



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/12/2021 4:23:39

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

Re: 2930489
SUMMIT/HAWTHORN RIDGE #73/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: I47923862 thru I47923894

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

Missouri COA: Engineering 001193



September 17, 2021

Sevier, Scott ,Engineer

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

	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
	Common Supported Gable	1	1	I47923862
	Job Reference (optional)			
Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:15 2021 Page 1				
ID:m1t2XGkUFyK2st1aXRSPCy84v9-IAMGEWG6WPCurwS4AWm9Elxv?odgp6MmxJrGHhydK72				
24-10-8			49-10-8	
24-10-8			25-0-0	

Scale = 1:84.6

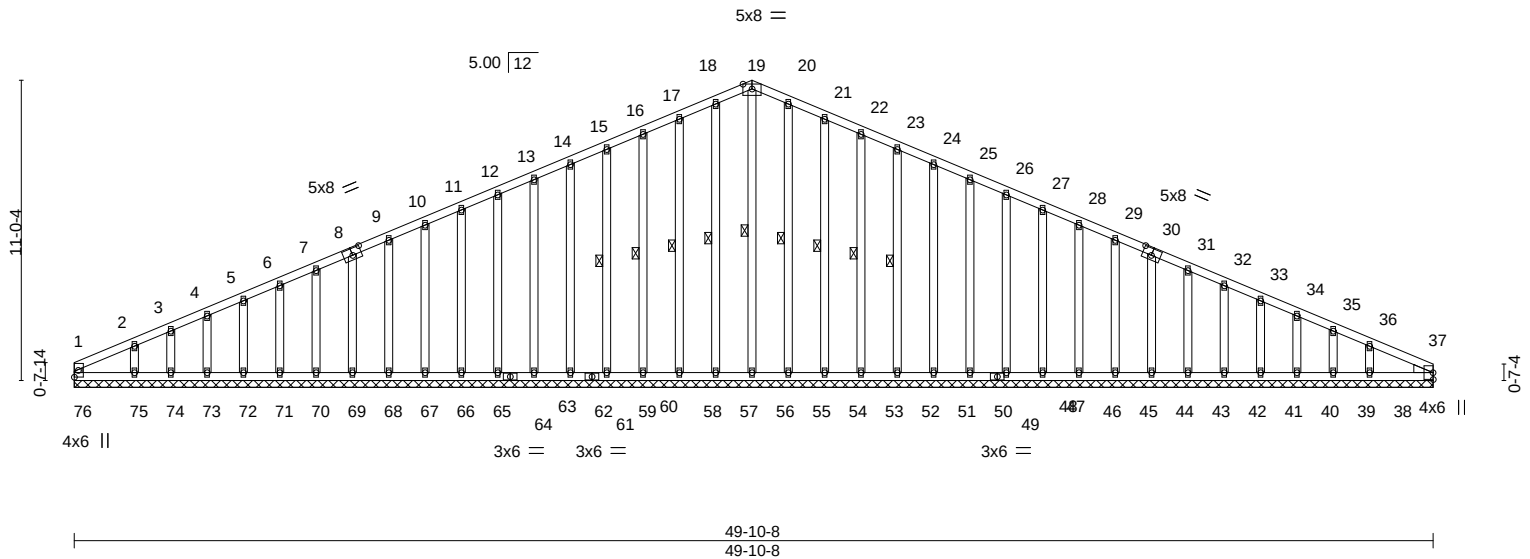


Plate Offsets (X,Y)-- [8:0-4-0-0-3-0], [30:0-4-0-0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01	37	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
Weight: 344 lb									FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 WEBS 2x4 SPF No.2
 OTHERS 2x4 SPF No.2
 WEDGE
 Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 19-56, 18-57, 17-58, 16-59, 15-60, 20-55, 21-54, 22-53, 23-52

REACTIONS.

All bearings 49-10-8.
 (lb) - Max Horz 76=-190(LC 17)
 Max Uplift All uplift 100 lb or less at joint(s) 76, 57, 58, 59, 60, 62, 63, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 55, 54, 53, 52, 51, 50, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38 except 75=-132(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 76, 56, 57, 58, 59, 60, 62, 63, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 55, 54, 53, 52, 51, 50, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37

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

TOP CHORD 13-14=-90/251, 14-15=-99/278, 15-16=-109/305, 16-17=-118/333, 17-18=-129/364, 18-19=-134/377, 19-20=-134/377, 20-21=-129/364, 21-22=-118/333, 22-23=-109/305, 23-24=-99/278, 24-25=-90/251

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-1-12 to 4-10-8, Exterior(2N) 4-10-8 to 24-10-8, Corner(3R) 24-10-8 to 29-10-6, Exterior(2N) 29-10-6 to 49-10-8 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
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 76, 57, 58, 59, 60, 62, 63, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 55, 54, 53, 52, 51, 50, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38 except (jt=lb) 75=132.
- N/A
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

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

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO	I47923863
Roof Special	1	1	Job Reference (optional)	
Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:25 2021 Page 1				
ID:m1t2XGkUFyK2st1aXRSPCy84v9-75z2LxON9UTT1SD?mdyVesMPRqp?9QMEEtGnc6ydK6u				
8-5-13	16-8-3	24-10-8	30-5-8	38-0-4
8-5-13	8-2-5	8-2-5	5-6-15	7-6-12
				3-8-13
				3-10-0
				4-3-8

Scale = 1:85.8

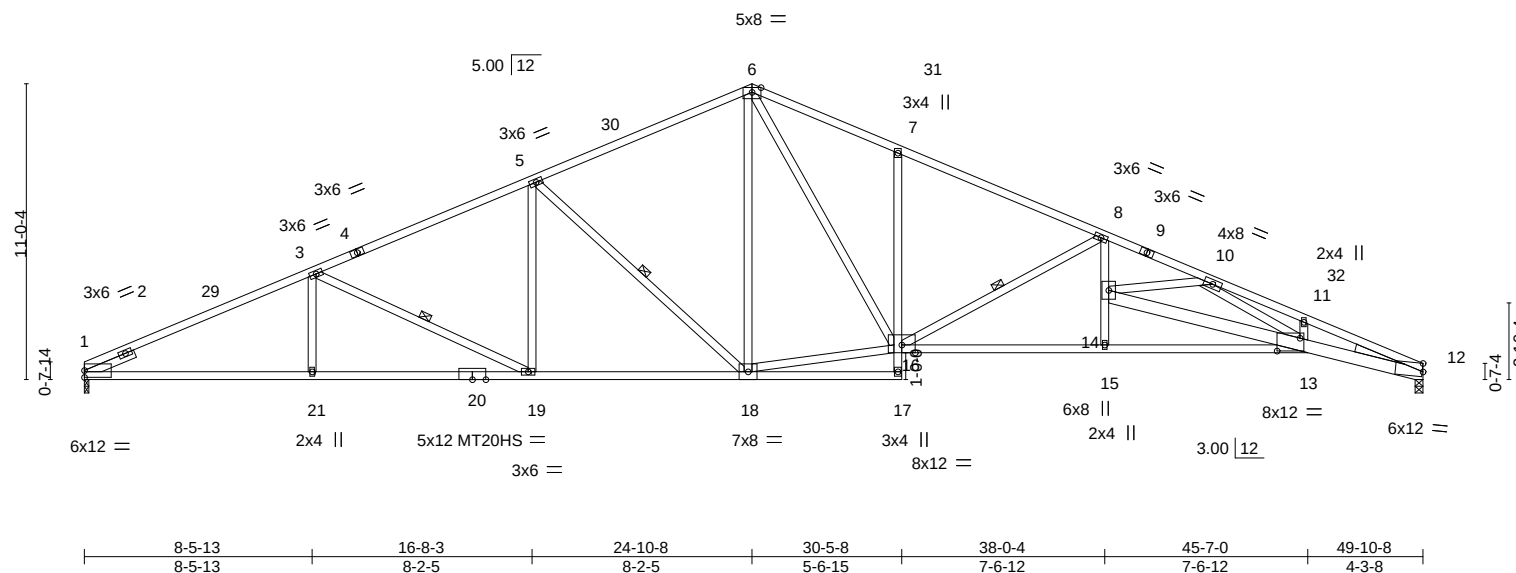


Plate Offsets (X,Y)--		[1:0-0-0,0-3-1], [12:0-0-6,Edge], [13:0-10-4,0-5-12]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.99	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.97	Vert(LL) -0.60 15-16 >999 240
BCLL 0.0	Lumber DOL 1.15	WB 0.97	Vert(CT) -1.14 15-16 >527 180
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.44 12 n/a n/a
	Code IRC2018/TPI2014		
			PLATES
			MT20 197/144
			MT20HS 148/108
			Weight: 252 lb FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 1-4,9-12: 2x4 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF 1650F 1.5E *Except* 1-20: 2x4 SP 2400F 2.0E, 7-17: 2x4 SPF No.2 12-14: 2x6 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-19, 5-18, 8-16
WEDGE Right: 2x4 SP No.3	
SLIDER Left 2x4 SPF No.2 2-0-0	

REACTIONS. (size) 1=0-2-0, 12=0-3-8
Max Horz 1=-185(LC 13)
Max Uplift 1=-378(LC 12), 12=-379(LC 13)
Max Grav 1=2244(LC 1), 12=2244(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-4567/758, 3-5=-3882/673, 5-6=-3002/613, 6-7=-3973/797, 7-8=-4027/705,
8-10=-5329/859, 10-11=-8157/1395, 11-12=-8301/1343
BOT CHORD 1-21=-787/4117, 19-21=-787/4117, 18-19=-547/3493, 7-16=-499/253, 15-16=-632/4861,
13-15=-632/4844, 13-14=-335/1409, 12-13=-1199/7647
WEBS 3-21=0/281, 3-19=-748/266, 5-19=-45/540, 5-18=-1153/368, 6-18=-146/597,
16-18=-239/2526, 6-16=-442/1948, 8-16=-1407/360, 14-15=0/296, 8-14=-79/802,
10-13=-288/1652, 10-14=-1326/324

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-11-14, Interior(1) 4-11-14 to 24-10-8, Exterior(2R) 24-10-8 to 29-10-6, Interior(1) 29-10-6 to 49-10-8 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
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=378, 12=379.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Roof Special	1	1	I47923864
Job Reference (optional)			
Valley Center, KS - 67147,			
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:27 2021 Page 1			
ID:m1t2XGkUFyK2st1aXRSPCy84v9-xU5omcQdh5jBHmNOt1_zjHRn9dVKdN?XhAluh_ydK6s			
8-5-13	16-8-3	24-10-8	29-1-0
8-5-13	8-2-5	8-2-5	4-2-8
			37-4-0
			8-3-0
			41-7-11
			4-3-11
			3-11-5
			4-3-8

Scale = 1:85.8

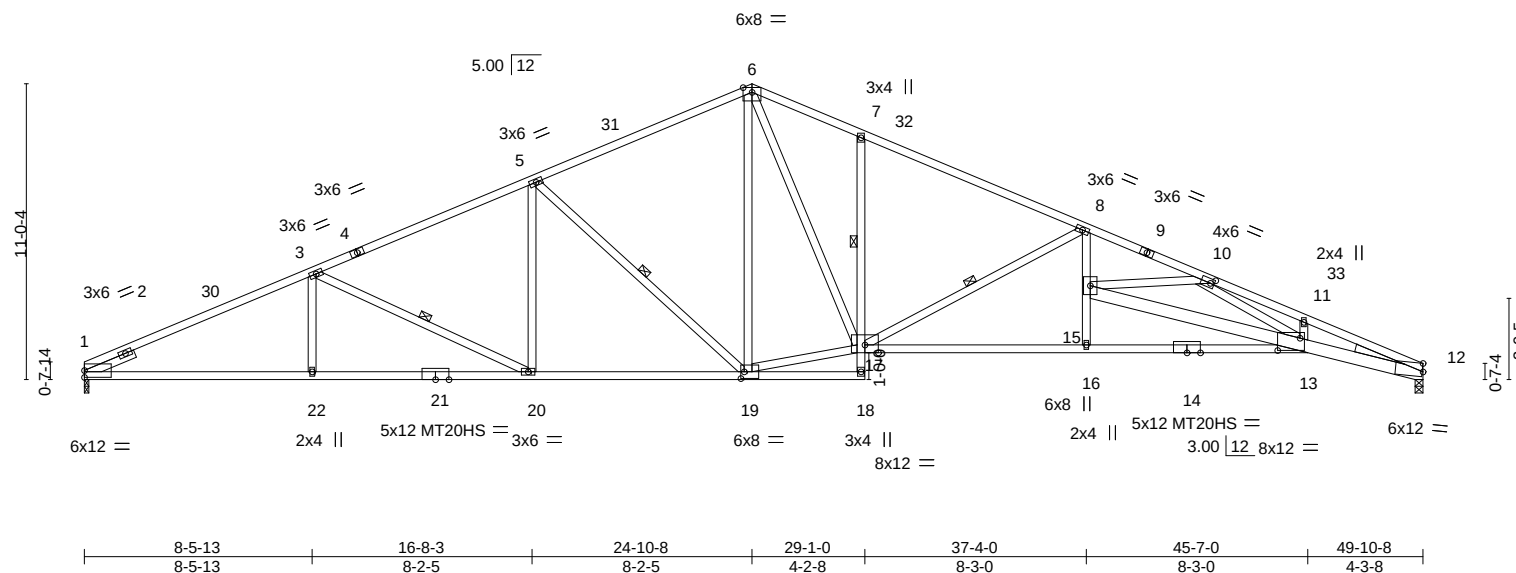


Plate Offsets (X,Y)--	[1:0-0-0,0-3-1], [10:0-1-12,0-2-0], [12:0-0-6,Edge], [13:0-10-0,0-5-8], [19:0-1-8,0-3-0]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.85	Vert(LL) -0.60	16-17	>998	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.98	Vert(CT) -1.16	16-17	>515	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.83	Horz(CT) 0.44	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 254 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 1650F 1.5E *Except*	TOP CHORD Structural wood sheathing directly applied.
1-4,9-12: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied. Except:
BOT CHORD 2x4 SPF 1650F 1.5E *Except*	1 Row at midpt 7-17
1-21,13-14: 2x4 SP 2400F 2.0E, 7-18: 2x4 SPF No.2	WEBS 1 Row at midpt 3-20, 5-19, 8-17
12-15: 2x6 SPF 2100F 1.8E	
2x4 SPF No.2	
WEBS	
WEDGE	
Right: 2x4 SP No.3	
SLIDER Left 2x4 SPF No.2 2-0-0	

REACTIONS. (size) 1=0-2-0, 12=0-3-8
Max Horz 1=-185(LC 13)
Max Uplift 1=-378(LC 12), 12=-379(LC 13)
Max Grav 1=2244(LC 1), 12=2244(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-4566/758, 3-5=-3883/673, 5-6=-3001/613, 6-7=-3761/768, 7-8=-3846/685,
8-10=-5180/834, 10-11=-8120/1388, 11-12=-8256/1333
BOT CHORD 1-22=-786/4116, 20-22=-786/4116, 19-20=-546/3494, 7-17=-482/245, 16-17=-610/4731,
13-16=-610/4725, 13-15=-366/1487, 12-13=-1190/7604
WEBS 3-22=0/281, 3-20=-746/266, 5-20=-44/542, 5-19=-1154/368, 6-19=-138/471,
17-19=-230/2624, 6-17=-425/1997, 8-17=-1456/383, 15-16=0/326, 8-15=-67/763,
10-13=-273/1646, 10-15=-1416/355

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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 4-11-14, Interior(1) 4-11-14 to 24-10-8, Exterior(2R) 24-10-8 to 29-10-6, Interior(1) 29-10-6 to 49-10-8 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
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=378, 12=379.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Roof Special	4	1	I47923865
Job Reference (optional)			

Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:28 2021 Page 1
ID:m1t2XGkUFyK2st1aXRSPCy84v9-PgfAzyQGSPRvwyarIVCGU_vf1s1MoSgwqVSDQydK6r
6-5-4 6-5-4 6-1-12 18-8-12 24-10-8 25-8-8 30-10-8 32-4-0 38-11-8 42-2-6 45-7-0 49-10-8
6-5-4 6-1-12 6-1-12 6-1-12 0-10-0 5-2-0 1-5-8 6-7-8 3-2-14 3-4-10 4-3-8

Scale = 1:85.6

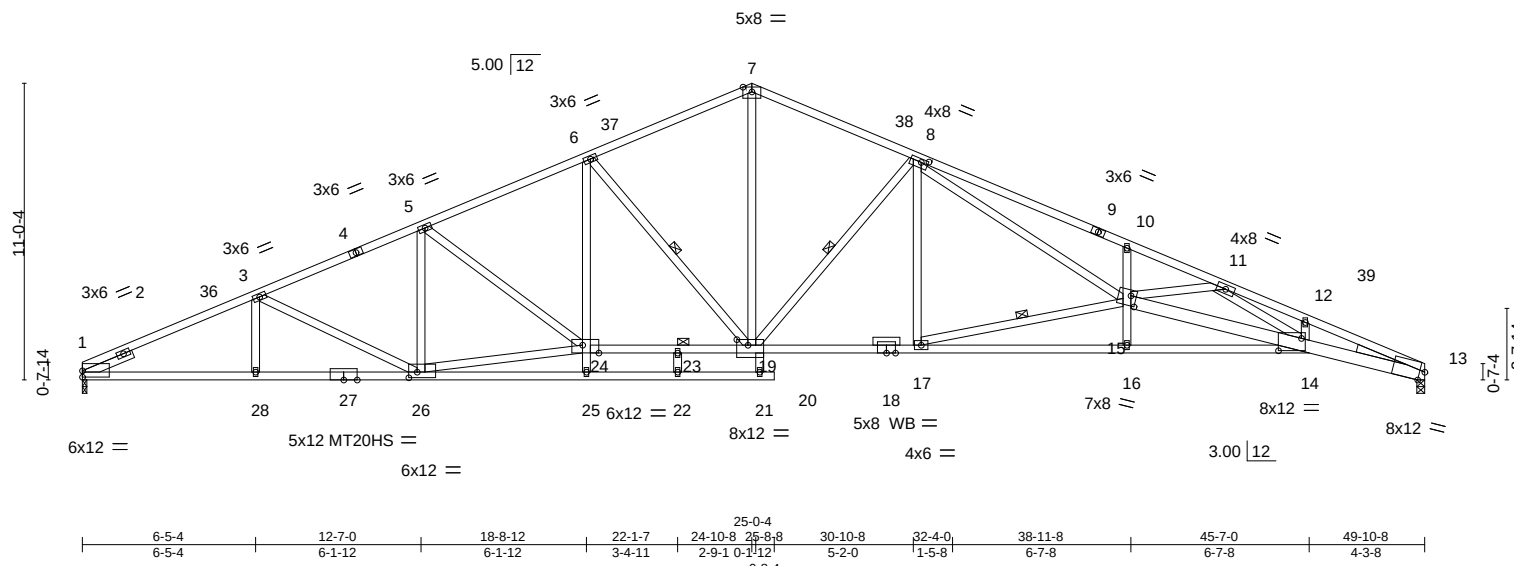


Plate Offsets (X,Y)-- [1:0-0-0,0-2-13], [8:0-3-2,0-1-8], [13:0-2-4,Edge], [14:0-10-4,0-5-8], [15:0-2-8,0-4-8], [19:0-5-0,0-2-8], [24:0-7-4,Edge], [26:0-3-12,0-2-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.99	Vert(LL) -0.62	16-17	>970	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.95	Vert(CT) -1.15	16-17	>519	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.95	Horz(CT) 0.45	13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 282 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 4-7: 2x4 SPF No.2, 9-13: 2x4 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SP 2400F 2.0E *Except* 18-24: 2x4 SPF No.2, 13-15: 2x6 SP 2400F 2.0E 20-27: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied. Except: 9-8-0 oc bracing: 14-16
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 6-19, 8-19, 15-17
OTHERS 2x4 SPF No.2	JOINTS 1 Brace at Jt(s): 23
WEDGE	
Right: 2x4 SP No.3	
SLIDER Left 2x4 SPF No.2 2-0-0	

REACTIONS. (size) 1=0-2-0, 13=0-3-8
Max Horz 1=-185(LC 13)
Max Uplift 1=-375(LC 12), 13=-376(LC 13)
Max Grav 1=2252(LC 1), 13=2252(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-4567/756, 3-5=-4233/699, 5-6=-4117/705, 6-7=-3245/634, 7-8=-3265/640,
8-10=-5513/945, 10-11=-5450/809, 11-12=-8076/1362, 12-13=-8227/1315
BOT CHORD 1-28=-803/4125, 26-28=-803/4125, 23-24=-523/3741, 19-23=-523/3741, 17-19=-428/3759,
16-17=-740/5152, 14-16=-743/5127, 14-15=-157/1170, 13-14=-1172/7574
WEBS 3-26=-374/169, 5-26=-309/85, 6-24=-145/847, 15-16=0/254, 10-15=-394/232,
7-19=-323/2046, 6-19=-1247/368, 24-26=-647/3855, 5-24=-316/161, 8-17=-32/498,
8-19=-1287/370, 8-15=-334/1501, 11-14=-329/1550, 11-15=-1264/305, 15-17=-1425/422

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-11-14, Interior(1) 4-11-14 to 24-10-8, Exterior(2R) 24-10-8 to 29-10-6, Interior(1) 29-10-6 to 49-10-8 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
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=375, 13=376.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

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



September 17, 2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/12/2021 4:23:43

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
2935489	A4	Roof Special	4	1	I47923865

Builders FirstSource (Valley Center)

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:28 2021 Page 2

ID:m1t2XGkUFyK2st1aXRSPCfy84v9-PgfAzyQGSPr2vwyaRIVCGU_vf1s1MoSgwqVSDQydK6r

NOTES

- 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.

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Roof Special	3	1	I47923866
Job Reference (optional)			

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:29 2021 Page 1
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31-10-14 32-6-4 38-9-11 42-11-15 45-8-8 50-0-0 50-10-8
17-5-12 25-0-0 6-10-13 0-7-7 6-3-7 4-2-4 2-8-9 4-3-8 0-10-8

Scale = 1:87.4

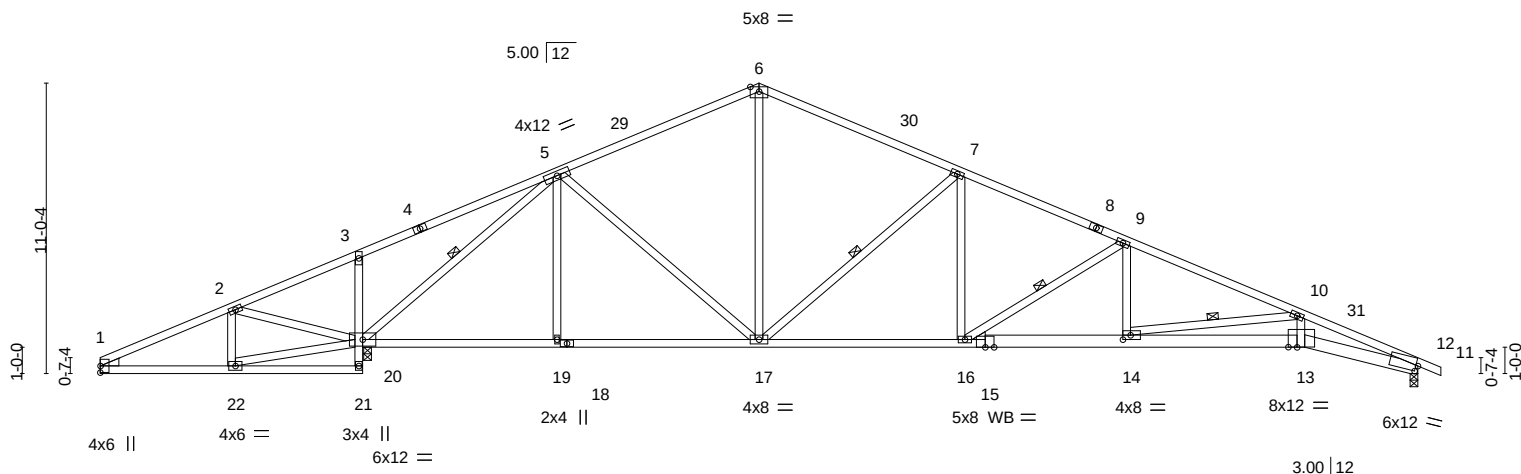


Plate Offsets (X,Y)--	[11:0-0-15,0-2-10], [13:0-4-0,0-0-1], [14:0-3-8,0-2-0]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.97	Vert(LL) -0.38	13-14	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.84	Vert(CT) -0.69	13-14	>696	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.97	Horz(CT) 0.24	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 231 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied.
18-20: 2x4 SP 2400F 2.0E, 11-13,13-15: 2x6 SPF 2100F 1.8E	WEBS 1 Row at midpt 5-20, 7-17, 9-16, 10-14
WEBS 2x4 SPF No.2 *Except*	
5-20: 2x4 SPF 1650F 1.5E	
OTHERS 2x4 SPF No.2	
WEDGE	
Left: 2x4 SPF No.2	

REACTIONS. (size) 11=0-3-8, 20=0-3-8
Max Horz 20=-196(LC 13)
Max Uplift 11=-356(LC 13), 20=-477(LC 12)
Max Grav 11=1763(LC 1), 20=2799(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-367/469, 2-3=-1195/1358, 3-5=-1107/1362, 5-6=-1752/419, 6-7=-1749/394,
7-9=-2787/573, 9-10=-3942/758, 10-11=-6111/1176
BOT CHORD 1-22=-362/360, 3-20=-455/222, 19-20=-118/1219, 17-19=-118/1219, 16-17=-263/2495,
14-16=-545/3591, 13-14=-1023/5569, 11-13=-1036/5639
WEBS 5-20=-3138/1130, 5-19=0/304, 10-13=-97/899, 2-22=-409/272, 6-17=-152/745,
5-17=-271/408, 7-16=-104/744, 7-17=-1292/384, 9-16=-1288/331, 9-14=-57/640,
10-14=-2004/484, 20-22=-284/397, 2-20=-862/880

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-11-13, Interior(1) 4-11-13 to 25-0-0, Exterior(2R) 25-0-0 to 30-0-0, Interior(1) 30-0-0 to 50-10-8 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
 - All plates are 3x6 MT20 unless otherwise indicated.
 - The Fabrication Tolerance at joint 13 = 0%
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=356, 20=477.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

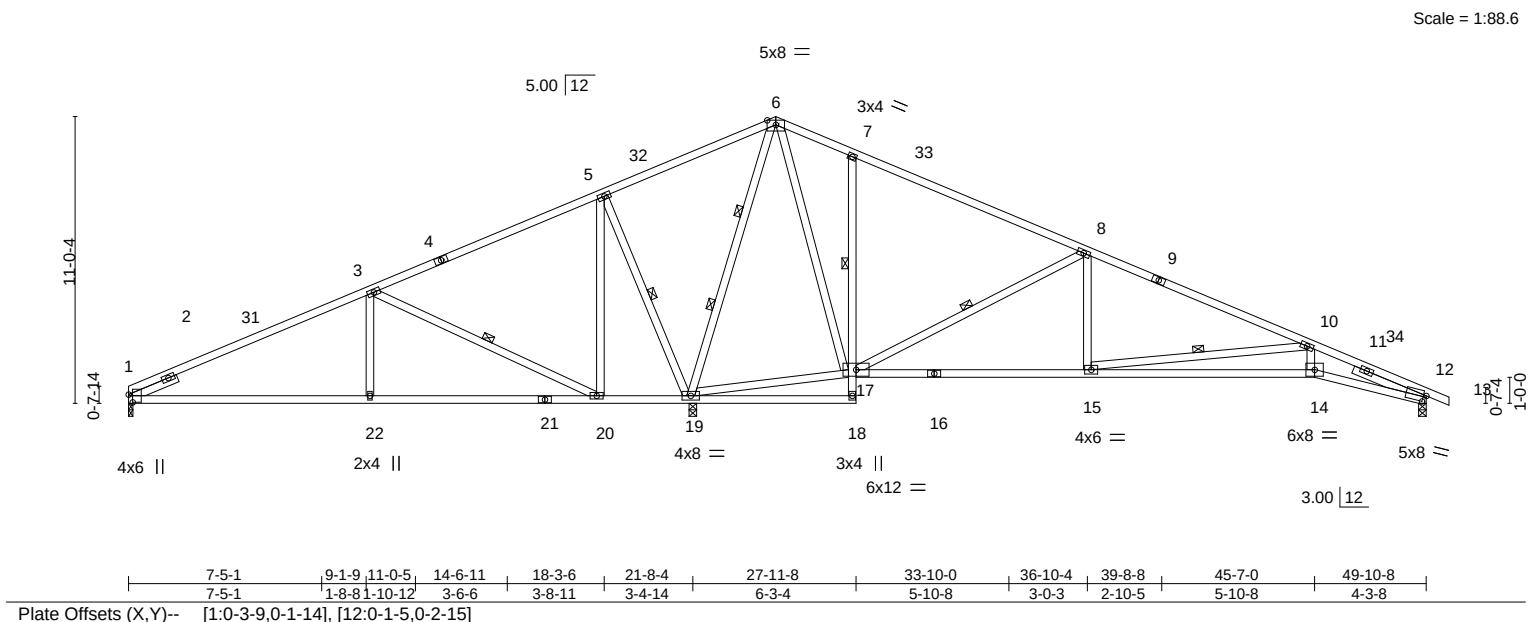
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
ROOF SPECIAL	2	1	I47923867
Job Reference (optional)			
Valley Center, KS - 67147,			
ID:m1t2XGkUFyK2st1aXRSPCy84v9-L3mxOeSW_05m8E6zYAXgLv3FKrYlqi5zO8_YHJydK6p			
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:30 2021 Page 1			
29-30-489 AG			
Builders FirstSource (Valley Center)			



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.98	Vert(LL) -0.24 14-15 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.87	Vert(CT) -0.51 14-15 >666 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.94	Horz(CT) 0.13 12 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS			
Weight: 231 lb FT = 20%					

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied. Except:
18-21: 2x4 SP 2400F 2.0E	1 Row at midpt 7-17
WEBS 2x4 SPF No.2	1 Row at midpt 8-17, 10-15, 5-19, 3-20
SLIDER Left 2x4 SPF No.2 2-0-0, Right 2x4 SPF No.2 3-0-0	2 Rows at 1/3 pts 6-19

REACTIONS.	(size) 1=0-2-0, 12=0-3-8, 19=0-3-8
	Max Horz 1=-198(LC 13)
	Max Uplift 1=-156(LC 12), 12=-213(LC 13), 19=-431(LC 13)
	Max Grav 1=653(LC 25), 12=909(LC 26), 19=3295(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-3=-754/659, 3-5=-136/1195, 5-6=-87/1575, 6-7=0/478, 7-8=0/545, 8-10=-1041/259, 10-12=-2880/653
BOT CHORD	1-22=-561/696, 20-22=-561/696, 19-20=-1077/438, 7-17=-461/240, 15-17=-67/873, 14-15=-534/2537, 12-14=-551/2693
WEBS	8-17=-1356/396, 10-15=-1679/471, 10-14=-53/680, 17-19=-735/399, 6-19=-2171/320, 6-17=-309/1164, 5-19=-1071/346, 5-20=-81/594, 3-20=-1171/349, 3-22=0/401, 8-15=0/545

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-11-14, Interior(1) 4-11-14 to 24-10-8, Exterior(2R) 24-10-8 to 29-10-6, Interior(1) 29-10-6 to 50-9-0 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 3x6 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=156, 12=213, 19=431.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Roof Special	2	1	I47923868
Job Reference (optional)			

Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:32 2021 Page 1
 ID:m1t2XGkUFyK2st1aXRSPCy84v9-lRuhpKTmWdLUNXFLgba8QK9bueEzIbgGrSTfMCydK6n
 Builders FirstSource (Valley Center) 29-10-6, 1-8-81-10-12, 14-6-11, 18-3-6, 21-8-4, 24-10-8, 27-11-8, 33-10-0, 36-10-4, 39-8-8, 45-7-0, 49-10-8, 51-9-0, 7-5-1, 7-5-1, 1-8-81-10-12, 3-6-6, 3-8-11, 3-4-14, 3-2-4, 3-1-0, 5-10-8, 3-0-3, 2-10-5, 5-10-8, 4-3-8, 1-10-8

Scale = 1:85.8

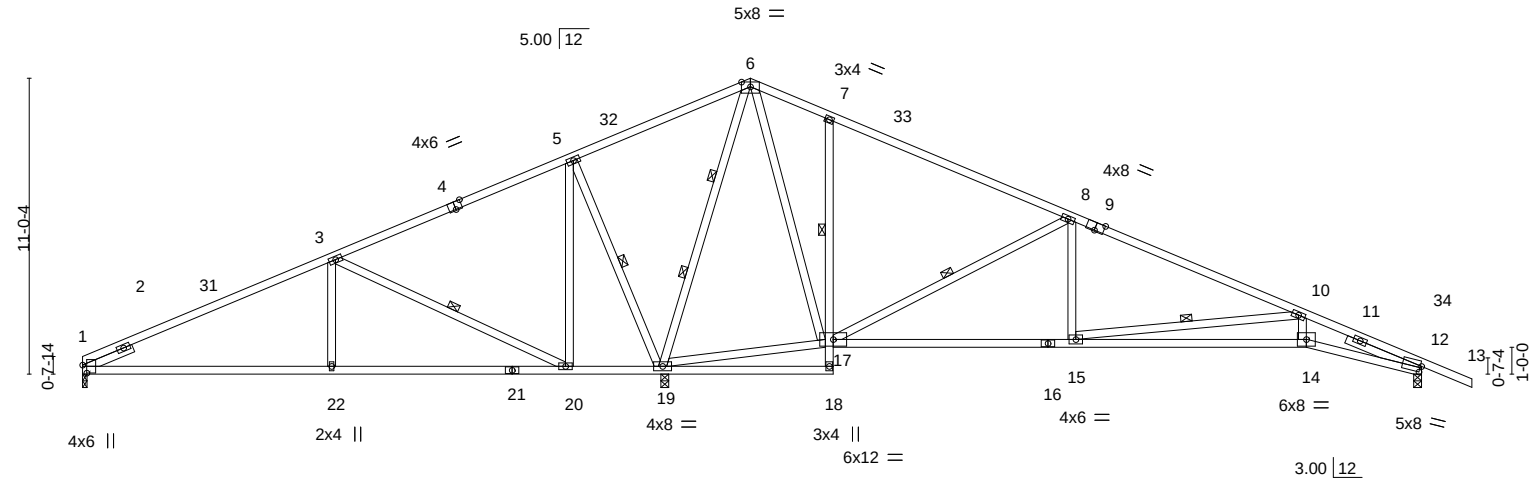


Plate Offsets (X,Y)--	1:0-3-9,0-1-14, [4:0-3-0,Edge], [9:0-4-0,Edge], [12:0-0-9,0-2-11]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.98	Vert(LL) -0.24	14-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.88	Vert(CT) -0.51	14-15	>670	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.93	Horz(CT) 0.13	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 233 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except*	BOT CHORD Rigid ceiling directly applied. Except:
18-21: 2x4 SP 2400F 2.0E	1 Row at midpt 7-17
WEBS 2x4 SPF No.2	1 Row at midpt 8-17, 10-15, 5-19, 3-20
SLIDER Left 2x4 SPF No.2 2-0-0, Right 2x4 SPF No.2 3-0-0	2 Rows at 1/3 pts 6-19

REACTIONS. (size) 1=0-2-0, 12=0-3-8, 19=0-3-8
 Max Horz 1=-212(LC 13)
 Max Uplift 1=-159(LC 12), 12=-242(LC 13), 19=-419(LC 13)
 Max Grav 1=655(LC 25), 12=987(LC 26), 19=3282(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-757/646, 3-5=-121/1181, 5-6=-73/1561, 6-7=0/469, 7-8=0/536, 8-10=-1042/265, 10-12=-2816/627
 BOT CHORD 1-22=-549/699, 20-22=-549/699, 19-20=-1064/439, 7-17=-461/240, 15-17=-57/874, 14-15=-496/2477, 12-14=-510/2626
 WEBS 8-17=-1347/392, 10-15=-1618/443, 10-14=-40/655, 17-19=-726/403, 6-19=-2159/308, 6-17=-307/1161, 5-19=-1071/346, 5-20=-80/594, 3-20=-1170/349, 3-22=0/401, 8-15=0/543

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-11-14, Interior(1) 4-11-14 to 24-10-8, Exterior(2R) 24-10-8 to 29-10-6, Interior(1) 29-10-6 to 51-9-0 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 3x6 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=159, 12=242, 19=419.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Roof Special	1	1	I47923869

Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:33 2021 Page 1
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 7-5-7 7-5-7 9-0-12 14-7-5 17-2-3 21-9-4 24-10-8 27-11-8 35-9-8 42-10-0 49-10-8 50-9-0
 7-5-7 1-7-5 5-6-10 2-6-13 4-7-1 3-1-4 3-1-0 7-10-0 7-0-7 7-0-9 0-10-8

Scale = 1:85.3

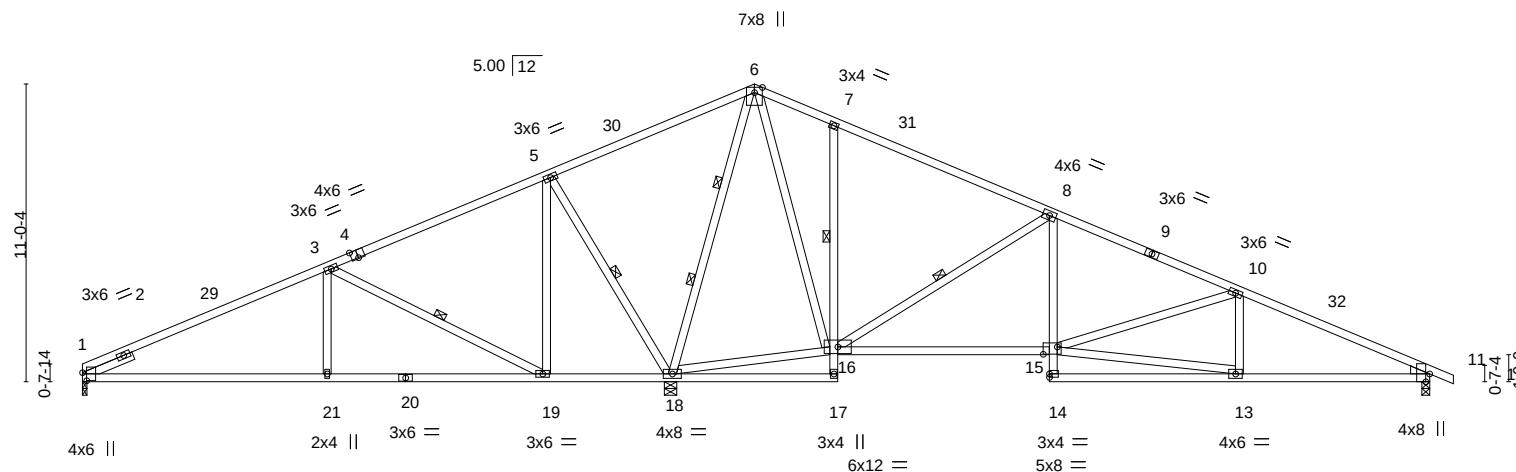


Plate Offsets (X,Y)--	[1:0-3-9,0-1-14], [4:0-3-0,Edge], [11:0-3-8,Edge], [15:0-6-4,0-3-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.74	Vert(LL) -0.13	15-16	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.58	Vert(CT) -0.29	15-16	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.81	Horz(CT) 0.06	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 232 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied. Except:
WEBS 2x4 SPF No.2	1 Row at midpt 7-16
WEDGE	1 Row at midpt 8-16, 5-18, 3-19
Right: 2x4 SPF No.2	2 Rows at 1/3 pts 6-18
SLIDER Left 2x4 SPF No.2 2-0-0	

REACTIONS. (size) 1=0-2-0, 11=0-3-8, 18=0-5-8
 Max Horz 1=-198(LC 13)
 Max Uplift 1=-169(LC 12), 11=-256(LC 13), 18=-371(LC 12)
 Max Grav 1=748(LC 25), 11=1068(LC 26), 18=2920(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-977/263, 3-5=-114/582, 5-6=0/1065, 6-7=-128/266, 8-10=-1273/359, 10-11=-1797/440
 BOT CHORD 1-21=-322/902, 19-21=-322/902, 18-19=-512/293, 7-16=-422/216, 15-16=-134/1121, 8-15=-41/550, 11-13=-316/1581
 WEBS 8-16=-1229/367, 13-15=-285/1496, 10-15=-533/198, 6-16=-318/1220, 6-18=-1902/247, 16-18=-363/294, 5-19=-81/571, 5-18=-1068/352, 3-21=0/377, 3-19=-1037/313

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-11-14, Interior(1) 4-11-14 to 24-10-8, Exterior(2R) 24-10-8 to 29-10-6, Interior(1) 29-10-6 to 50-9-0 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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=169, 11=256, 18=371.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

Scale = 1:85.4

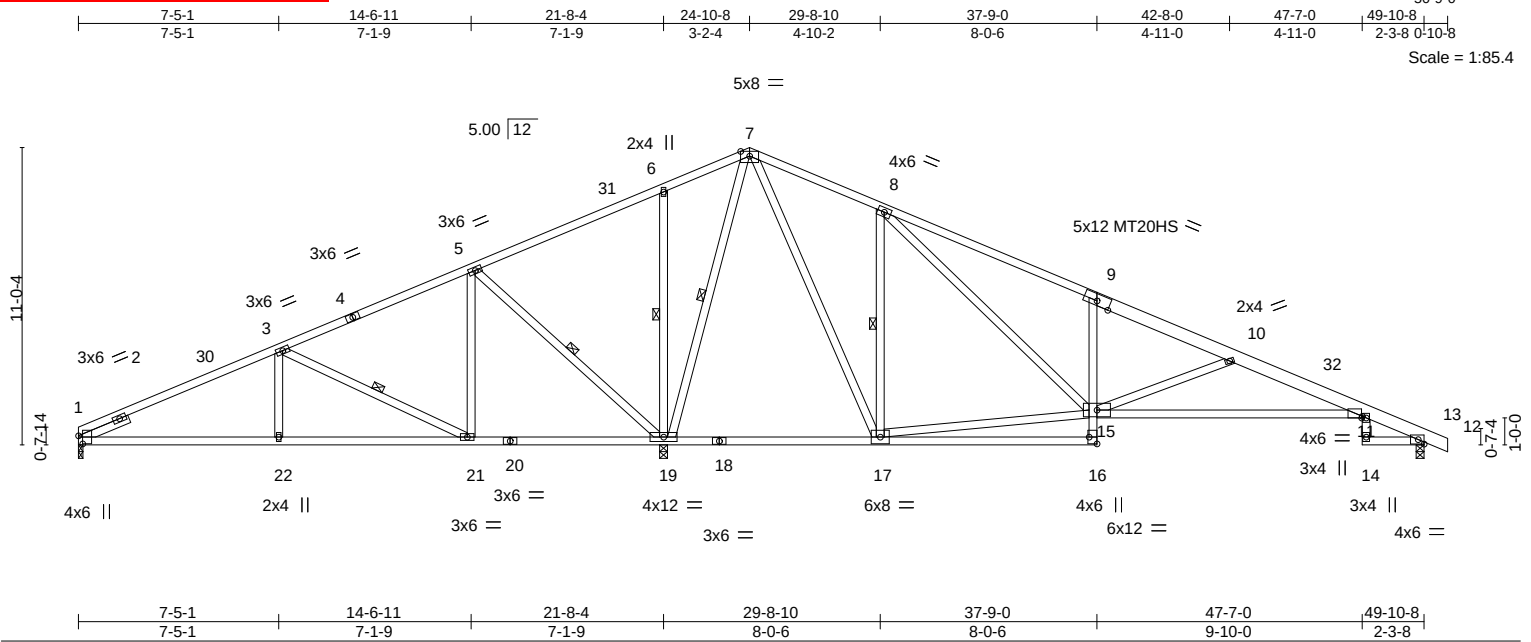


Plate Offsets (X,Y)-- [1:0-3-9,0-1-14], [11:0-0-5,Edge], [16:Edge,0-3-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL 25.0		Plate Grip DOL 1.15		TC 0.78		Vert(LL) -0.30 11-15 >999 240		MT20	197/144
TCDL 10.0		Lumber DOL 1.15		BC 0.72		Vert(CT) -0.69 11-15 >491 180		MT20HS	148/108
BCLL 0.0		Rep Stress Incr YES		WB 0.95		Horz(CT) 0.14 12 n/a n/a			
BCDL 10.0		Code IRC2018/TPI2014		Matrix-AS				Weight: 243 lb	FT = 20%

TOP CHORD	2x4 SPF No.2 *Except* 9-13: 2x6 SPF 2100F 1.8E
BOT CHORD	2x4 SPF No.2 *Except* 18-20: 2x4 SP 2400F 2.0E
WEBS	2x4 SPF No.2 *Except* 7-19: 2x4 SPF 1650F 1.5E
SLIDER	Left 2x4 SPF No.2 2-0-0

TOP CHORD	Structural wood sheathing directly applied.	
BOT CHORD	Rigid ceiling directly applied.	
WEBS	1 Row at midpt	3-21, 5-19, 6-19, 7-19, 8-17

(size) 1=0-2-0, 12=0-3-8, 19=0-3-8
 Max Horz 1=-201(LC 13)
 Max Uplift 1=-264(LC 26), 12=-193(LC 13), 19=-474(LC 13)
 Max Grav 1=551(LC 25), 12=785(LC 26), 19=3608(LC 1)

TOP CHORD
1-3=-646/906, 3-5=-185/1364, 5-6=-180/1980, 6-7=-113/1901, 7-8=0/573, 8-9=-733/364,
9-10=-715/225, 10-11=-1522/408, 11-12=-361/115

BOT CHORD
1-22=-792/597, 21-22=-792/597, 19-21=-1239/464, 17-19=-1052/412, 9-15=-461/260,
11-15=-296/1472

WEBS
3-22=0/322, 3-21=-937/266, 5-21=-53/539, 5-19=-1041/323, 6-19=-430/211,
7-19=-2419/408, 7-17=-398/1354, 8-17=-1031/404, 15-17=-440/240, 8-15=-382/1333,
10-15=-944/289

- 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 4-11-14, Interior(1) 4-11-14 to 24-10-8, Exterior(2R) 24-10-8 to 29-8-10, Interior(1) 29-8-10 to 50-9-0 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) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=264, 12=193, 19=474.
- 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.



September 17, 2021



WARNING – verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE (M1-7473 REV. 3/19/2020) BEFORE USE. Design valid for use only with MiTEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Code**

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Roof Special	1	1	I47923871

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:36 2021 Page 1
ID:m1t2XGkUFyK2st1aXRSPCy84v9-AD8CfhXHasrsvs9Z7vQe4bAJHgGctERmsm4RtVzydK6j

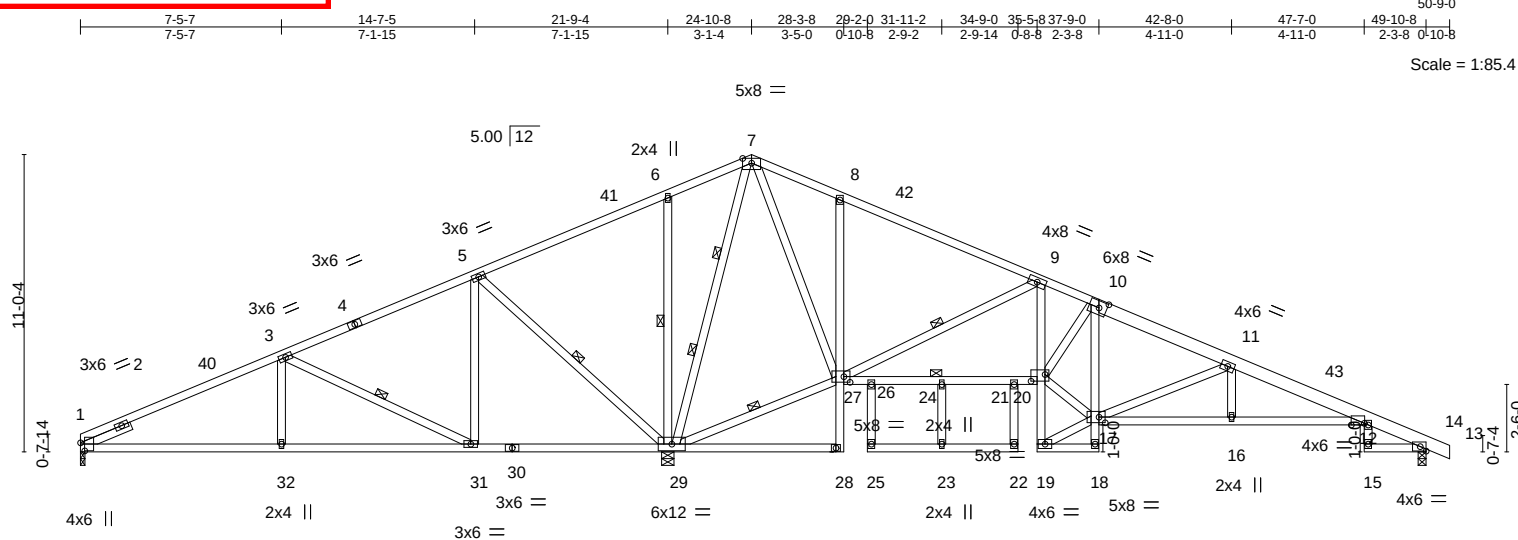


Plate Offsets (X,Y)--	[1:0-3-9,0-1-14], [10:0-3-8,0-3-0], [12:0-5-13,Edge], [17:0-2-12,0-2-8], [20:0-6-4,0-3-0], [27:0-2-12,0-2-8]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.99	Vert(LL) -0.26	12-16	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.82	Vert(CT) -0.44	12-16	>752	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.80	Horz(CT) 0.15	13	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 269 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 10-14: 2x6 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except* 28-30: 2x4 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 3-31, 5-29, 6-29, 27-29, 9-27 2 Rows at 1/3 pts 7-29
SLIDER Left 2x4 SPF No.2 2-0-0	JOINTS 1 Brace at Jt(s): 24

REACTIONS. (size) 1=0-2-0, 13=0-3-8, 29=0-5-8
Max Horz 1=-201(LC 13)
Max Uplift 1=-275(LC 26), 13=-186(LC 13), 29=-485(LC 13)
Max Grav 1=583(LC 25), 13=744(LC 26), 29=3635(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-717/935, 3-5=-192/1395, 5-6=-187/1991, 6-7=-120/1908, 7-8=-14/1131,
8-9=-128/1204, 10-11=-493/182, 11-12=-1446/360, 12-13=-359/116
BOT CHORD 1-32=-818/662, 31-32=-818/662, 29-31=-1268/471, 8-27=-443/223, 9-20=-57/577,
10-17=-114/279, 16-17=-252/1368, 12-16=-253/1368
WEBS 3-32=0/319, 3-31=-938/266, 5-31=-51/549, 5-29=-1057/325, 6-29=-440/212,
7-29=-1884/206, 27-29=-1370/521, 7-27=-142/700, 9-27=-1258/349, 17-20=0/457,
10-20=-324/156, 11-17=-1098/307

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 4-11-14, Interior(1) 4-11-14 to 24-10-8, Exterior(2R) 24-10-8 to 29-10-6, Interior(1) 29-10-6 to 50-9-0 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 3x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=275, 13=186, 29=485.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

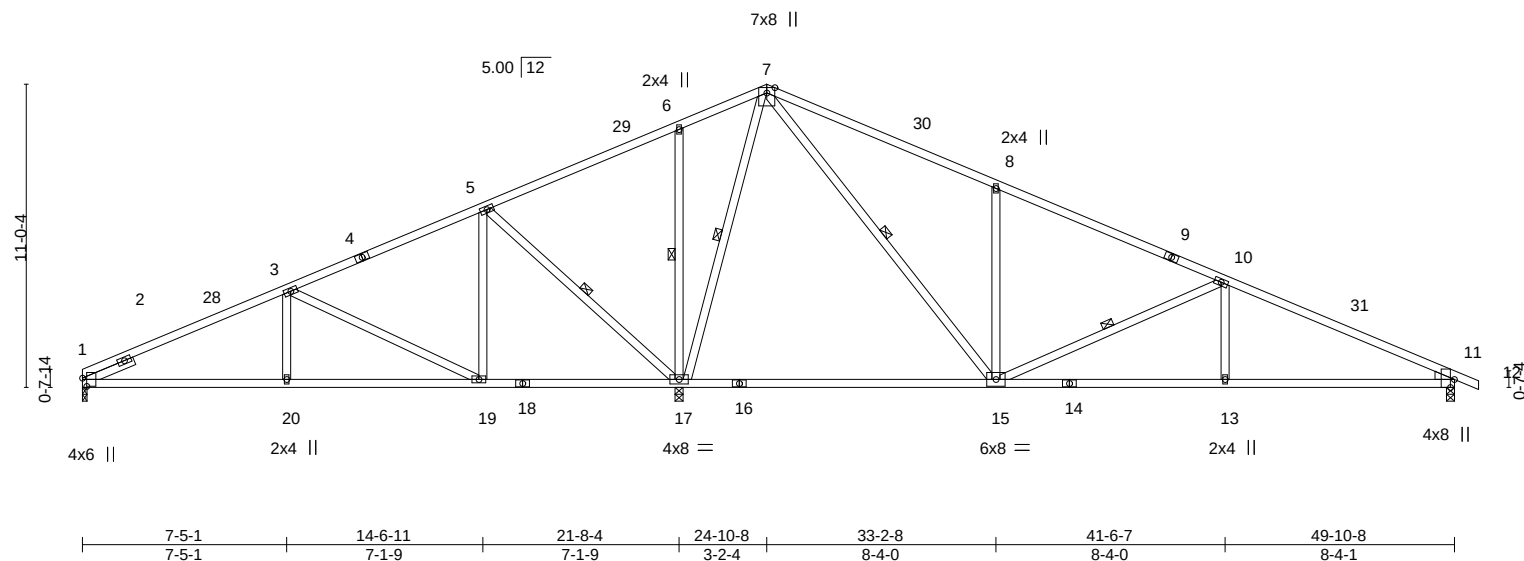


Plate Offsets (X,Y)-- [1:0-3-9,0-1-14], [1:0-3-8,Edge]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.32	15-17	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.65	15-17	>519	180		
BCLL	0.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 215 lb	FT = 20%

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
16-18: 2x4 SP 2400F 2.0E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-0-0

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 5-17, 6-17, 10-15, 7-17, 7-15

(size) 17=0-3-8, 1=0-2-0, 11=0-3-8
 Max Horz 1=-198(LC 13)
 Max Uplift 17=-411(LC 12), 1=-146(LC 12), 11=-260(LC 13)
 Max Grav 17=2947(LC 1), 1=701(LC 25), 11=1089(LC 26)

TOP CHORD	1-3=-986/230, 3-5=-268/397, 5-6=-58/1035, 6-7=0/985, 7-8=-907/457, 8-10=-890/295, 10-11=-1783/442
BOT CHORD	1-20=-309/910, 19-20=-309/910, 17-19=-342/262, 15-17=-368/245, 13-15=-306/1558, 11-13=-306/1558
WEBS	3-20=0/314, 3-19=-859/262, 5-19=-61/480, 5-17=-1014/333, 6-17=-401/197, 8-15=-626/320, 10-15=-930/302, 10-13=0/306, 7-17=-1770/305, 7-15=-449/1535

- 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 4-11-14, Interior(1) 4-11-14 to 24-10-8, Exterior(2R) 24-10-8 to 29-10-6, Interior(1) 29-10-6 to 50-9-0 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) All plates are 3x6 MT20 unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=411, 1=146, 11=260.
- 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.



September 17, 2021



WARNING – Velly design parameters are READ NOTES ON THIS AND INCLUDED WITH REFERENCE PAGE MM-1475 (Rev. 3/25/2020) BEFORE USE.
Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
GABLE	1	1	I47923873
Job Reference (optional)			
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:24 2021 Page 1			
ID:m1t2XGkUFyK2st1aXRSPCy84v9-XvPg7bNIOALcQJepCvQG5epGtQY1Q?d5?DXE4fydK6v			
30-10-8 40-0-4 40-2-0 43-7-7 49-10-8 50-9-0			
9-5-4 18-8-12 24-10-8 6-0-0 9-1-12 0-1-12 3-5-7 6-3-1 0-10-8			

Scale = 1:84.3

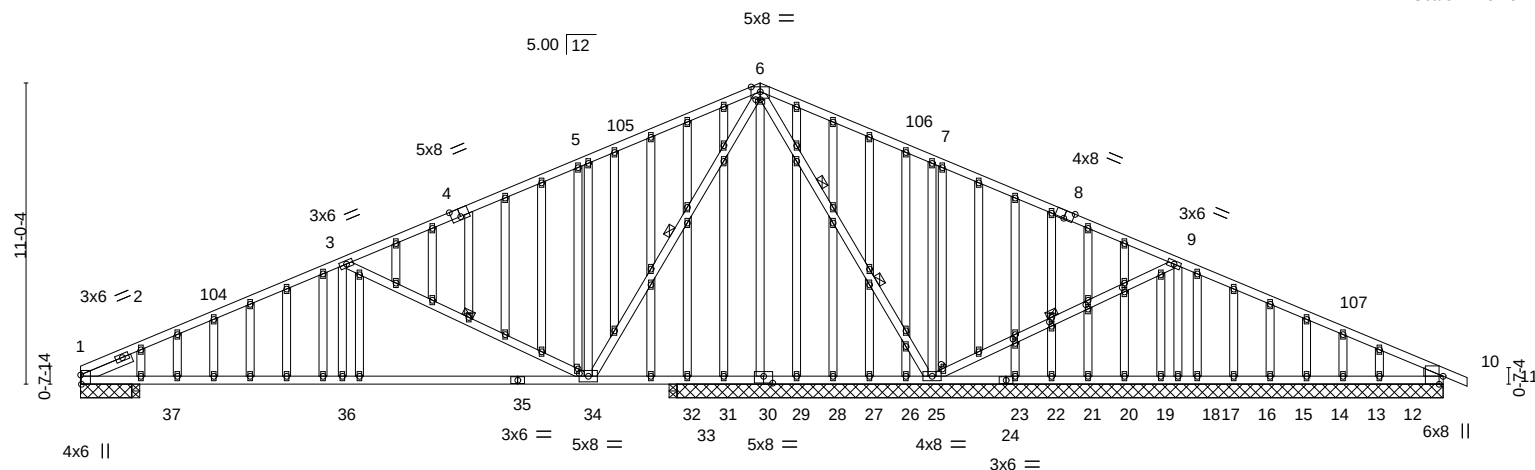


Plate Offsets (X,Y)--	[1:0-4-1,Edge], [4:0-4-0,Edge], [6:0-2-0,0-0-0], [8:0-4-0,Edge], [10:0-3-8,Edge], [25:0-2-0,0-0-8], [30:0-4-0,0-3-0], [34:0-2-0,0-0-8], [83:0-1-14,0-1-0], [85:0-1-14,0-1-0], [87:0-1-14,0-1-0], [89:0-1-14,0-1-0]
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LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.85	in (loc) l/defl L/d	MT20	197/144
TCCL 10.0	Lumber DOL 1.15	BC 0.70	Vert(LL) -0.17 34-36 >999 240		
BCLL 0.0	Rep Stress Incr YES	WB 0.87	Vert(CT) -0.39 34-36 >596 180		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) 0.05 25 n/a n/a		
				Weight: 406 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 6-34, 9-25, 3-34
OTHERS 2x4 SPF No.2	2 Rows at 1/3 pts 6-25
WEDGE	
Right: 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 2-0-0	

REACTIONS. All bearings 28-0-8 except (jt=length) 1=1-10-8, 37=0-3-8, 33=0-3-8.
 (lb) - Max Horz 1=-198(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 10, 14, 37 except 1=-157(LC 12), 25=-485(LC 12), 18=-270(LC 25), 32=-391(LC 1), 13=-179(LC 1), 12=-224(LC 13), 33=-144(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 10, 31, 32, 29, 28, 27, 26, 23, 22, 21, 20, 19, 17, 16, 15, 14, 13, 10 except 1=908(LC 1), 25=2346(LC 1), 18=309(LC 26), 12=526(LC 1), 37=263(LC 25), 33=455(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-1856/383, 3-5=-928/266, 5-6=-906/388, 6-7=-32/844, 7-9=-119/892
 BOT CHORD 1-37=-424/1622, 36-37=-424/1622, 34-36=-424/1622
 WEBS 7-25=-571/290, 5-34=-582/292, 6-34=-395/1256, 6-25=-1640/352, 9-18=-302/276, 9-25=-721/226, 3-36=0/351, 3-34=-977/313

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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 4-11-14, Interior(1) 4-11-14 to 24-10-8, Exterior(2R) 24-10-8 to 29-10-6, Interior(1) 29-10-6 to 50-9-0 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
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 1-4-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 14, 37, 10 except (jt=lb) 1=157, 25=485, 18=270, 32=391, 13=179, 12=224, 33=144.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Common	Qty	4	Ply	1	SUMMIT/HAWTHORN RIDGE #73/MO	I47923874
Valley Center, KS - 67147,		Job Reference (optional)					

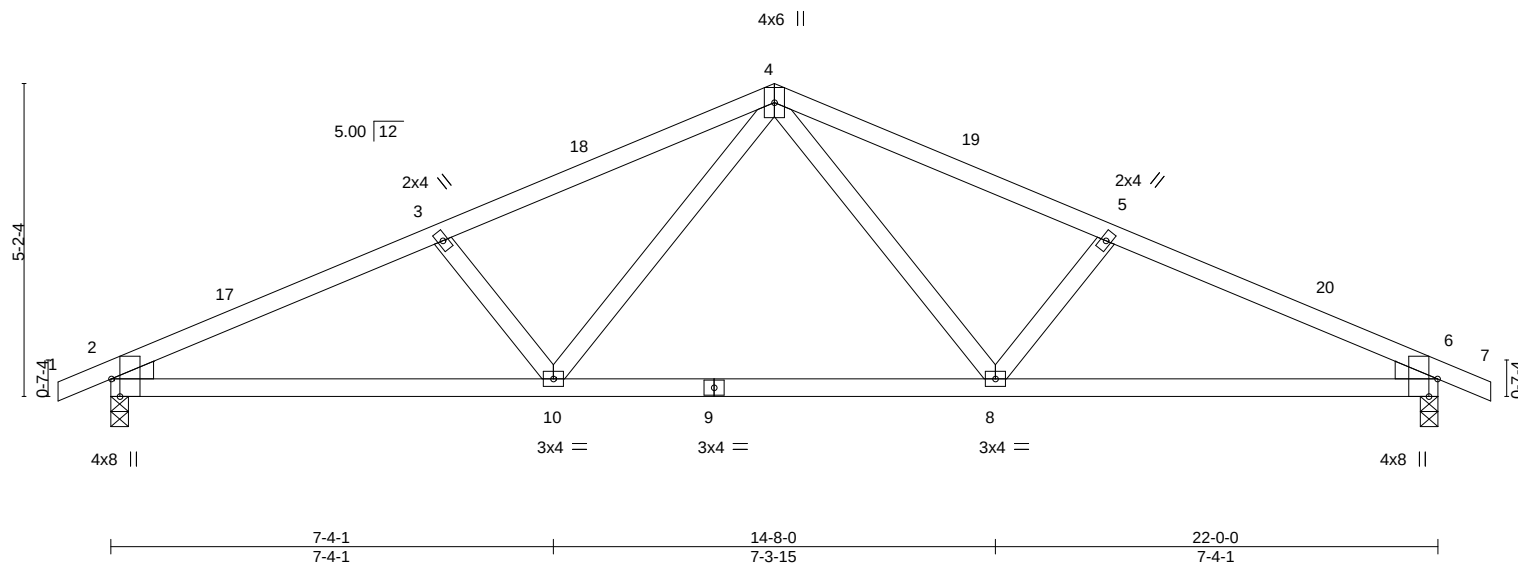


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [6:0-3-8,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.10 8-10 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.22 8-10 >999 180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.05 6 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 76 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8
 Max Horz 2=-87(LC 13)
 Max Uplift 2=-187(LC 12), 6=-187(LC 13)
 Max Grav 2=1051(LC 1), 6=1051(LC 1)

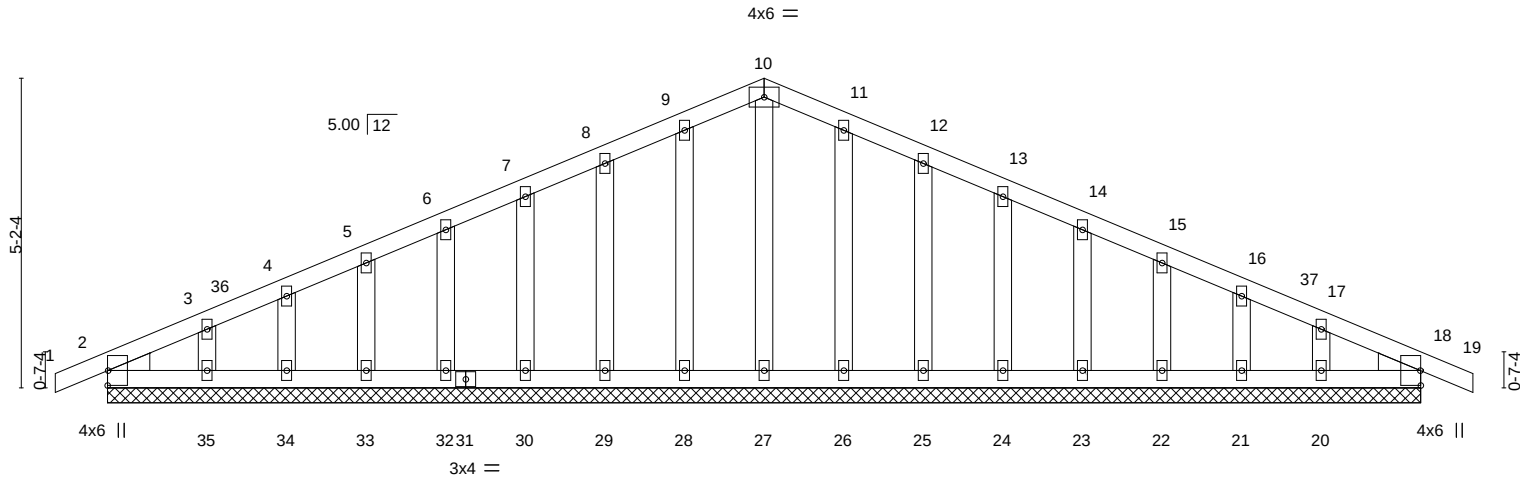
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1814/398, 3-4=-1608/384, 4-5=-1608/384, 5-6=-1814/398
 BOT CHORD 2-10=-303/1610, 8-10=-151/1126, 6-8=-299/1610
 WEBS 4-8=-113/521, 5-8=-352/189, 4-10=-113/521, 3-10=-352/188

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 22-10-8 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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=187, 6=187.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
GABLE	1	1	I47923875
Job Reference (optional)			
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:39 2021 Page 1			
ID:m1t2XGkUFyK2st1aXRSPCy84v9-bopLHjZ9snEUjclhaZCnCx1dTqAR_LIS2fX6lydK6g			



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	-0.00 18 n/r 120	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00 19 n/r 120				
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00 18 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							
								Weight: 100 lb		FT = 20%	

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

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

REACTIONS. All bearings 22-0-0.
(lb) - Max Horz 2=-87(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 28, 29, 30, 32, 33, 34, 35, 18, 26, 25, 24, 23, 22, 21, 20
Max Grav All reactions 250 lb or less at joint(s) 2, 27, 28, 29, 30, 32, 33, 34, 35, 18, 26, 25, 24, 23, 22, 21, 20

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 11-0-0, Corner(3R) 11-0-0 to 14-0-0, Exterior(2N) 14-0-0 to 22-10-8 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
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 1-4-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 28, 29, 30, 32, 33, 34, 35, 18, 26, 25, 24, 23, 22, 21, 20.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO	I47923876
GABLE	1	1	Job Reference (optional)	
Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:40 2021 Page 1				
ID:m112XGkUFyK2st1aXRSPCy84v9-3_NjU3and5MLLmtu8Gj0I0UCLtAFARiRhiP4ekydK6f				
0-10-8	3-4-0	6-8-0	7-6-8	0-10-8
0-10-8	3-4-0	3-4-0		

Scale = 1:17.0

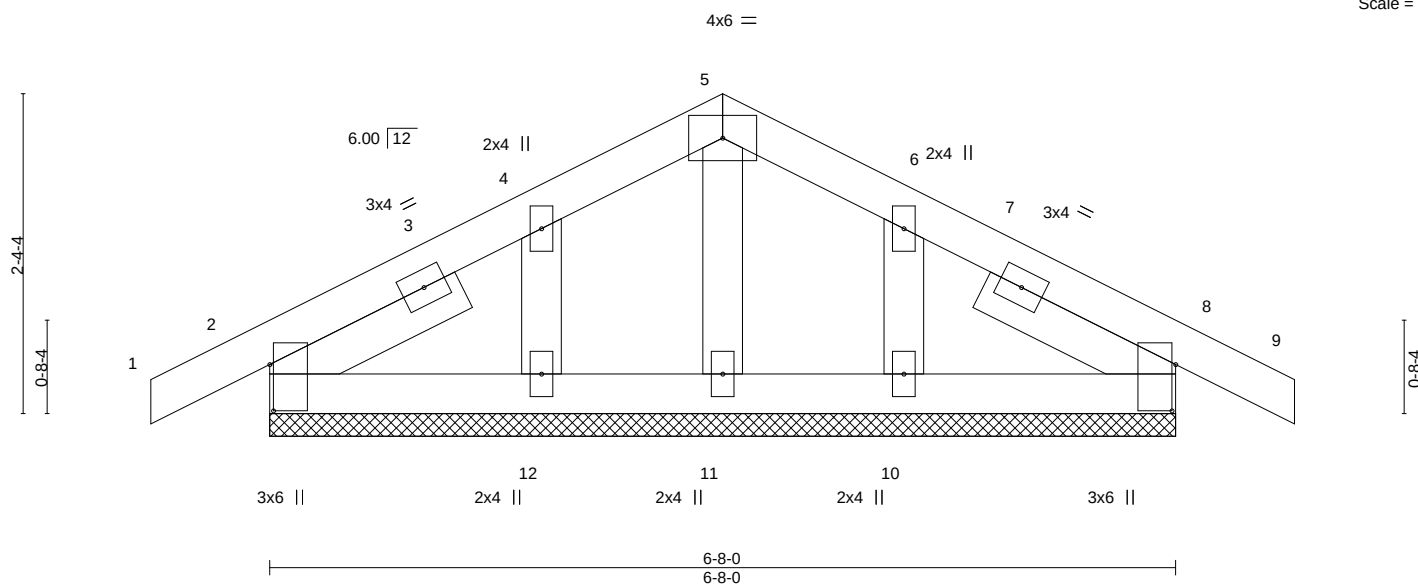


Plate Offsets (X,Y)--		[2:0-4-1,0-0-5], [8:0-4-1,0-0-5]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	2-0-0	TC 0.05	in (loc) l/defl L/d
TCDL 10.0	Plate Grip DOL 1.15	BC 0.03	Vert(LL) -0.00 8 n/r 120
BCLL 0.0	Lumber DOL 1.15	WB 0.03	Vert(CT) -0.00 8 n/r 120
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 8 n/a n/a
	Code IRC2018/TPI2014		
		PLATES	GRIP
		MT20	197/144
		Weight: 27 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2
 OTHERS 2x4 SPF No.2
 SLIDER Left 2x4 SPF No.2 1-6-10, Right 2x4 SPF No.2 1-6-10

BRACING-

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

REACTIONS.

All bearings 6-8-0.
 (lb) - Max Horz 2=37(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 12, 10
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 11, 12, 10

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 3-4-0, Corner(3R) 3-4-0 to 6-4-0, Exterior(2N) 6-4-0 to 7-6-8 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
- 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.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 12, 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.



September 17, 2021

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

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

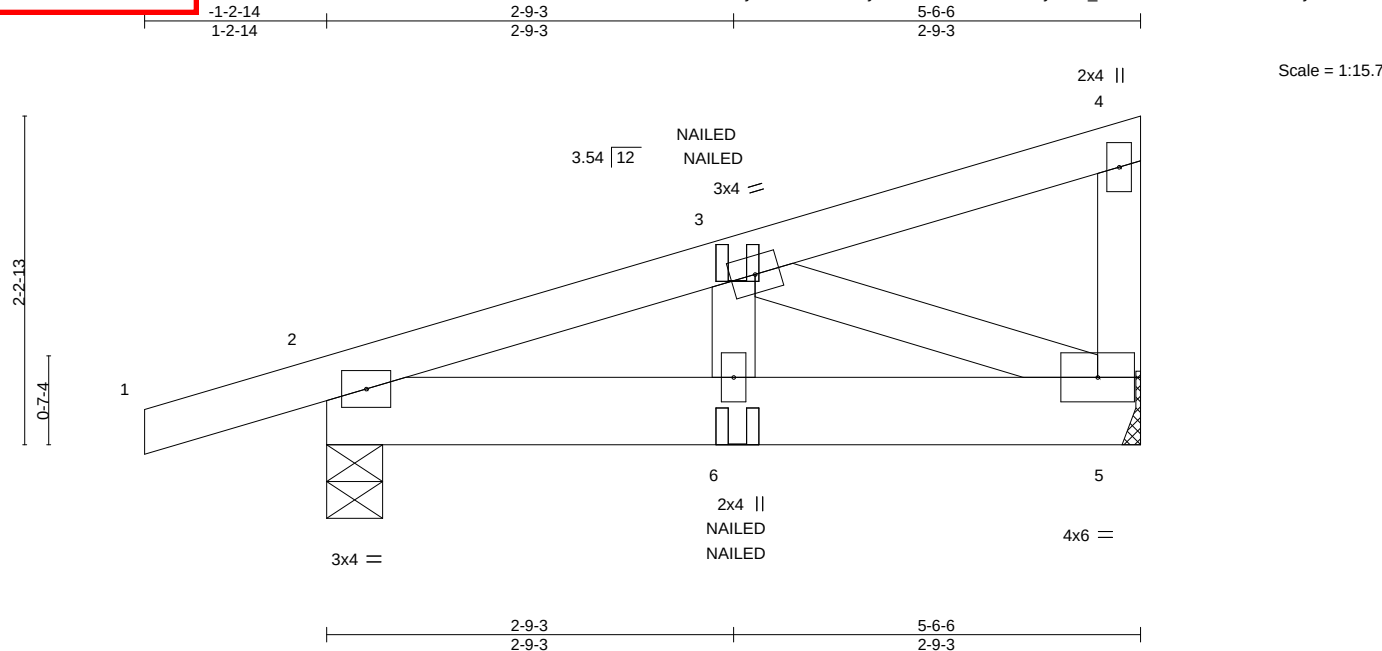
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Diagonal Hip Girder	2	1	I47923877

Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:41 2021 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.11	Vert(LL)	-0.00	6	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	-0.01	6	>999		
BCLL 0.0	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MP					Weight: 23 lb	FT = 20%
	Code IRC2018/TPI2014							

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-6-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 2=0-4-9, 5=Mechanical
Max Horz 2=84(LC 7)
Max Uplift 2=-119(LC 4), 5=-70(LC 8)
Max Grav 2=345(LC 1), 5=239(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-340/88
BOT CHORD 2-6=-91/307, 5-6=-91/307
WEBS 3-5=-330/117

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=119.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 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=-13(F=-7, B=-7)



September 17, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Hip Girder	1	1	I47923878
Job Reference (optional)			
Valley Center, KS - 67147,			

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:42 2021 Page 1
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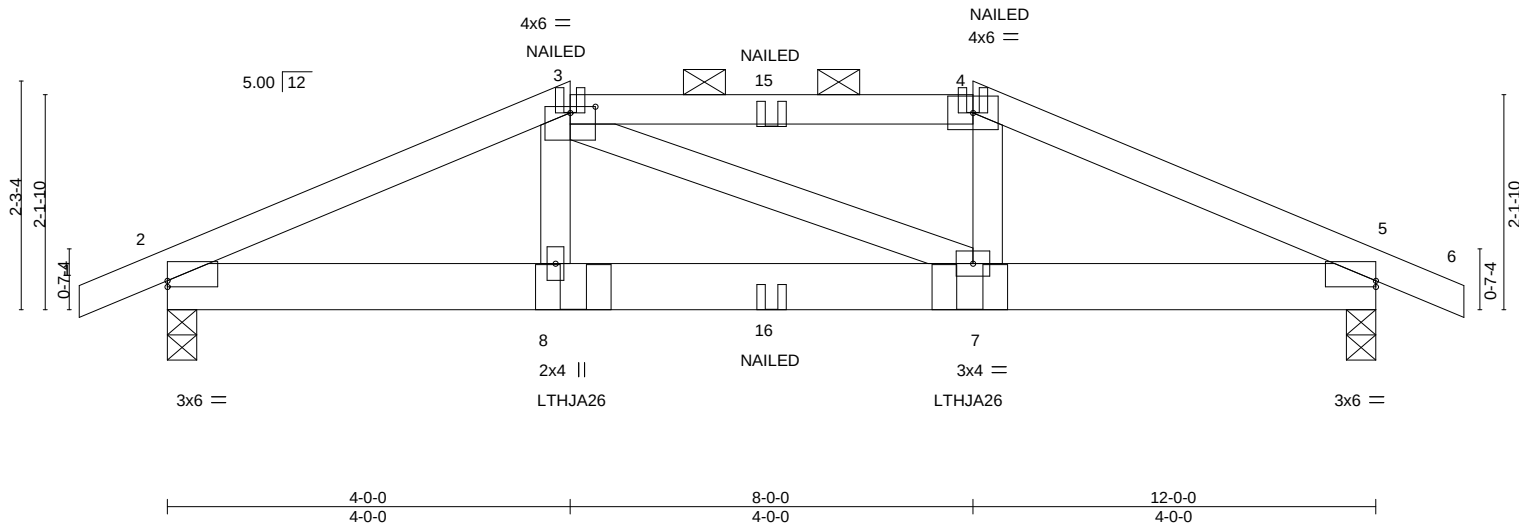


Plate Offsets (X,Y)-- [2:0-0-0,0-0-12], [3:0-3-0,0-0-12], [5:0-0-0,0-0-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.42	Vert(LL)	-0.04	7-8	>999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.46	Vert(CT)	-0.08	7-8	>999		
BCLL 0.0	Lumber DOL 1.15	WB 0.08	Horz(CT)	0.02	5	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS						
	Code IRC2018/TPI2014						Weight: 47 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-1 oc purlins, except
BOT CHORD 2x6 SPF No.2	2-0-0 oc purlins (4-4-9 max.): 3-4.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=35(LC 33)
Max Uplift 2=-259(LC 8), 5=-259(LC 9)
Max Grav 2=933(LC 1), 5=933(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1668/475, 3-4=-1470/456, 4-5=-1661/472
BOT CHORD 2-8=-418/1501, 7-8=-413/1477, 5-7=-388/1494
WEBS 3-8=-54/306, 4-7=-57/306

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=259, 5=259.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 1 ply, Left Hand Hip) or equivalent at 4-0-6 from the left end to connect truss(es) to front face of bottom chord.
 - Use Simpson Strong-Tie LTHJA26 (LTHJA26 on 1 ply, Right Hand Hip) or equivalent at 7-11-10 from the left end to connect truss(es) to front face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-6=-70, 9-12=-20



September 17, 2021

Continued on page 2

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
10/12/2021 4:23:44

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
2935489	D1	Hip Girder	1	1	I47923878
Builders FirstSource (Valley Center)					Job Reference (optional)

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:42 2021 Page 2
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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 4=-35(F) 8=-256(F) 7=-256(F) 3=-35(F) 15=-35(F) 16=-46(F)

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

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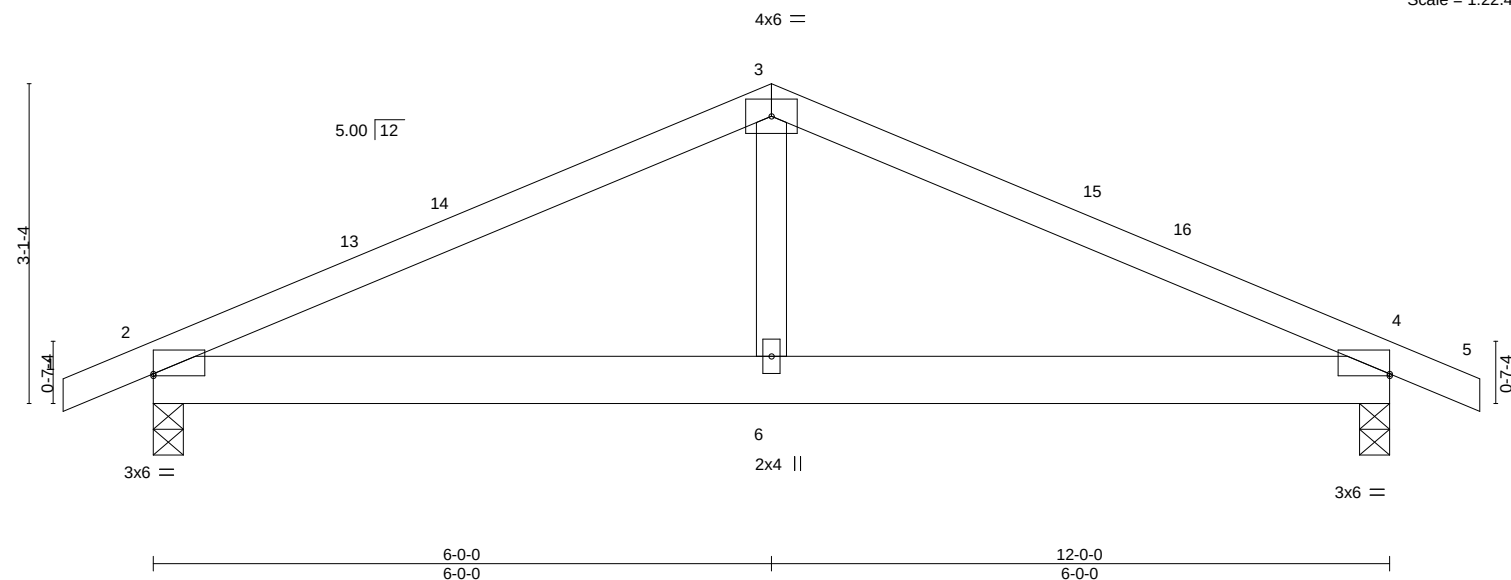
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Common	Qty	3	Ply	1	SUMMIT/HAWTHORN RIDGE #73/MO	I47923879
Valley Center, KS - 67147,		Job Reference (optional)					
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:43 2021 Page 1		ID:m1t2XGkUFyK2st1aXRSPCy84v9-TZ3r75cgw0kwCdbTpOGjNf6ep48?Mo_uNgdkF3ydK6c					
0-10-8		6-0-0		12-0-0		12-10-8	
0-10-8		6-0-0		6-0-0		0-10-8	

Scale = 1:22.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.02 6-12 >999 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	-0.03 6-12 >999 180				
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01 4 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							
								Weight: 41 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	2x6 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=50(LC 16)
Max Uplift 2=-111(LC 12), 4=-111(LC 13)
Max Grav 2=601(LC 1), 4=601(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-806/308, 3-4=-806/308
BOT CHORD 2-6=-176/672, 4-6=-176/672
WEBS 3-6=0/267

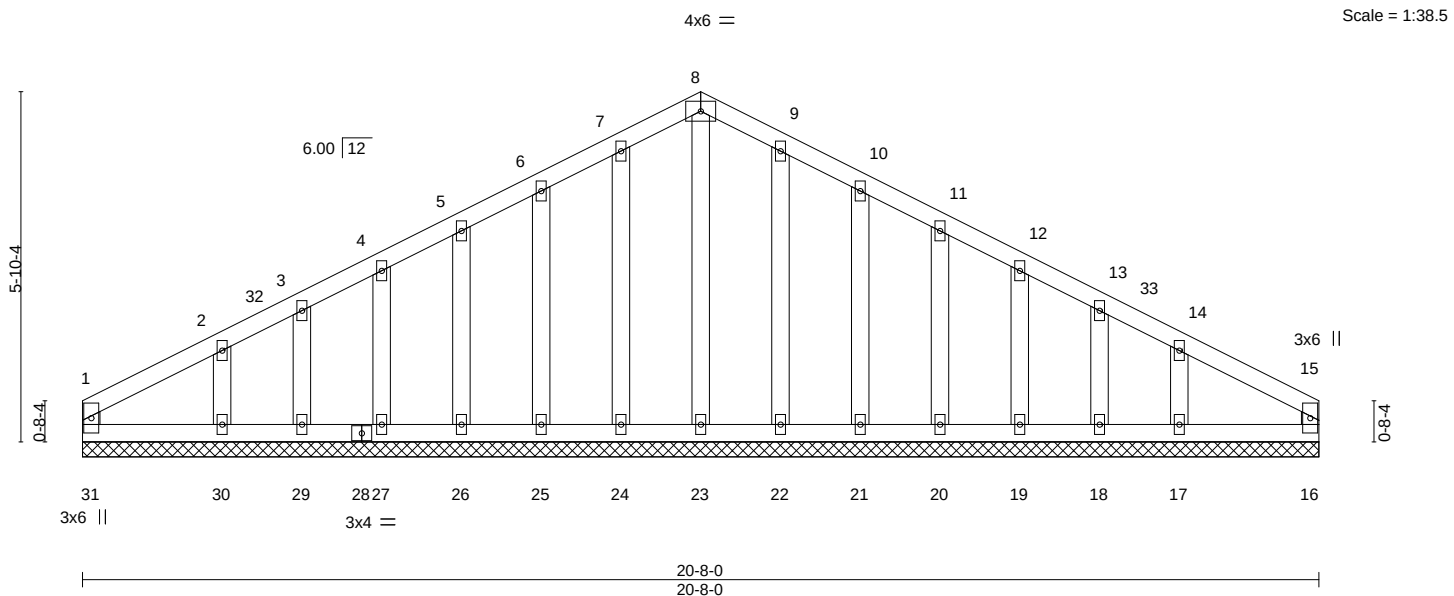
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 6-0-0, Exterior(2R) 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
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=111, 4=111.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 17, 2021

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Common Supported Gable	1	1	I47923880
Job Reference (optional)			

Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:44 2021 Page 1
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 97 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 20-8-0.
(lb) - Max Horz 31=-83(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 31, 16, 24, 25, 26, 27, 29, 30, 22, 21, 20, 19, 18, 17
Max Grav All reactions 250 lb or less at joint(s) 31, 16, 23, 24, 25, 26, 27, 29, 30, 22, 21, 20, 19, 18, 17

FORCES.

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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 10-4-0, Corner(3R) 10-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 20-6-4 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
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 31, 16, 24, 25, 26, 27, 29, 30, 22, 21, 20, 19, 18, 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

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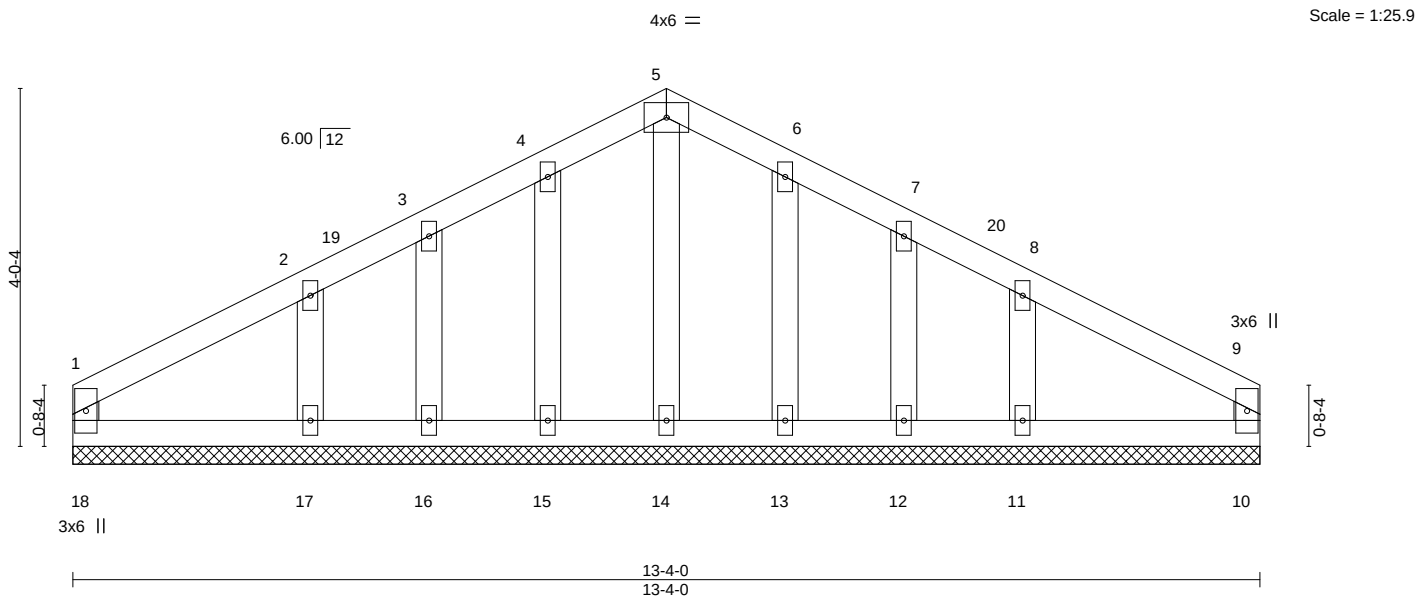
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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO	I47923881
Common Supported Gable	1	1	Job Reference (optional)	
Valley Center, KS - 67147,	8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:45 2021 Page 1			
	ID:m1t2XGkUFyK2st1aXRSPCy84v9-PxAcXmewSd_dRXlrxplBS4B2tutDqi_Aq_6rJxydK6a			



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R							
	Code IRC2018/TPI2014							Weight: 52 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-4-0.
 (lb) - Max Horz 18=59(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 18, 10, 15, 16, 17, 13, 12, 11
 Max Grav All reactions 250 lb or less at joint(s) 18, 10, 14, 15, 16, 17, 13, 12, 11

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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 6-8-0, Corner(3R) 6-8-0 to 9-8-0, Exterior(2N) 9-8-0 to 13-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 10, 15, 16, 17, 13, 12, 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.



September 17, 2021

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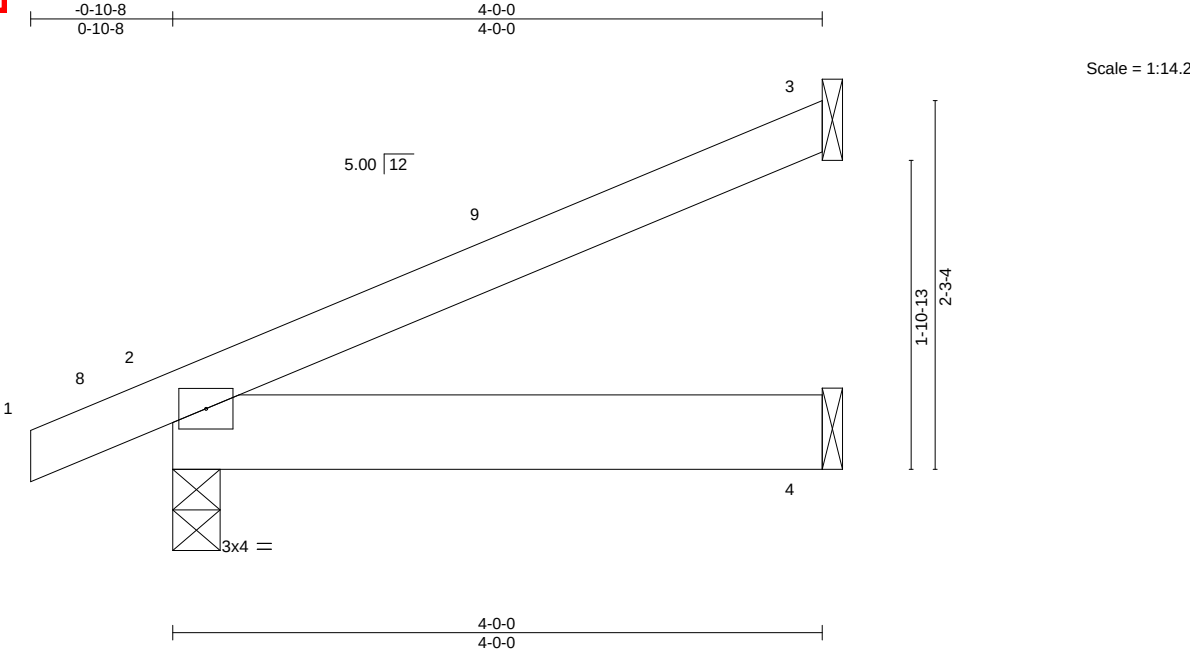
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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Jack-Open	3	1	I47923882

Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:46 2021 Page 1
 ID:m112XGkUFyK2st1aXRSPCy84v9-t8k_l6eYDx6U3hK2UXqQ_HkBDICWZ9gK3esPsOydK6Z



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.15	Vert(LL)	0.01	4-7	>999	240	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	-0.01	4-7	>999	180		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS						Weight: 13 lb	FT = 20%
	Code IRC2018/TPI2014								

LUMBER-

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

BRACING-

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

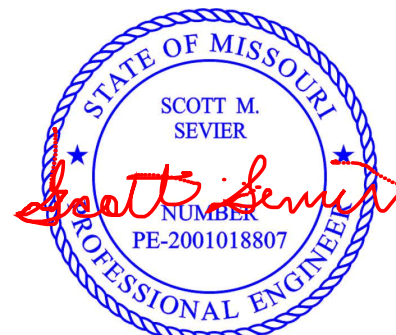
REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
 Max Horz 2=80(LC 12)
 Max Uplift 3=-52(LC 12), 2=-45(LC 12), 4=-3(LC 12)
 Max Grav 3=105(LC 1), 2=245(LC 1), 4=82(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 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.
- 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.



September 17, 2021

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

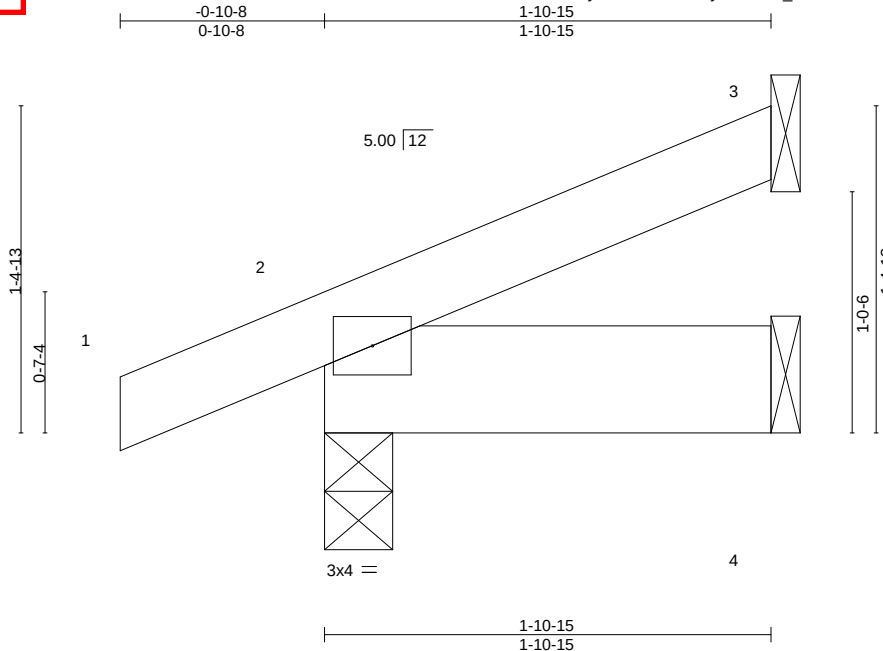
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
Jack-Open	4	1	I47923883
Job Reference (optional)			

Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:46 2021 Page 1
ID:m1t2XGkUFyK2st1aXRSPCy84v9-t8k_l6eYDx6U3hK2UXqQ_HkDnIDnZ9gK3esPsOydK6Z



Scale = 1:9.9

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

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=45(LC 12)
Max Uplift 3=-23(LC 12), 2=-34(LC 8), 4=-2(LC 12)
Max Grav 3=45(LC 1), 2=161(LC 1), 4=38(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.



September 17, 2021

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

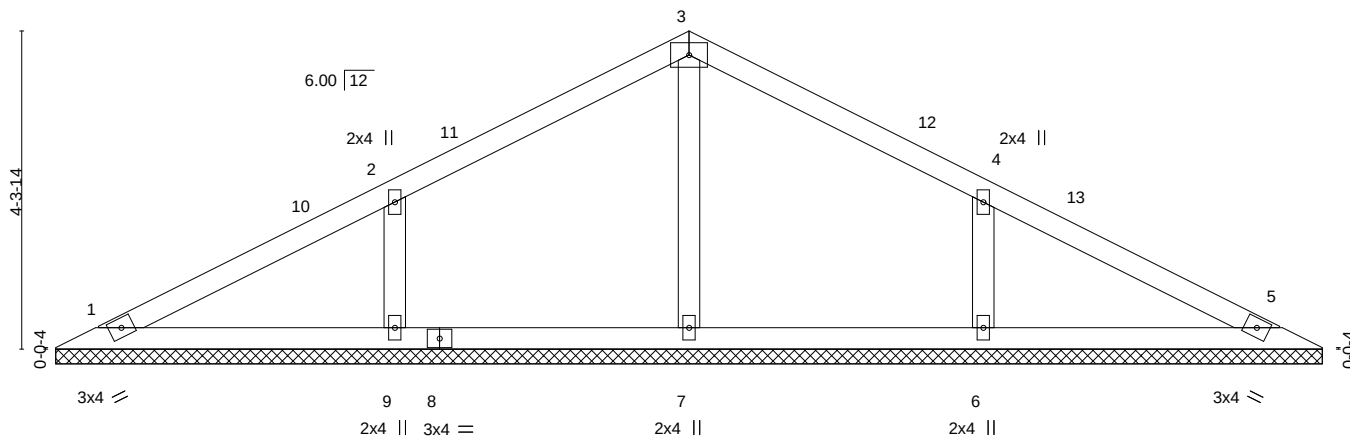


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Valley	Qty	1	Ply	1	SUMMIT/HAWTHORN RIDGE #73/MO	I47923884
Valley Center, KS - 67147,	Job Reference (optional)						

8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:50 2021 Page 1
ID:m1t2XGkUFyK2st1aXRSPCy84v9-mv_VbUh3H9cwXlepJNuM97usuvZEVygw_Fqc?9ydK6V
17-3-10
8-7-13

Scale = 1:31.3



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 0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 48 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 17-2-10.
(lb) - Max Horz 1=-71(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-151(LC 12), 6=-151(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=286(LC 1), 9=432(LC 25), 6=432(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-333/201, 4-6=-333/201

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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 8-7-13, Exterior(2R) 8-7-13 to 11-7-13, Interior(1) 11-7-13 to 16-8-1 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=151, 6=151.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

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

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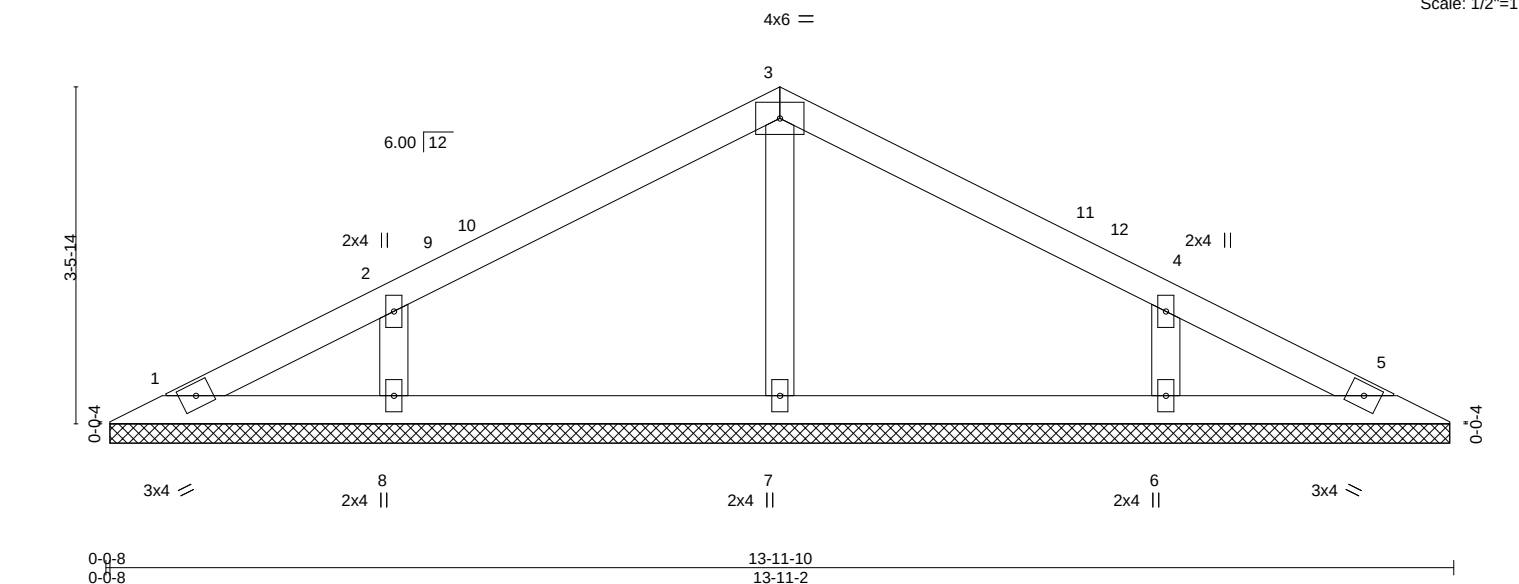


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Truss Type	Valley	Qty	1	Ply	1	SUMMIT/HAWTHORN RIDGE #73/MO	I47923885
Valley Center, KS - 67147,		Job Reference (optional)		8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:51 2021 Page 1			ID:m1t2XGkUFyK2st1aXRSPCy84v9-E5Ytoqih1Tkn9SC?H4PbhLR2hJvgEPA3DvZAXbydK6U

6-11-13	6-11-13	6-11-13	6-11-13
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Scale: 1/2"=1'



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.17	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	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 37 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 13-10-10.
 (lb) - Max Horz 1=-56(LC 17)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 8=-124(LC 12), 6=-124(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=320(LC 1), 8=348(LC 25), 6=348(LC 26)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-278/197, 4-6=-278/197

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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 6-11-13, Exterior(2R) 6-11-13 to 9-11-13, Interior(1) 9-11-13 to 13-4-1 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7 except (jt=lb) 8=124, 6=124.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

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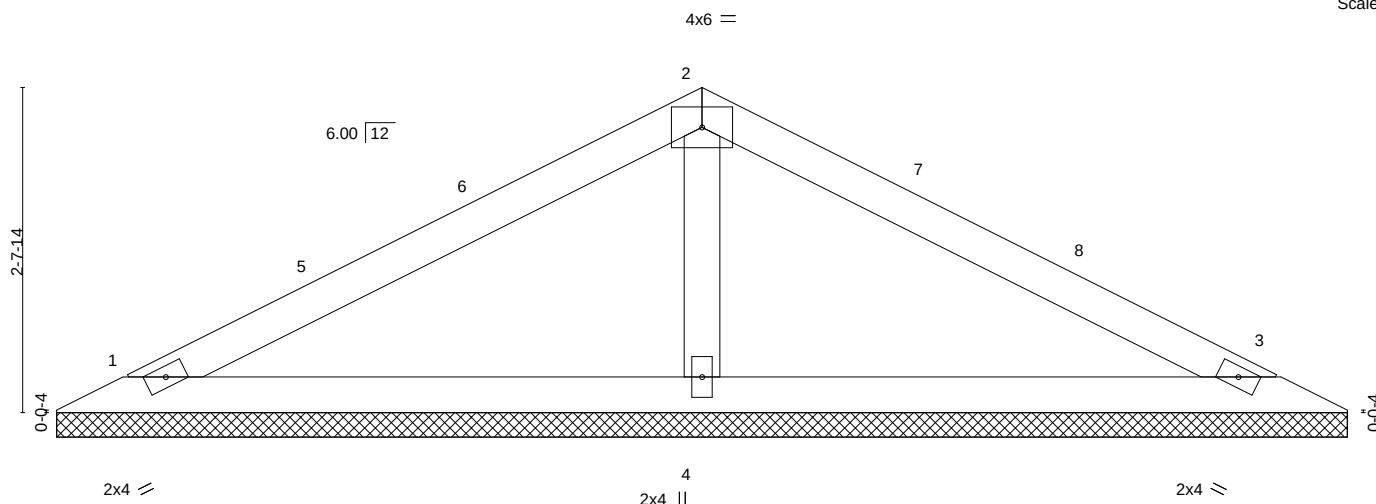


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Valley	Qty	1	Ply	1	SUMMIT/HAWTHORN RIDGE #73/MO	I47923886
Valley Center, KS - 67147,		Job Reference (optional)		8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:52 2021 Page 1			

5-3-13	5-3-13	10-7-10	5-3-13
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Scale = 1:18.8



0-0-8	0-0-8	10-7-10	10-7-2
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LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 26 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=10-6-10, 3=10-6-10, 4=10-6-10
 Max Horz 1=41(LC 16)
 Max Uplift 1=-45(LC 12), 3=-53(LC 13), 4=-49(LC 12)
 Max Grav 1=195(LC 25), 3=195(LC 26), 4=459(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-4=-317/189

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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 5-3-13, Exterior(2R) 5-3-13 to 8-3-13, Interior(1) 8-3-13 to 10-0-1 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

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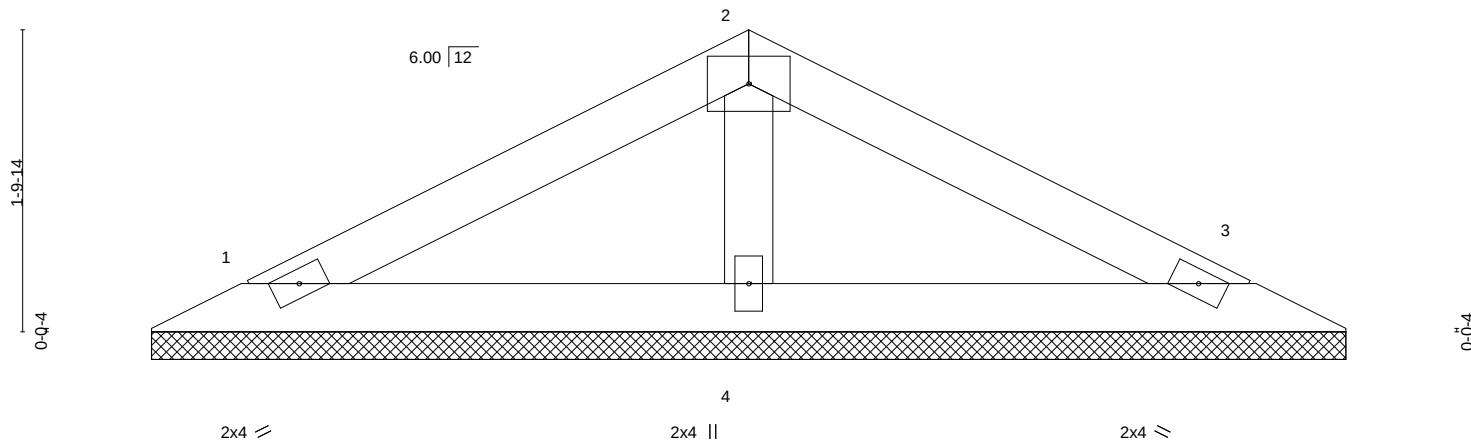
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Valley	Qty	1	Ply	1	SUMMIT/HAWTHORN RIDGE #73/MO	I47923887
Valley Center, KS - 67147,		Job Reference (optional)		8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:52 2021 Page 1			ID:m1t2XGkUFyK2st1aXRSPCy84v9-il6F?9jJonsencnBrnxqEY_DYiFGzsmCRZJj31ydK6T

3-7-13	3-7-13	7-3-10	3-7-13
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Scale = 1:13.9

4x6 =



0-0-8	0-0-8	7-3-10	7-3-2
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.16	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/TPI2014		Matrix-P						Weight: 17 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-2-10, 3=7-2-10, 4=7-2-10
 Max Horz 1=27(LC 16)
 Max Uplift 1=-36(LC 12), 3=-41(LC 13), 4=-19(LC 12)
 Max Grav 1=138(LC 1), 3=138(LC 1), 4=267(LC 1)

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

NOTES-

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



September 17, 2021

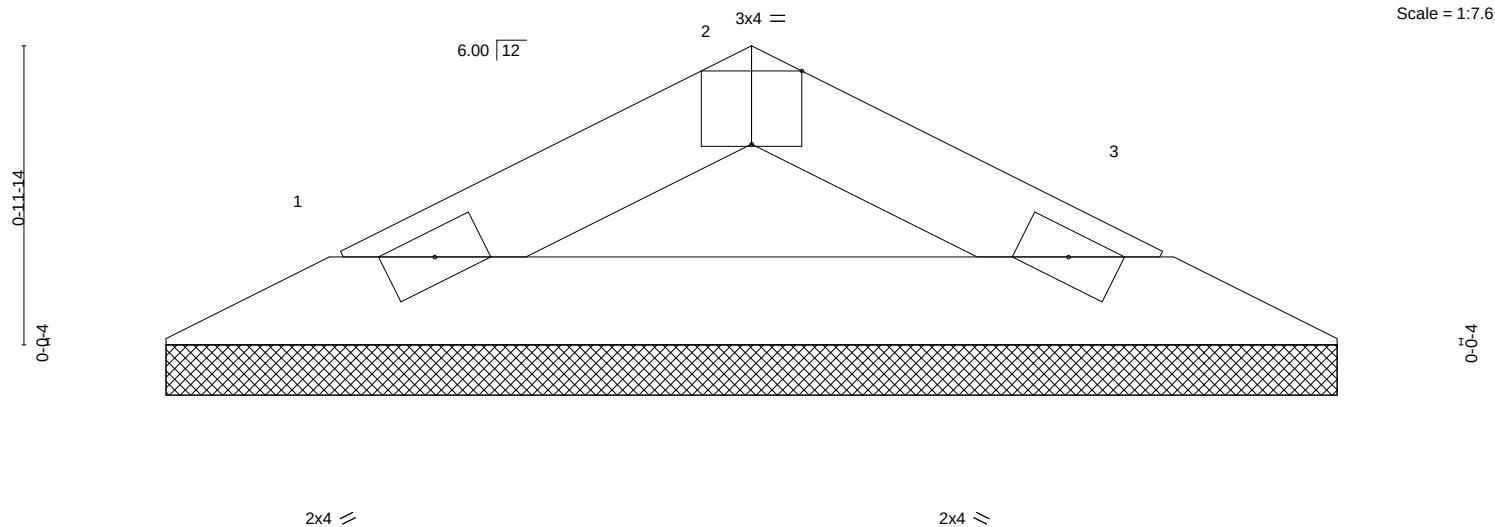
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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:53 2021 Page 1
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1-11-13 3-11-10
1-11-13 1-11-13

[illegible]

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

TOP CHORD	Structural wood sheathing directly applied or 3-11-10 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

(size) 1=3-10-10, 3=3-10-10
 Max Horz 1=-12(LC 17)
 Max Uplift 1=-20(LC 12), 3=-20(LC 13)
 Max Grav 1=122(LC 1), 3=122(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; TCDF=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.



September 17, 2021



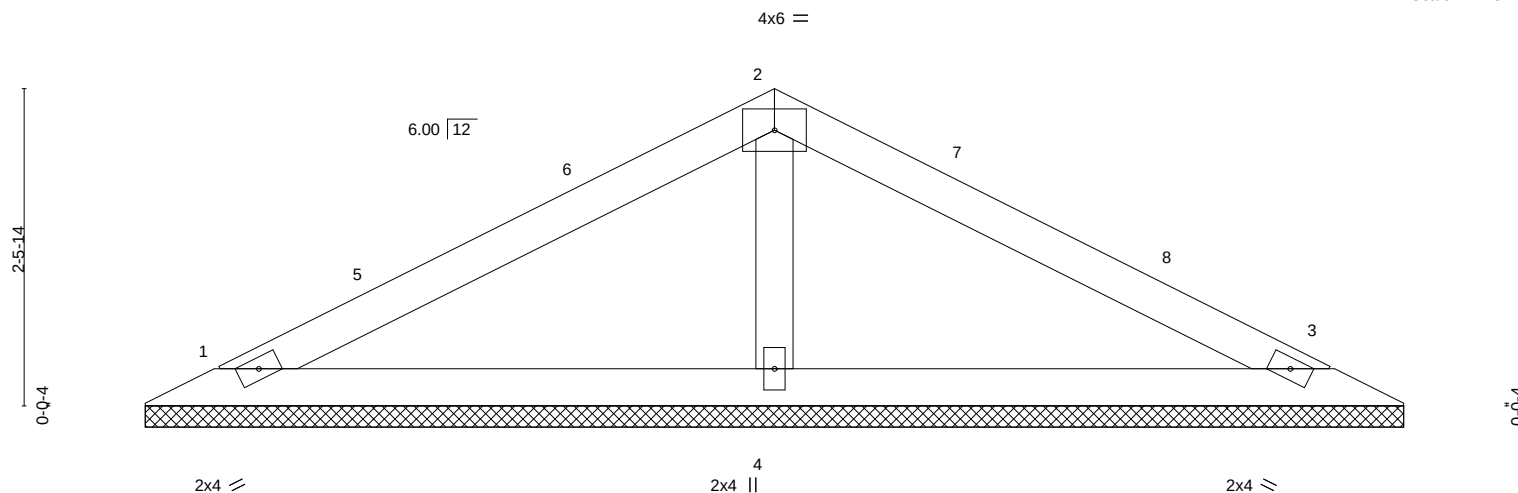
WARNING: Velly design parameters are listed in the NOTES ON THIS AND INCLUDED WITH THE REFERENCE CASE. MIF-743-161, 3/29/2020. BEFORE USE, Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601.



16023 Swingley Ridge Rd
Chesterfield, MO 63017

	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO	I47923889
	Valley	1	1	Job Reference (optional)	
Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:53 2021 Page 1					
ID:m1t2XGkUFyK2st1aXRSPCy84v9-AUfdDVkxZ4?VomMOPVS3nmWMM6aEiJlMgD2GcUydK6S					
4-11-13		9-11-10			
4-11-13		4-11-13			

Scale = 1:18.1



0-0-8		9-11-10										
0-0-8		9-11-2										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=9-10-10, 3=9-10-10, 4=9-10-10
 Max Horz 1=-38(LC 17)
 Max Uplift 1=-42(LC 12), 3=-50(LC 13), 4=-45(LC 12)
 Max Grav 1=181(LC 25), 3=181(LC 26), 4=427(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-4=-295/184

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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 4-11-13, Exterior(2R) 4-11-13 to 7-11-13, Interior(1) 7-11-13 to 9-4-1 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
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

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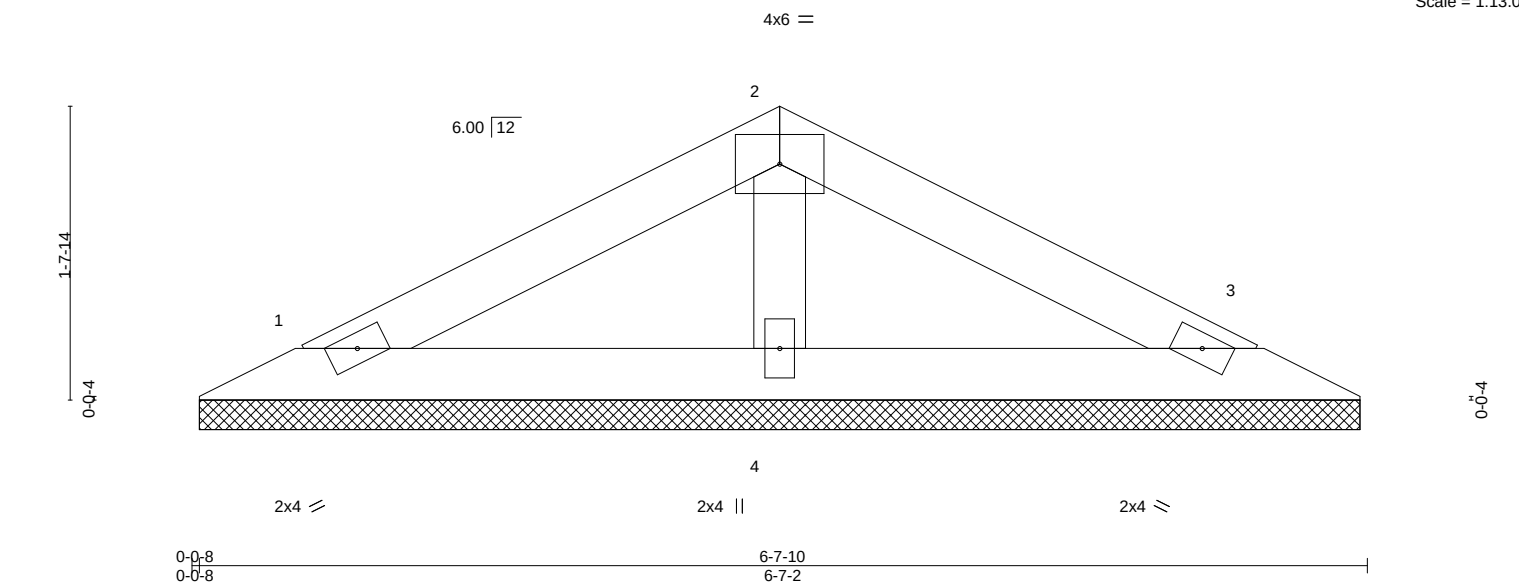
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO	I47923890
Valley	1	1	Job Reference (optional)	
Valley Center, KS - 67147,				
8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:54 2021 Page 1				
ID:m1t2XGkUFyK2st1aXRSPCfy84v9-egD?QrlZKO7M0wxayCzIjz3abWy_RmHVvtog8wydK6R				
3-3-13	3-3-13	6-7-10	3-3-13	

Scale = 1:13.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.13	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr YES	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 16 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=6-6-10, 3=6-6-10, 4=6-6-10
 Max Horz 1=24(LC 16)
 Max Uplift 1=-32(LC 12), 3=-36(LC 13), 4=-17(LC 12)
 Max Grav 1=123(LC 1), 3=123(LC 1), 4=237(LC 1)

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

NOTES-

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



September 17, 2021

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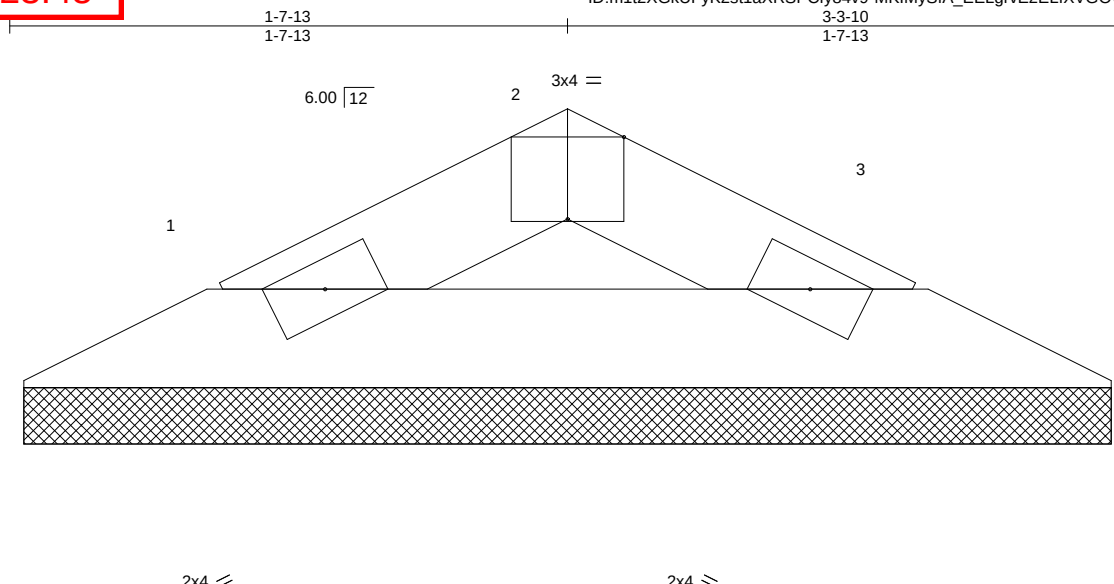
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**
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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO	I47923891
Valley	1	1	Job Reference (optional)	

ID:m1t2XGkUFyK2st1aXRSPCy84v9-MKIMySfA_EELgrvE2ELfXVG0vhZflcwTllbyOqydK6Y



Scale = 1:6.8

		0-0-8		3-3-10								
		0-0-8		3-3-2								
Plate Offsets (X,Y)--		[2:0-2:0,Edge]										
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL 1.15		TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.04	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: 6 lb FT = 20%		

LUMBER-

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

REACTIONS.

(size) 1=3-2-10, 3=3-2-10
 Max Horz 1=9(LC 12)
 Max Uplift 1=-15(LC 12), 3=-15(LC 13)
 Max Grav 1=92(LC 1), 3=92(LC 1)

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

NOTES-

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



September 17, 2021

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16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Valley	Qty	1	Ply	1	SUMMIT/HAWTHORN RIDGE #73/MO	I47923892
Valley Center, KS - 67147,		Job Reference (optional)		8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:47 2021 Page 1			ID:m1t2XGkUFyK2st1aXRSPCy84v9-MKIMySfA_EELgrvE2ELfXVGN6hX2lcwTIIbyOqydK6Y

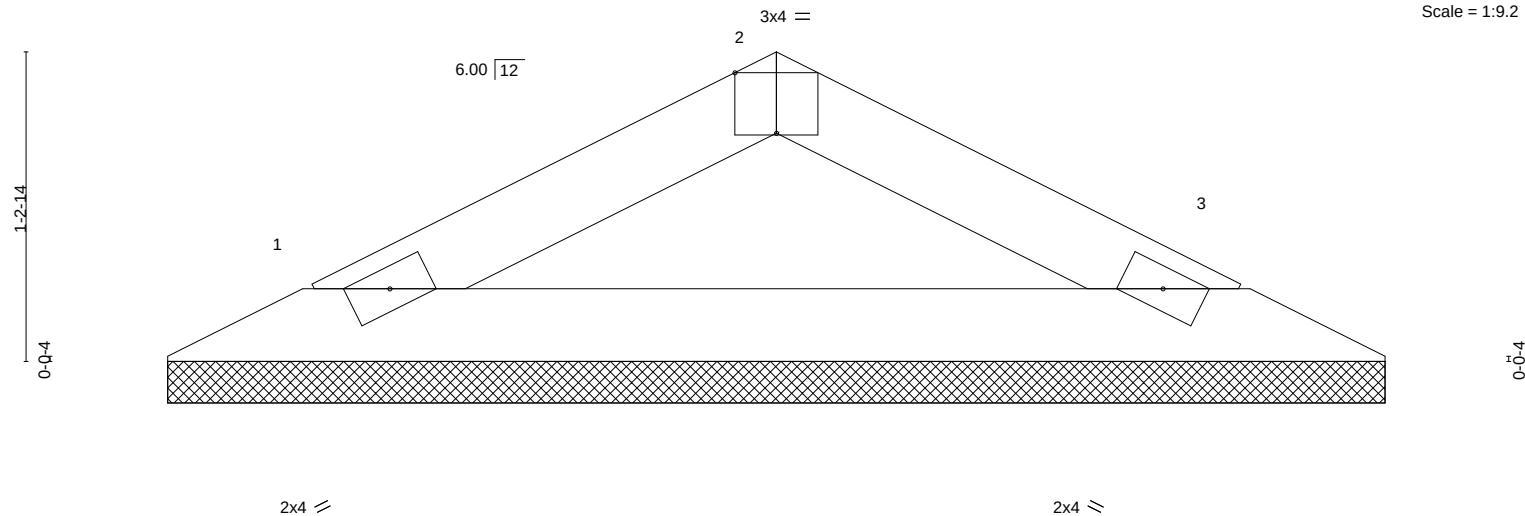


Plate Offsets (X,Y)-- [2:0-2.0,Edge]		4-11-10	
0-0-8		4-11-2	
0-0-8			
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.08	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.14	Vert(LL) n/a - n/a 999
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Vert(CT) n/a - n/a 999
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	Horz(CT) 0.00 3 n/a n/a
		PLATES	
		GRIP	
		MT20 197/144	
		Weight: 10 lb FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-11-10 oc purlins.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-10-10, 3=4-10-10
 Max Horz 1=16(LC 12)
 Max Uplift 1=-28(LC 12), 3=-28(LC 13)
 Max Grav 1=167(LC 1), 3=167(LC 1)

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

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

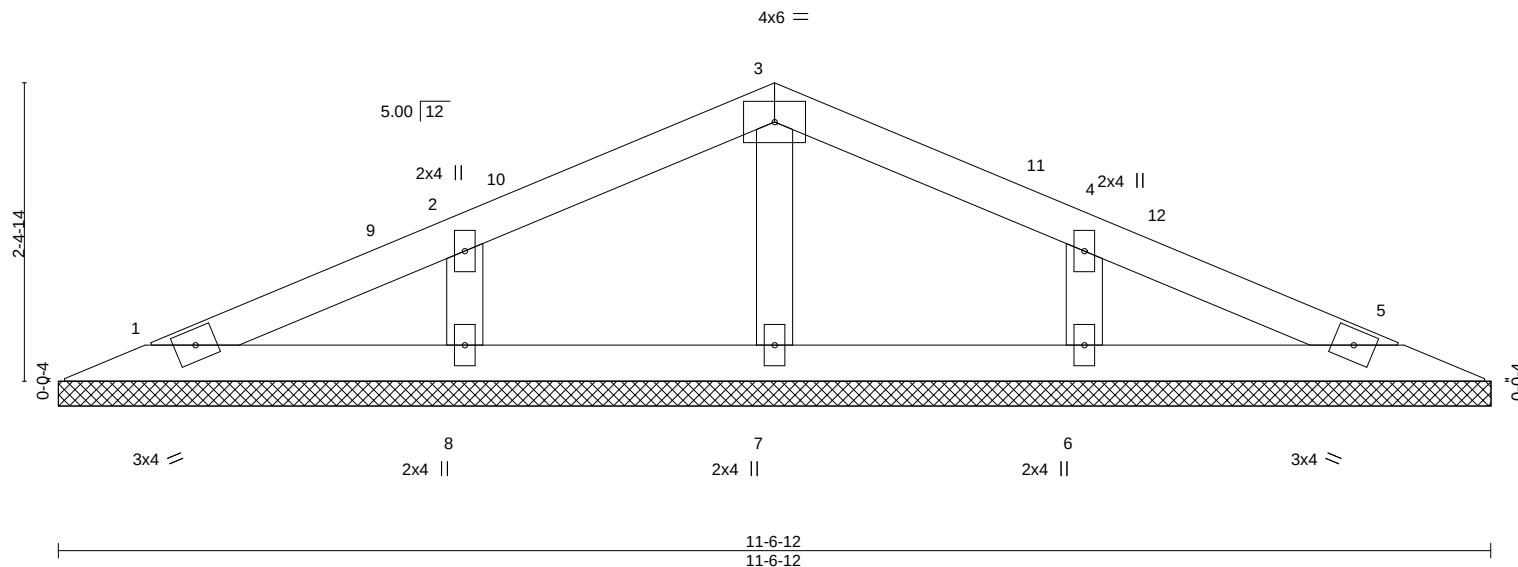


September 17, 2021

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO
GABLE	1	1	I47923893

Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:48 2021 Page 1
 ID:m1t2XGkUFyK2st1aXRSPCfy84v9-qWskAogolYMCI?UQcysu4ipYc5vr13jdWylVwGydK6X
 11-6-12 5-9-6

Scale = 1:18.6



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 29 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-6-12.
 (lb) - Max Horz 1=37(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=271(LC 25), 6=271(LC 26)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=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 5-9-6, Exterior(2R) 5-9-6 to 8-9-6, Interior(1) 8-9-6 to 10-9-11 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



September 17, 2021

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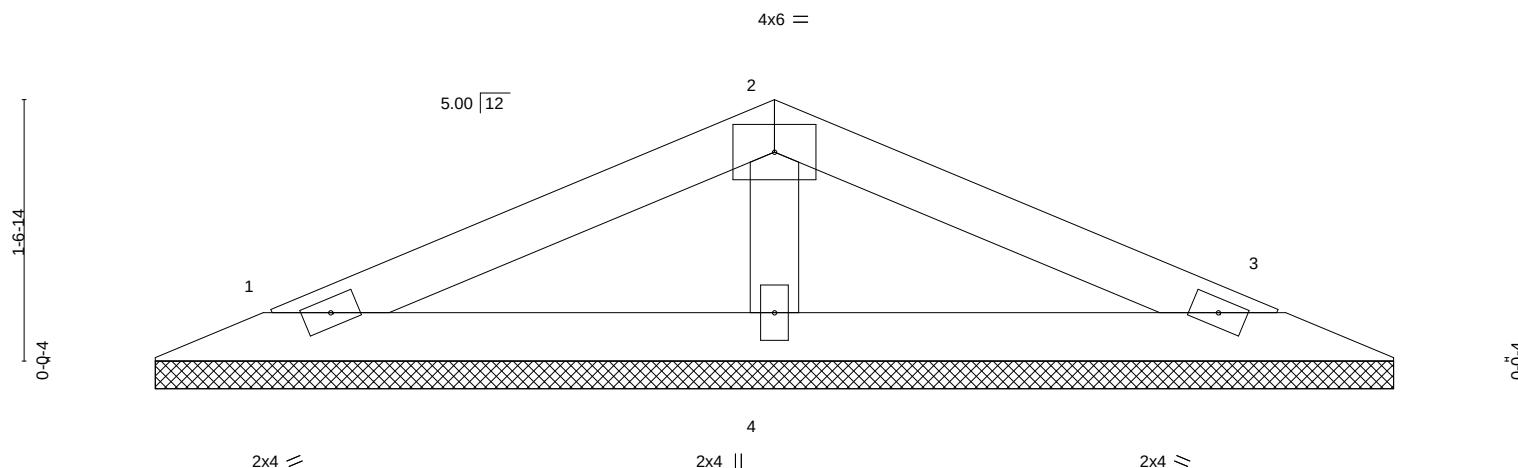


16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #73/MO	I47923894
Valley	1	1	Job Reference (optional)	

Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Wed Sep 15 16:57:49 2021 Page 1
ID:m1t2XGkUFyK2st1aXRSPCy84v9-ljQ6N8hRWsU3w83cAfN7cwMiiVDZmW_mlc43SiydK6W
3-9-6 7-6-12 3-9-6

Scale = 1:13.9



0-0-10			7-6-12									
0-0-10			7-6-2									
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.16	Vert(LL)	n/a	-	n/a	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/TPI2014		Matrix-P							Weight: 17 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=7-5-8, 3=7-5-8, 4=7-5-8
Max Horz 1=-22(LC 13)
Max Uplift 1=-35(LC 12), 3=-39(LC 13), 4=-22(LC 12)
Max Grav 1=135(LC 1), 3=135(LC 1), 4=275(LC 1)

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

NOTES-

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



September 17, 2021

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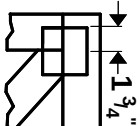
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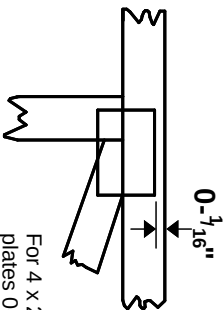
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{3}{16}$ " from outside edge of truss.

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

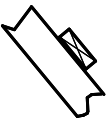
* Plate location details available in **MiTek 20120** software or upon request.

PLATE SIZE

4 X 4

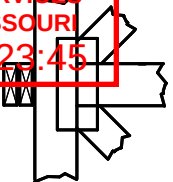
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



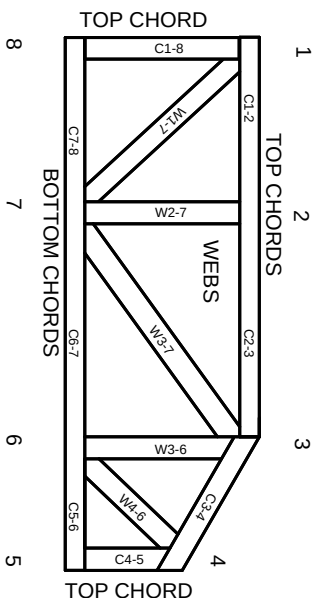
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T or I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.