



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

Re: 2901204

SUMMIT/HAWTHORNE #13/MO

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Valley Center).

Pages or sheets covered by this seal: I47514045 thru I47514103

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

Missouri COA: Engineering 001193



August 19,2021

Johnson, Andrew

,Engineer

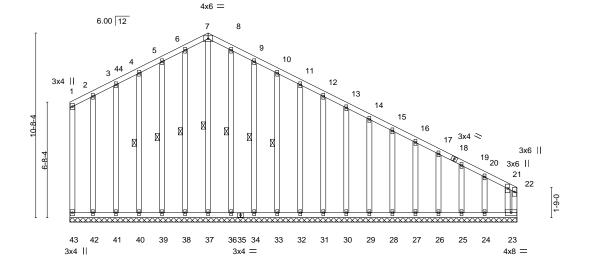
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW

Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO DEVELOPMENT SERVICES 2901204 A1 **GABLE** LEF'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg ID:74Akgedx1Dhx781xCdyIOjzvpGE-V1MCuvV0PygCRG9Z lgrMFY P 25-10-8 8-0-0 17-10-8

Scale = 1:66.7



LOADING (psf) SPACING-DEFL. L/d **PLATES GRIP** 2-0-0 CSI (loc) I/defl Vert(LL) 197/144 **TCLL** 25.0 Plate Grip DOL 1.15 TC 0.36 n/a n/a 999 MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.21 Vert(CT) n/a 999 n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.10 Horz(CT) 0.01 23 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-R Weight: 210 lb FT = 20%

25-10-8

BRACING-LUMBER-

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

WEBS 2x4 SPF No.2 **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.

WEBS 7-37, 6-38, 5-39, 4-40, 8-36, 9-34, 10-33

REACTIONS. All bearings 25-10-8

Max Horz 43=-314(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 43, 37, 38, 39, 40, 41, 42, 36, 34, 33, 32, 31, 30, 29, 28, 27,

26, 25 except 23=-146(LC 11), 24=-421(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 43, 37, 38, 39, 40, 41, 42, 36, 34, 33, 32, 31, 30, 29, 28,

27, 26, 25 except 23=420(LC 8), 24=250(LC 20)

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

TOP CHORD 5-6=-169/286, 6-7=-172/306, 7-8=-172/306, 8-9=-169/286, 20-21=-376/244,

22-23=-343/529

BOT CHORD 42-43=-198/303, 41-42=-198/303, 40-41=-198/303, 39-40=-198/303, 38-39=-198/303,

37-38=-198/303, 36-37=-198/303, 34-36=-198/303, 33-34=-198/303, 32-33=-198/303,

31-32=-198/303, 30-31=-198/303, 29-30=-198/303, 28-29=-198/303, 27-28=-198/303,

26-27=-198/303, 25-26=-198/303, 24-25=-198/303, 23-24=-198/303

WEBS 20-24=-272/401, 21-23=-868/546

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-1-12, Exterior(2N) 3-1-12 to 8-0-0, Corner(3R) 8-0-0 to 11-0-0, Exterior(2N) 11-0-0 to 25-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 43, 37, 38, 39, 40, 41, 42, 36, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25 except (jt=lb) 23=146, 24=421
- 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.

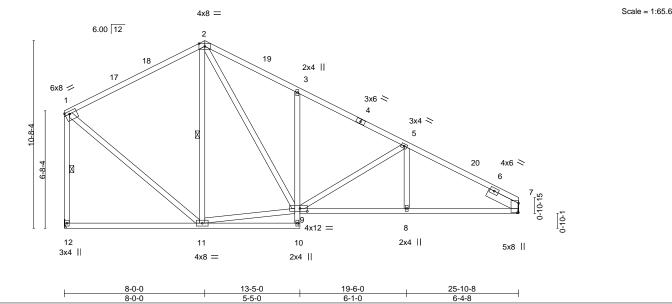


August 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 A2 Roof Special LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-KBjT9yan?oRM9Bcjk.ymVpQL7 Builders FirstSource (Valley Center), Valley Center, KS - 67147, 19-6-0

5-5-0



6-1-0

Plate Offs	sets (X,Y)	[1:Edge,0-1-12], [7:0-6-4,0	0-0-2], [9:0-5-0),0-2-0]								
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.09	8-9	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.20	8-9	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.06	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-AS						Weight: 134 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

WEBS 2x4 SPF No.2 **SLIDER** Right 2x6 SPF No.2 2-0-0

REACTIONS. (size) 12=Mechanical, 7=Mechanical

Max Horz 12=-300(LC 10)

Max Uplift 12=-183(LC 13), 7=-203(LC 13) Max Grav 12=1158(LC 1), 7=1158(LC 1)

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

 $1\hbox{-}2\hbox{--}823/271, 2\hbox{-}3\hbox{--}1308/420, 3\hbox{-}5\hbox{--}1340/321, 5\hbox{-}7\hbox{--}1763/339, 1\hbox{-}12\hbox{--}1084/280}$ TOP CHORD

8-0-0

BOT CHORD 3-9=-437/229, 8-9=-224/1495, 7-8=-224/1495

WEBS 2-11=-450/172, 9-11=0/600, 2-9=-306/978, 5-9=-450/198, 1-11=-176/777

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12. Interior(1) 3-1-12 to 8-0-0. Exterior(2R) 8-0-0 to 11-0-0. Interior(1) 11-0-0 to 25-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=183, 7=203.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

2-11, 1-12

Rigid ceiling directly applied.

1 Row at midpt



Job Truss Truss Type Qty Ply SUMMIT/HAWTHORNE #13/MO 2901204 **A3** Roof Special Girder Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147,

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI

Scale = 1:72.1

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12 23 12021 Ragg ID:74Akgedx1Dhx781xCdylOjzvpGE-GarDZeb1XQh4OVm; rM_EatHjjrebyLWDGyi/zg/mcn 19-11-8 24-0-0

Special

Structural wood sheathing directly applied or 4-10-15 oc purlins,

except end verticals, and 2-0-0 oc purlins (2-5-14 max.): 8-11.

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

6-0-0 oc bracing: 19-20.

25-10-9 28-0-5 30-0-0 31-6-5 34-0-034-10₁8 1-10-9 2-1-12 1-11-11 1-6-5 2-5-11 0-10-8 15-10-15 3-10-7 4-0-8 4-0-8 4-0-8

6.00 12 2x4 || 3x4 / 2x4 4x8 < 2x4 | 10-8-4 3x4 🗢 NAILED $6x8 = 2x4 \mid | 4x6 =$ 8x12 = 6-8-4 NAILED 10 2-6-9 17 16 15 5x8 =5x8 = 21 10x20 MT20HS = 4x8 = 20 19 2x4 || 3x6 =HUS26 NAILED 4x8 = 2x4 || 8x12 =

		4-1-12 8	3-0-0 _i ′	11-10-7	15-10-15	19-11-8	24-0-0	₁ 25-10-9 ₁ 28-	0-5 30-0-0 31-6-	-5, 34-0-0	
		4-1-12 3-	-10-4	3-10-7	4-0-8	4-0-8	4-0-8	1-10-9 2-1	-12	5 2-5-11	
Plate Offse	ets (X,Y)	[8:0-3-6,Edge], [11:0-6-0,	0-2-3], [12:0-6	-0,0-2-4], [1	5:0-3-8,0-2-0],	[18:0-2-12,0-2-8]]				
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl L	/d I	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.45 16-17	>895 2	10 0	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.81 16-17	>500 1	1 08	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	NO	WB	0.68	Horz(CT)	0.24 13	n/a r	/a		
BCDL	10.0	Code IRC2018/TP	PI2014	Matri	x-MS				\	Weight: 391 lb	FT = 20%

BOT CHORD

LUMBER-BRACING-TOP CHORD

2x4 SPF No.2 *Except* TOP CHORD 11-13: 2x10 SP 2400F 2.0E

BOT CHORD 2x4 SPF No.2 *Except* 12-17: 2x6 SPF 2100F 1.8E

WEBS 2x4 SPF No.2

REACTIONS. (size) 21=Mechanical, 13=0-3-8

Max Horz 21=-317(LC 6)

Max Uplift 21=-320(LC 9), 13=-589(LC 9) Max Grav 21=1757(LC 1), 13=2450(LC 1)

4-1-12

3-10-4

6x8 =

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

TOP CHORD 2-3=-1272/372, 3-4=-2195/581, 4-5=-2218/492, 5-6=-5873/1313, 6-8=-5892/1218,

8-9=-12120/2738, 9-10=-12168/2750, 10-11=-10158/2383, 11-12=-7451/1800,

12-13=-1086/286

BOT CHORD 20-21=-39/750, 4-18=-270/164, 17-18=-448/3053, 16-17=-2652/12369,

15-16=-2298/10158, 14-15=-1748/7526, 12-14=-1729/7449

WEBS 3-20=-850/157, 18-20=0/1100, 3-18=-541/2253, 8-17=-7566/1800, 11-14=-158/628,

5-18=-1849/516, 5-17=-826/3521, 8-16=-880/471, 9-16=-362/100, 10-15=-1318/305,

10-16=-417/2284, 11-15=-629/3008, 2-20=-138/819, 2-21=-1728/313

NOTES-

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

Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc, 2x10 - 2 rows staggered 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) Unbalanced roof live loads have been considered for this design.

- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=320, 13=589.









16023 Swingley Ridge Rd Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty Ply SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 АЗ Roof Special Girder LEE'S SUMMIT. MISSOURI

Builders FirstSource (Valley Center), Valley Center, KS - 67147, | LEE'S SUMMIT, MISSOU 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 1 2 2 2 3 1 2021 Figure 1 ID:74Akgedx1Dhx781xCdylOjzvpGE-GarDZeb1XQh4OVm M_EatHirdyxLWDQviyzym cnc

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

- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent at 25-11-4 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) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 208 lb down and 103 lb up at 29-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Vert: 1-3=-70, 3-8=-70, 8-11=-70, 11-12=-70, 12-13=-92, 19-21=-20, 18-22=-20

Concentrated Loads (lb)

Vert: 11=-86(B) 14=-208(B) 16=-788(B) 10=-86(B)



Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 A4 Roof Special Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aven LEF'S SUMMIT, MISSOURI

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 15-0-0 22-0-0 7-0-0 7-0-0 6-0-0

Scale = 1:67.8

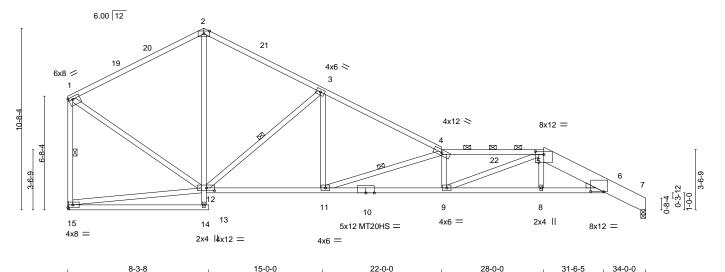


Plate Offs	ets (X.Y)	[1:Edge,0-1-12], [5:0-6-0	.0-2-31. [6:0-9	-4.0-0-31. [12:0)-5-12.0-2-	01			000		2011	
	(, -)	[::===g=;= :==j; [:::= : :	, = = = 1, [= := =		,	1						
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.40	9-11	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.74	9-11	>545	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.26	7	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matrix	-AS						Weight: 173 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

Job

TOP CHORD 2x4 SPF No.2 *Except*

4-5: 2x4 SPF 1650F 1.5E, 5-7: 2x10 SP 2400F 2.0E

BOT CHORD 2x4 SPF 1650F 1.5E *Except* 13-15: 2x4 SPF No.2

WEBS 2x4 SPF No.2

WEDGE

Right: 2x4 SP No.3

REACTIONS. (size) 15=Mechanical, 7=0-3-8

Max Horz 15=-317(LC 10)

Max Uplift 15=-251(LC 13), 7=-295(LC 13) Max Grav 15=1519(LC 1), 7=1523(LC 1)

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

TOP CHORD 1-2=-1249/304, 2-3=-1255/329, 3-4=-2592/469, 4-5=-5068/952, 5-6=-3563/679,

4x8 =

6-7=-671/154, 1-15=-1431/279

BOT CHORD 11-12=-224/2221, 9-11=-836/5101, 8-9=-554/3372, 6-8=-556/3363

WEBS 3-12=-1582/432, 3-11=-143/1124, 4-11=-3032/662, 4-9=-556/165, 5-9=-291/1814,

2-12=-105/574, 12-15=-153/277, 1-12=-192/1175

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 28-0-0, Exterior(2R) 28-0-0 to 31-0-13, Interior(1) 31-0-13 to 33-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=251, 7=295.
- 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.



Structural wood sheathing directly applied, except end verticals, and

3-12, 4-11, 1-15

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

Rigid ceiling directly applied.

1 Row at midpt

August 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 A4A Roof Special LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg ID:74Akgedx1Dhx781xCdylOjzvpGE-Dyz_KdH21xnep vUzn0if V 912-12:22-33-2021-Rago 1 N/TagDPEUhi/FB/2<mark>V/mcn</mark>a 34-0-0 34-10₁8 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

6-0-0

6-0-0

14-0-0

4x8 = Scale = 1:67.7

5-6-5

Structural wood sheathing directly applied, except end verticals, and

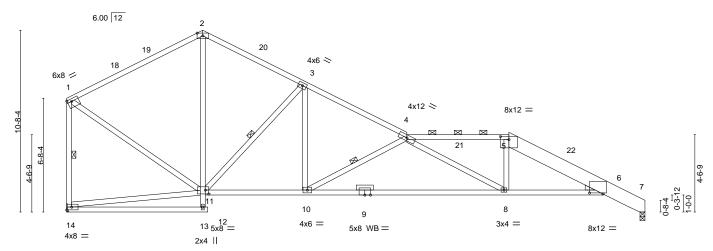
2-0-0 oc purlins (2-10-0 max.): 4-5.

Rigid ceiling directly applied.

1 Row at midpt

26-0-0

6-0-0



	0-3-0	5-6-6	6-0-0	6-0-0	5-6-5	2-0-11	
Plate Offsets (X,Y)	[1:Edge,0-1-12], [5:0-6-0,0-2-3], [6:0-9-	3,0-0-11], [11:0-2-8,0-2-12	2]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc) I/defl	L/d		GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.82	Vert(LL)		240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.93	Vert(CT)		180		
BCLL 0.0	Rep Stress Incr YES	WB 0.71	Horz(CT)	0.23 7 n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS				Weight: 180 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

5-7: 2x10 SP 2400F 2.0E 2x4 SPF 1650F 1.5E *Except*

BOT CHORD 12-14: 2x4 SPF No.2

WEBS 2x4 SPF No.2

2x4 SPF No.2 **OTHERS**

WEDGE

Right: 2x4 SP No.3

REACTIONS. (size) 14=Mechanical, 7=0-3-8

Max Horz 14=-317(LC 10)

Max Uplift 14=-251(LC 13), 7=-295(LC 13) Max Grav 14=1519(LC 1), 7=1523(LC 1)

8-3-8

8-0-0

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

TOP CHORD 1-2=-1248/306, 2-3=-1231/334, 3-4=-2340/426, 4-5=-2961/587, 5-6=-3185/565,

6-7=-671/154, 1-14=-1431/282

BOT CHORD 10-11=-176/2004, 8-10=-588/3735, 6-8=-419/2929

WEBS 3-11=-1461/383, 3-10=-159/1159, 4-10=-1976/514, 5-8=-12/673, 11-14=-153/276,

1-11=-194/1173, 2-11=-120/600, 4-8=-891/201

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-0-0, Exterior(2R) 8-0-0 to 11-0-0, Interior(1) 11-0-0 to 26-0-0, Exterior(2R) 26-0-0 to 29-0-0, Interior(1) 29-0-0 to 33-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=251, 7=295.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 19,2021



SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICESO

34-0-0

Structural wood sheathing directly applied, except end verticals, and

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

Rigid ceiling directly applied.

1 Row at midpt

LEF'S SUMMIT, MISSOURI

Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc.

Wed A 2021 Rag 018 12/235-2021 Rap 1 Ll C91/9 DZ mbO/mcm/ 34-0-0 34-10₁8

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

Truss

A4B

18-0-0 8-0-0 5-0-0 5-0-0

Truss Type

Roof Special

ID:74Akgedx1Dhx781xCdylOjzvpGE-9L5kP0fYaeBVt64t-C2Ak4\$L 24-0-0 6-0-0 7-6-5

Qty

Scale = 1:67.7

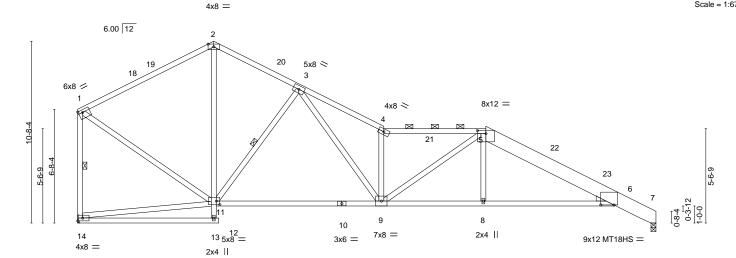


Plate Offsets (X,Y)--[1:Edge,0-1-12], [5:0-6-0,0-2-3], [6:0-9-5,0-0-0], [11:0-2-8,0-2-8] L/d **PLATES GRIP** LOADING (psf) SPACING-DEFL. in (loc) I/def 197/144 TCLL 25.0 Plate Grip DOL 1.15 TC 0.83 Vert(LL) -0.38 9-11 >999 240 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.97 Vert(CT) -0.85 9-11 >476 180 MT18HS 197/144 **BCLL** 0.0 Rep Stress Incr YES WB 0.66 Horz(CT) 0.21 n/a n/a Code IRC2018/TPI2014 **BCDL** 10.0 Weight: 186 lb FT = 20%Matrix-AS

BRACING-

TOP CHORD

BOT CHORD

WEBS

24-0-0

18-0-0

LUMBER-

Job

2901204

TOP CHORD 2x4 SPF No.2 *Except*

5-7: 2x10 SP 2400F 2.0E

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

WEDGE

Right: 2x4 SP No.3

REACTIONS. (size) 14=Mechanical, 7=0-3-8

Max Horz 14=-317(LC 10)

Max Uplift 14=-251(LC 13), 7=-295(LC 13) Max Grav 14=1519(LC 1), 7=1523(LC 1)

8-0-0

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

TOP CHORD 1-2=-1248/313, 2-3=-1209/346, 3-4=-3405/703, 4-5=-3026/579, 5-6=-2829/530,

6-7=-671/154, 1-14=-1431/292

BOT CHORD 9-11=-167/1752, 8-9=-350/2565, 6-8=-351/2560

WFBS 3-11=-1285/391, 3-9=-437/2096, 4-9=-1849/457, 5-9=-63/558, 1-11=-201/1171,

11-14=-152/279, 2-11=-135/630

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-6-9, Interior(1) 3-6-9 to 8-0-0, Exterior(2R) 8-0-0 to 11-4-13, Interior(1) 11-4-13 to 24-0-0, Exterior(2R) 24-0-0 to 27-4-13, Interior(1) 27-4-13 to 33-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=251, 7=295.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 19,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES1 2901204 A5 Roof Special Girder LEE'S SUMMIT, MISSOURI Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ayg 2027 Rage

ID:74Akgedx1Dhx781xCdylOjzvpGE-dXe6dLfALyJMVGf3evaPHH? 1-10-9 18-9-3 23-1-12 27-6-5 3-3-3 4-10-4 4-4-9 0-5-11 3-10-15 4-4-9 4-4-9

30-0-0

Structural wood sheathing directly applied or 2-9-13 oc purlins,

3-13, 5-13, 1-16

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

except end verticals.

1 Row at midpt

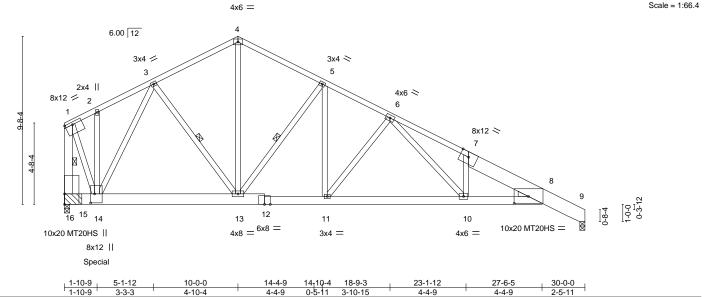


Plate Offsets (X,Y)--[1:Edge,0-1-12], [8:0-9-13,0-4-12], [14:0-6-4,0-2-12] **PLATES GRIP** LOADING (psf) SPACING-DEFL. in (loc) I/def L/d TCLL 25.0 Plate Grip DOL 1.15 TC 0.53 Vert(LL) -0.17 10-11 >999 240 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.97 Vert(CT) -0.32 10-11 >999 180 MT20HS 148/108 **BCLL** 0.0 Rep Stress Incr NO WB 0.75 Horz(CT) 0.14 n/a n/a Code IRC2018/TPI2014 **BCDL** 10.0 Weight: 206 lb FT = 20%Matrix-MS

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

BOT CHORD

2x4 SPF No.2 *Except* TOP CHORD

7-9: 2x10 SP 2400F 2.0E 2x8 SP 2400F 2.0E *Except*

8-12: 2x6 SPF No.2 WEBS 2x4 SPF No.2 *Except*

1-16: 2x6 SPF No.2, 1-14: 2x4 SPF 1650F 1.5E

WEDGE

Right: 2x4 SPF No.2

REACTIONS. (size) 16=(0-3-8 + bearing block) (req. 0-4-7), 9=0-3-8

Max Horz 16=-268(LC 4)

Max Uplift 16=-959(LC 9), 9=-292(LC 9) Max Grav 16=5369(LC 1), 9=1576(LC 1)

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

TOP CHORD 1-2=-1828/367, 2-3=-1788/392, 3-4=-1742/413, 4-5=-1743/392, 5-6=-2284/468,

6-7=-3644/744, 7-8=-3474/613, 8-9=-695/153, 1-16=-4892/856

BOT CHORD 14-16=-85/284, 13-14=-190/1629, 11-13=-137/1997, 10-11=-282/2416, 8-10=-475/3227 **WEBS** 3-13=-449/307, 4-13=-254/1157, 5-13=-853/292, 7-10=-590/238, 1-14=-718/4247,

3-14=-790/503, 6-11=-695/238, 6-10=-270/1169, 5-11=-133/614

NOTES-

- 1) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 16 attached to front face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners. Bearing is assumed to be SP 2400F 2.0E.
- Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=959, 9=292.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4273 lb down and 832 lb up at 1-10-6 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



August 19,2021

COARIGASE(S)geStandard

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



RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO DEVELOPMENT SERVICES1 2901204 A5 Roof Special Girder LEE'S SUMMIT. MISSOURI

Builders FirstSource (Valley Center), Valley Center, KS - 67147, | Job Reference (optional) | LEE'S SUMMIT, MISSOURI | 8.430 s Jun | 2.2021 MiTek Industries, Inc. | Wed Avg 12 (22.238-2021 Rags 2 ID:74Akgedx1Dhx781xCdylOjzvpGE-dXe6dLfALyJMVGf evaPH (7) | Devot PPQf form of X

LOAD CASE(S) Standard

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

Vert: 1-4=-70, 4-8=-70, 8-9=-92, 16-17=-20

Concentrated Loads (lb) Vert: 14=-4273(B)



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES2 2901204 A6 Roof Special 3 LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-5jCUqhgo6GRD6QEFCd5epVxi Builders FirstSource (Valley Center), Valley Center, KS - 67147, 16-10-9 10-0-0 14-10-4 1-0-7

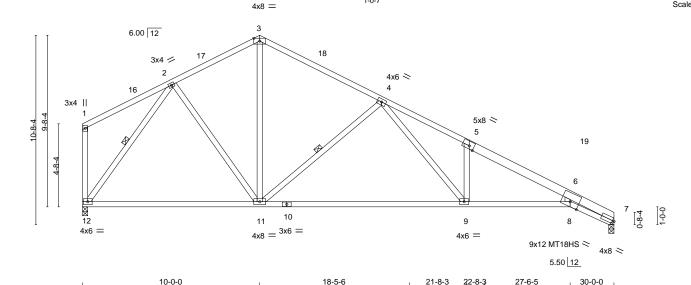


Plate Offsets (X,Y)	[5:0-3-4,Eage], [7:0-1-2,0-1-14]			
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.75	DEFL. in (loc) I/defl L/d Vert(LL) -0.35 9-11 >999 240	PLATES GRIP MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.83	Vert(CT) -0.75 9-11 >477 180	MT18HS 197/144
BCLL 0.0	Rep Stress Incr YES	WB 0.45	Horz(CT) 0.20 7 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 136 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x4 SPF No.2 *Except* TOP CHORD

5-7: 2x6 SPF 2100F 1.8E 2x4 SPF 1650F 1.5E

BOT CHORD WEBS 2x4 SPF No.2

REACTIONS. (size) 7=0-3-8, 12=0-3-8 Max Horz 12=-267(LC 8)

Max Uplift 7=-249(LC 13), 12=-186(LC 13) Max Grav 7=1343(LC 1), 12=1343(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1177/296, 3-4=-1213/301, 4-5=-2785/584, 5-6=-2693/447, 6-7=-3438/469 TOP CHORD **BOT CHORD** 11-12=-41/805, 9-11=-151/1680, 8-9=-302/2443, 7-8=-344/2877

10-0-0

WEBS 2-11=-27/395, 3-11=-107/572, 6-8=-81/1036, 2-12=-1327/264, 4-11=-917/348,

5-9=-647/263, 4-9=-248/1170

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0 Interior(1) 13-0-0 to 30-0-0 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
- All plates are MT20 plates unless otherwise indicated.
- 4) The Fabrication Tolerance at joint 8 = 12%, joint 8 = 12%
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=249, 12=186.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

2-12, 4-11

Rigid ceiling directly applied.

1 Row at midpt

Scale = 1:65.0

August 19,2021



Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 A7 Roof Special 3 LEE'S SUMMIT, MISSOURI Job Reference (optional)

21-11-10 16-0-15 19-3-11 25-1-13 5-10-2 2-7-5 3-2-13 2-7-14 3-2-3

Scale = 1:64.9

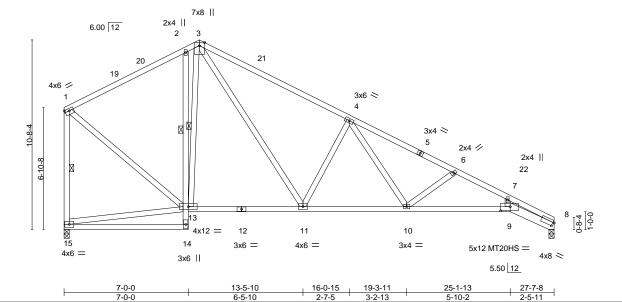


Plate Offsets (X,Y)-- [1:0-3-0,0-1-8], [8:0-0-15,0-2-7], [9:0-6-8,0-2-12]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.89	Vert(LL) -0.28 9-10 >999 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.94	Vert(CT) -0.54 9-10 >608 180	MT20HS 148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.63	Horz(CT) 0.19 8 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 148 lb FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

Job

Builders FirstSource (Valley Center)

2x4 SPF No.2 *Except* TOP CHORD

5-8: 2x4 SP 2400F 2.0E

BOT CHORD 2x4 SPF No.2 *Except*

8-9: 2x6 SPF No.2, 9-12: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

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

Max Horz 15=-319(LC 10)

Max Uplift 15=-204(LC 13), 8=-225(LC 13) Max Grav 15=1237(LC 1), 8=1237(LC 1)

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

TOP CHORD 1-2=-914/266, 2-3=-807/316, 3-4=-1572/401, 4-6=-2414/450, 6-7=-2811/520,

7-8=-3413/552, 1-15=-1173/245

BOT CHORD 2-13=-440/244, 11-13=0/748, 10-11=-182/1671, 9-10=-407/2629, 8-9=-440/2917 WEBS 7-9=-76/846, 1-13=-176/930, 3-13=-490/206, 3-11=-288/1017, 4-11=-854/344,

Valley Center, KS - 67147,

4-10=-132/760, 6-10=-698/234

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-Č Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-7-8, Exterior(2R) 7-7-8 to 10-7-8, Interior(1) 10-7-8 to 27-7-8 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
- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=204, 8=225.
- 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.



Structural wood sheathing directly applied, except end verticals.

1-15, 3-13

2-13

Rigid ceiling directly applied. Except:

1 Row at midpt

1 Row at midpt

August 19,2021



Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES4 2901204 **A8** Roof Special LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg Builders FirstSource (Valley Center), Valley Center, KS - 67147,

7-7-8

0-5-0 4x8 Scale = 1:64.9

ID:74Akgedx1Dhx781xCdyIOjzvpGE-16KFFNi2ethxMkNe

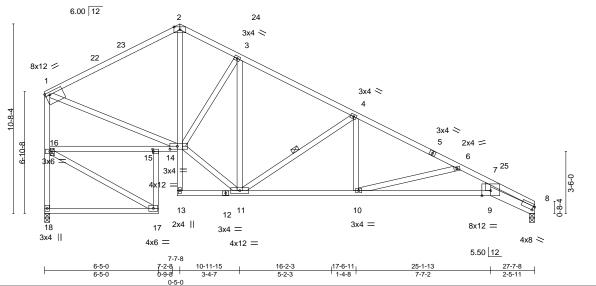


Plate Offsets (X,Y)--[1:Edge,0-1-12], [8:0-0-15,0-2-7], [14:0-5-0,0-2-0], [15:0-0-8,0-1-8] SPACING-**GRIP** LOADING (psf) DEFL. in (loc) I/def L/d **PLATES** TCLL 25.0 Plate Grip DOL 1.15 TC 0.91 Vert(LL) -0.23 9-10 >999 240 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.73 Vert(CT) -0.49 9-10 >672 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.76 Horz(CT) 0.21 n/a 8 n/a Code IRC2018/TPI2014 **BCDL** 10.0 Weight: 157 lb FT = 20%Matrix-AS

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

Job

2x4 SPF No.2 *Except* TOP CHORD

5-8: 2x4 SP 2400F 2.0E **BOT CHORD** 2x4 SPF No.2 *Except*

8-9: 2x6 SPF 2100F 1.8E, 9-12: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

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

Max Horz 18=-319(LC 10)

Max Uplift 18=-204(LC 13), 8=-226(LC 13) Max Grav 18=1234(LC 1), 8=1236(LC 1)

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

TOP CHORD 1-2=-1232/252, 2-3=-1147/289, 3-4=-1314/314, 4-6=-2185/385, 6-7=-3147/607,

7-8=-3911/669, 16-18=-1175/284, 1-16=-1151/218

17-18=-204/323, 15-16=-84/252, 14-15=-90/286, 10-11=-207/1871, 9-10=-514/3037, **BOT CHORD**

8-9=-558/3417

WEBS 7-9=-112/1105, 2-14=-77/670, 1-14=-69/990, 11-14=-39/1317, 3-14=-280/319,

4-11=-955/290, 4-10=-22/517, 6-10=-1201/336, 16-17=-320/235

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-7-8, Exterior(2R) 7-7-8 to 10-7-8, Interior(1) 10-7-8 to 27-7-8 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=204, 8=226.
- 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.

1-18, 4-11

Rigid ceiling directly applied.

1 Row at midpt

August 19,2021





RELEASE FOR CONSTRUCTION SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW

DEVELOPMENT SER FICE 185

LEE'S SUMMIT, MISSOURI

Scale = 1:64.9

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc.

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg ID:74Akgedx1Dhx781xCdylOjzvpGE-WludSjihPBqozu vqtleLR 9 2021 Rage 21-11-0 28-6-0 5-8-8

Structural wood sheathing directly applied, except end verticals.

2-15, 4-14

1-17, 3-15

Rigid ceiling directly applied. Except:

1 Row at midpt

1 Row at midpt

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 6-1-0 1-6-8 3-5-8 5-5-0 5-5-0

Truss Type

Roof Special

4x6 || 6.00 12 2x4 || 2x4 || 24 . 2 4 4x6 / 3x4 > 3x6 > 2x4 // 3x4 <> 25 8 9 10 4x12 = 12 11 16 13 3x6 = 4x12 = 4x6 | 4x6 =3x4 || 4x6 |

Qty

6-1-0 11-1-0 19-2-8

Plate Offsets (X,Y)	[1:Edge,0-1-12], [9:0-3-9,0-0-1], [14:0-2-8,0-2-8]	

Truss

A9

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.38	Vert(LL) -0.11 11-13 >999 240	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.24 11-13 >999 180	
BCLL 0.0	Rep Stress Incr YES	WB 0.58	Horz(CT) 0.06 9 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 163 lb FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

Job

2901204

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) 17=0-3-8, 9=0-3-8 Max Horz 17=-328(LC 10)

Max Uplift 17=-203(LC 13), 9=-246(LC 13) Max Grav 17=1236(LC 1), 9=1299(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-852/251, 2-3=-824/324, 3-4=-1284/393, 4-5=-1306/316, 5-7=-1828/377, TOP CHORD

7-9=-2019/391, 1-17=-1181/231

BOT CHORD 2-15=-362/213, 14-15=0/717, 4-14=-314/176, 9-11=-258/1742

WEBS 11-14=-138/1343, 5-14=-544/247, 5-11=-58/311, 7-11=-279/183, 3-14=-326/1038,

3-15=-326/91, 1-15=-170/938, 15-17=-148/260

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph, TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-7-8, Exterior(2R) 7-7-8 to 10-7-8, Interior(1) 10-7-8 to 28-6-0 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=203, 9=246.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 19,2021



RELEASE FOR CONSTRUCTION SUMMIT/HAWTHORNE #13/MO

AS NOTED FOR PLAN REVIEW DEVELOPMENT SER FICES

LEE'S SUMMIT, MISSOURI

Scale = 1:65.8

2901204 A10 Roof Special Builders FirstSource (Valley Center), Valley Center, KS - 67147,

Truss Type

Truss

Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 18-12/2-25-2021 Rags 1 ID:74Akgedx1Dhx781xCdylOjzvpGE-SQUyJbXGxaxwga.yV5tqK115-MyVhEVyVFEnzythchi 5-1-0 17-0-8 21-2-4 25-4-0 27--8 28-6-0

Structural wood sheathing directly applied, except end verticals.

1-16, 4-13

2-14

Rigid ceiling directly applied. Except:

1 Row at midpt

1 Row at midpt

15-1-0 17-0-8 1-0-0 1-11-8 1-6-8 6-5-8 4-1-12 4-1-12

Qty

4x6 = 6.00 12 3x6 / 3x4 ≥ 4x6 / 5x8 < 5 23 5x8 =13 12 2x4 5x8 = ₁₅4x8 = 2x4 16 3x6 = 2x4 || 3x4 || 4x8 = 4x6 = 2x4 || 4x6 =2x4 || 2x4 ||

15-1-0 17-0-8 27-7-8 6-1-0 7-7-8 6-1-0 1-6-8 7-5-8 1-11-8 4-1-12 Plate Offsets (X,Y)-- [1:Edge.0-1-12], [5:0-2-12.0-1-12], [6:0-7-0.0-1-6], [6:0-6-12.0-2-14], [7:0-0-0.0-0-9], [14:0-6-0.0-2-0]

- idio onooid	- (, - /	[::=ago;o : :=]; [o:o = ::	-,, [,			1, 1,	,	-1			
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL	1.15	TC	0.91	Vert(LL)	-0.21	6-10	>999	240	MT20	197/144
TCDL 1	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.47	11-13	>700	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.21	7	n/a	n/a		
BCDL 1	10.0	Code IRC2018/TF	PI2014	Matri	x-AS						Weight: 174 lb	FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

Job

2x4 SPF No.2 *Except* TOP CHORD 5-8: 2x6 SPF No.2

BOT CHORD 2x4 SPF No.2 *Except* 6-12: 2x4 SPF 1650F 1.5E

WEBS 2x4 SPF No.2

2x6 SPF No.2 **OTHERS**

LBR SCAB 5-8 2x6 SPF No.2 one side WEDGE

Right: 2x6 SP No.2

REACTIONS. (size) 16=0-3-8, 7=0-3-8

Max Horz 16=-329(LC 10)

Max Uplift 16=-203(LC 13), 7=-243(LC 13) Max Grav 16=1236(LC 1), 7=1304(LC 1)

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

TOP CHORD 1-2=-846/253, 2-3=-866/301, 3-4=-945/281, 4-5=-2033/368, 5-6=-2687/484,

6-7=-592/139, 1-16=-1172/235

BOT CHORD 2-14=-662/152, 13-14=0/681, 11-13=-88/1414, 10-11=-357/2526, 6-10=-359/2527 1-14=-171/924, 3-13=-163/507, 2-13=-54/480, 4-13=-925/334, 4-11=-97/691, WEBS

5-11=-942/309

NOTES-

- 1) Attached 8-2-14 scab 5 to 8, front face(s) 2x6 SPF No.2 with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 0-0-8 from end at joint 5, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 3-11-7 from end at joint 5, nail 2 row(s) at 4" o.c. for 4-1-0.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-7-8, Exterior(2R) 7-7-8 to 10-7-8, Interior(1) 10-7-8 to 28-6-0 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
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=203, 7=243,
- This truss 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 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 A11 Roof Special

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avs ID:74Akgedx1Dhx781xCdylOjzvpGE-wc2KWxYuit3nlkt 82pO3t ka 21-2-8 6-1-0 1-6-8 7-5-8 6-1-8 6-5-0

LEE'S SUMMIT, MISSOURI 2021 Rage

Structural wood sheathing directly applied, except end verticals.

1-15, 3-12, 3-13

2-13

Rigid ceiling directly applied. Except:

1 Row at midpt

1 Row at midpt

28-6-0

Scale = 1:64.9

5x8 = 6.00 12 2x4 | 2 20 4x6 / 3x4 || 3x4 ≤ 3x4 ≤ 3x4 <> 23 7 12 4x12 = 6x12 15 14 11 10 4x6 II 4x6 =3x4 || 3x4 || 4x6 = 15-1-0 21-2-8 6-1-0 1-6-8 Plate Offsets (X V)-- [1:Edge 0-1-12] [8:0-3-13 0-0-1]

Tidlo One	JC13 (71, 1)	[1.Lagc,0 1 12], [0.0 0 10,0 0 1]			
LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.57	Vert(LL) -0.21 12-13 >999 240	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.59	Vert(CT) -0.45 12-13 >737 180	
BCLL	0.0	Rep Stress Incr YES	WB 0.41	Horz(CT) 0.06 8 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 152 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

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) 15=0-3-8, 8=0-3-8

Max Horz 15=-328(LC 10)

Max Uplift 15=-203(LC 13), 8=-246(LC 13) Max Grav 15=1236(LC 1), 8=1299(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. $1-2=-860/247,\ 2-3=-788/300,\ 3-4=-1897/504,\ 4-6=-1824/345,\ 6-8=-2011/373,$

TOP CHORD 1-15=-1192/227

BOT CHORD 2-13=-335/187, 12-13=0/735, 4-12=-536/286, 8-10=-234/1728

10-12=-188/1674, 1-13=-164/945, 13-15=-108/291, 3-12=-413/1343, 3-13=-388/170 **WEBS**

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-7-8, Exterior(2R) 7-7-8 to 10-7-8, Interior(1) 10-7-8 to 28-6-0 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=203, 8=246.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 19,2021



RELEASE FOR CONSTRUCTION SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW

> DEVELOPMENT SERVICES LEF'S SUMMIT, MISSOURI

> > Scale = 1:66.7

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc.

28-2-8

Valley Center, KS - 67147,

Truss Type

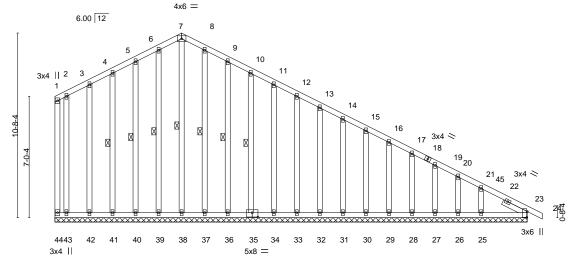
GABLE

Truss

A12

Builders FirstSource (Valley Center),

7-4-0



Qty

20-0-0

27-4-0

Plate Offs	sets (X,Y)	[23:0-4-1,0-0-5], [35:0-4-0,0-3-0]		
LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.26	Vert(LL) 0.00 23 n/r 120 MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) 0.00 24 n/r 120
BCLL	0.0	Rep Stress Incr YES	WB 0.10	Horz(CT) 0.01 23 n/a n/a
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S	Weight: 216 lb FT = 20%

LUMBER-BRACING-

TOP CHORD 2x4 SPF No.2 TOP CHORD

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

Rigid ceiling directly applied or 6-0-0 oc bracing. 2x4 SPF No.2 **OTHERS** WEBS 7-38, 6-39, 5-40, 4-41, 8-37, 9-36, 10-35 1 Row at midpt

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

REACTIONS. All bearings 27-4-0.

Max Horz 44=-330(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 44, 38, 39, 40, 41, 42, 43, 37, 36, 35, 34, 33, 32, 23, 31, 30,

29, 28, 27, 26 except 25=-138(LC 13)

All reactions 250 lb or less at joint(s) 44, 38, 39, 40, 41, 42, 43, 37, 36, 35, 34, 33, 32, 23, 31, Max Grav

30, 29, 28, 27, 26, 25

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

TOP CHORD 5-6=-168/271, 6-7=-171/291, 7-8=-171/291, 8-9=-168/271, 20-21=-262/167,

21-23=-358/215

BOT CHORD 43-44=-185/338, 42-43=-185/338, 41-42=-185/338, 40-41=-185/338, 39-40=-185/338,

38-39=-185/338, 37-38=-185/338, 36-37=-185/338, 35-36=-185/338, 34-35=-186/339, 33-34=-186/339, 32-33=-186/339, 31-32=-186/339, 30-31=-186/339, 29-30=-186/339, 28-29=-186/339, 27-28=-186/339, 26-27=-186/339, 25-26=-186/339, 23-25=-186/339

NOTES-

Job

2901204

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 3-4-0, Exterior(2N) 3-4-0 to 7-4-0, Corner(3R) 7-4-0 to 10-4-0, Exterior(2N) 10-4-0 to 28-2-8 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
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 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) 44, 38, 39, 40, 41, 42, 43, 37, 36, 35, 34, 33, 32, 23, 31, 30, 29, 28, 27, 26 except (jt=lb) 25=138.
- 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 19,2021

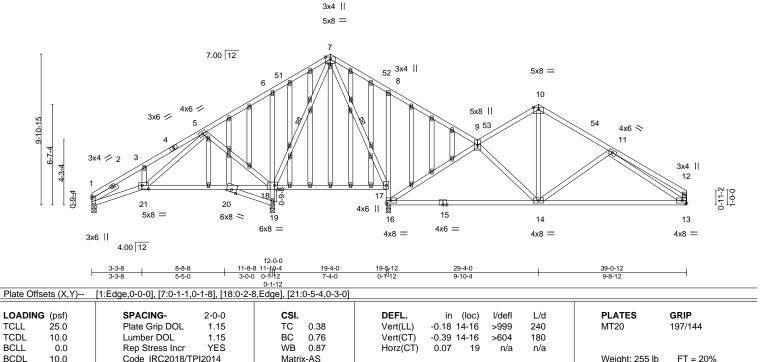


Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 **B1 GABLE** LEF'S SUMMIT, MISSOURI Job Reference (optional) Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-Sh0NtPkxxo4WDB6D_\qpWY\(\fextit{f}\) 25-4-0 6-0-0

12-72-42-9021-Bago Cm//(dB/nytesUymem)

Scale = 1:75.7



BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

Job

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

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

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

REACTIONS. All bearings 0-3-8 except (jt=length) 13=Mechanical.

Max Horz 1=255(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1 except 19=-311(LC 12), 16=-249(LC 13), 13=-197(LC 13) Max Grav All reactions 250 lb or less at joint(s) except 1=349(LC 25), 19=1255(LC 19), 16=1205(LC 26), 13=817(LC 26)

12-0-0 3-3-8

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

TOP CHORD 1-3=-642/133, 3-5=-657/247, 5-6=-119/519, 6-7=-43/485, 7-8=-94/292, 8-9=-40/264,

9-10=-817/275, 10-11=-830/268, 11-12=-420/91, 12-13=-332/101

BOT CHORD 1-21=-230/676, 18-19=-1188/338, 6-18=-315/191, 16-17=-565/96, 8-17=-387/226,

14-16=-178/709, 13-14=-205/843

WEBS 7-18=-507/54, 9-16=-1001/344, 10-14=-143/476, 5-21=-253/749, 5-18=-478/231,

11-14=-275/185, 11-13=-690/225

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 15-8-0, Exterior(2R) 15-8-0 to 18-8-0, Interior(1) 18-8-0 to 29-4-0, Exterior(2R) 29-4-0 to 32-4-0, Interior(1) 32-4-0 to 38-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 1-4-0 oc.
- 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) 1, 19 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) 1 except (jt=lb) 19=311, 16=249, 13=197.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



Structural wood sheathing directly applied, except end verticals.

7-18, 7-17

Rigid ceiling directly applied.

1 Row at midpt

August 19,2021

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



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICESO 2901204 B2 Roof Special LEF'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12 22 44 9021 Rags 12 ID:74Akgedx1Dhx781xCdylOjzvpGE-0478I4IBTPKESV 3b6bjHtzl 201/jl A F MxN/m cn P Builders FirstSource (Valley Center), Valley Center, KS - 67147,

6-0-0

4-0-0

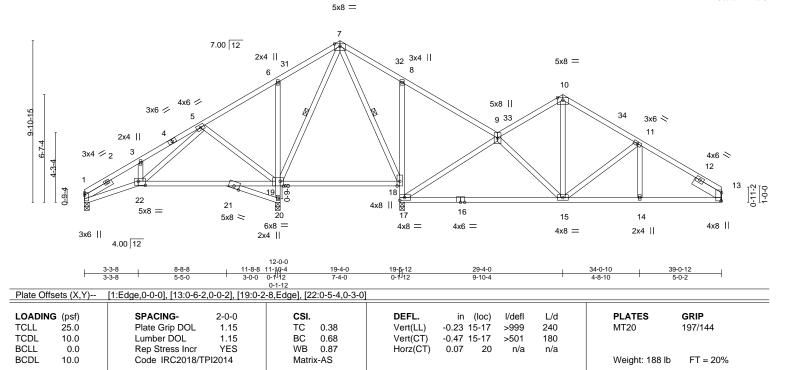
Structural wood sheathing directly applied.

7-19, 7-18

Rigid ceiling directly applied.

1 Row at midpt

Scale = 1:70.6



BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SPF No.2

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

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

REACTIONS. All bearings 0-3-8 except (jt=length) 13=Mechanical.

Max Horz 1=238(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1 except 13=-200(LC 13), 20=-310(LC 12), 17=-250(LC 13) Max Grav All reactions 250 lb or less at joint(s) except 13=820(LC 26), 1=352(LC 25), 20=1244(LC 19),

17=1224(LC 26)

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

TOP CHORD 1-3=-646/131, 3-5=-655/240, 5-6=-111/515, 6-7=-33/478, 7-8=-74/311, 8-9=-21/274,

9-10=-808/286, 10-11=-814/280, 11-13=-1060/301

BOT CHORD 1-22=-240/672, 19-20=-1177/337, 6-19=-323/196, 17-18=-581/95, 8-18=-387/226,

15-17=-178/699, 14-15=-182/857, 13-14=-182/857

WEBS 7-19=-494/51, 9-17=-997/354, 10-15=-153/456, 5-22=-248/725, 5-19=-485/235,

11-15=-297/163

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 15-8-0, Exterior(2R) 15-8-0 to 18-8-0, Interior(1) 18-8-0 to 29-4-0, Exterior(2R) 29-4-0 to 32-4-0, Interior(1) 32-4-0 to 39-0-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 1, 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 13=200 20=310 17=250
- 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.



August 19,2021





SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES1

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc.

LEF'S SUMMIT, MISSOURI

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

Truss

B3

Job

2901204

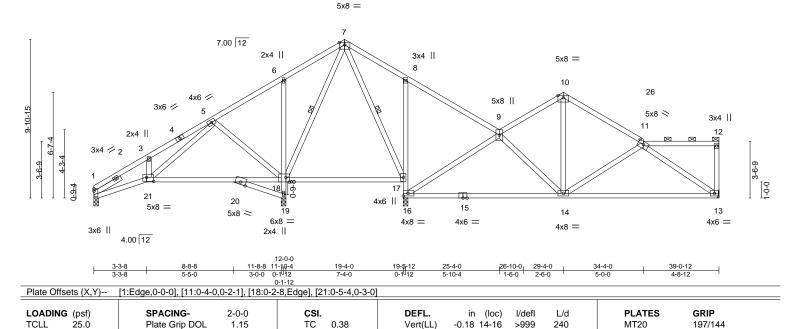
8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avo 12 222 ID:74Akgedx1Dhx781xCdylOjzvpGE-sGhWVQmpEjS54frogl W8BsAPpt DaxS 15-8-0 3-8-0 25-4-0 6-0-0

Qty

Truss Type

Roof Special

Scale = 1:72.0



1.15 **BCLL** 0.0 Rep Stress Incr YES WB 0.87 Horz(CT) Code IRC2018/TPI2014 **BCDL** 10.0 Matrix-AS

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

Vert(CT)

2-0-0 oc purlins (6-0-0 max.): 11-12.

>613

n/a

180

n/a

Weight: 189 lb

FT = 20%

-0.38 14-16

19

0.07

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

0.77

BC

REACTIONS. All bearings 0-3-8 except (jt=length) 13=Mechanical.

Lumber DOL

Max Horz 1=288(LC 11) (lb) -

2x4 SPF No.2

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 1 except 13=-170(LC 13), 19=-315(LC 12), 16=-293(LC 13) Max Grav All reactions 250 lb or less at joint(s) except 13=815(LC 26), 1=347(LC 25), 19=1254(LC 19), 16=1211(LC 26)

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

TOP CHORD 1-3=-638/131, 3-5=-656/247, 5-6=-144/520, 6-7=-69/489, 7-8=-105/255, 8-9=-75/272,

9-10=-804/226, 10-11=-825/208

BOT CHORD 1-21=-254/670, 18-19=-1187/341, 6-18=-311/189, 16-17=-573/176, 8-17=-387/228,

14-16=-156/701, 13-14=-226/848

WEBS 7-18=-508/58, 5-18=-474/231, 5-21=-262/756, 9-16=-987/279, 11-13=-987/257,

11-14=-262/141, 10-14=-98/467

NOTES-

TCDL

LUMBER-

TOP CHORD

BOT CHORD

10.0

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed: MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-10-14, Interior(1) 3-10-14 to 15-8-0, Exterior(2R) 15-8-0 to 19-6-10, Interior(1) 19-6-10 to 29-4-0, Exterior(2R) 29-4-0 to 33-2-14, Interior(1) 33-2-14 to 38-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 1, 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 13=170, 19=315, 16=293,
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



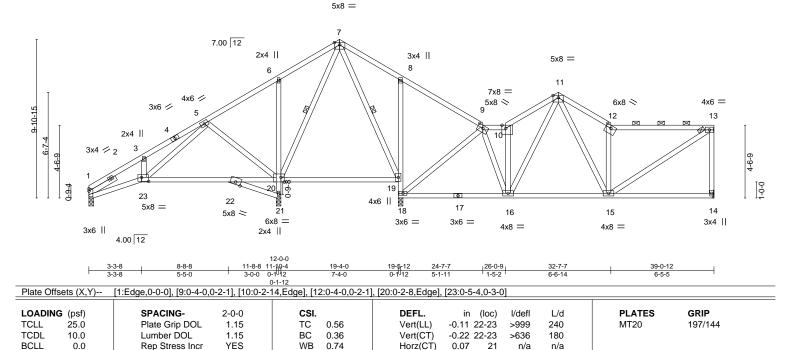
August 19,2021





Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES2 2901204 В4 Roof Special LEF'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-ofpGw6o4lKioJy_4 njG_DclS Builders FirstSource (Valley Center), Valley Center, KS - 67147, 15-8-0 3-8-0

Scale = 1:72.0



BRACING-LUMBER-

TOP CHORD 2x4 SPF No.2 Structural wood sheathing directly applied, except end verticals, and TOP CHORD

BOT CHORD 2x4 SPF No.2 2-0-0 oc purlins (5-2-0 max.): 9-10, 12-13.

WEBS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied. SLIDER Left 2x4 SPF No.2 2-0-0 **WEBS** 1 Row at midpt 7-20, 7-19

Matrix-AS

REACTIONS. All bearings 0-3-8 except (jt=length) 14=Mechanical.

Max Horz 1=302(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1 except 14=-171(LC 13), 21=-318(LC 12), 18=-289(LC 13) All reactions 250 lb or less at joint(s) except 14=797(LC 26), 1=341(LC 25), 21=1229(LC 19), Max Grav

18=1261(LC 26)

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

Code IRC2018/TPI2014

TOP CHORD 1-3=-619/137, 3-5=-634/249, 5-6=-152/536, 6-7=-75/502, 7-8=-71/318, 8-9=-87/334, 9-10=-687/211, 10-11=-823/284, 11-12=-989/276, 12-13=-813/201, 13-14=-732/191 **BOT CHORD** 1-23=-268/651, 20-21=-1162/345, 6-20=-316/192, 18-19=-617/173, 8-19=-355/212,

16-18=-126/526. 15-16=-143/561

WEBS 7-20=-480/62, 9-18=-920/225, 9-16=-65/476, 10-16=-506/165, 11-16=-132/280,

11-15=-106/499, 12-15=-830/256, 13-15=-187/917, 5-20=-479/234, 5-23=-255/736

NOTES-

BCDL

10.0

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-10-14, Interior(1) 3-10-14 to 15-8-0, Exterior(2R) 15-8-0 to 19-6-10, Interior(1) 19-6-10 to 29-4-0, Exterior(2E) 29-4-0 to 32-7-7, Interior(1) 32-7-7 to 38-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 1, 21 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 14=171, 21=318, 18=289,
- 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.



Weight: 202 lb

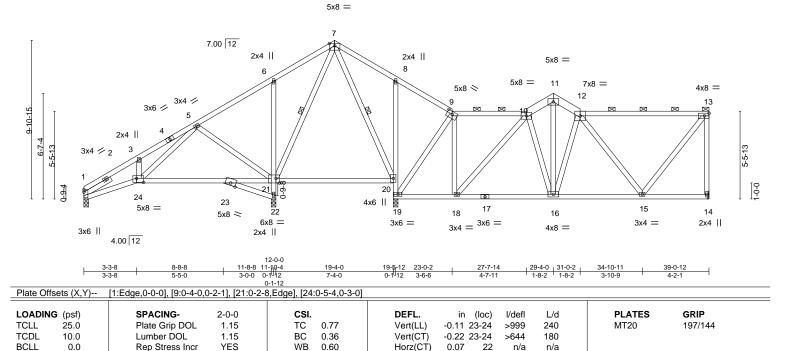
FT = 20%

August 19,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 **B**5 Roof Special LEF'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg ID:74Akgedx1Dhx781xCdylOjzvpGE-HrNf8SpiWeqfx6ZNL 2nDmplla Builders FirstSource (Valley Center), Valley Center, KS - 67147, 15-8-0 3-8-0 |29-4-0 |31-0-2 | |1-8-2 |1-8-2 |

Scale = 1:72.0



LUMBER-

Code IRC2018/TPI2014

2x4 SPF No.2 *Except* TOP CHORD

10-11,11-12: 2x6 SPF No.2

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

10.0

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

Structural wood sheathing directly applied, except end verticals, and

n/a

2-0-0 oc purlins (5-4-14 max.): 9-10, 12-13.

n/a

Weight: 212 lb

FT = 20%

BOT CHORD Rigid ceiling directly applied.

22

1 Row at midpt **WEBS**

REACTIONS. All bearings 0-3-8 except (jt=length) 14=Mechanical.

Max Horz 1=315(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1 except 14=-177(LC 13), 22=-323(LC 12), 19=-273(LC 13) Max Grav All reactions 250 lb or less at joint(s) except 14=806(LC 26), 1=344(LC 20), 22=1226(LC 19), 19=1237(LC 26)

Matrix-AS

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

TOP CHORD 1-3=-616/146, 3-5=-624/251, 5-6=-168/529, 6-7=-89/492, 7-8=-98/319, 8-9=-78/296, 9-10=-327/205, 10-11=-734/237, 11-12=-804/253, 12-13=-432/150, 13-14=-759/180 **BOT CHORD** 1-24=-285/654, 21-22=-1159/350, 6-21=-324/197, 19-20=-529/137, 8-20=-289/169,

18-19=-87/298, 16-18=-180/661, 15-16=-210/742

WEBS 7-21=-482/70, 9-19=-841/184, 9-18=-64/540, 11-16=-233/761, 12-16=-468/165, 10-18=-543/141, 5-21=-488/238, 5-24=-244/710, 12-15=-517/162, 13-15=-95/630

BCDL

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-10-14, Interior(1) 3-10-14 to 15-8-0, Exterior(2R) 15-8-0 to 19-6-10, Interior(1) 19-6-10 to 29-4-0, Exterior(2E) 29-4-0 to 31-0-2, Interior(1) 31-0-2 to 38-11-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Bearing at joint(s) 1, 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 14=177, 22=323, 19=273.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 19,2021



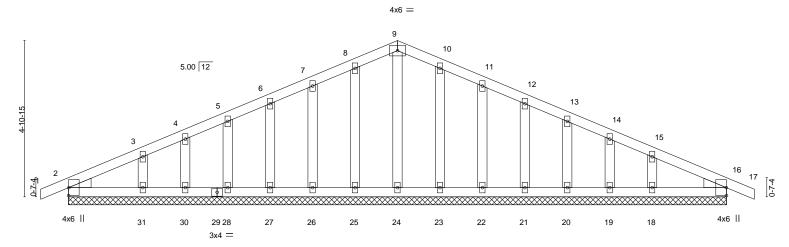
RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES4 2901204 C₁ **GABLE** LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 18 12 22 56 2021 Rage ID:74Akgedx1Dhx781xCdylOjzvpGE-DEVPZ8qy2F4NAC ISrqhrEa5 Fgy 44 Hbd p 389/m cn Builders FirstSource (Valley Center), Valley Center, KS - 67147, |-0-10-8 | 0-10-8

10-4-0

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

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

Scale = 1:36.2



20-8-0 20-8-0								
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.05 BC 0.03 WB 0.03	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 16 n/r 120 Vert(CT) 0.00 16 n/r 120 Horz(CT) 0.00 16 n/a n/a	PLATES GRIP MT20 197/144				
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	11012(01) 0.00 10 11/4 11/4	Weight: 91 lb FT = 20%				

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 20-8-0.

Max Horz 2=-82(LC 17) (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) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-4-0, Exterior(2N) 2-4-0 to 10-4-0, Corner(3R) 10-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 21-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

10-4-0

- 8) 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.
- 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.





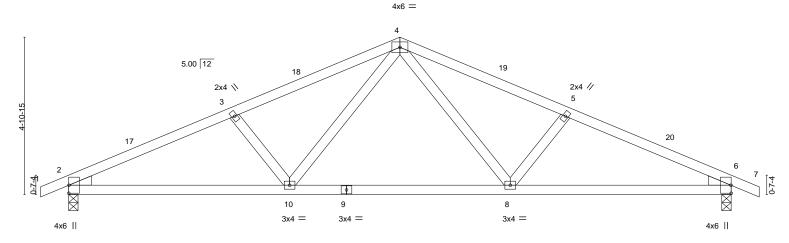




Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES5 2901204 C2 Common LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-hQ2nmUrapZCEoalxDZLwO360 0-10-8 5-2-1 5-2-1 5-1-15 5-1-15

Scale = 1:35.9

RELEASE FOR CONSTRUCTION



	6-10-11					13-9-5					20-8-0				
		6-10-11				6-10-10					6-10-11				
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP			
TCLL	25.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.09	8-10	>999	240	MT20	197/144			
TCDL	10.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.19	8-10	>999	180					
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.04	6	n/a	n/a					
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-AS						Weight: 72 lb	FT = 20%			

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

WEBS 2x4 SPF No.2 WEDGE

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8 Max Horz 2=-82(LC 13)

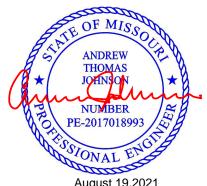
Max Uplift 2=-177(LC 12), 6=-177(LC 13) Max Grav 2=991(LC 1), 6=991(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1688/392, 3-4=-1498/378, 4-5=-1498/378, 5-6=-1688/392 TOP CHORD

BOT CHORD 2-10=-288/1497. 8-10=-151/1053. 6-8=-295/1497

WEBS 4-8=-104/481, 5-8=-325/176, 4-10=-104/481, 3-10=-325/176

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-4-0, Exterior(2R) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 21-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=177, 6=177.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



August 19,2021



SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

Job Truss Truss Type Qty 2901204 C3 **GABLE** Builders FirstSource (Valley Center), Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aven ID:74Akgedx1Dhx781xCdyIOjzvpGE-9cc9zqsCasK5Qkt8aGs9wffGI

LUS26

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

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

except end verticals.

Ply

13-11-0

3-4-0

12-12-2-52-9021-Rage 1 ECDMppJ5<mark>I</mark>IADv2mbmH 20-11-0

6x8 =

HUS26

6.00 12 Scale = 1:41.2 4x6 || 7x8 / 3 5.00 12 5x8 < 4x6 = 2 4-10-15 3-6-4 0-9-0 23 24 25 26 27 10 28 29 30 31 32 11 9 8x12 = LUS26 HUS26 HUS26 6x8 =LUS26 LUS26 3x6 II 8x12 = 4x8

LUS26

5-1-15

HUS26

HUS26

		4-9-12 4-9-12	5-5-1 0-7-5			13-11-0 3-4-0	17-3-4 3-4-4	20-11-0 3-7-12	—
Plate Offse	ts (X,Y)	[7:Edge,0-4-0], [8:0-6-0,0				3-4-0	J-4-4	3-7-12	
LOADING TCLL TCDL BCLL	(psf) 25.0 10.0 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 NO	CSI. TC 0.72 BC 0.62 WB 0.80	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.17 8-9 -0.30 8-9 0.06 7	l/defl L/d >999 240 >833 180 n/a n/a	PLATES MT20	GRIP 197/144
BCDL	10.0	Code IRC2018/TF	PI2014	Matrix-MS				Weight: 240 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SPF No.2 TOP CHORD BOT CHORD 2x6 SPF 2100F 1.8E 2x4 SPF No.2

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

REACTIONS. (size) 1=0-6-8, 7=0-3-8 Max Horz 1=278(LC 7)

HUS26

Max Uplift 1=-1082(LC 8), 7=-1277(LC 8) Max Grav 1=5627(LC 1), 7=5396(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-10021/1999, 2-3=-6928/1497, 3-4=-6877/1504, 4-5=-3965/876 TOP CHORD BOT CHORD 1-11=-1921/9210. 9-11=-1921/9210. 8-9=-1596/7271. 7-8=-758/3531

WEBS 2-9=-3141/605, 3-9=-1016/4926, 4-9=-1291/316, 4-8=-5228/1171, 5-8=-1329/6016,

5-7=-5765/1347, 2-11=-281/2092

NOTES-

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

Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-8-0 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=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) 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.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=1082, 7=1277. 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) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 11-10-8 oc max. starting at 0-3-12 from the left end to 20-2-4 to connect truss(es) to back face of bottom chord.
- 12) Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 10-3-12 from the left end to 18-2-4 to connect truss(es) to back face of bottom chord.

Oலிtiniledi onaphages where hanger is in contact with lumber.



August 19,2021



RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW Job Truss Truss Type Qty Ply SUMMIT/HAWTHORNE #13/MO DEVELOPMENT SERVICES6 2901204 C3 **GABLE** Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12 22 52 2021 Rag 2
ID:74Akgedx1Dhx781xCdylOjzvpGE-9cc9zqsCasK5Qkt8aGs9wfGJEeJMbpJgIADvzmtm-l LEE'S SUMMIT. MISSOURI Builders FirstSource (Valley Center), Valley Center, KS - 67147,

LOAD CASE(S) Standard

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

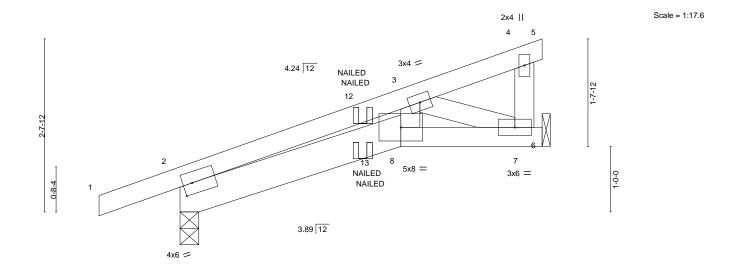
Uniform Loads (plf) Vert: 1-3=-70, 3-4=-70, 4-6=-70, 7-20=-20

Concentrated Loads (lb)

Vert: 9=-797(B) 23=-873(B) 24=-866(B) 25=-866(B) 26=-866(B) 27=-866(B) 28=-800(B) 29=-795(B) 30=-777(B) 31=-786(B) 32=-859(B)

RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 CJ1 Diagonal Hip Girder LEE'S SUMMIT, MISSOURI Job Reference (optional) 18-12-22-53-2021- Rago abeli/15Sdd N1/IIL mbm 8.430 s Jun 2 2021 MTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-doAYB9sqLASy1tS 48_NOT to Builders FirstSource (Valley Center), Valley Center, KS - 67147,

3-4-8



2-1-15

5-6-6

except end verticals.

Structural wood sheathing directly applied or 5-6-6 oc purlins,

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

			-		3-4-≀	5			2-1	-15	*		
Plate Offset	ts (X,Y)	[2:0-1-11,0-2-0]											
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL :	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.01	8	>999	240	MT20	197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.02	8	>999	180			
BCLL	0.0	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.01	7	n/a	n/a			
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-MP						Weight: 21 lb	FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2-8: 2x6 SPF No.2

WEBS 2x4 SPF No.2

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

Max Horz 2=85(LC 5)

Max Uplift 2=-105(LC 4), 7=-75(LC 8) Max Grav 2=332(LC 1), 7=236(LC 1)

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

1-2-14

TOP CHORD 2-3=-517/146 **BOT CHORD**

2-8=-166/464, 7-8=-148/408

WEBS 3-7=-434/170

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=105.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-70, 4-5=-20, 8-9=-20, 6-8=-20

Concentrated Loads (lb) Vert: 13=2(F=1, B=1)

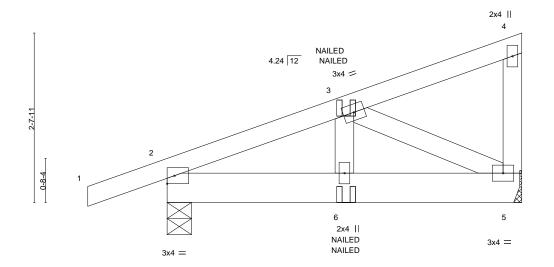


August 19,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SER FICES 2901204 CJ2 Diagonal Hip Girder 2 Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avs 12 42
ID:74Akgedx1Dhx781xCdylOjzvpGE-5?kwOVtT6Uapf11W hud?4k nij 2000 LEE'S SUMMIT, MISSOURI 18-12:22-54-2021 Rago 1200g/tn) 1 G/Hn/mtm Builders FirstSource (Valley Center), Valley Center, KS - 67147, 1-2-14 2-9-3



					2-9-3	<u>'</u>			2-9-3		'	
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.00	6	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-MP						Weight: 24 lb	FT = 20%

5-6-6

LUMBER-BRACING-

TOP CHORD 2x4 SPF No 2 TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins. 2x6 SPF No.2 **BOT CHORD** BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 2x4 SPF No.2

2-9-3

REACTIONS. 2=0-4-9, 5=Mechanical (size)

Max Horz 2=101(LC 4) Max Uplift 2=-106(LC 4), 5=-82(LC 8)

Max Grav 2=343(LC 1), 5=236(LC 1)

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

TOP CHORD 2-3=-293/54 WFRS 3-5=-276/114

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=106.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-4=-70, 5-7=-20 Concentrated Loads (lb) Vert: 6=-7(F=-4, B=-4)



RELEASE FOR CONSTRUCTION

Scale = 1:18.0

August 19,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 D1 **GABLE** Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed August ID:74Akgedx1Dhx781xCdylOjzvpGE-ZBIlcru5tnigHBcjFPPsYIH 23 Miterial Control of the Control of LEF'S SUMMIT, MISSOURI Builders FirstSource (Valley Center), Valley Center, KS - 67147, -0-10-8 0-10-8 10-0-0 10-0-0

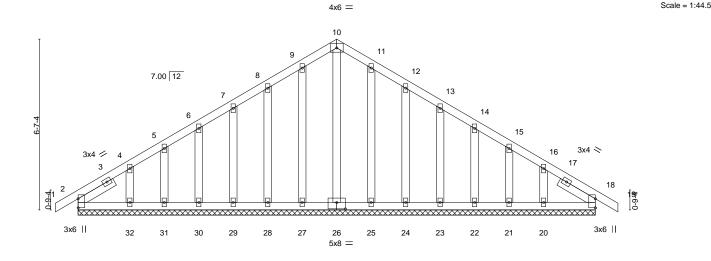


Plate Offsets (X,Y)--[2:Edge,0-0-0], [18:Edge,0-0-0], [26:0-4-0,0-3-0] SPACING-(loc) **PLATES GRIP** LOADING (psf) CSI DEFL. in I/defl L/d TCLL 25.0 Plate Grip DOL 1.15 TC 0.05 Vert(LL) -0.00 18 120 197/144 n/r MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.03 Vert(CT) -0.00 18 n/r 120 **BCLL** 0.0 Rep Stress Incr YES WB 0.09 Horz(CT) 0.00 18 n/a n/a Code IRC2018/TPI2014 FT = 20% **BCDL** 10.0 Weight: 108 lb Matrix-S

20-0-0

LUMBER-BRACING-

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

SLIDER Left 2x4 SPF No.2 1-7-7, Right 2x4 SPF No.2 1-7-7

REACTIONS. All bearings 20-0-0.

Max Horz 2=-166(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 27, 28, 29, 30, 31, 25, 18, 24, 23, 22, 21, 20 except

32=-102(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 2, 26, 27, 28, 29, 30, 31, 32, 25, 18, 24, 23, 22, 21, 20

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 27, 28, 29, 30, 31, 25, 18, 24, 23, 22, 21, 20 except (jt=lb) 32=102
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



RELEASE FOR CONSTRUCTION

August 19,2021

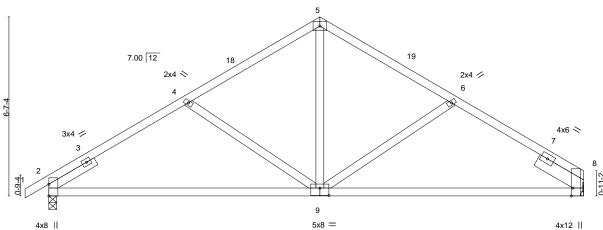


RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICESO 2901204 D2 Common 5 LEE'S SUMMIT, MISSOURI Builders FirstSource (Valley Center), Valley Center, KS - 67147, 14-10-4 0-1-10 0-10-8 0-10-8 14-8-10 5-1-12 4-10-4 4-8-10 4-10

> Scale = 1:42.5 4x6 =

> > Structural wood sheathing directly applied.

Rigid ceiling directly applied.



19-8-12 Plate Offsets (X V)-- [2:Edge 0-0-0] [8:0-3-8 Edge] [9:0-4-0 0-3-4]

1 1010 011	3013 (A, 1)	[2.Luge,0-0-0], [0.0-3-0,L	ugoj, [J.O + O	0 0 1]								
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.14	9-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.28	9-16	>842	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-AS						Weight: 76 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

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

Max Horz 2=161(LC 9)

Max Uplift 8=-139(LC 13), 2=-162(LC 12) Max Grav 8=886(LC 1), 2=950(LC 1)

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

2-4=-1084/223, 4-5=-937/197, 5-6=-934/197, 6-8=-1163/219 TOP CHORD

BOT CHORD 2-9=-222/984. 8-9=-124/947

WEBS 4-9=-333/202, 5-9=-63/514, 6-9=-295/192

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 19-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=139, 2=162.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



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RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES1 2901204 E1 Hip Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave
ID:74Akgedx1Dhx781xCdylOjzvpGE-WaQ21XwLPPzOWVI5NpSKdjMDg LEE'S SUMMIT, MISSOURI Builders FirstSource (Valley Center), Valley Center, KS - 67147, 7-11-8

2-0-0

6-0-0

Structural wood sheathing directly applied, except

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

Rigid ceiling directly applied.

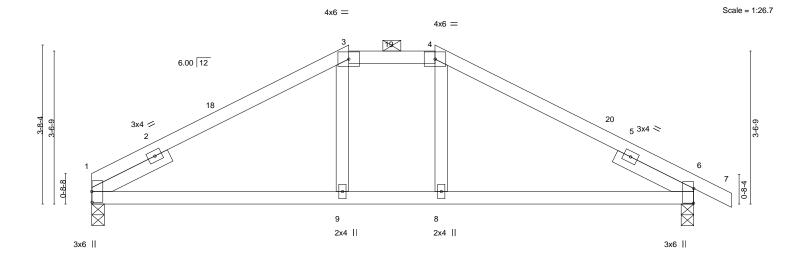


Plate Off	sets (X,Y)	[1:0-3-0,0-0-1], [6:0-4-1,0	0-0-1]									
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.08	8-16	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.11	8-16	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.02	1	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-AS	' '					Weight: 46 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

REACTIONS. (size) 1=0-3-8, 6=0-3-8

Max Horz 1=-67(LC 13)

Max Uplift 1=-105(LC 12), 6=-126(LC 13) Max Grav 1=626(LC 1), 6=691(LC 1)

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

5-11-8

5-11-8

1-3=-782/271, 3-4=-687/281, 4-6=-810/262 TOP CHORD 1-9=-131/691, 8-9=-131/687, 6-8=-129/691 BOT CHORD

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-11-8, Exterior(2E) 5-11-8 to 7-11-8, Exterior(2R) 7-11-8 to 12-2-7, Interior(1) 12-2-7 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=105, 6=126
- 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.



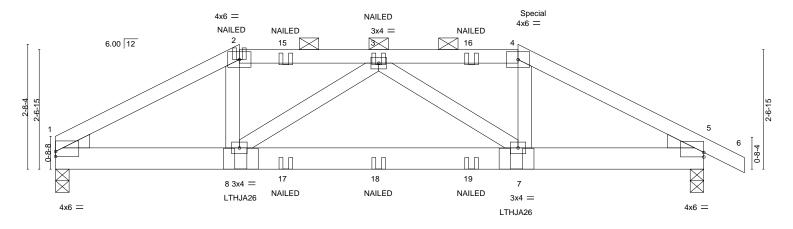
August 19,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES2 2901204 E2 Hip Girder LEE'S SUMMIT, MISSOURI

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-_m_REtwzAi5E8fKN XzZAw Builders FirstSource (Valley Center), Valley Center, KS - 67147, 14-10-0 9-11-8 13-11 3-11-8 3-0-0 3-0-0 4-0-

Scale = 1:24.8



		3-11-8 3-11-8		6-11-8 3-0-0	i		-11-8 I-0-0		_		13-11-8 4-0-0	
Plate Offs	sets (X,Y)	[1:0-0-0,0-1-5], [5:0-0-0,0	0-1-3]									
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.05	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.51	Vert(CT)	-0.10	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-MS						Weight: 58 lb	FT = 20%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

WEBS 2x4 SPF No.2 WEDGE

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

REACTIONS. (size) 1=0-3-8, 5=0-3-8 Max Horz 1=-49(LC 9)

Max Uplift 1=-263(LC 8), 5=-278(LC 9)

Max Grav 1=936(LC 1), 5=999(LC 1)

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

1-2=-1568/441, 2-3=-1320/418, 3-4=-1323/410, 4-5=-1572/432 **BOT CHORD** 1-8=-368/1344, 7-8=-466/1573, 5-7=-342/1348

2-8=-59/420, 3-8=-364/178, 3-7=-349/168, 4-7=-53/416

WEBS

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=263, 5=278.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 1 ply, Right Hand Hip) or equivalent at 3-11-14 from the left end to connect truss(es) to back face of bottom chord.
- 9) Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 1 ply, Left Hand Hip) or equivalent at 9-11-2 from the left end to connect truss(es) to back face of bottom chord.
- 10) Fill all nail holes where hanger is in contact with lumber.
- 11) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 116 lb down and 113 lb up at 9-11-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 13) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard



Structural wood sheathing directly applied or 4-5-7 oc purlins, except

2-0-0 oc purlins (4-11-12 max.): 2-4.

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

August 19,2021

Continued on page 2





RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO DEVELOPMENT SERVICES2 2901204 E2 Hip Girder LEE'S SUMMIT. MISSOURI

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

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 22 56 2021 Rags 2

ID:74Akgedx1Dhx781xCdylOjzvpGE-_m_REtwzAj5E8fKlv XzZAw Ozwini Al T ilu Ozmini B

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-70, 2-4=-70, 4-6=-70, 9-12=-20

Concentrated Loads (lb)

Vert: 2=-46(B) 4=-46(B) 8=-156(B) 3=-46(B) 7=-156(B) 15=-46(B) 16=-46(B) 17=-25(B) 18=-25(B) 19=-25(B)



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES3 2901204 G1 GABLE LEF'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdyIOjzvpGE-SyXpRDxbw0D5lovU 8.430 s Jun 2 2021 MiTek Industries, Inc. Builders FirstSource (Valley Center), Valley Center, KS - 67147, 12-10-8 8-8-8 3-3-8 3-3-8 2-8-8 2-8-8 3-3-8

> 3x6 = 4x6 ||

Scale = 1:27.7

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

2 7.00 12 19 2x4 2x4 || 2x4 || 2x4 || 6x8 =6x8 = 4x8 = 4.00 12 4x8 <

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

SPACING-L/d **PLATES** LOADING (psf) CSI. DEFL. in (loc) I/def GRIP Plate Grip DOL TCLL 25.0 1.15 TC 0.32 Vert(LL) -0.04 5-6 >999 240 MT20 197/144 TCDL 10.0 Lumber DOL 1.15 BC 0.24 Vert(CT) -0.08 5-6 >999 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.11 Horz(CT) -0.03 n/a n/a **BCDL** Code IRC2018/TPI2014 FT = 20% 10.0 Weight: 60 lb Matrix-AS

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SPF No.2 TOP CHORD

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

5-6: 2x4 SPF No.2 WEBS 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2

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

Max Horz 3=-100(LC 10)

Max Uplift 1=-85(LC 12), 3=-106(LC 13) Max Grav 1=538(LC 1), 3=603(LC 1)

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

TOP CHORD 1-2=-1102/234, 2-3=-1092/231

BOT CHORD 1-6=-121/902, 5-6=-78/566, 3-5=-120/891

WEBS 2-5=-50/443, 2-6=-41/440

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-0-0, Exterior(2R) 6-0-0 to 9-0-0, Interior(1) 9-0-0 to 12-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Bearing at joint(s) 1, 3 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 3=106.
- 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.



August 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES4 2901204 G2 Flat LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 18 12 22 55 2021 Rage 1 ID:74Akgedx1Dhx781xCdylOjzvpGE-SyXpRDxbw0D5lovUUEUoiaR Builders FirstSource (Valley Center), Valley Center, KS - 67147, 19-8-12 6-8-1 6-4-9 6-8-1 3x4 = 3x4 =3x4 =3x4 = Scale = 1:38.1 3x4 =\$ 2 \boxtimes 8 7 6 6x8 = 4x6 =3x4 =6x8 = 9-10-6 19-8-12 Plate Offsets (X,Y)--[5:Edge,0-1-8] SPACING-**PLATES** GRIP LOADING (psf) 2-0-0 CSI. DEFL. in (loc) I/def L/d 25.0 TCLL Plate Grip DOL 1.15 TC 0.51 Vert(LL) -0.18 7-9 >999 240 197/144 MT20 TCDL 10.0 Lumber DOL 1.15 BC 0.77 Vert(CT) -0.367-9 >649 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.33 Horz(CT) 0.02 6 n/a n/a Code IRC2018/TPI2014 FT = 20% **BCDL** 10.0 Weight: 94 lb Matrix-AS BRACING-

TOP CHORD

BOT CHORD

WEBS

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

2-9, 4-6

Rigid ceiling directly applied.

1 Row at midpt

LUMBER-

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

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

Max Horz 9=-237(LC 8)

Max Uplift 9=-236(LC 8), 6=-236(LC 9) Max Grav 9=875(LC 1), 6=875(LC 1)

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

TOP CHORD 2-4=-702/389

BOT CHORD 7-9=-563/647, 6-7=-515/647 WFBS 2-9=-849/611, 4-6=-849/611

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=236, 6=236
- 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 19,2021



SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES

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

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

LEF'S SUMMIT, MISSOURI

Wed Aye 2021 Rage

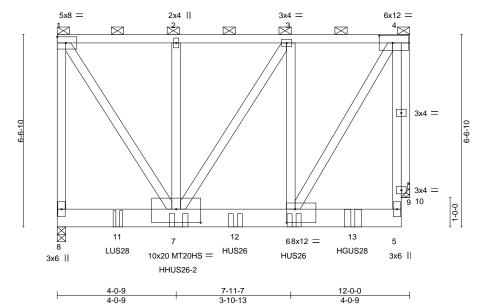
Job Reference (optional)
8.430 s Jun 2 2021 MiTek Industries, Inc. ID:74Akgedx1Dhx781xCdylOjzvpGE-w95BfZyDhKLyNyUg2y?1Fl

Ply

Qty

12-0-0 4-0-9 3-10-13

Scale = 1:39.2



4-0-9 Plate Offsets (X,Y)-- [4:0-5-8,0-3-0], [6:0-3-8,0-5-8], [7:0-10-0,0-5-8]

Truss

G3

Builders FirstSource (Valley Center),

Truss Type

Valley Center, KS - 67147,

ROOF SPECIAL GIRDER

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL) -0.04	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.19	Vert(CT) -0.06	6-7	>999	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr NO	WB 0.50	Horz(CT) -0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 209 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

Job

2901204

2x4 SPF No.2 TOP CHORD BOT CHORD 2x8 SP 2400F 2.0E WEBS 2x4 SPF No.2 **OTHERS** 2x4 SPF No.2

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

Max Horz 8=-180(LC 6)

Max Uplift 8=-780(LC 4), 10=-812(LC 5) Max Grav 8=4107(LC 1), 10=4294(LC 1)

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

TOP CHORD $1-8 = -3531/686, \ 1-2 = -2192/444, \ 2-3 = -2192/444, \ 3-4 = -2242/428, \ 5-9 = -121/791,$

4-9=-121/791

BOT CHORD 6-7=-440/2242

1-7=-763/4038, 2-7=-283/137, 4-6=-749/3927, 4-10=-4300/813 **WEBS**

NOTES-

- 1) n/a
- 2) 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: 2x8 - 2 rows staggered at 0-6-0 oc.

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

- 3) 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.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=780. 10=812.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 12) Use Simpson Strong-Tie LUS28 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 2-0-12 from the left end to connect truss(es) to back face of bottom chord.
- 13) Use Simpson Strong-Tie HHUS26-2 (14-10d Girder, 4-10d Truss) or equivalent at 4-1-10 from the left end to connect truss(es) to back face of bottom chord.





August 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty Ply SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES5 ROOF SPECIAL GIRDER 2901204 G3 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 6-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 6-0-12 from the left end to 8-0-12 to connect truss(es) to back face of bottom chord.

- 15) Use Simpson Strong-Tie HGUS28 (36-10d Girder, 6-10d Truss) or equivalent at 10-0-12 from the left end to connect truss(es) to back face of bottom chord.
- 16) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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

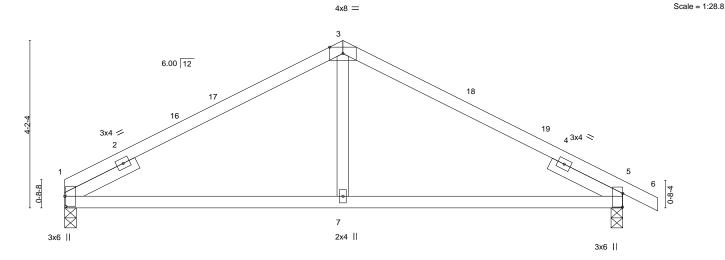
Vert: 1-4=-70, 5-8=-20

Concentrated Loads (lb)

Vert: 7=-1737(B) 6=-1499(B) 11=-1138(B) 12=-1499(B) 13=-1499(B)

RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES6 2901204 G5 Common Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug
ID:74Akgedx1Dhx781xCdylOjzvpGE-OLfZsvzsSdTp?63scfWG LEE'S SUMMIT, MISSOURI Builders FirstSource (Valley Center), Valley Center, KS - 67147, 13-11-8 14-10-0 6-11-8 7-0-0



			0 11 0						10 11	•		
		_	6-11-8						7-0-0)		
Plate Off	fsets (X,Y)	[1:0-3-0,0-0-5], [5:0-4-1,0-	0-1]									
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defI	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.07	7-14	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.12	7-14	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.03	1	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI	12014	Matri	x-AS	, ,					Weight: 44 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

13-11-8

Rigid ceiling directly applied.

Structural wood sheathing directly applied.

LUMBER-

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

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

REACTIONS. (size) 1=0-3-8, 5=0-3-8 Max Horz 1=-77(LC 13)

Max Uplift 1=-102(LC 12), 5=-123(LC 13)

Max Grav 1=626(LC 1), 5=691(LC 1)

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

1-3=-748/294, 3-5=-777/290 TOP CHORD **BOT CHORD** 1-7=-130/650, 5-7=-130/650

WEBS 3-7=0/294

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0. Interior(1) 3-0-0 to 6-11-8. Exterior(2R) 6-11-8 to 9-11-8. Interior(1) 9-11-8 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=102, 5=123.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.





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

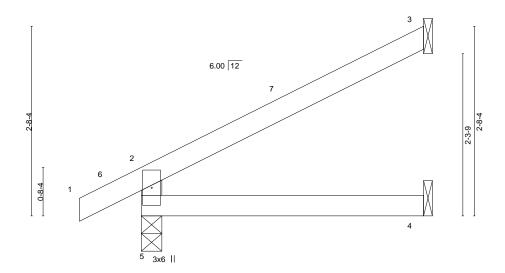


Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICEST 2901204 J1 Jack-Open 5 LEE'S SUMMIT. MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-sXDx4EzUDxbgcGe39 V1VKm.67 18-12:**23:**02-902/1-Rago Gwill (m) Ogijhak ymem7 Builders FirstSource (Valley Center), Valley Center, KS - 67147, 4-0-0

4-0-0

Scale = 1:16.3

RELEASE FOR CONSTRUCTION



		· ·	4-0-0	
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.20	DEFL. in (loc) I/defl L/d Vert(LL) -0.01 4-5 >999 240	PLATES GRIP MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) -0.02 4-5 >999 180	W1120 197/144
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-MR	Horz(CT) -0.01 3 n/a n/a	Weight: 11 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x4 SPF No.2

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

Max Horz 5=89(LC 12)

Max Uplift 5=-36(LC 12), 3=-67(LC 12)

Max Grav 5=252(LC 1), 3=116(LC 1), 4=71(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

0-10-8

- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-0-0 oc purlins,

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

except end verticals.



Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 J2 Jack-Open 2 LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12/2022-902/ Rags ID:74Akgedx1Dhx781xCdylOjzvpGE-sXDx4EzUDxbgcGe39 VIVKm 5 10-74WO O jihak/m m Builders FirstSource (Valley Center), Valley Center, KS - 67147, 0-10-8 2-5-11 1-6-5

Scale = 1:16.3

RELEASE FOR CONSTRUCTION

FT = 20%

Weight: 14 lb

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

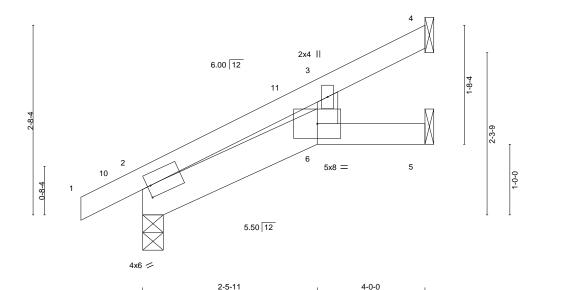


Plate Offsets (X,Y)	Plate Offsets (X,Y) [2:0-0-8,0-2-0]											
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP		
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	0.03	6	>999	240	MT20	197/144		
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.04	6	>999	180				
BCII 00	Pan Stress Incr	VES	WB 0.02	Horz(CT	0.02	5	n/a	n/a				

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

WEBS

BCDL

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

10.0

2-6: 2x6 SPF No.2 2x4 SPF No.2

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

Max Horz 2=96(LC 12)

Max Uplift 4=-73(LC 12), 2=-33(LC 12)

Max Grav 4=156(LC 1), 2=245(LC 1), 5=29(LC 3)

Code IRC2018/TPI2014

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

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-AS

- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 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 19,2021

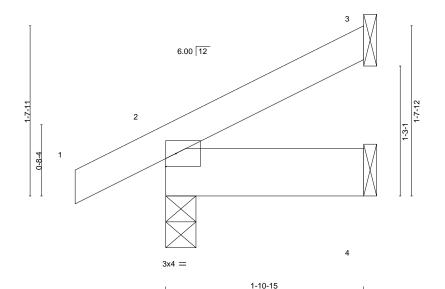


RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES9 2901204 J4 Jack-Open LEE'S SUMMIT. MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12 22 03 2021 Rage 1 ID:74Akgedx1Dhx781xCdylOjzvpGE-KknKHa_6_FjXEQDFj4ZktzdxgygFyzy5yw5Fsrpymrn/g Builders FirstSource (Valley Center), Valley Center, KS - 67147, -0-10-8 1-10-15

1-10-15

0-10-8

Scale = 1:11.1



1-10-15 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL 1.15 TC Vert(LL) -0.00 >999 240 197/144 **TCLL** 0.05 MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.02 Vert(CT) -0.00 >999 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-MP Weight: 7 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

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

Max Horz 2=54(LC 12) Max Uplift 3=-28(LC 12), 2=-28(LC 12), 4=-3(LC 12) Max Grav 3=48(LC 1), 2=161(LC 1), 4=37(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 1-10-15 oc purlins.

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

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RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICESO 2901204 J5 Jack-Open 2 LEE'S SUMMIT. MISSOURI

Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Aug 12 12 22 30 3 2021 Fags 1
ID:74Akgedx1Dhx781xCdylOjzvpGE-KknKHa_6_FjXEQ_DFj4Zktlcllcd9ffzlbfw6Ffsmmmmfg

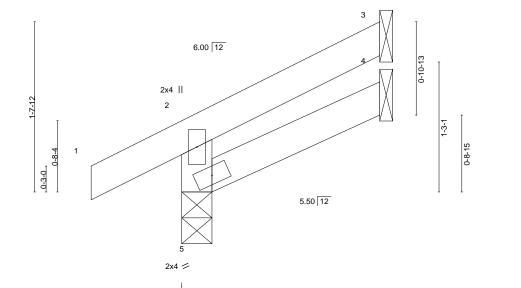
Structural wood sheathing directly applied or 1-10-15 oc purlins,

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

except end verticals.

-0-10-8 1-10-15 0-10-8 1-10-15

Scale = 1:11.1



LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.07	DEFL. in (loc) I/defl L/d Vert(LL) -0.00 5 >999 240	PLATES GRIP MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00 5 >999 180	
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-MR	Horz(CT) -0.00 3 n/a n/a	Weight: 6 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

Valley Center, KS - 67147,

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

Builders FirstSource (Valley Center),

REACTIONS. 3=Mechanical, 4=Mechanical, 5=0-3-8 (size) Max Horz 5=47(LC 12)

Max Uplift 3=-32(LC 12), 5=-27(LC 12) Max Grav 3=44(LC 1), 4=31(LC 3), 5=171(LC 1)

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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RELEASE FOR CONSTRUCTION Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES1

Jack-Closed Girder Builders FirstSource (Valley Center), Valley Center, KS - 67147,

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 22 24 4 2021 Bar 1 ID:74Akgedx1Dhx781xCdylOjzvpGE-pwLiVw?klYrOsao RHn4_FB9 colyA_r rc/cge/mcg-5

LEE'S SUMMIT, MISSOURI

Scale = 1:16.3

2-5-11 1-6-5

2x4 || 4 3 6.00 12 2 6 8x12 / 4x8 = 9 0-8-4

1-6-5

5.50 12

Plate Offsets (X,Y)	[1:0-0-15,0-2-3], [7:0-5-12,0-5-4]

J7

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.02	7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.03	7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.35	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TF	PI2014	Matri	x-MP						Weight: 15 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

Job

2901204

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

1-7: 2x6 SPF No.2

WEBS 2x4 SPF No.2

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

Max Horz 1=70(LC 5)

Max Uplift 1=-113(LC 8), 6=-179(LC 8) Max Grav 1=676(LC 1), 6=808(LC 1)

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

TOP CHORD 1-2=-1595/309

BOT CHORD 1-7=-374/1779 6-7=-238/1067 **WEBS** 2-7=-267/1416, 2-6=-1255/294

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

4x6 /

- 3) Refer to girder(s) for truss to truss connections.
- 4) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=113, 6=179.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1138 lb down and 223 lb up at 2-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-3=-70, 3-4=-20, 7-8=-20, 5-7=-20

Concentrated Loads (lb) Vert: 11=-1138(F)



Structural wood sheathing directly applied or 4-0-0 oc purlins,

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

except end verticals.

August 19,2021





RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES2 2901204 L1 Lay-In Gable LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12 22 05 2021 Rags ID:74Akgedx1Dhx781xCdylOjzvpGE-H6v4iG0MWszFTjN xVbDyQhy 29 Quttl 4 xvjAynt n Builders FirstSource (Valley Center), Valley Center, KS - 67147, 9-7-4 5-3-0 4-4-4

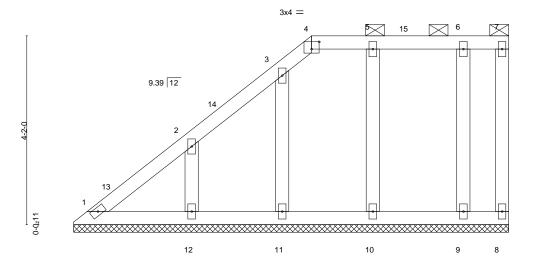


Plate Offsets (X,Y)	[4:0-2-0,0-1-15]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL) n/a - n/a 999	MT20 197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.05	Vert(CT) n/a - n/a 999	
BCLL 0.0	Rep Stress Incr YES	WB 0.04	Horz(CT) -0.00 8 n/a n/a	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 41 lb FT = 20%

LUMBER-BRACING-

TOP CHORD 2x4 SPF No.2 Structural wood sheathing directly applied or 6-0-0 oc purlins, TOP CHORD **BOT CHORD** 2x4 SPF No.2 except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-7. WEBS 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SPF No.2

REACTIONS. All bearings 9-7-4.

Max Horz 1=154(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 9, 10, 11 except 12=-117(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 8, 9, 10, 11, 12

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

TOP CHORD 1-2=-272/166

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-3 to 3-4-3, Interior(1) 3-4-3 to 5-3-0, Exterior(2E) 5-3-0 to 9-5-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 9, 10, 11 except (jt=lb) 12=117.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



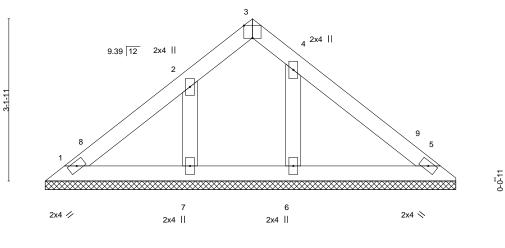
Scale = 1:25.4

August 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES3 2901204 L2 Lay-In Gable LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 19-12 ID:74Akgedx1Dhx781xCdylOjzvpGE-H6v4iG0MWszFTjNe VbDyO Builders FirstSource (Valley Center), Valley Center, KS - 67147, 05-9021/-Rage 4-0-2 3-11-4

> Scale = 1:22.3 3x4 =



7-11-6

1 late 0/13013 (X, 1) [0.0 2 0,Euge]										
LOADING (psf	SPACING- 2-0-	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP						
TCLL 25.0	Plate Grip DOL 1.1	TC 0.12	Vert(LL) n/a - n/a 999	MT20 197/144						
TCDL 10.0	Lumber DOL 1.1	BC 0.05	Vert(CT) n/a - n/a 999							
BCLL 0.0	Rep Stress Incr YE	WB 0.04	Horz(CT) 0.00 5 n/a n/a							
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 24 lb FT = 20%						

LUMBER-BRACING-

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

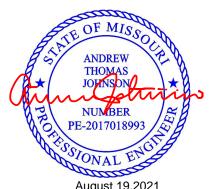
REACTIONS. All bearings 7-11-6. Max Horz 1=-73(LC 8) (lb) -

Plate Offsets (X V)-- [3:0-2-0 Edge]

Max Uplift All uplift 100 lb or less at joint(s) except 6=-127(LC 13), 7=-108(LC 12) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=276(LC 20)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-1 to 3-5-1, Interior(1) 3-5-1 to 4-0-2, Exterior(2R) 4-0-2 to 7-0-2, Interior(1) 7-0-2 to 7-7-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 127 lb uplift at joint 6 and 108 lb uplift at joint 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.



August 19,2021



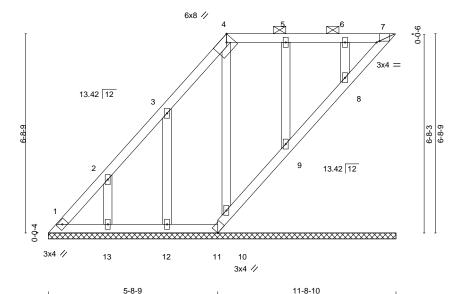
RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES4 2901204 L3 **GABLE** LEF'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg ID:74Akgedx1Dhx781xCdylOjzvpGE-IJSSvc1_HA565 kqOC6sV

6-0-1 6-0-1

Scale = 1:38.8

FT = 20%

Weight: 52 lb



5-8-9

Plate Offsets (X,Y)--[4:0-2-10,Edge], [7:0-1-2,Edge] SPACING-**PLATES** LOADING (psf) CSI. DEFL. in (loc) I/defl L/d GRIP Plate Grip DOL TCLL 25.0 1.15 TC 0.07 Vert(LL) n/a 999 MT20 197/144 n/a TCDL 10.0 Lumber DOL 1.15 BC 0.03 Vert(CT) n/a n/a 999 BCLL 0.0 Rep Stress Incr YES WB 0.07 Horz(CT) -0.00 n/a n/a

LUMBER-**BRACING-**

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

2x4 SPF No.2 **BOT CHORD** 2-0-0 oc purlins (6-0-0 max.): 4-7.

Matrix-S

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

REACTIONS. All bearings 11-8-10.

(lb) -Max Horz 1=261(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 11, 10, 9, 8 except 13=-144(LC 12), 12=-154(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 11, 13, 12, 10, 9, 8

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

Code IRC2018/TPI2014

TOP CHORD 1-2=-268/226

10.0

NOTES-

BCDL

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 6-0-1, Exterior(2R) 6-0-1 to 9-0-1, Interior(1) 9-0-1 to 11-4-9 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
- 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) 1, 7, 11, 10, 9, 8 except (jt=lb) 13=144, 12=154.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 10, 9, 8.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES5 2901204 L4 **GABLE** LEE'S SUMMIT. MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12 22 07 2021 Rag 1 ID:74Akgedx1Dhx781xCdylOjzvpGE-DV0q7y1c2TDzj1W0ywdh1pn n tryynth YQSF2yncn 2 Builders FirstSource (Valley Center), Valley Center, KS - 67147, 2-10-4 2-10-4

> Scale = 1:22.9 4x6 =

> > Structural wood sheathing directly applied or 5-8-9 oc purlins.

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

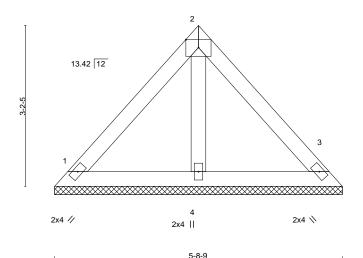


Plate Offsets	Plate Offsets (X,Y) [2:Edge,0-1-14]											
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 2	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 1	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 1	10.0	Code IRC2018/Ti	PI2014	Matri	x-P						Weight: 18 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=5-8-9, 3=5-8-9, 4=5-8-9

Max Horz 1=-76(LC 8)

Max Uplift 1=-41(LC 13), 3=-35(LC 13)

Max Grav 1=142(LC 1), 3=142(LC 1), 4=171(LC 1)

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

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



August 19,2021



RELEASE FOR CONSTRUCTION

SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES6

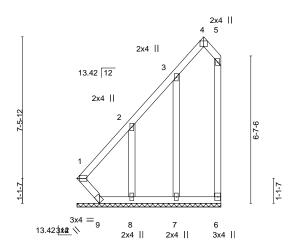
LEE'S SUMMIT, MISSOURI

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc.

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-hhaDKl2FpnLqKB5DV d8wa1 62

Qty

3x4 = Scale = 1:51.7



5-8-4

1-0-0	6-5-8	
1-0-0	5-5-8	

Plate Off	fsets (X,Y)	[4:Edge,0-3-0]										
LOADIN	IG (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.Ó	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-S	, ,					Weight: 37 lb	FT = 20%

LUMBER-BRACING-

2x4 SPF No.2 TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** 2x4 SPF No.2 except end verticals. **WEBS** 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except: **OTHERS** 2x4 SPF No.2 6-0-0 oc bracing: 1-9.

REACTIONS. All bearings 6-5-8.

Max Horz 1=263(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 9, 7 except 8=-182(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 1, 6, 9, 7, 8

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

TOP CHORD 1-2=-387/389, 2-3=-246/258 WEBS 3-7=-313/247, 2-8=-286/233

NOTES-

Job

2901204

Truss

L5

Builders FirstSource (Valley Center),

Truss Type

GABLE

Valley Center, KS - 67147,

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-6 to 3-2-6, Interior(1) 3-2-6 to 5-8-4, Exterior(2E) 5-8-4 to 6-3-12 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 9, 7 except (jt=lb) 8=182.
- 6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1.
- 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 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICEST 2901204 V1 Valley LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Builders FirstSource (Valley Center), Valley Center, KS - 67147, 7-9-8 6-9-8 1-0-0 5-8-0

> 4x8 = Scale = 1:24.4

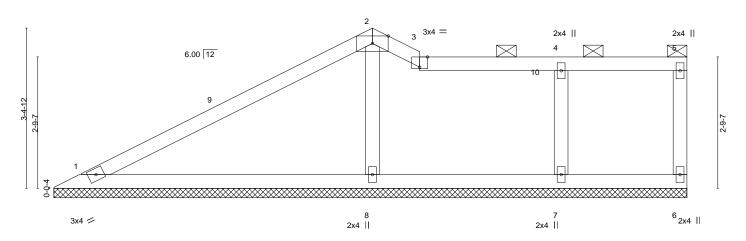


Plate Off	sets (X,Y)	[3:0-2-0,Eage]			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.54	Vert(LL) n/a - n/a 999	MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.26	Vert(CT) n/a - n/a 999	
BCLL	0.0	Rep Stress Incr YES	WB 0.08	Horz(CT) -0.00 6 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 39 lb FT = 20%

LUMBER-BRACING-

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

REACTIONS. All bearings 13-5-0.

Max Horz 1=110(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8, 7

Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 8=536(LC 1), 7=325(LC 26)

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

WEBS 2-8=-385/270, 4-7=-272/111

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-9-8, Exterior(2E) 6-9-8 to 7-9-8, Interior(1) 7-9-8 to 13-3-12 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
- 3) Provide adequate drainage to prevent water ponding.
- 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, 6, 8, 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

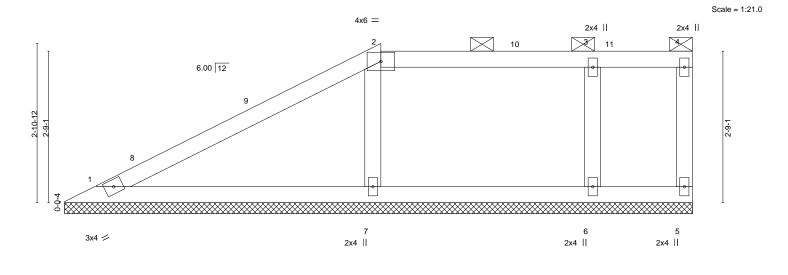


August 19,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES Valley 2901204 V2 Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdyIOjzvpGE-WrxUbL7?Od6z26 MsuFKb12 LEE'S SUMMIT, MISSOURI Builders FirstSource (Valley Center), Valley Center, KS - 67147, 5-8-0



<u> </u>			11-5-8 11-5-8						
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.37 BC 0.17 WB 0.05 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 34 lb	GRIP 197/144 FT = 20%

BRACING-LUMBER-

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

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

REACTIONS. All bearings 11-5-0. Max Horz 1=102(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=468(LC 1), 6=308(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-7=-342/231, 3-6=-254/123 WEBS

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-9-8, Exterior(2R) 5-9-8 to 10-0-7, Interior(1) 10-0-7 to 11-3-12 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
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7, 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

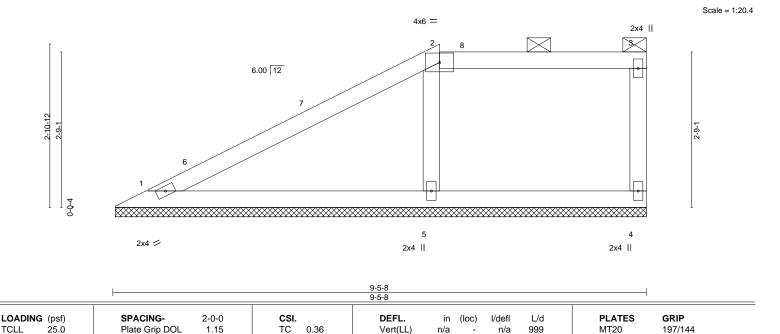


RELEASE FOR CONSTRUCTION

August 19,2021



Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES Valley 2901204 V3 LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Builders FirstSource (Valley Center), Valley Center, KS - 67147, Wed Ayg ID:74Akgedx1Dhx781xCdyIOjzvpGE-WrxUbL7?Od6z26ZMsuFK 3-8-0



Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

-0.00

n/a

n/a

999

n/a

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

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.

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

Weight: 27 lb

FT = 20%

LUMBER-

Code IRC2018/TPI2014

1.15

YES

Lumber DOL

Rep Stress Incr

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

10.0

0.0

10.0

OTHERS 2x4 SPF No.2

REACTIONS. (size) 1=9-5-0, 4=9-5-0, 5=9-5-0

Max Horz 1=102(LC 9)

Max Uplift 1=-30(LC 12), 4=-42(LC 8), 5=-91(LC 12) Max Grav 1=195(LC 1), 4=145(LC 26), 5=464(LC 1)

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

2-5=-339/274 WEBS

NOTES-

TCDL

BCLL

BCDL

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-9-8, Exterior(2E) 5-9-8 to 9-3-12 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

ВС

WB

Matrix-S

0.17

0.05

- 3) Provide adequate drainage to prevent water ponding.
- 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, 4, 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



RELEASE FOR CONSTRUCTION

August 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICESO 2901204 V4 Valley LEE'S SUMMIT. MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 18-12:23:15-2021 Rags WarFPLs lo My W<u>/ y</u>n cl Builders FirstSource (Valley Center), Valley Center, KS - 67147, Wed Ayg ID:74Akgedx1Dhx781xCdyIOjzvpGE-_1Vsoh8e9xEqgG7ZQbmZMV6Fd

1-8-0

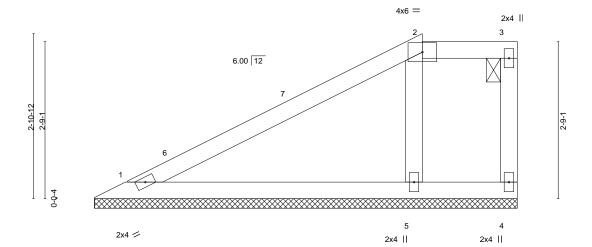
Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals, and 2-0-0 oc purlins: 2-3.

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

5-9-8

Scale = 1:20.2



		l		7-5-8	
LOADIN	G (psf) 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.52	DEFL. in (loc) I/defl L/d Vert(LL) n/a - n/a 999	PLATES GRIP MT20 197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.17	Vert(CT) n/a - n/a 999	
BCLL	0.0	Rep Stress Incr YES	WB 0.04	Horz(CT) 0.00 4 n/a n/a	
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 22 lb FT = 20%

BOT CHORD

7-5-8

LUMBER-BRACING-TOP CHORD

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=7-5-0, 4=7-5-0, 5=7-5-0

Max Horz 1=102(LC 9)

Max Uplift 1=-42(LC 12), 4=-28(LC 8), 5=-53(LC 12) Max Grav 1=214(LC 1), 4=40(LC 1), 5=347(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-9-8, Exterior(2E) 5-9-8 to 7-3-12 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
- 3) Provide adequate drainage to prevent water ponding.
- 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, 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.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



August 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES1 2901204 V5 Valley LEE'S SUMMIT. MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12 22 16 2021 Rags 1 ID:74Akgedx1Dhx781xCdylOjzvpGE-SE3E018GwEMh Qil_JHdujjJygy/z sbo66k22/yndy Builders FirstSource (Valley Center), Valley Center, KS - 67147, 4-7-8 0-10-0

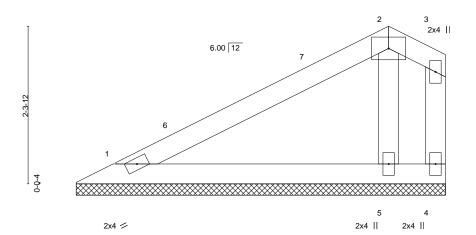
> Scale = 1:16.9 4x6 =

> > 1-10-12

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

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

except end verticals.



LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL 1.15 TC Vert(LL) 999 197/144 **TCLL** 0.30 n/a n/a MT20 **TCDL** 10.0 Lumber DOL 1.15 ВС 0.11 Vert(CT) n/a n/a 999 **BCLL** 0.0 Rep Stress Incr YES WB 0.04 Horz(CT) 0.00 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-P Weight: 16 lb FT = 20%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

OTHERS 2x4 SPF No.2

REACTIONS. (size) 1=5-5-0, 4=5-5-0, 5=5-5-0

Max Horz 1=74(LC 9)

Max Uplift 1=-36(LC 12), 4=-79(LC 3), 5=-15(LC 12)

Max Grav 1=171(LC 1), 5=269(LC 1)

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

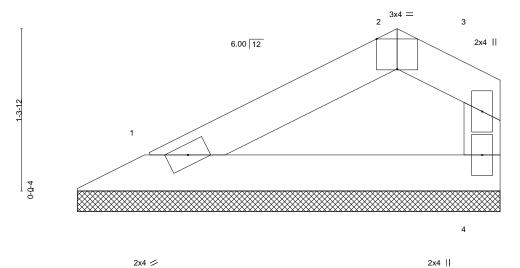
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-7-8, Exterior(2E) 4-7-8 to 5-3-12 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
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 5.
- 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.





RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICE92 2901204 V6 Valley Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave
ID:74Akgedx1Dhx781xCdylOjzvpGE-SE3E018GwEMhlCil_JHou[fy] LEE'S SUMMIT. MISSOURI Builders FirstSource (Valley Center), Valley Center, KS - 67147, 2-7-8 2-7-8



BRACING-

TOP CHORD

BOT CHORD

Plate Off	sets (X,Y)	[2:0-2-0,Edge]										
LOADIN	G (psf)	SPACING- 2	-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI20	014	Matri	x-R						Weight: 8 lb	FT = 20%

LUMBER-

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

WEBS 2x4 SPF No.2

REACTIONS. (size) 1=3-5-0, 4=3-5-0 Max Horz 1=32(LC 9)

Max Uplift 1=-22(LC 12), 4=-20(LC 12) Max Grav 1=121(LC 1), 4=121(LC 1)

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

NOTES-

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



Scale = 1:9.3

0-10-12

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

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

except end verticals.



RELEASE FOR CONSTRUCTION

SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SER FICE 183

LEF'S SUMMIT, MISSOURI

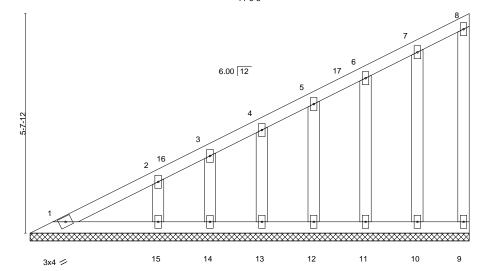
Scale = 1:29.6

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc.

11-3-8

Qty

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12 22 17 2021 ID:74Akgedx1Dhx781xCdylOjzvpGE-wQdcDN9uhYUYv2 HxY0p Rychals W Jsgr6



LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES** GRIP (loc) 25.0 Plate Grip DOL 1.15 TC Vert(LL) 999 197/144 **TCLL** 0.18 n/a n/a MT20 TCDL 10.0 Lumber DOL 1.15 ВС 0.09 Vert(CT) n/a 999 n/a **BCLL** 0.0 Rep Stress Incr YES WB 0.04 Horz(CT) 0.00 9 n/a n/a Code IRC2018/TPI2014 BCDL 10.0 Matrix-S Weight: 51 lb FT = 20%

LUMBER-BRACING-

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

except end verticals.

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

REACTIONS. All bearings 11-3-8. (lb) -Max Horz 1=219(LC 9)

2x4 SPF No.2

Max Uplift All uplift 100 lb or less at joint(s) 9, 10, 11, 12, 13, 14, 15 Max Grav All reactions 250 lb or less at joint(s) 1, 9, 10, 11, 12, 13, 14, 15

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

TOP CHORD 1-2=-417/216, 2-3=-325/175, 3-4=-291/170

OTHERS

Job

2901204

Truss

V7

Builders FirstSource (Valley Center),

Truss Type

GABLE

Valley Center, KS - 67147,

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-7-7 to 3-7-7, Exterior(2N) 3-7-7 to 11-1-12 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) 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) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 oc.
- 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) 9, 10, 11, 12, 13, 14, 15.
- 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 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES4

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

Valley

V8

Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg ID:74Akgedx1Dhx781xCdyIOjzvpGE-OcB_RjAWSscPX s85kKQ_8

2x4 ||

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

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

except end verticals.

LEE'S SUMMIT, MISSOURI

Scale = 1:28.2

8-11-8

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

LOADIN	G (psf)	SPACING- 2-0-	CSI.	DEFL.	in (lo	oc) I	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.1	TC 0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1.1	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr YES	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 27 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

2x4 ||

LUMBER-TOP CHORD

2901204

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

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

REACTIONS. (size) 1=8-11-0, 4=8-11-0, 5=8-11-0

Max Horz 1=171(LC 9)

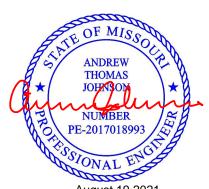
Max Uplift 4=-32(LC 9), 5=-136(LC 12)

Max Grav 1=151(LC 20), 4=124(LC 1), 5=461(LC 1)

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

1-2=-263/171 TOP CHORD WEBS 2-5=-359/275

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 8-9-12 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=136
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 19,2021



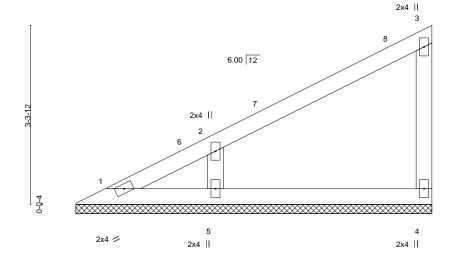
Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO 2901204 V9 Valley Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Builders FirstSource (Valley Center), Valley Center, KS - 67147,

RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-OcB_RjAWSscPX s85kKQ_8 6-7-8

Scale = 1:21.3



LOADING	(psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL 1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr YES	WB 0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 19 lb	FT = 20%

TOP CHORD

LUMBER-BRACING-

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

except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

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

REACTIONS. (size) 1=6-7-0, 4=6-7-0, 5=6-7-0

Max Horz 1=122(LC 9)

Max Uplift 4=-31(LC 12), 5=-121(LC 12)

Max Grav 1=50(LC 20), 4=141(LC 1), 5=358(LC 1)

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

WEBS 2-5=-279/269

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-5-12 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=121.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

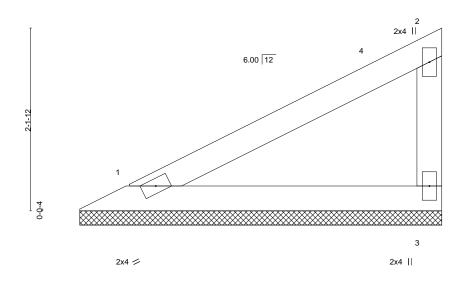


August 19,2021

RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 V10 Valley LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-9t8bYe3ta5Thy Builders FirstSource (Valley Center), Valley Center, KS - 67147,

4-3-8

Scale = 1:13.5



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. i	n (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.23	Vert(LL) n/a	a -	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.12	Vert(CT) n/s	a -	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00) 3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 11 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2

REACTIONS. 1=4-3-0, 3=4-3-0 (size) Max Horz 1=73(LC 9)

Max Uplift 1=-27(LC 12), 3=-45(LC 12) Max Grav 1=158(LC 1), 3=158(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-Č Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-1-12 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 4-3-8 oc purlins,

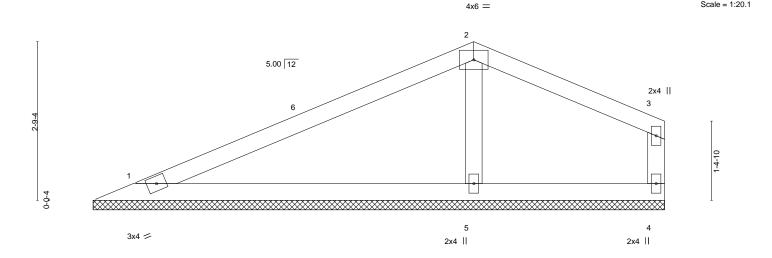
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICEST 2901204 V12 Valley Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12 2016 2021 Rags
ID:74Akgedx1Dhx781xCdylOjzvpGE-d4izlz4VLObXaVFb 12BOfS PBV9datu E Vif symfon LEE'S SUMMIT, MISSOURI Builders FirstSource (Valley Center), Valley Center, KS - 67147, 9-11-13 6-7-13 3-4-0



						9-11-13						
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	n/a		n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/T	PI2014	Matri	x-S						Weight: 26 lb	FT = 20%

BOT CHORD

9-11-13

LUMBER-BRACING-TOP CHORD

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

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

REACTIONS. (size) 1=9-11-13, 4=9-11-13, 5=9-11-13

Max Horz 1=47(LC 12)

Max Uplift 1=-49(LC 12), 4=-46(LC 13), 5=-80(LC 12) Max Grav 1=234(LC 1), 4=126(LC 26), 5=497(LC 1)

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

WEBS 2-5=-353/248

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-9-1 to 3-9-1, Interior(1) 3-9-1 to 6-7-13, Exterior(2E) 6-7-13 to 9-10-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4, 5.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

except end verticals.

RELEASE FOR CONSTRUCTION

Scale = 1:20.1



Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES Valley 2901204 V13 LEE'S SUMMIT. MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ava ID:74Akgedx1Dhx781xCdylOjzvpGE-d4izlz4VLObXaVFb 12BOfS U Builders FirstSource (Valley Center), Valley Center, KS - 67147, 3-10-4

4x6 = 5.00 12 3 2x4 / 2x4 > 2x4 ||

						7-2-4						
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a		n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2	2014	Matri	x-P						Weight: 17 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

REACTIONS.

1=7-2-4, 3=7-2-4, 4=7-2-4 (size)

Max Horz 1=-23(LC 17)

Max Uplift 1=-36(LC 12), 3=-40(LC 13), 4=-22(LC 12) Max Grav 1=138(LC 1), 3=138(LC 1), 4=281(LC 1)

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

NOTES-

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



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

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

RELEASE FOR CONSTRUCTION

Scale = 1:13.6



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES 2901204 V14 Valley LEE'S SUMMIT, MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-6GGLzJ476ikOBeqr BmidCft.c3 Builders FirstSource (Valley Center), Valley Center, KS - 67147, 5-5-7 5-5-7 10-10-14 5-5-7

4x6 =

7.00 12 2x4 > 2x4 / 2x4 II

	<u> </u>		10-10-14 10-10-14	
LOADING (psf) TCLL 25.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.34 BC 0.20 WB 0.06 Matrix-S	DEFL. in (loc) I/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a	PLATES GRIP MT20 197/144 Weight: 28 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

OTHERS 2x4 SPF No.2

> 1=10-10-14, 3=10-10-14, 4=10-10-14 (size)

Max Horz 1=75(LC 11)

Max Uplift 1=-48(LC 12), 3=-58(LC 13), 4=-47(LC 12) Max Grav 1=209(LC 25), 3=209(LC 26), 4=466(LC 1)

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

2-4=-317/125 WEBS

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 3-6-8, Interior(1) 3-6-8 to 5-5-7, Exterior(2R) 5-5-7 to 8-5-7, Interior(1) 8-5-7 to 10-4-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

Scale = 1:22.1

August 19,2021



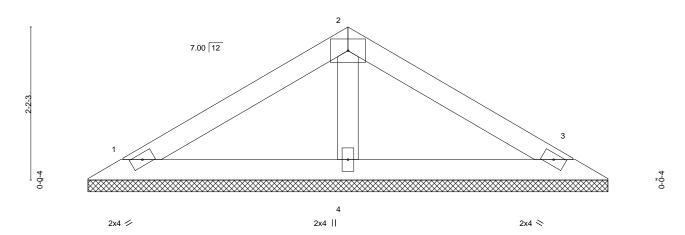
Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICESO Valley 2901204 V15 LEE'S SUMMIT. MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-6GGLzJ476ikOBec nBmidQxJ Builders FirstSource (Valley Center), Valley Center, KS - 67147, 3-8-14 3-8-14

> 4x6 = Scale = 1:16.4

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

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

RELEASE FOR CONSTRUCTION



	0-0-7		7-5-5			1	
LOADING (psf) TCLL 25.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15	CSI. TC 0.18 BC 0.09	DEFL. in Vert(LL) n/a Vert(CT) n/a	(loc) l/defl - n/a - n/a	L/d 999 999	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.03 Matrix-P	Horz(CT) 0.00	3 n/a	n/a	Weight: 19 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

7-5-12

LUMBER-

REACTIONS.

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

1=7-4-14, 3=7-4-14, 4=7-4-14 (size)

Max Horz 1=49(LC 9)

0-Q-7

Max Uplift 1=-38(LC 12), 3=-45(LC 13), 4=-16(LC 12) Max Grav 1=151(LC 1), 3=151(LC 1), 4=274(LC 1)

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

NOTES-

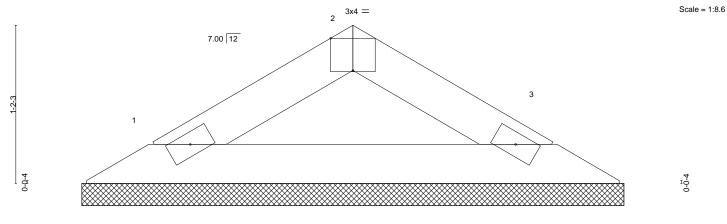
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left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



August 19,2021



RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES1 Valley 2901204 V16 LEE'S SUMMIT. MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg 12 12 22 12 2012 Rags ID:74Akgedx1Dhx781xCdylOjzvpGE-aSqjAf5lt0sFpoP_ITILskUs 9 022 Fqhy8ph) m Builders FirstSource (Valley Center), Valley Center, KS - 67147, 2-0-5 2-0-5



2x4 // 2x4 <

Plate Offsets (X,Y) [2	2:0-2-0,Edge]		4-0-10						
LOADING (psf) TCLL 25.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.04	DEFL. Vert(LL)	in n/a	(loc)	l/defl n/a	L/d 999	PLATES MT20	GRIP 197/144
TCDL 10.0 BCLL 0.0 BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.09 WB 0.00 Matrix-P	Vert(CT) Horz(CT)	n/a 0.00	3	n/a n/a	999 n/a	Weight: 8 lb	FT = 20%

LUMBER-

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

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 4-0-10 oc purlins.

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

REACTIONS. 1=4-0-10, 3=4-0-10 (size)

Max Horz 1=-23(LC 8)

Max Uplift 1=-22(LC 12), 3=-22(LC 13) Max Grav 1=134(LC 1), 3=134(LC 1)

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

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





RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICE92 2901204 V17 Valley LEE'S SUMMIT. MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Ave ID:74Akgedx1Dhx781xCdylOjzvpGE-2f05O?6NdJ_6Ry AJAk5 4 Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (lo	oc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.22	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 15 lb	FT = 20%

TOP CHORD

BOT CHORD

2x4 ||

except end verticals.

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

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

LUMBER-BRACING-

2x4 /

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

REACTIONS. 1=5-5-0, 3=5-5-0 (size) Max Horz 1=97(LC 9)

Max Uplift 1=-35(LC 12), 3=-60(LC 12) Max Grav 1=209(LC 1), 3=209(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-Č Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-3-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



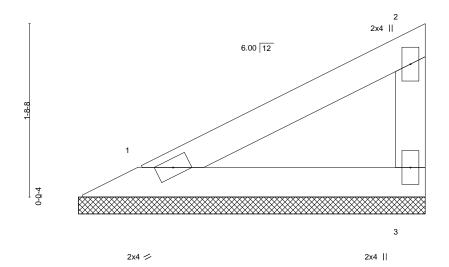
Scale = 1:17.5





RELEASE FOR CONSTRUCTION Job Truss Truss Type Qty SUMMIT/HAWTHORNE #13/MO AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICE93 2901204 V18 Valley LEE'S SUMMIT. MISSOURI Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Jun 2 2021 MiTek Industries, Inc. Wed Avg ID:74Akgedx1Dhx781xCdylOjzvpGE-2fO5O?6NdJ_6Ry_AJAk5l-4

Scale = 1:11.4



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0 TCDL 10.0	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.12 BC 0.07	Vert(LL) Vert(CT)	n/a n/a	-	n/a n/a	999 999	MT20	197/144
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.00 Matrix-P	Horz(CT)	0.00	3	n/a	n/a	Weight: 9 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SPF No.2

REACTIONS. 1=3-5-0, 3=3-5-0 (size) Max Horz 1=55(LC 9)

Max Uplift 1=-20(LC 12), 3=-34(LC 12) Max Grav 1=119(LC 1), 3=119(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Structural wood sheathing directly applied or 3-5-0 oc purlins,

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

except end verticals.

August 19,2021



RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI O'1/6" For 4 x 2 orientation, locate plates 0- 1/16" For 4 x 2 orientation, locate plates 0- 1/16" from outside

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

connector plates.

This symbol indicates the required direction of slots in

edge of truss.

PLATE SIZE

4 × 4

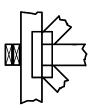
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

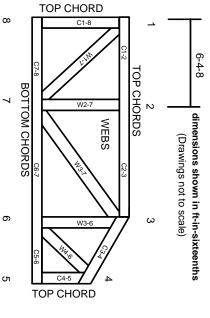
Min size shown is for crushing only

Industry Standards:

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

ANSI/TPI1: DSB-89:

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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

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

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

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