.23

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

1-2=-395/229, 2-4=-308/191 TOP CHORD WEBS 5-8=-378/181, 2-11=-255/155

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 16-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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.

1.15

YES

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9, 11.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 9,2021





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

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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Summit/11 Hawthorn 147354498 2888681 V2 Valley

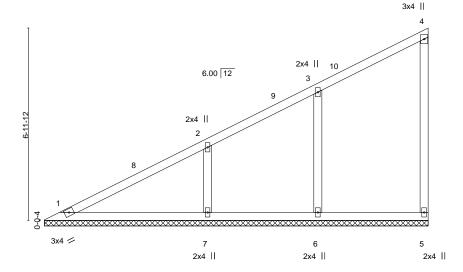
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:56 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-dniJzbltdlXgdEgkSuYLR49mkHOmuTFOoY_R9ByqUyH

13-11-8

Scale = 1:41.8



LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr. VES	CSI. TC 0.30 BC 0.19	Vert(CT) r	in (loc) n/a - 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 0.13 Matrix-S	Horz(CT) -0.	00 5	n/a	n/a	Weight: 48 lb	FT = 20%

LUMBER-

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

BOT CHORD 2x4 SPF No.2 WEBS

OTHERS 2x4 SPF No.2 BRACING-

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

except end verticals.

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

REACTIONS. All bearings 13-11-0. Max Horz 1=230(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 7

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=418(LC 18), 7=442(LC 1)

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

TOP CHORD 1-2=-336/207

WEBS 3-6=-348/173, 2-7=-321/214

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 13-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) 5, 6, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354499 2888681 V3 Valley

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:59 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-1MORccnmwDvEUiPJ81523jnIyUQm5riqUWD6mWyqUyE

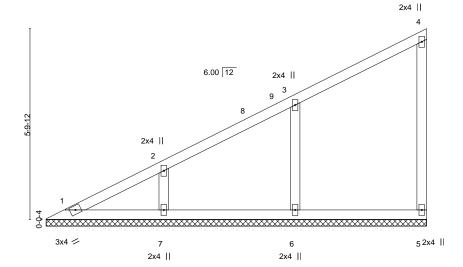
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

11-7-8

Scale = 1:35.1



LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.24 BC 0.11 WB 0.09	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (n/a n/a -0.00	(loc) - - 5	l/defl 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	Horz(CT)	-0.00	5	n/a	n/a	Weight: 38 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. All bearings 11-7-0. Max Horz 1=189(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 7

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=463(LC 18), 7=304(LC 1)

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

1-2=-287/182 TOP CHORD WEBS 3-6=-378/196

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-8, Interior(1) 3-7-8 to 11-5-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) 5, 6, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354500 2888681 V4 Valley

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

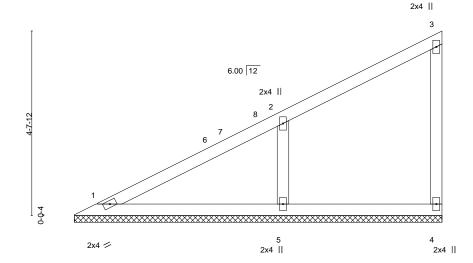
Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 18:00:00 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-VZyppyoOhW155szVhkdHcwJShulJqlL_jAyflyyqUyD

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

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

except end verticals.

Scale = 1:29.0



LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.31 BC 0.15 WB 0.06	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - - -	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES GRIP MT20 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT)	-0.00	4	n/a	n/a	Weight: 29 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

REACTIONS.

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

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

(size) 1=9-3-0, 4=9-3-0, 5=9-3-0

Max Horz 1=149(LC 11)

Max Uplift 4=-23(LC 11), 5=-75(LC 14)

Max Grav 1=150(LC 1), 4=167(LC 18), 5=535(LC 18)

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

WEBS 2-5=-424/236

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 9-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354501 2888681 V5 Valley

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 18:00:01 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-zlWC1lo0Sq9yj?YiFR8W88seRl6LZlr7yqiCrPyqUyC

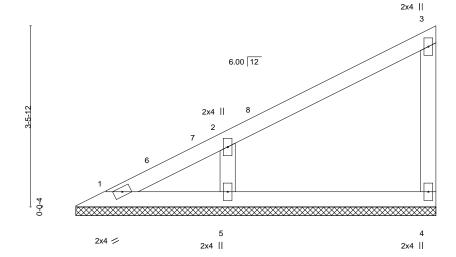
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

6-11-8

Scale = 1:22.1



LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Pen Stress Incr. VES	CSI. TC 0.24 BC 0.10	Vert(LL) Vert(CT)	n/a n/a	oc) l/defl - n/a - n/a	L/d 999 999	PLATES GRIP MT20 197/144
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.05 Matrix-P	Horz(CT)	0.00	4 n/a	n/a	Weight: 20 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

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

(size) 1=6-11-0, 4=6-11-0, 5=6-11-0

Max Horz 1=108(LC 11)

Max Uplift 4=-19(LC 11), 5=-58(LC 14)

Max Grav 1=60(LC 22), 4=178(LC 18), 5=450(LC 18)

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

2-5=-369/233 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354502 2888681 V₆ Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 18:00:01 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-zlWC1lo0Sq9yj?YiFR8W88sYll41Zla7yqiCrPyqUyC

> 2x4 || 2 6.00 12 0-0-4 3 2x4 / 2x4 ||

LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 20.0 Plate Grip DOL 1.15 TC Vert(LL) 999 197/144 0.61 n/a n/a MT20 (Roof Snow=20.0) Lumber DOL 1.15 ВС 0.25 Vert(CT) 999 n/a n/a **TCDL** 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 15 lb FT = 20% **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. 1=5-7-4, 3=5-7-4 (size)

Max Horz 1=85(LC 13) Max Uplift 1=-15(LC 14), 3=-21(LC 11) Max Grav 1=275(LC 18), 3=275(LC 18)

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; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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.



Structural wood sheathing directly applied or 5-7-12 oc purlins,

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

except end verticals.

Scale = 1:17.9





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

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

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



Job Truss Truss Type Qty Summit/11 Hawthorn 147354503 V7 2888681 Valley

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 18:00:02 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-Rx4aEepeD8HpL97up9flhLPoxiSPlC0GAURmNryqUyB

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

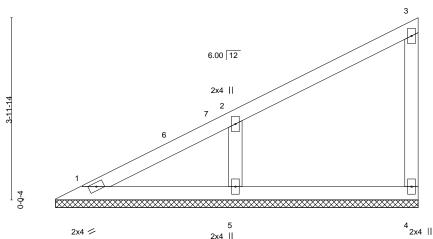
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

2x4 ||

7-11-12

Scale = 1:25.2



LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 20.0 Plate Grip DOL 1.15 TC Vert(LL) 999 197/144 0.26 n/a n/a MT20 (Roof Snow=20.0) Lumber DOL 1.15 ВС 0.11 Vert(CT) 999 n/a n/a **TCDL** 10.0 Horz(CT) Rep Stress Incr YES WB 0.05 -0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 24 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 **OTHERS** 2x4 SPF No.2

REACTIONS.

(size) 1=7-11-4, 4=7-11-4, 5=7-11-4

Max Horz 1=126(LC 11)

Max Uplift 4=-21(LC 11), 5=-64(LC 14)

Max Grav 1=102(LC 22), 4=174(LC 18), 5=483(LC 18)

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

WEBS 2-5=-393/232

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354504 2888681 V8 Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 18:00:03 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-w8dyR_qGzRPgyJi4NsA_EZxye5oU1e2QP8BJvHyqUyA 2-9-4 1-2-0 8-8-8 Scale = 1:30.9 2x4 || 5 10 2x4 || 3x6 = 6.00 12 4x12 > 2 0-9-10 6 2x4 || 3x4 / 8 7 2x4 || 12-7-12 3-10-12 Plate Offsets (X,Y)--[2:0-3-0,Edge], [3:0-5-0,0-2-12] LOADING (psf) SPACING-**PLATES** GRIP 2-0-0 CSI. **DEFL** in (loc) I/defl L/d **TCLL** 20.0 197/144 Plate Grip DOL 1.15 TC 0.33 Vert(LL) 999 MT20 n/a n/a (Roof Snow=20.0) Lumber DOL 1.15 вС 0.12 Vert(CT) n/a n/a 999 **TCDL** 10.0

Code IRC2018/TPI2014 BCDL

2x4 SPF No.2

2x4 SPF No.2

2x4 SPF No.2

0.0

TOP CHORD 2x4 SPF No.2

BRACING-

Horz(CT)

-0.00

TOP CHORD

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

Weight: 39 lb

except end verticals.

6

BOT CHORD

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

n/a

n/a

REACTIONS. All bearings 12-7-4.

Max Horz 1=167(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 8

Rep Stress Incr

Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 7=468(LC 34), 8=327(LC 34)

YES

WB

Matrix-S

0.07

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

WEBS 4-7=-374/191, 3-8=-254/130

NOTES-

BCLL

WEBS

OTHERS

LUMBER-

BOT CHORD

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-11-4, Interior(1) 3-11-4 to 12-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 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) 6, 7, 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.



August 9,2021

FT = 20%



Job Truss Truss Type Qty Summit/11 Hawthorn 147354505 2888681 V9 Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 18:00:04 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-OKBKfKruklYXaTHHwahDmmU98V8?m5iZeowsRkyqUy9 8-8-8 Scale = 1:31.6

3x6 = 6.00 12 3x6 =5 2-6-1 3x4 = 11 10 9 8

Plate Offsets (X,Y) [3:0-3-0,Edge]									
LOADING (psf) TCLL 20.0 (Roof Snow=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 0.21 BC 0.10 WB 0.10 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) n/a - n/a - 0.00 8	l/defl n/a n/a n/a	L/d 999 999 n/a		GRIP 197/144 FT = 20%	

14-11-12 14-11-12

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

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

REACTIONS. All bearings 14-11-4. Max Horz 1=207(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 9, 10, 11

Max Grav All reactions 250 lb or less at joint(s) 1, 8 except 9=436(LC 34), 10=381(LC 34), 11=389(LC 32)

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

TOP CHORD 1-2=-351/189

WFBS 6-9=-351/170, 5-10=-301/122, 2-11=-315/270

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-1-4, Exterior(2E) 5-1-4 to 6-3-4, Interior(1) 6-3-4 to 14-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) 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, 8, 9, 10, 11.
- 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.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354506 2888681 V10 Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:52 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-k0To8DhNZ31E8dMzD3TPHE_3Lg0Xyfjotw0E0QyqUyL 17-3-12 7-5-4 7-5-4 1-2-0 8-8-8 Scale = 1:44.7 3x4 || 16 17 6 3x6 =2x4 || 3x6 = 3 6.00 12 4 5 2x4 || 3-1-10 3x4 / 12 10 9 8 11 2x4 || 3x6 =2x4 || 2x4 || 2x4 || Plate Offsets (X,Y)--[3:0-3-0,Edge] LOADING (psf) SPACING-GRIP 2-0-0 CSI. **DEFL** in (loc) I/defl L/d **PLATES** TCLL 20.0 Plate Grip DOL 1.15 TC 0.33 Vert(LL) 999 MT20 197/144 n/a n/a (Roof Snow=20.0) Lumber DOL 1.15 вС 0.14 Vert(CT) n/a n/a 999 **TCDL** 10.0 Rep Stress Incr YES WB 0.17 Horz(CT) -0.00 8 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 20% Matrix-S Weight: 61 lb BCDL LUMBER-**BRACING-**TOP CHORD 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

BOT CHORD

except end verticals.

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

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

REACTIONS. All bearings 17-3-4. Max Horz 1=248(LC 11) (lb) -

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 8, 9, 10, 12

Max Grav All reactions 250 lb or less at joint(s) 1, 8 except 9=444(LC 34), 10=357(LC 34), 12=544(LC 32)

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

TOP CHORD 1-2=-363/207

WFBS 6-9=-356/164, 5-10=-286/108, 2-12=-430/272

NOTES-

OTHERS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-5-4, Exterior(2E) 7-5-4 to 8-7-4, Interior(1) 8-7-4 to 17-2-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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) Provide adequate drainage to prevent water ponding.
- 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) 8, 9, 10, 12.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 9,2021





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

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

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



Job Truss Truss Type Qty Summit/11 Hawthorn 147354507 2888681 V11 Valley

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:53 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-CC1ALZi?KN95mnx9nm_eqSX8v3Njh5Ky6amnYsyqUyK

8-8-8

Scale = 1:51.1

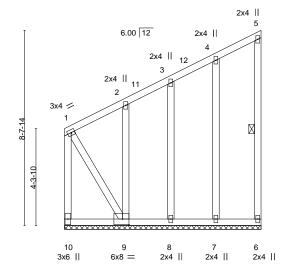


Plate Offsets (X,Y) [9:0-3-8,0-3-0]										
LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.73 BC 0.08 WB 0.21 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT) -	in (loc) n/a - n/a - -0.00 6	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 61 lb	GRIP 197/144 FT = 20%		

LUMBER-

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

2x4 SPF No.2 **OTHERS** 2x4 SPF No.2 BRACING-TOP CHORD

BOT CHORD

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

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

8-0-1 oc bracing: 9-10. **WEBS** 1 Row at midpt 5-6

REACTIONS. All bearings 8-8-8.

Max Horz 10=279(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 8 except 10=-171(LC 12), 9=-299(LC 11) Max Grav All reactions 250 lb or less at joint(s) 6, 7, 8 except 10=355(LC 11), 9=354(LC 21)

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

1-10=-846/513, 1-2=-386/246, 2-3=-293/210 TOP CHORD

BOT CHORD 9-10=-553/416 **WEBS** 1-9=-535/867

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 8-6-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=20.0 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7, 8 except (jt=lb) 10=171, 9=299.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354508 Valley 2888681 V17 Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:54 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-gPbYZvjd5gHyNxWMLTWtMf4NHThnQb35LEVL5JyqUyJ 5-9-8 5-9-8 Scale = 1:20.0 4x6 =2 6.00 12 2-10-12 3x4 / 3x4 > 2x4 || 11-7-1 11-6-9 LOADING (psf) SPACING-2-0-0 DEFL. I/defI **PLATES** GRIP (loc) L/d TCLL 20.0 Plate Grip DOL 1.15 TC Vert(LL) 999 197/144 0.49 n/a n/a MT20 (Roof Snow=20.0) Lumber DOL 1.15 ВС 0.22 Vert(CT) 999 n/a n/a TCDL 10.0 Rep Stress Incr YES WB 0.05 Horz(CT) 0.00 3 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 29 lb FT = 20% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD OTHERS 2x4 SPF No.2

REACTIONS. 1=11-6-1, 3=11-6-1, 4=11-6-1 (size)

Max Horz 1=-49(LC 12)

Max Uplift 1=-26(LC 14), 3=-26(LC 14), 4=-23(LC 14) Max Grav 1=273(LC 18), 3=273(LC 19), 4=466(LC 19)

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

2-4=-314/169 WEBS

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-9-8, Exterior(2R) 5-9-8 to 8-9-8, Interior(1) 8-9-8 to 10-11-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

August 9,2021





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

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

AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Summit/11 Hawthorn 147354509 2888681 V18 Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:55 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147, ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-9b8wmFkFs_Pp?45YvB16vtccHt3A92kEZuFudlyqUyl 3-9-8 3-9-8 Scale = 1:14.2 4x6 = 2 6.00 12 -10-12 0-0-4 2x4 || 2x4 > 2x4 / 7-6-9 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) TCLL 20.0 Plate Grip DOL 1.15 Vert(LL) 999 MT20 197/144 TC 0.22 n/a n/a (Roof Snow=20.0) Lumber DOL 1.15 ВС 0.08 Vert(CT) 999 n/a n/a **TCDL** 10.0 Rep Stress Incr YES WB 0.02 Horz(CT) 0.00 3 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 18 lb FT = 20% **BCDL** 10.0 LUMBER-**BRACING-**TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

BOT CHORD

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

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

BOT CHORD OTHERS 2x4 SPF No.2

REACTIONS. 1=7-6-1, 3=7-6-1, 4=7-6-1 (size)

Max Horz 1=30(LC 13)

Max Uplift 1=-21(LC 14), 3=-21(LC 14), 4=-3(LC 14) Max Grav 1=170(LC 18), 3=170(LC 19), 4=251(LC 1)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 9,2021



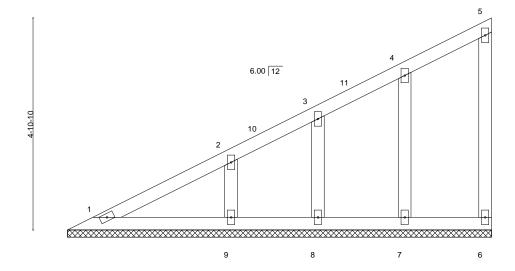
Job Truss Truss Type Qty Summit/11 Hawthorn 147354510 2888681 V19 Valley

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:55 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-9b8wmFkFs_Pp?45YvB16vtceqt4W92LEZuFudlyqUyl

Scale = 1:26.5



LOADING (psf) TCLL 20.0 (Roof Snow=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 0.06 WB 0.05	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) n/a - n/a - 0.00 6	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 36 lb	FT = 20%

LUMBER-BRACING-

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

OTHERS 2x4 SPF No.2 TOP CHORD

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

except end verticals.

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

REACTIONS. All bearings 9-9-4.

Max Horz 1=157(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 8, 9

Max Grav All reactions 250 lb or less at joint(s) 1, 6, 7, 8 except 9=268(LC 18)

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

TOP CHORD 1-2=-333/177

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-7-7 to 3-9-4, Exterior(2N) 3-9-4 to 9-7-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pf=20.0 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) All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7, 8, 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.



August 9,2021



Job Truss Truss Type Qty Summit/11 Hawthorn 147354511 2888681 V20 Valley

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

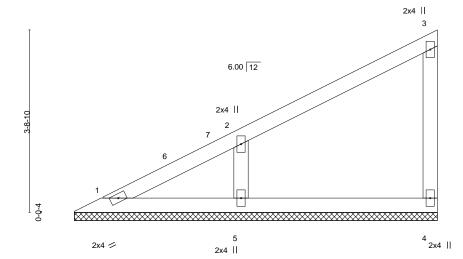
Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:57 2021 Page 1 ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-5_GhBxIVObfWE0Fw0c3a_lhyQhlPdypX1Ck?heyqUyG

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

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

except end verticals.

Scale = 1:23.5



LOADING (psf) TCLL 20.0 (Roof Snow=20.0) TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.24 BC 0.10	DEFL. Vert(LL) Vert(CT)	n/a n/a	loc) l/de - n/ - n/	a 999 a 999	PLATES GRIP MT20 197/144
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.05 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=7-4-12, 4=7-4-12, 5=7-4-12

Max Horz 1=116(LC 11)

Max Uplift 4=-20(LC 11), 5=-60(LC 14)

Max Grav 1=81(LC 22), 4=177(LC 18), 5=463(LC 18)

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

2-5=-378/231 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-5-4, Interior(1) 3-5-4 to 7-3-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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.



August 9,2021



LOADING (psf) TCLL 20.0	SPACING- Plate Grip DOL		CSI. C 0.46	DEFL. Vert(LL)	in (loc n/a		defl L/d n/a 999	PLATES MT20	GRIP 197/144
							ł		
		2x4 🖊					2x4		
							3		
	₹ 🔯			××××××××××××××××××××××××××××××××××××××	*******	****			
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	2-6-10		,	//					
				•	4				
				6.00 12					
							2x4 2		Scale = 1:16.3
	·			o-1-4					Scale = 1:16.3
	⊢			1D:VPVqvFnP 5-1-4 5-1-4	UPUb1j2tZrlC	qezdKb	bx-∠Aq3OGm79vnľ 	vsrq/aJapXVE3n440	CMPqhFsTYE4yqUyF
Builders FirstSource (Valley	Center), Valley Center	r, KS - 67147,		10.1/01/ 5.0	8.430	Jun 2	2 2021 MiTek Indus	tries, Inc. Fri Aug 6	17:59:58 2021 Page 1
2888681	V21	Valley		1		1	Reference (options	SI)	147 3043 12
lob	Truss	Truss Type		Qty	Ply	Sur	mmit/11 Hawthorn		147354512

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

0.00

999

n/a

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

Structural wood sheathing directly applied or 5-1-4 oc purlins,

Weight: 14 lb

FT = 20%

n/a

n/a

except end verticals.

3

LUMBER-TOP CHORD

TCDL

BCLL

BCDL

(Roof Snow=20.0)

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

BOT CHORD WEBS 2x4 SPF No.2

10.0

0.0

REACTIONS. 1=5-0-12, 3=5-0-12 (size) Max Horz 1=76(LC 13)

Max Uplift 1=-13(LC 14), 3=-19(LC 11) Max Grav 1=241(LC 18), 3=241(LC 18)

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-11-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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.

1.15

YES

ВС

WB

Matrix-P

0.19

0.00

- 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.



August 9,2021





Job Truss Truss Type Qty Summit/11 Hawthorn 147354513 2888681 V22 Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Fri Aug 6 17:59:58 2021 Page 1 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

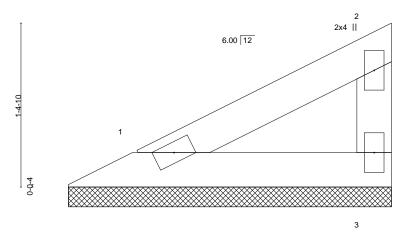
ID:VPVqvFnP0P0b1j2tZrlOqezdKbx-ZAq3OGm79vnNsYq7aJapXVE9o46dMPqhFsTYE4yqUyF

Structural wood sheathing directly applied or 2-9-4 oc purlins,

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

except end verticals.

Scale = 1:9.7



2x4 / 2x4 ||

BRACING-

TOP CHORD

BOT CHORD

LOADING (psf) TCLL 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.08	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 197/144
(Roof Snow=20.0) TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0 BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 7 lb	FT = 20%

LUMBER-

REACTIONS.

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

2x4 SPF No.2

1=2-8-12, 3=2-8-12 (size)

Max Horz 1=35(LC 11) Max Uplift 1=-6(LC 14), 3=-9(LC 11) Max Grav 1=101(LC 18), 3=101(LC 18)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Enclosed; MWFRS (directional) and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pf=20.0 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.



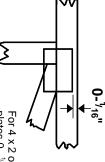


Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

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

PLATE SIZE

4 × 4

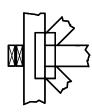
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

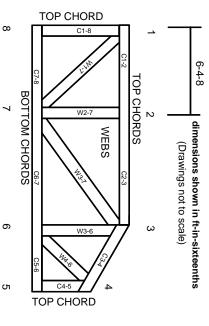
Min size shown is for crushing only

Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.
Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

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- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

œ

Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber

9

- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21.The design does not take into account any dynamic or other loads other than those expressly stated.