



MiTek USA, Inc.

16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Re: 3022527

SUMMIT/HAWTHORN RIDGE #140/MO

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI

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: I49347613 thru I49347663

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

Missouri COA: Engineering 001193



December 21, 2021

Sevier, Scott ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A1	Common Supported Gable	1	1	l49347613

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:27:55 2021 Page 1
ID:VPVqVFnP0P0b1j2tZrOqezdKbx-aJ588OiWKY3Mm8TaannvUvF6o?5emej7yBTpdvy76e2

10-8-8 10-8-8 20-0-0 31-7-0 0-10-8

4x6 =

Scale: 3/16"=1'

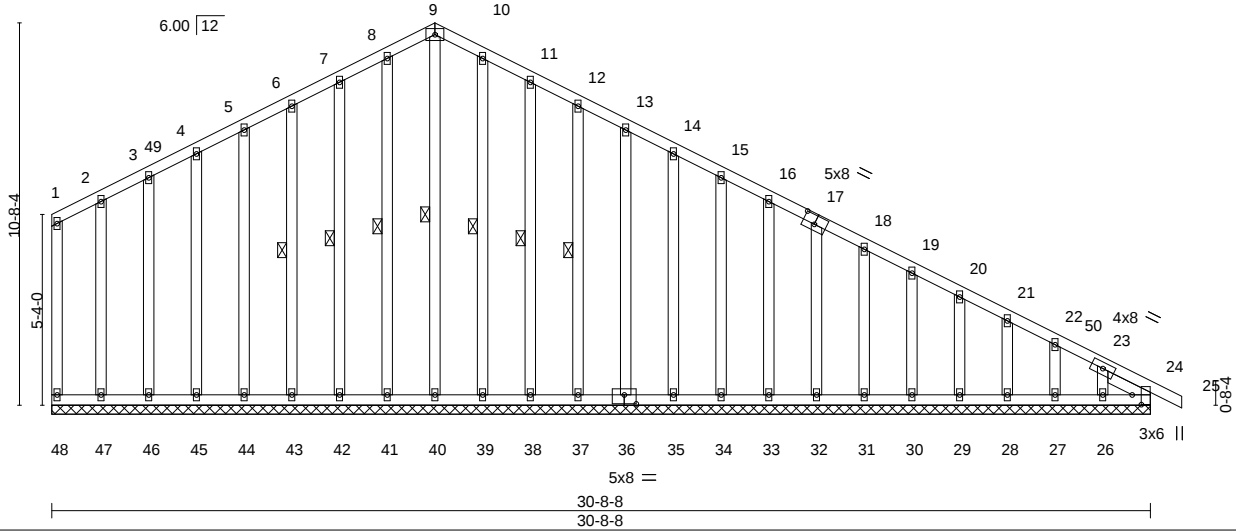


Plate Offsets (X,Y)-- [17:0-4-0,0-3-0], [24:0-3-4,0-3-1], [36:0-4-0,0-3-0]

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 0.14	Vert(LL)	-0.00	24	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	-0.00	25	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01	24	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 236 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 9-40, 8-41, 7-42, 6-43, 10-39, 11-38, 12-37
OTHERS 2x4 SPF No.2	
SLIDER Right 2x4 SPF No.2 1-4-5	

REACTIONS. All bearings 30-8-8.
(lb) - Max Horz 48=-281(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 48, 40, 41, 42, 43, 44, 45, 46, 47, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 24 except 26=-104(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 48, 40, 41, 42, 43, 44, 45, 46, 47, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=-153/282, 7-8=-167/321, 8-9=-170/338, 9-10=-170/338, 10-11=-167/321, 11-12=-153/282, 23-24=-291/167
BOT CHORD 47-48=-136/252, 46-47=-136/252, 45-46=-136/252, 44-45=-136/252, 43-44=-136/252, 42-43=-136/252, 41-42=-136/252, 40-41=-136/252, 39-40=-136/252, 38-39=-136/252, 37-38=-136/252, 36-37=-136/252, 35-36=-136/251, 34-35=-136/251, 33-34=-136/251, 32-33=-136/251, 31-32=-136/251, 30-31=-136/251, 29-30=-136/251, 28-29=-136/251, 27-28=-136/251, 26-27=-136/251, 24-26=-136/251

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 3-1-12, Exterior(2N) 3-1-12 to 10-8-8, Corner(3R) 10-8-8 to 13-8-8, Exterior(2N) 13-8-8 to 31-7-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate 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) 48, 40, 41, 42, 43, 44, 45, 46, 47, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 24 except (it=lb) 26=104.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 21,2021

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A2	Roof Special	5	1	I49347614

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:02 2021 Page 1
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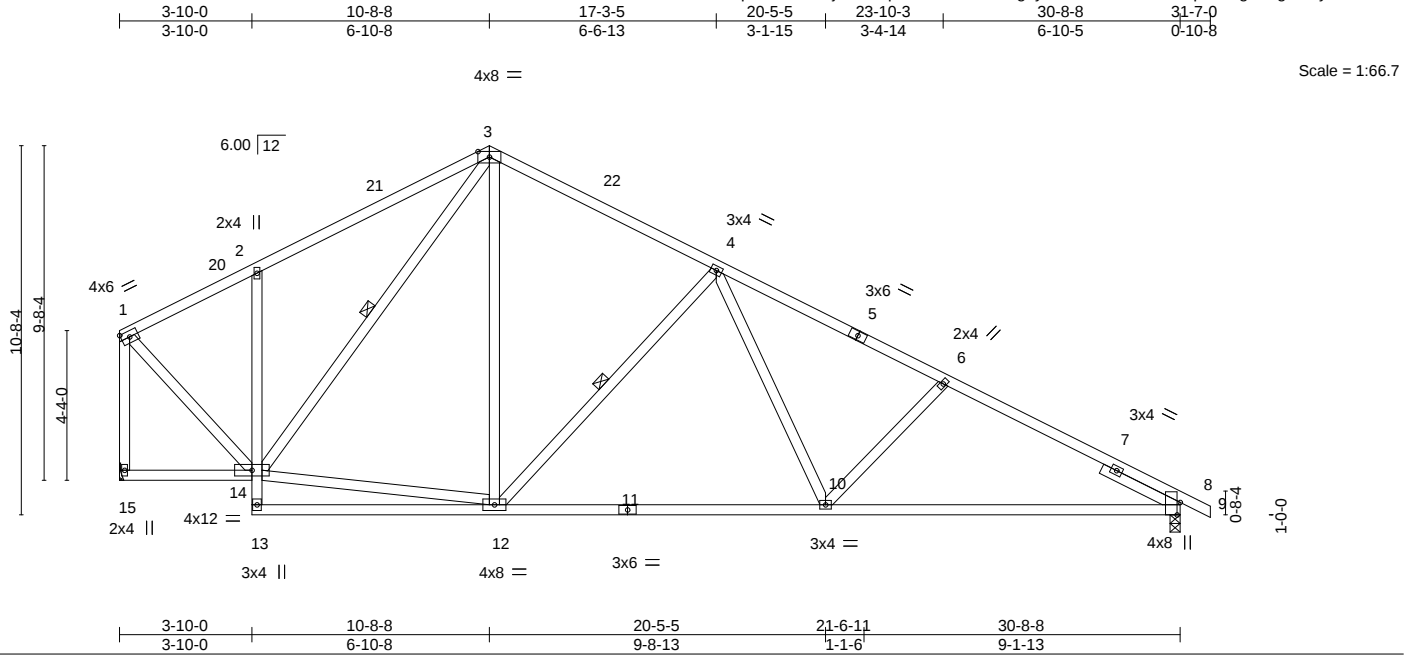


Plate Offsets (X,Y)-- [8:0-4-5,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.46	Vert(LL)	-0.15 10-18	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.32 10-12	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.35	Horz(CT)	0.05 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 153 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-14, 4-12

REACTIONS.

(size) 15=Mechanical, 8=0-3-8
Max Horz 15=-262(LC 8)
Max Uplift 15=-186(LC 12), 8=-274(LC 13)
Max Grav 15=1374(LC 1), 8=1437(LC 1)

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

TOP CHORD 1-2=-929/218, 2-3=-1005/339, 3-4=-1184/325, 4-6=-1993/418, 6-8=-2247/447,
1-15=-1323/245
BOT CHORD 14-15=-113/259, 2-14=-445/252, 10-12=-105/1489, 8-10=-294/1950
WEBS 12-14=-6/884, 3-14=-360/78, 3-12=-177/679, 1-14=-203/1149, 4-12=-811/317,
4-10=-91/528, 6-10=-380/226

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 10-8-8, Exterior(2R) 10-8-8 to 13-8-8, Interior(1) 13-8-8 to 31-7-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=186, 8=274.
- This truss 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.



December 21, 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**
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A3	Roof Special	1	1	149347615

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

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ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-LsaAq7oXR?4EjN472T?npbaH1DeOe5iJoRPEuRy76dw

Job Reference (optional)

-0-10-8 7-4-8 12-8-4 14-0-0 18-0-0 22-3-8 30-0-0 38-0-0
0-10-8 7-4-8 5-3-12 1-3-12 4-0-0 4-3-8 7-8-8 8-0-0

Scale = 1:72.0

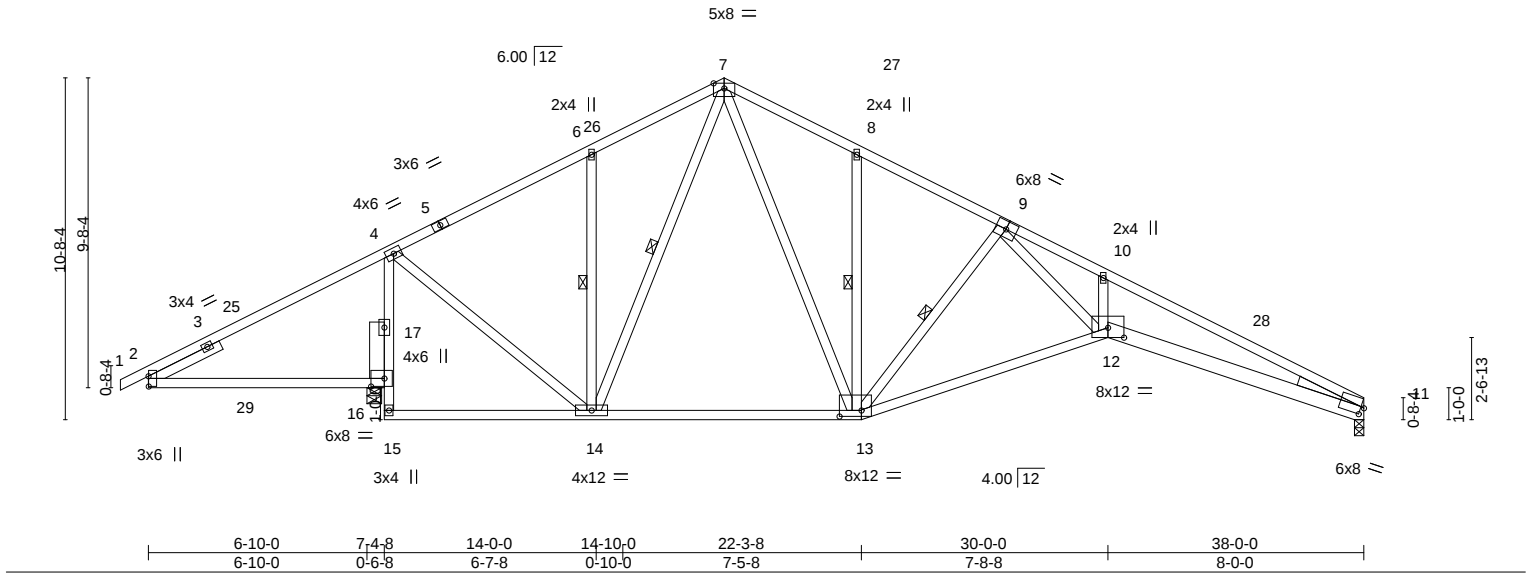


Plate Offsets (X,Y)--		[2:0-3-13,0-0-1], [11:0-1-3,0-2-11], [12:0-6-0,0-3-11], [13:0-8-4,0-2-4], [16:0-5-0,0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.39 12-13	>928	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.77 12-13	>472	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.27 11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 182 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
9-11: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
11-12: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
16-17: 2x6 SPF No.2
WEDGE
Right: 2x4 SP No.3
SLIDER Left 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-13, 7-14, 6-14, 9-13

REACTIONS.

(size) 16=0-5-8, 11=0-3-8
Max Horz 16=-192(LC 13)
Max Uplift 16=-367(LC 12), 11=-250(LC 13)
Max Grav 16=2209(LC 1), 11=1272(LC 1)

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

TOP CHORD 2-4=-575/783, 4-6=-755/247, 6-7=-707/304, 7-8=-1309/453, 8-9=-1307/341,
9-10=-4504/920, 10-11=-4625/785
BOT CHORD 2-16=-571/575, 4-16=-2043/721, 14-15=-521/564, 13-14=0/718, 12-13=-236/2059,
11-12=-631/4185
WEBS 8-13=-332/193, 10-12=-277/232, 7-13=-331/1033, 7-14=-402/205, 6-14=-344/203,
4-14=-399/1402, 9-13=-1371/316, 9-12=-580/3042

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 2-11-2, Interior(1) 2-11-2 to 18-0-0, Exterior(2R) 18-0-0 to 21-9-10, Interior(1) 21-9-10 to 38-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 16=367, 11=250.
- This truss 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.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A4	Roof Special	2	1	i49347616

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

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ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-IEwEpqozcKyzgEV9u1Fu0fd61MW6yqcGluLzKy76du

0-10-8 7-4-8 9-3-8 12-9-7 13-7-12 18-0-0 18-3-8 22-3-8 26-8-9 30-0-0 38-0-0
0-10-8 7-4-8 1-11-0 3-5-15 0-10-5 4-4-4 0-3-8 4-0-0 4-5-1 3-3-7 8-0-0

Scale = 1:80.5

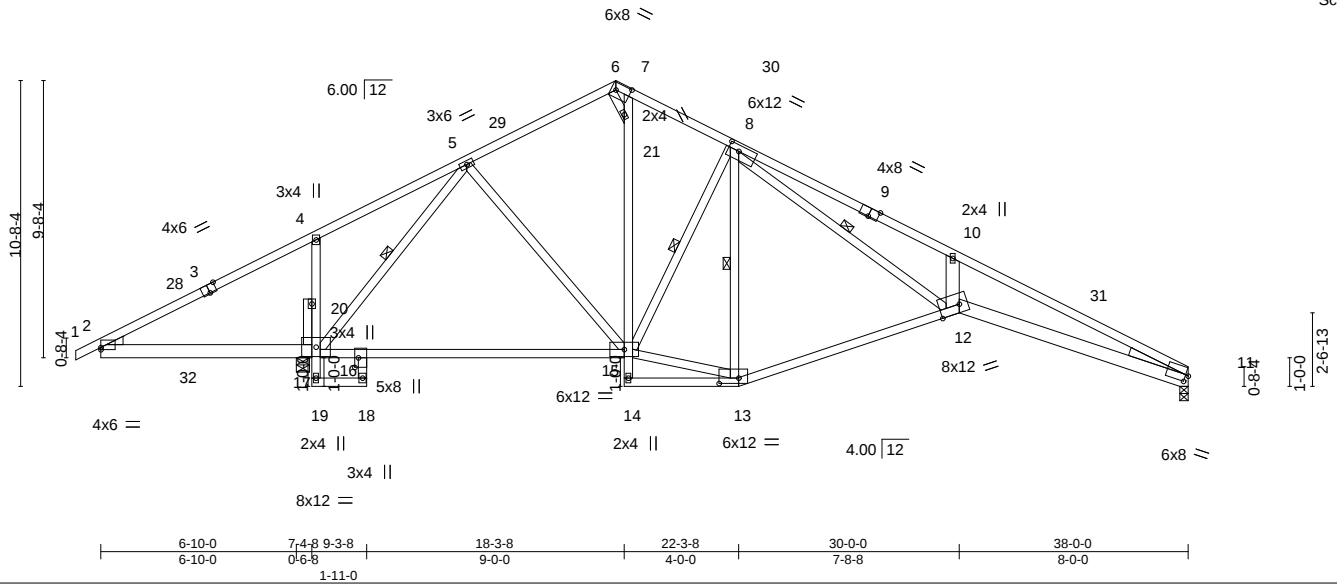


Plate Offsets (X,Y)-- [2:0-0-0,0-0-15], [3:0-3-0,Edge], [6:0-6-0,0-3-0], [8:0-4-7,0-2-8], [9:0-4-0,Edge], [11:0-1-3,0-2-11], [12:0-8-8,Edge], [13:0-8-4,0-2-4], [16:0-4-0,0-1-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.92	Vert(LL)	-0.52	12-13	>703	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.69	Vert(CT)	-1.00	12-13	>366	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.90	Horz(CT)	0.40	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 186 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-9,9-11: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
2-17: 2x6 SPF No.2, 11-12: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
10-12: 2x6 SPF No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-13, 8-15, 5-17, 8-12

REACTIONS.

(size) 17=0-5-8, 11=0-3-8
Max Horz 17=-192(LC 13)
Max Uplift 17=-367(LC 12), 11=-250(LC 13)
Max Grav 17=2209(LC 1), 11=1272(LC 1)

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

TOP CHORD 2-4=-592/762, 4-5=-577/741, 5-6=-1011/304, 6-7=-789/294, 7-8=-1046/308,
8-10=-4666/1021, 10-11=-4651/801
BOT CHORD 2-17=-573/598, 4-17=-482/239, 18-19=-308/0, 16-17=0/690, 15-16=-32/534,
15-21=-208/665, 7-21=-106/437, 12-13=-40/1189, 11-12=-649/4213
WEBS 8-13=-508/55, 10-12=-490/325, 13-15=0/1254, 8-15=-671/318, 5-15=-171/495,
5-17=-1808/678, 6-21=-110/313, 8-12=-765/3664

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 2-11-2, Interior(1) 2-11-2 to 18-0-0, Exterior(2R) 18-0-0 to 21-9-10, Interior(1) 21-9-10 to 38-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 17=367, 11=250.
- This truss 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.



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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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A5	Roof Special	3	1	149347617

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

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ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-mRFIS9qQkwSoaqpijbYURDCqMRf4rvyIUPEvVmy76dt

2-5-8	6-9-12	7-2-0	11-2-0	11-5-8	15-5-8	18-7-2	18-11-2	23-2-0	31-2-0
2-5-8	4-4-4	0-4-4	4-0-0	0-3-8	4-0-0	3-1-10	0-4-0	4-2-14	8-0-0

Scale = 1:70.5

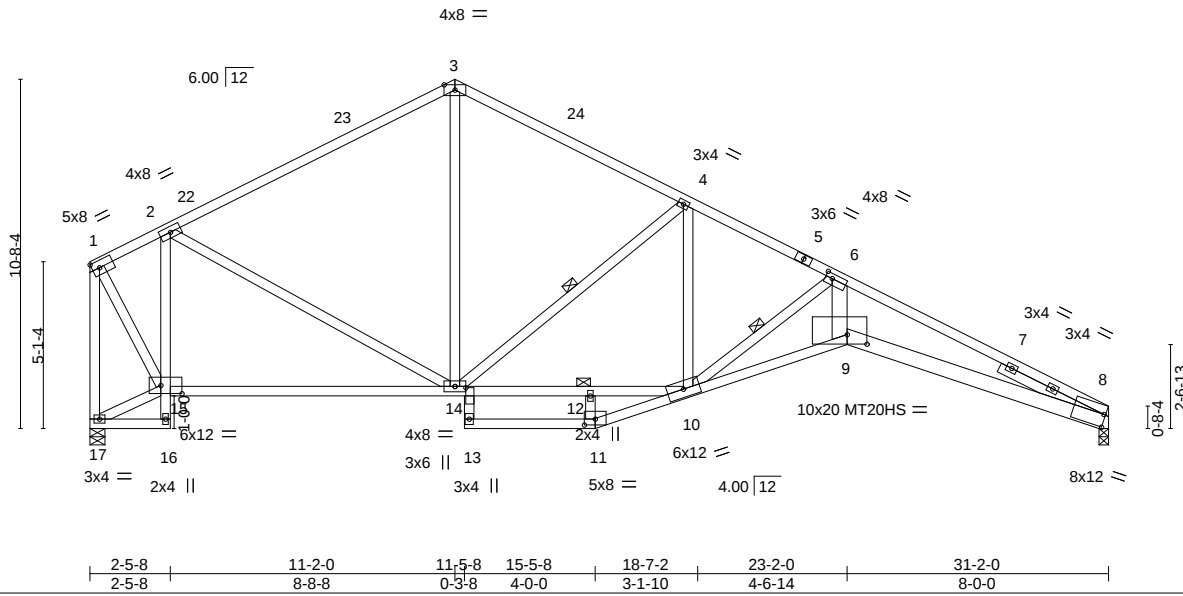


Plate Offsets (X,Y)-- [6:0-2-8,0-1-12], [8:0-0-11,0-4-11], [9:0-7-4,0-3-8], [11:0-4-0,0-2-3], [14:0-0-8,0-4-0], [15:0-7-12,0-3-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.83	Vert(LL)	-0.36	9-10	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.67	9-10	>556	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.52	Horz(CT)	0.37	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 162 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-8: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
9-11: 2x4 SPF 1650F 1.5E, 8-9: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
6-9: 2x6 SPF No.2
SLIDER Right 2x4 SPF No.2 3-6-0

REACTIONS. (size) 8=0-3-8, 17=0-5-8
Max Horz 17=-268(LC 10)
Max Uplift 8=-248(LC 13), 17=-193(LC 12)
Max Grav 8=1389(LC 1), 17=1389(LC 1)

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

TOP CHORD 1-2=-683/168, 2-3=-1375/303, 3-4=-1369/330, 4-6=-2078/396, 6-8=-5006/781,
1-17=-1368/178
BOT CHORD 2-15=-1001/321, 14-15=-77/723, 12-14=-144/1817, 10-12=-148/1813, 9-10=-573/4265,
8-9=-620/4596
WEBS 6-9=-343/2782, 15-17=-113/304, 1-15=-205/1290, 3-14=-88/600, 4-14=-957/321,
2-14=-103/498, 6-10=-2779/503, 4-10=-81/486

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) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 11-2-0, Exterior(2R) 11-2-0 to 14-3-6, Interior(1) 14-3-6 to 31-0-4 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
- 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) 8 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) 8=248, 17=193.
- This truss 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.



December 21, 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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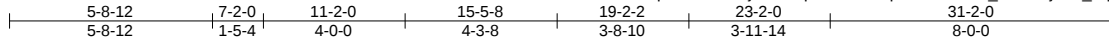
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A6	Roof Special	1	1	149347618

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:07 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-EdphfUr2VEafC_OuHJ3jzRk_eq_casDuj3NS1Cy76ds



4x6 =

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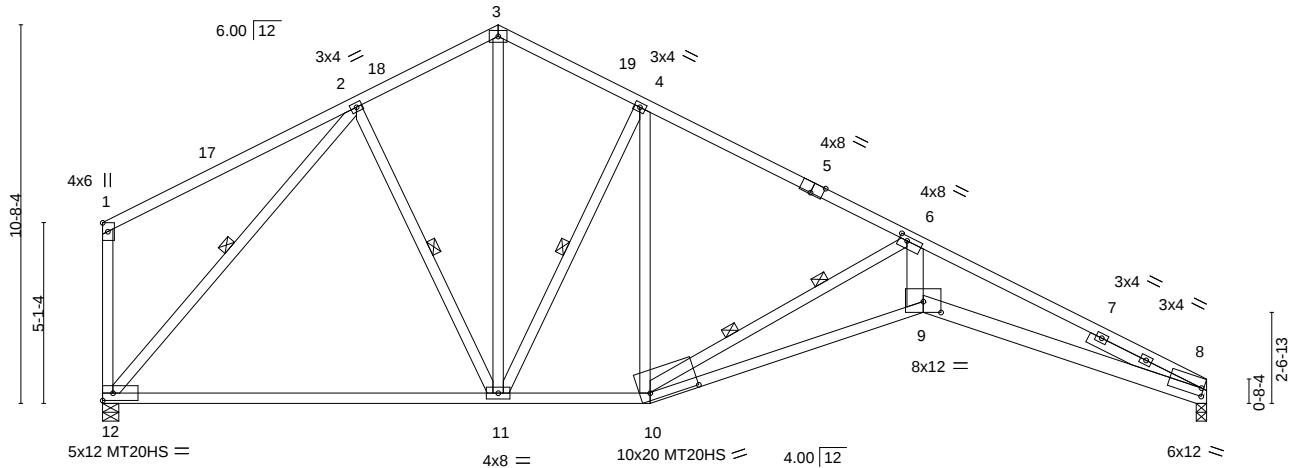


Plate Offsets (X,Y)-- [5:0-4-0,Edge], [6:0-2-12,0-1-8], [8:0-0-12,0-2-12], [9:0-6-0,0-3-11], [10:1-4-8,0-2-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.86	Vert(LL)	-0.44	9-10	>846	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.91	Vert(CT)	-0.87	9-10	>428	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.91	Horz(CT)	0.42	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 158 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-8: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
9-10: 2x4 SPF 1650F 1.5E, 8-9: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
6-9: 2x6 SPF No.2
SLIDER Right 2x4 SPF No.2 3-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-11, 2-11, 2-12
2 Rows at 1/3 pts 6-10

REACTIONS.

(size) 8=0-3-8, 12=0-5-8
Max Horz 12=-268(LC 10)
Max Uplift 8=-248(LC 13), 12=-193(LC 12)
Max Grav 8=1389(LC 1), 12=1389(LC 1)

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

TOP CHORD 2-3=-1170/330, 3-4=-1180/343, 4-6=-1587/343, 6-8=-5128/801, 1-12=-260/133
BOT CHORD 11-12=-71/915, 10-11=-88/1341, 9-10=-603/4390, 8-9=-642/4720
WEBS 4-10=-98/421, 6-9=-328/2912, 3-11=-226/822, 4-11=-840/324, 2-11=-50/275,
2-12=-1333/264, 6-10=-3270/618

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) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 11-2-0, Exterior(2R) 11-2-0 to 14-3-6, Interior(1) 14-3-6 to 31-0-4 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
- 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) 8 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) 8=248, 12=193.
- This truss 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.



December 21, 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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A7	Roof Special	5	1	l49347619

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:08 2021 Page 1
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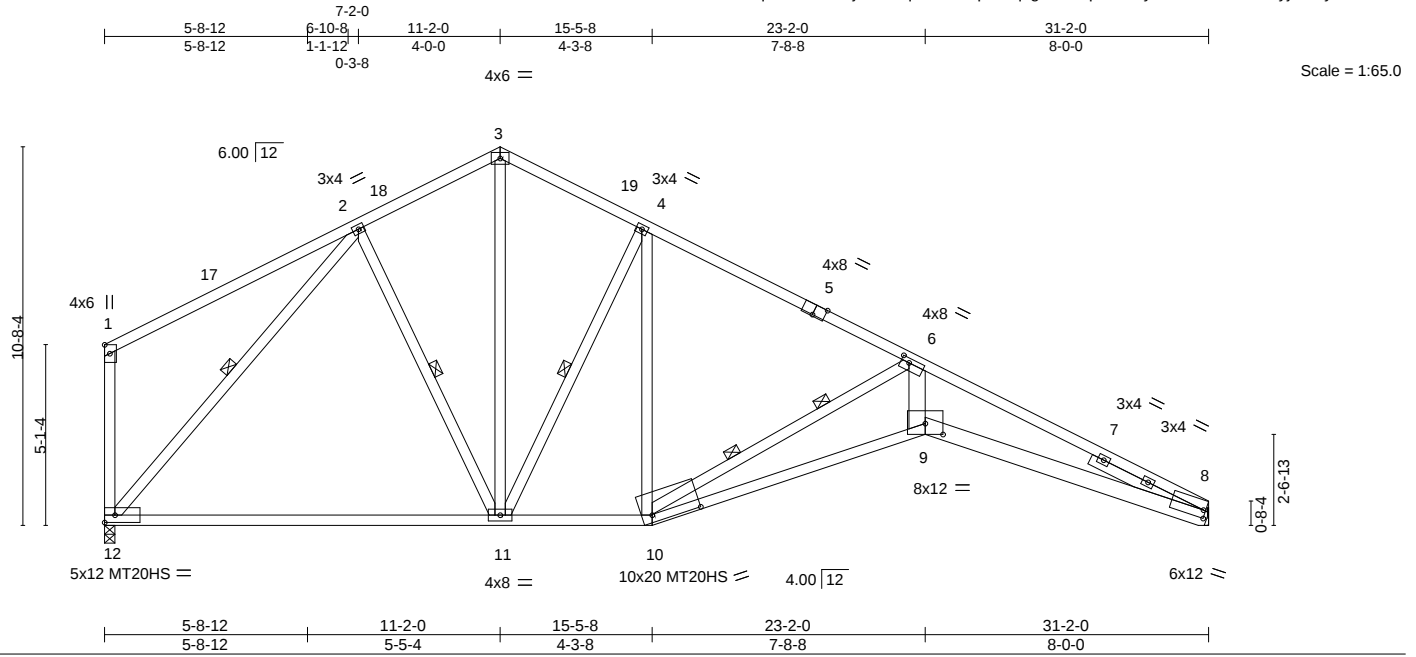


Plate Offsets (X,Y)-- [5:0-4-0,Edge], [6:0-2-12,0-1-8], [8:0-0-12,0-2-12], [9:0-6-0,0-3-11], [10:1-4-8,0-2-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.84	Vert(LL) -0.44	9-10	>838	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.91	Vert(CT) -0.87	9-10	>425	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.92	Horz(CT) 0.42	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 158 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-8: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2 *Except*
9-10: 2x4 SPF 1650F 1.5E, 8-9: 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
6-9: 2x6 SPF No.2
SLIDER Right 2x4 SPF No.2 3-6-0

REACTIONS. (size) 8=Mechanical, 12=0-3-8
Max Horz 12=-268(LC 10)
Max Uplift 8=-249(LC 13), 12=-193(LC 12)
Max Grav 8=1393(LC 1), 12=1393(LC 1)

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

TOP CHORD 2-3=-1174/331, 3-4=-1185/343, 4-6=-1594/345, 6-8=-5185/809, 1-12=-260/133
BOT CHORD 11-12=-71/918, 10-11=-88/1347, 9-10=-608/4439, 8-9=-649/4777
WEBS 3-11=-227/825, 4-11=-845/325, 6-10=-3316/624, 6-9=-334/2955, 2-12=-1338/265,
4-10=-100/428, 2-11=-49/277

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) 0-1-12 to 3-3-2, Interior(1) 3-3-2 to 11-2-0, Exterior(2R) 11-2-0 to 14-3-6, Interior(1) 14-3-6 to 31-1-4 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
- 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=249, 12=193.
- This truss 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.



December 21, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A9	Common	1	1	149347621

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:10 2021 Page 1

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4x8 =

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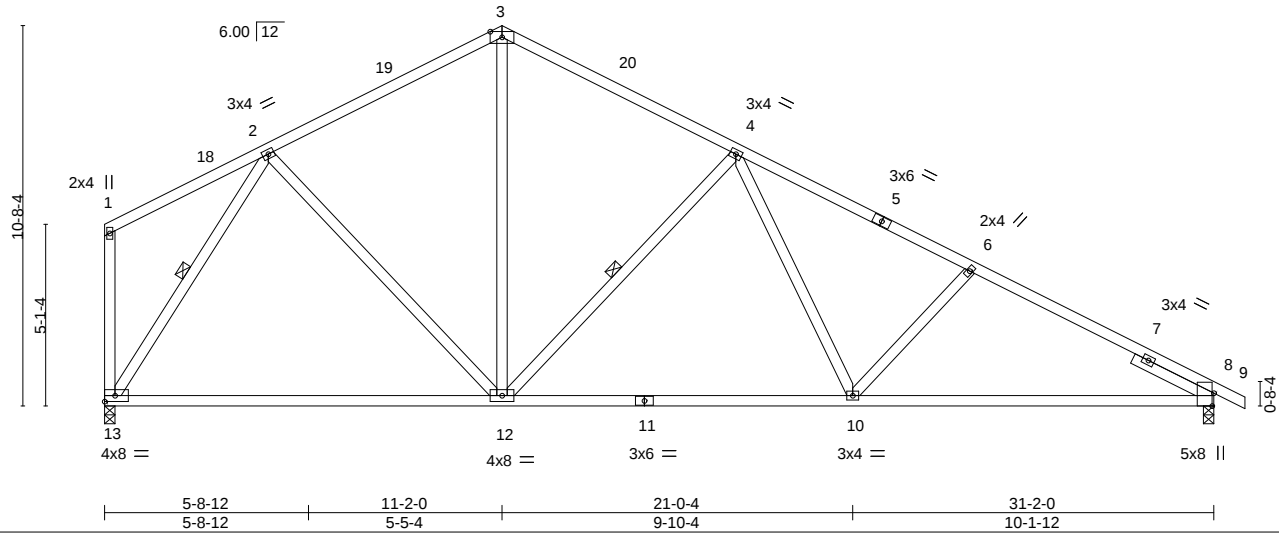


Plate Offsets (X,Y)-- [8:0-4-5,Edge]

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 0.51	Vert(LL)	-0.34 12-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.90	Vert(CT)	-0.70 12-13	>535	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.46	Horz(CT)	0.07 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 141 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-12, 2-13

REACTIONS.

(size) 8=0-3-8, 13=0-3-8
Max Horz 13=-277(LC 10)
Max Uplift 8=-270(LC 13), 13=-193(LC 12)
Max Grav 8=1458(LC 1), 13=1395(LC 1)

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

TOP CHORD 2-3=-1215/307, 3-4=-1220/324, 4-6=-2041/415, 6-8=-2288/439
BOT CHORD 12-13=-70/761, 10-12=-110/1528, 8-10=-287/1986
WEBS 2-12=-26/408, 3-12=-125/554, 4-12=-806/323, 4-10=-98/511, 6-10=-377/226,
2-13=-1367/305

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 32-0-8 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) 8=270, 13=193.
- This truss 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.



December 21, 2021

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



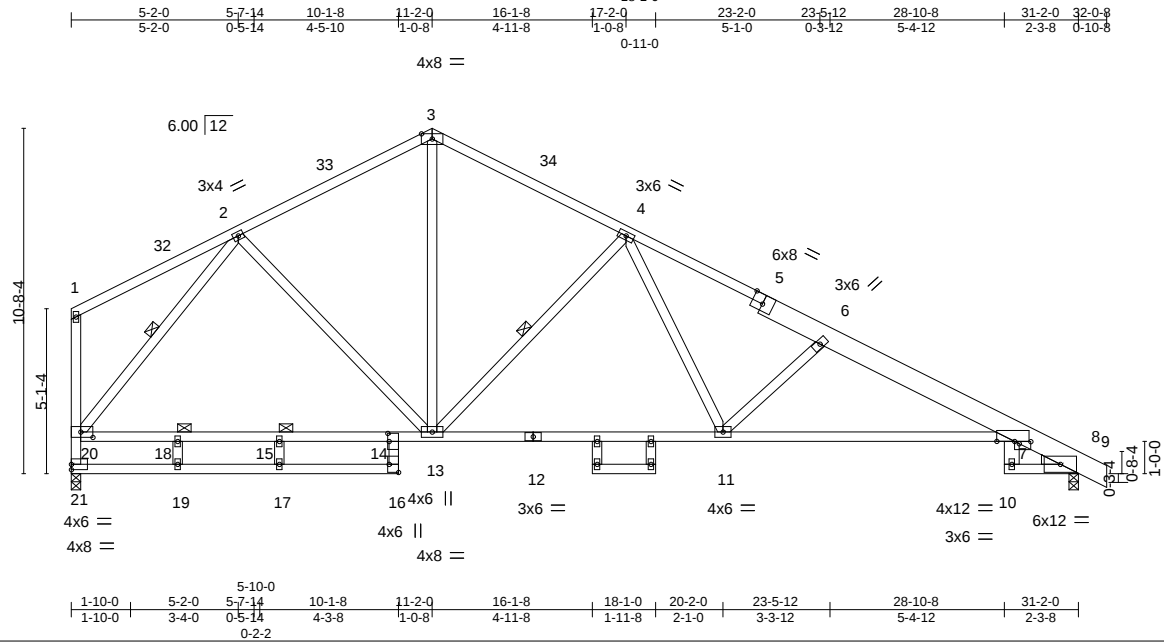
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A10	Roof Special	2	1	l49347622

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:27:57 2021 Page 1

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Scale = 1:71.3

Plate Offsets (X,Y)-- [5:0-4-0,Edge], [7:0-4-5,0-0-13], [7:0-6-10,0-0-1], [14:0-3-0,0-0-8], [16:Edge,0-3-8], [20:0-4-8,0-2-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.57	Vert(LL) -0.23	11-28	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.86	Vert(CT) -0.48	11-28	>780	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.46	Horz(CT) 0.19	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 176 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-9: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
7-10: 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-13, 2-20
JOINTS 1 Brace at Jt(s): 18, 15

REACTIONS.

(size) 21=0-3-8, 8=0-3-8
Max Horz 21=-279(LC 10)
Max Uplift 21=-193(LC 12), 8=-268(LC 13)
Max Grav 21=1396(LC 1), 8=1464(LC 1)

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

TOP CHORD 2-3=-1311/308, 3-4=-1307/323, 4-6=-2453/454, 6-7=-2892/519, 7-8=-568/144,
20-21=-1331/260
BOT CHORD 19-21=-16/290, 17-19=-16/290, 16-17=-16/290, 18-20=-191/761, 15-18=-191/761,
14-15=-191/761, 13-14=-87/914, 11-13=-102/1696, 7-11=-364/2682
WEBS 3-13=-126/668, 2-13=-5/354, 4-13=-895/316, 4-11=-155/870, 6-11=-850/310,
2-20=-1444/276

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 32-0-8 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 21=193, 8=268.
- This truss 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.



December 21, 2021

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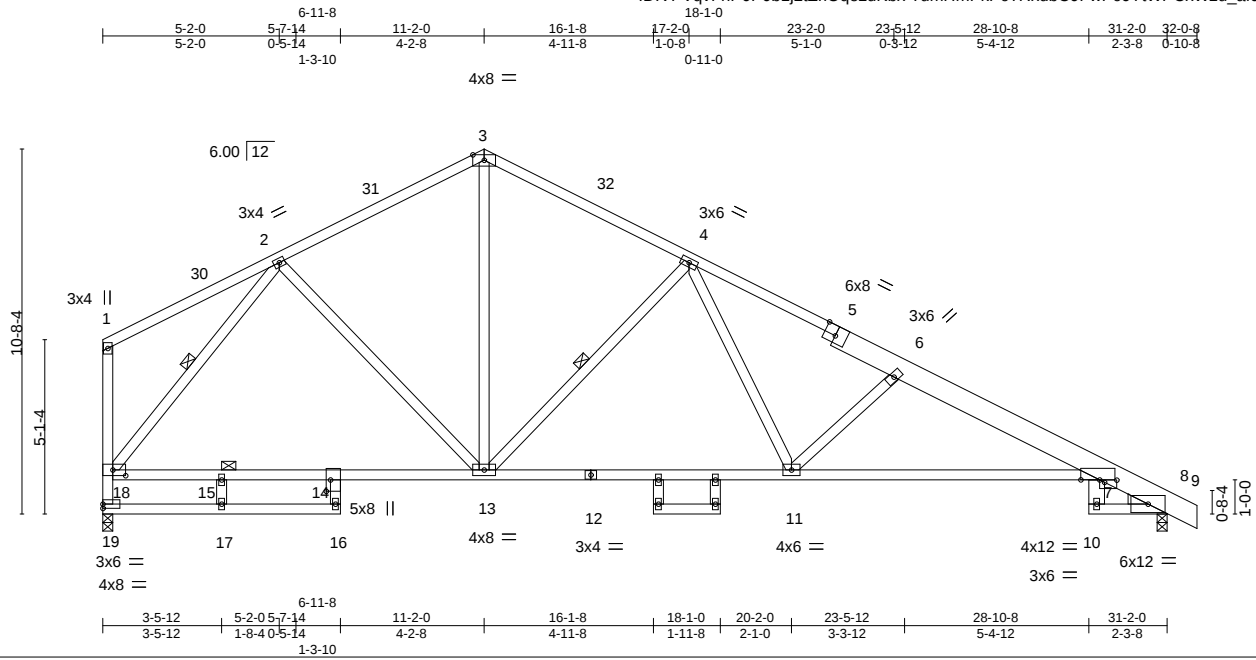


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A11	Roof Special	2	1	l49347623

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:27:58 2021 Page 1
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Scale = 1:67.5

Plate Offsets (X,Y)-- [5:0-4-0,Edge], [7:0-4-5,0-0-13], [7:0-6-10,0-0-1], [14:0-4-0,0-1-8], [18:0-4-8,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.23 11-26	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.49 11-26	>765	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.46	Horz(CT)	0.21 8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 172 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-9: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SPF No.2 *Except*
7-10: 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-13, 2-18
JOINTS 1 Brace at Jt(s): 15

REACTIONS.

(size) 19=0-3-8, 8=0-3-8
Max Horz 19=-279(LC 10)
Max Uplift 19=-193(LC 12), 8=-268(LC 13)
Max Grav 19=1396(LC 1), 8=1464(LC 1)

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

TOP CHORD 2-3=-1318/306, 3-4=-1314/321, 4-6=-2448/456, 6-7=-2887/521, 7-8=-568/144,
18-19=-1331/260
BOT CHORD 17-19=-43/272, 16-17=-43/272, 15-18=-185/806, 14-15=-185/806, 13-14=-84/922,
11-13=-101/1698, 7-11=-365/2678
WEBS 3-13=-121/674, 2-13=-4/352, 4-13=-887/322, 4-11=-163/857, 6-11=-849/307,
2-18=-1435/273

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 32-0-8 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 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=193, 8=268.
- This truss 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.



December 21, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A12	Roof Special	1	1	149347624

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:27:59 2021 Page 1
ID:VPVqvFnP0P0b1j2ZrIQeqzdKbx-T5Kf_IL1NmZoFlnLpdwrelPiXcHHikVjtpR1mgy76e_

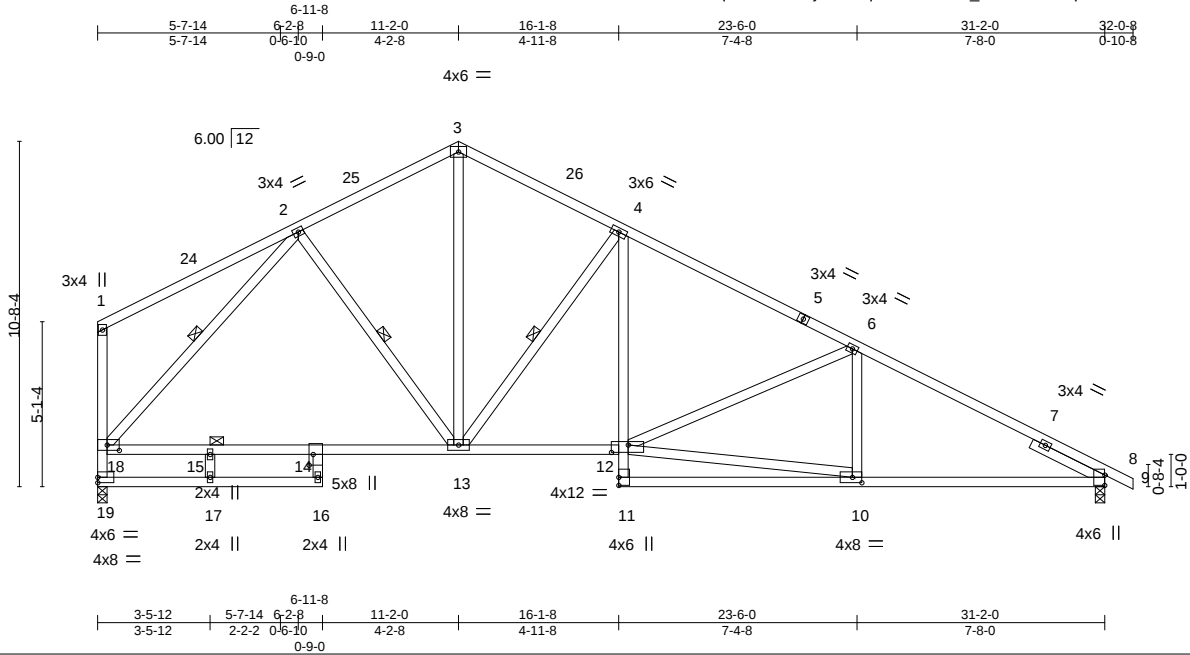


Plate Offsets (X,Y)-- [8:0-3-13,0-0-1], [10:0-3-8,0-2-0], [12:0-6-4,0-2-12], [14:0-4-0,0-1-8], [18:0-4-8,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.48	Vert(LL) -0.21	14	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.81	Vert(CT) -0.44	14	>841	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.57	Horz(CT) 0.09	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 163 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x4 SPF No.2 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-13, 2-13, 2-18
JOINTS 1 Brace at Jt(s): 15

REACTIONS.

(size) 19=0-3-8, 8=0-3-8
Max Horz 19=-277(LC 10)
Max Uplift 19=-193(LC 12), 8=-270(LC 13)
Max Grav 19=1395(LC 1), 8=1458(LC 1)

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

TOP CHORD 2-3=-1299/316, 3-4=-1304/329, 4-6=-1914/362, 6-8=-2294/419, 18-19=-1330/261
BOT CHORD 17-19=-46/269, 16-17=-46/269, 15-18=-188/884, 14-15=-188/884, 13-14=-83/991,
12-13=-87/1610, 4-12=-100/506, 8-10=-262/1981
WEBS 3-13=-163/786, 4-13=-881/320, 10-12=-289/1821, 6-12=-448/229, 2-13=-15/293,
2-18=-1426/253

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) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 11-2-0, Exterior(2R) 11-2-0 to 14-2-0, Interior(1) 14-2-0 to 32-0-8 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) 19=193, 8=270.
- This truss 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.



December 21, 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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	A13	Common Supported Gable	1	1	l49347625

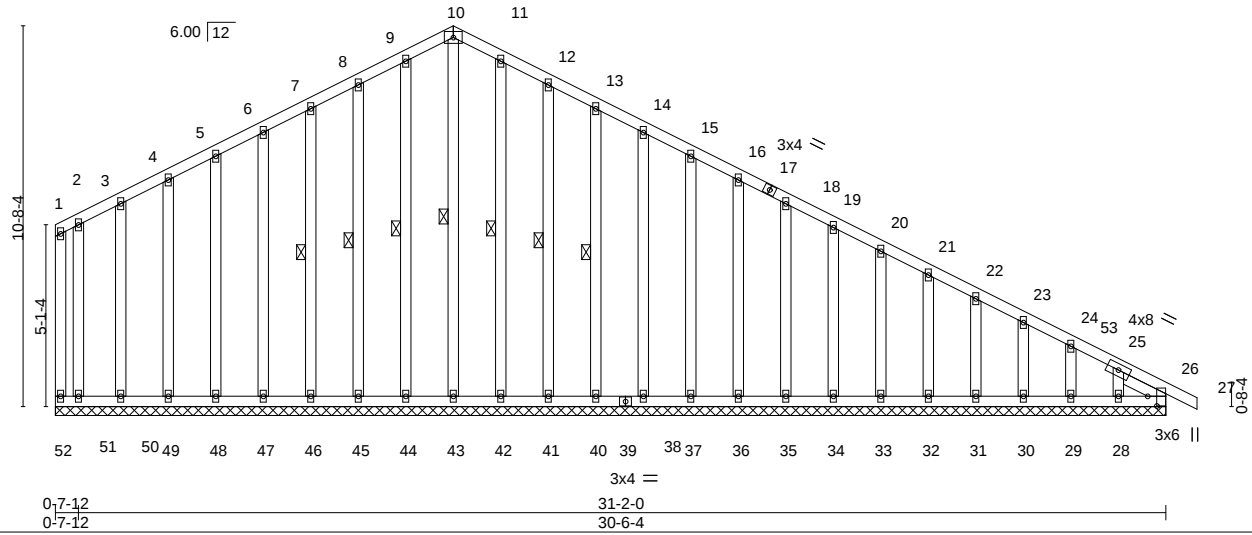
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:01 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-PTSPPRmHvOqWU3wkw2yJkAU8ZQ80ALB0L7w8qZy76dy

0-7-12 11-2-0 31-2-0 32-0-8
0-7-12 10-6-4 20-0-0 0-10-8

4x6 =

Scale = 1:64.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.00	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.00				
BCLL	0.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.01				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							
								Weight: 242 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
SLIDER Right 2x4 SPF No.2 1-4-5

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 10-43, 9-44, 8-45, 7-46, 11-42, 12-41, 13-40

REACTIONS.

All bearings 31-2-0.
(lb) - Max Horz 52=-275(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 52, 43, 44, 45, 46, 47, 48, 49, 50, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 26, 51 except 28=-103(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 52, 43, 44, 45, 46, 47, 48, 49, 50, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26, 51

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=-140/254, 7-8=-152/288, 8-9=-166/327, 9-10=-169/344, 10-11=-169/344, 11-12=-166/327, 12-13=-152/288, 13-14=-140/254, 25-26=-288/158

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 3-2-0, Exterior(2N) 3-2-0 to 11-2-0, Corner(3R) 11-2-0 to 14-2-0, Exterior(2N) 14-2-0 to 32-0-8 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) 52, 43, 44, 45, 46, 47, 48, 49, 50, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 26, 51 except (jt=lb) 28=103.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 21, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	B1	Common	4	1	I49347626

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

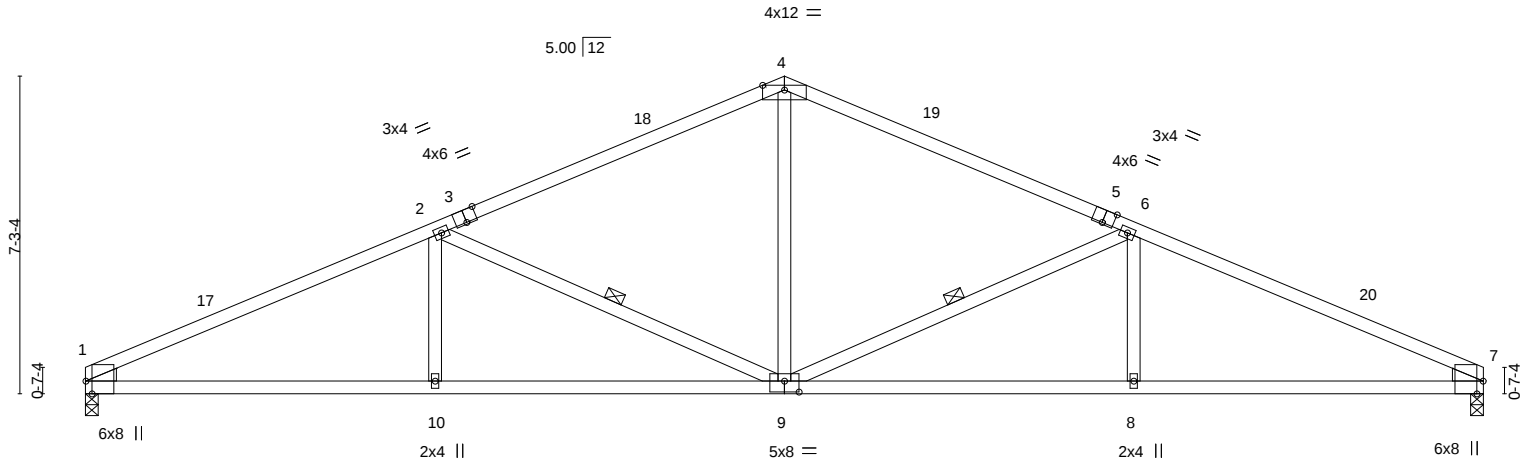
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:11 2021 Page 1

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Job Reference (optional)

8-0-1	16-0-0	23-11-15	32-0-0
8-0-1	7-11-15	7-11-15	8-0-1

Scale = 1:52.7



8-0-1	16-0-0	23-11-15	32-0-0
8-0-1	7-11-15	7-11-15	8-0-1

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	0.70	Vert(LL)	-0.18 9-10	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.38 9-10	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.12 7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 112 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.
WEBS 1 Row at midpt 6-9, 2-9

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=118(LC 16)
Max Uplift 1=-243(LC 12), 7=-243(LC 13)
Max Grav 1=1440(LC 1), 7=1440(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2785/459, 2-4=-1965/378, 4-6=-1965/378, 6-7=-2785/459
BOT CHORD 1-10=-457/2480, 9-10=-457/2480, 8-9=-340/2480, 7-8=-340/2480
WEBS 4-9=-87/879, 6-9=-901/309, 6-8=0/293, 2-9=-901/308, 2-10=0/293

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 3-0-0, Interior(1) 3-0-0 to 16-0-0, Exterior(2R) 16-0-0 to 19-0-0, Interior(1) 19-0-0 to 32-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 1=243, 7=243.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



December 21, 2021

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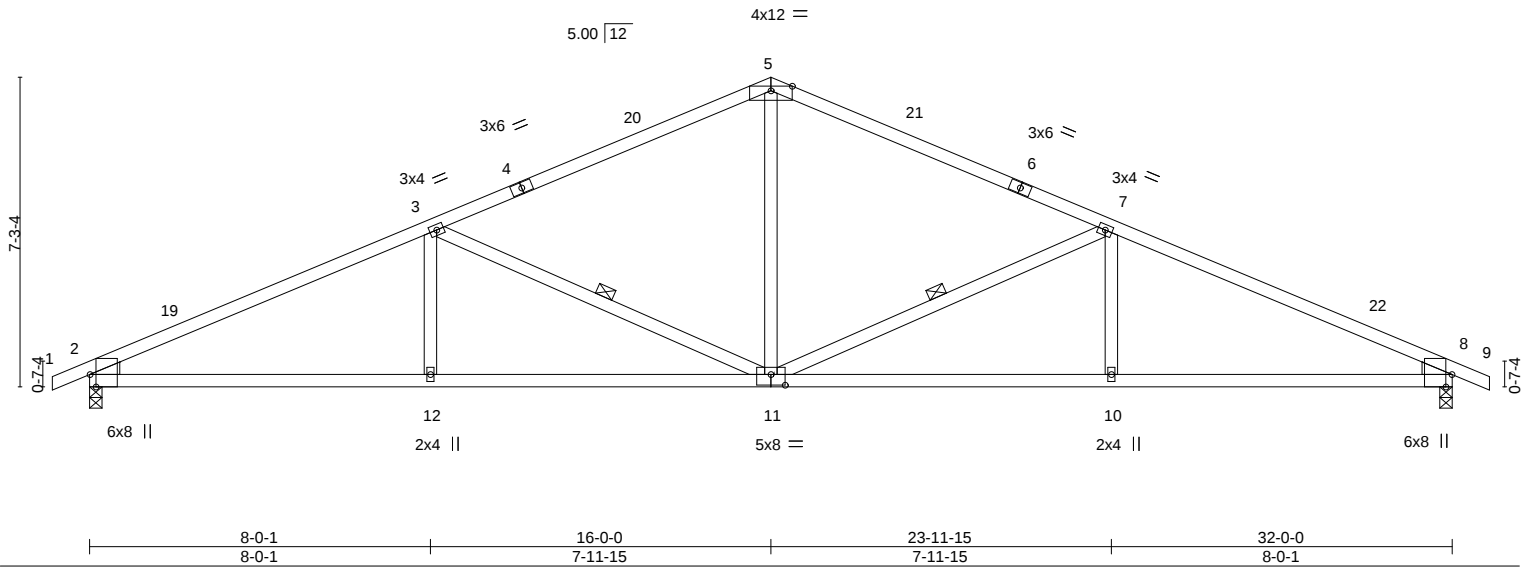
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	B2	Common	6	1	i49347627

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:12 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-abdaiCvBjMcyllGr4sfugUStfrjtFGWetK5DiQy76dn
23-11-15 32-0-0 32-10-8
7-11-15 8-0-1 0-10-8

Scale = 1:54.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.18 11-12 >999 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.38 11-12 >999 180				
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.12 8 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							
								Weight: 115 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.
WEBS 1 Row at midpt 7-11, 3-11

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=124(LC 16)
Max Uplift 2=-263(LC 12), 8=-263(LC 13)
Max Grav 2=1501(LC 1), 8=1501(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2776/457, 3-5=-1961/375, 5-7=-1961/375, 7-8=-2776/457
BOT CHORD 2-12=-449/2470, 11-12=-449/2470, 10-11=-325/2470, 8-10=-325/2470
WEBS 5-11=-84/875, 7-11=-895/307, 7-10=0/292, 3-11=-895/307, 3-12=0/292

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 16-0-0, Exterior(2R) 16-0-0 to 19-0-0, Interior(1) 19-0-0 to 32-10-8 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=263, 8=263.
- This truss 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.



December 21, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	B3	GABLE	1	1	i49347628

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:13 2021 Page 1

ID:VPVqvFnP0P0b1j2tZr1OqezdKbx-3nBywYwp44Kpwr2dZA7Di_43F6T_jVn5_rmFsy76dm
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7-11-15 8-0-1 0-10-8

Scale = 1:54.2

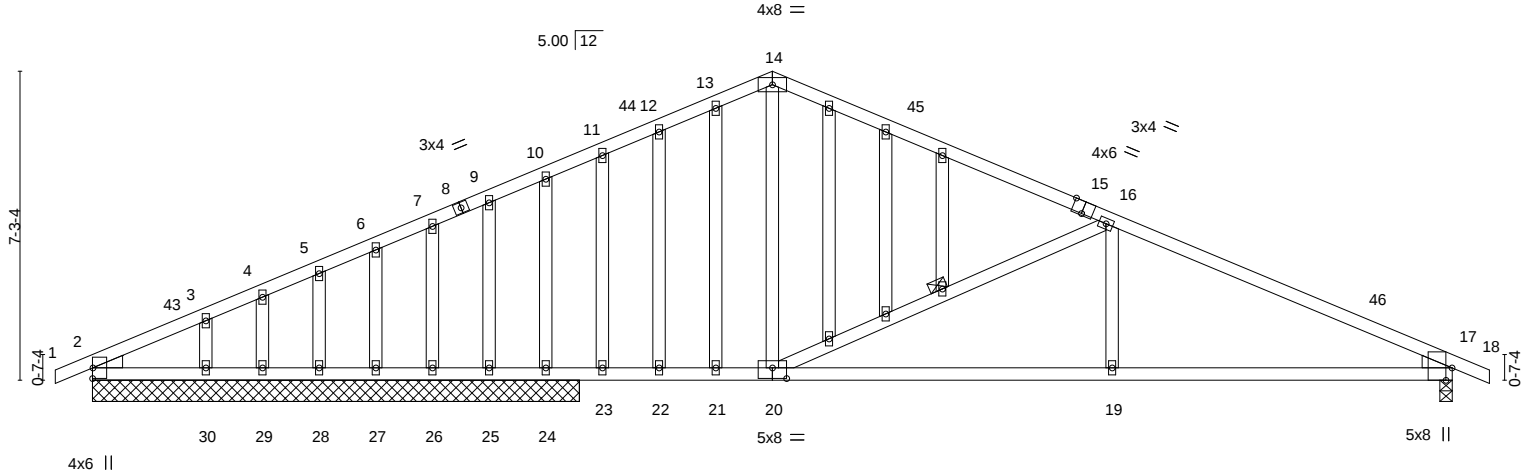


Plate Offsets (X,Y)--	[15:0-3-0,Edge], [17:0-3-8,Edge], [20:0-4-0,0-3-0]
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LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.60	Vert(LL) -0.14	19-20	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.62	Vert(CT) -0.32	19-20	>793	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.34	Horz(CT) 0.07	17	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 158 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
Left: 2x4 SPF No.2, Right: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 16-20

REACTIONS. All bearings 11-5-8 except (jt=length) 17=0-3-8.
(lb) - Max Horz 2=124(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 26, 27, 28, 29 except 17=247(LC 13), 24=159(LC 12), 25=211(LC 1), 30=120(LC 26)
Max Grav All reactions 250 lb or less at joint(s) 25, 26, 27, 28, 29, 30 except 2=803(LC 1), 17=1257(LC 1), 24=588(LC 1), 2=803(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1264/174, 3-4=-1221/187, 4-5=-1235/202, 5-6=-1233/216, 6-7=-1233/230, 7-9=-1240/244, 9-10=-1189/255, 10-11=-1265/273, 11-12=-1248/285, 12-13=-1229/303, 13-14=-1176/284, 14-16=-1332/268, 16-17=-2217/420
BOT CHORD 2-30=-34/1122, 29-30=-34/1122, 28-29=-34/1122, 27-28=-34/1122, 26-27=-34/1122, 25-26=-34/1122, 24-25=-34/1122, 23-24=-34/1122, 22-23=-34/1122, 21-22=-34/1122, 20-21=-34/1122, 19-20=-291/1961, 17-19=-291/1961
WEBS 14-20=-28/531, 16-20=-940/311, 16-19=0/319, 10-24=-291/100

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 16-0-0, Exterior(2R) 16-0-0 to 19-0-0, Interior(1) 19-0-0 to 32-10-8 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) 2, 26, 27, 28, 29, 2 except (jt=lb) 17=247, 24=159, 25=211, 30=120.
- This truss 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.



December 21, 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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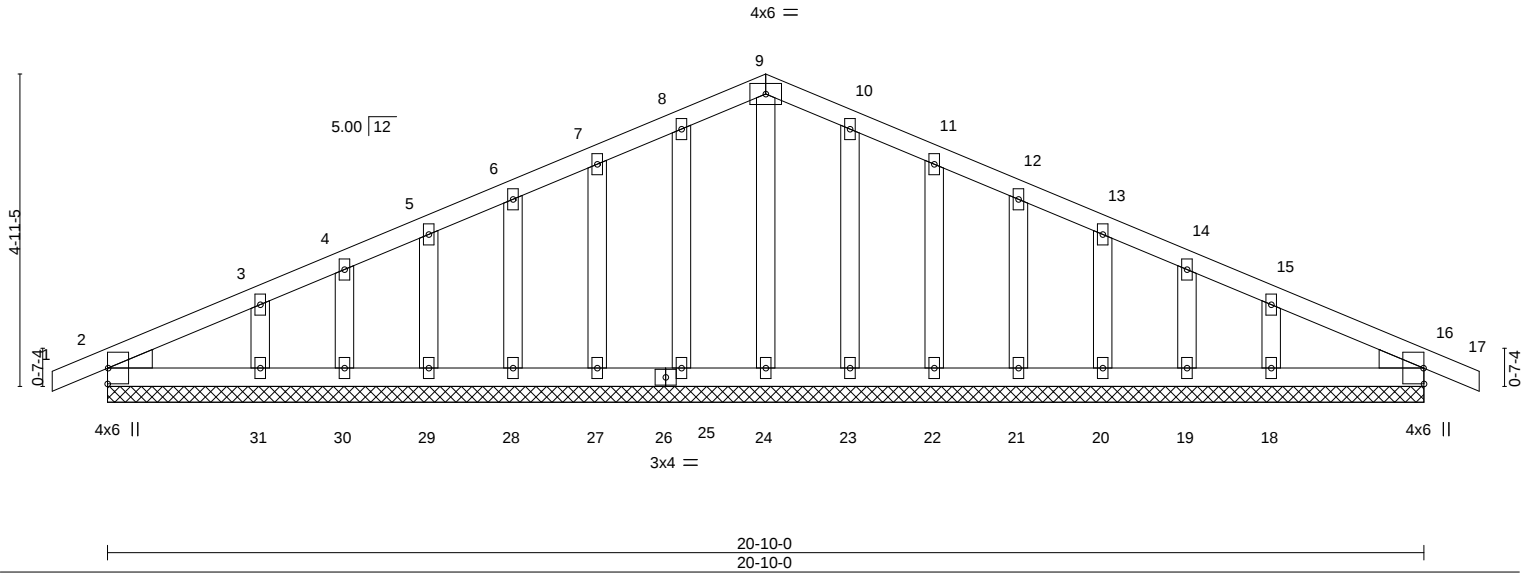
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	B4	Common Supported Gable	1	1	l49347629

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:15 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-?AliLDx3chaX9D?Ql_Cbl74YE3x9Sip4ZIKtJly76dk
20-10-0 21-8-8
10-5-0 0-10-8

Scale = 1:36.5



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)	0.00	16	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	16	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.00	16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 92 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 20-10-0.
(lb) - Max Horz 2=-83(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 24, 25, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16

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 2-5-0, Exterior(2N) 2-5-0 to 10-5-0, Corner(3R) 10-5-0 to 13-5-0, Exterior(2N) 13-5-0 to 21-8-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 25, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, 18, 16.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 16.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 21, 2021

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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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	C1	Half Hip Girder	1	2	149347630

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:16 2021 Page 1

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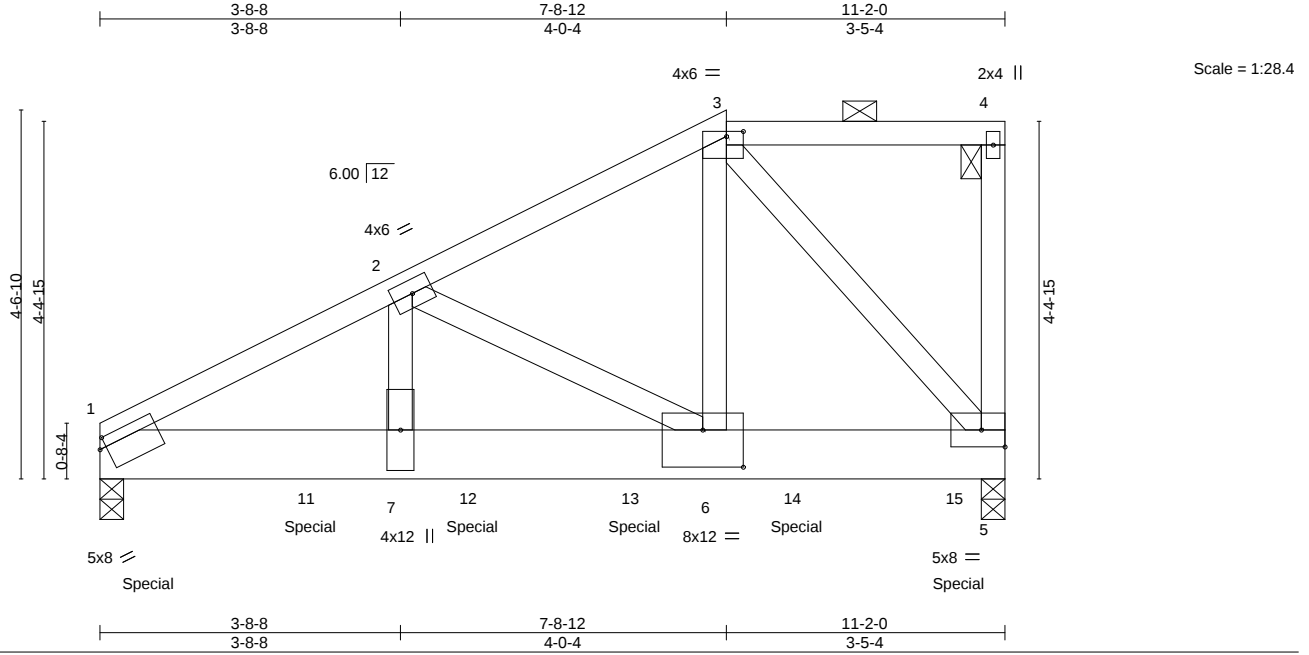


Plate Offsets (X,Y)-- [1:0-1-0,0-1-8], [3:0-2-8,0-0-12], [6:0-6-0,0-5-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.20	Vert(LL) -0.04	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.25	Vert(CT) -0.08	6-7	>999	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.51	Horz(CT) 0.01	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 137 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-2-5 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
Max Horz 1=161(LC 28)
Max Uplift 1=-862(LC 8), 5=-890(LC 5)
Max Grav 1=4572(LC 1), 5=4685(LC 1)

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

TOP CHORD 1-2=-5657/1078, 2-3=-3094/599
BOT CHORD 1-7=-991/5012, 6-7=-991/5012, 5-6=-523/2583
WEBS 3-5=-4028/782, 3-6=-789/4173, 2-7=-389/2193, 2-6=-2583/572

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 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; 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) 1=862, 5=890.
- This truss 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1380 lb down and 266 lb up at 0-7-4, 1376 lb down and 270 lb up at 2-7-4, 1376 lb down and 287 lb up at 4-7-4, 1376 lb down and 270 lb up at 6-7-4, and 1376 lb down and 270 lb up at 8-7-4, and 1382 lb down and 264 lb up at 10-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



December 21, 2021

Continued on page 2

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	C1	Half Hip Girder	1	2	Job Reference (optional)

I49347630

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:16 2021 Page 2
ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-TMs4YZyhN?jOnMadJikqqKcgYTEzB0aDny3QrBy76dj

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, 5-8=-20
 - Concentrated Loads (lb)
 - Vert: 10=-1380(B) 11=-1376(B) 12=-1376(B) 13=-1376(B) 14=-1376(B) 15=-1382(B)

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

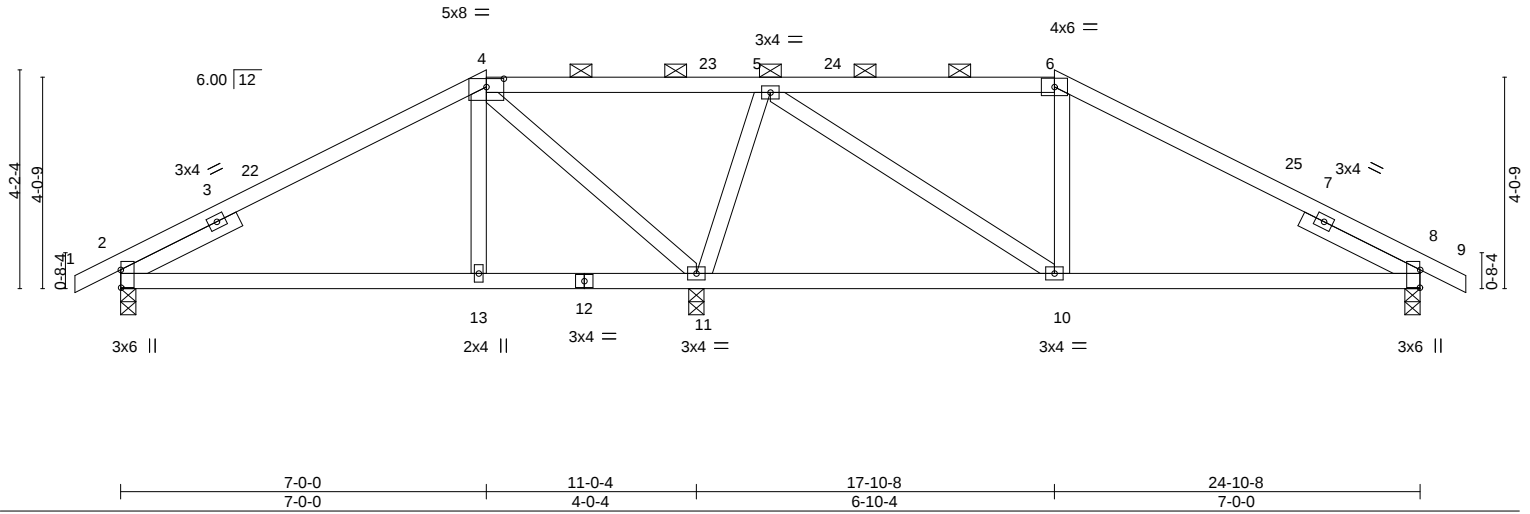
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	C2	Hip	1	1	l49347631

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:17 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-xYQTMvzJ8lrFPW9psPF4NY9ousYEwXdN0cp_Ody76di

0-10-8 7-0-0 12-5-4 17-10-8 24-10-8 25-9-0
0-10-8 7-0-0 5-5-4 5-5-4 7-0-0 0-10-8

Scale = 1:44.1



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.42	Vert(LL)	-0.05 13-16 >999 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.11 13-16 >999 180				
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.02 2 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 93 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-6-0, Right 2x4 SPF No.2 2-6-0

REACTIONS.

(size) 2=0-3-8, 11=0-3-8, 8=0-3-8
Max Horz 2=67(LC 12)
Max Uplift 2=-182(LC 12), 11=-162(LC 9), 8=-198(LC 13)
Max Grav 2=638(LC 1), 11=984(LC 1), 8=739(LC 1)

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

TOP CHORD 2-4=-639/244, 5-6=-739/294, 6-8=-853/271
BOT CHORD 2-13=-179/547, 11-13=-180/541, 10-11=-136/408, 8-10=-137/736
WEBS 4-11=-486/82, 5-11=-701/205, 5-10=-47/474

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 7-0-0, Exterior(2R) 7-0-0 to 11-2-15, Interior(1) 11-2-15 to 17-10-8, Exterior(2R) 17-10-8 to 22-1-7, Interior(1) 22-1-7 to 25-9-0 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
- 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=182, 11=162, 8=198.
- This truss 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 21, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	C3	Roof Special Girder	1	1	149347632

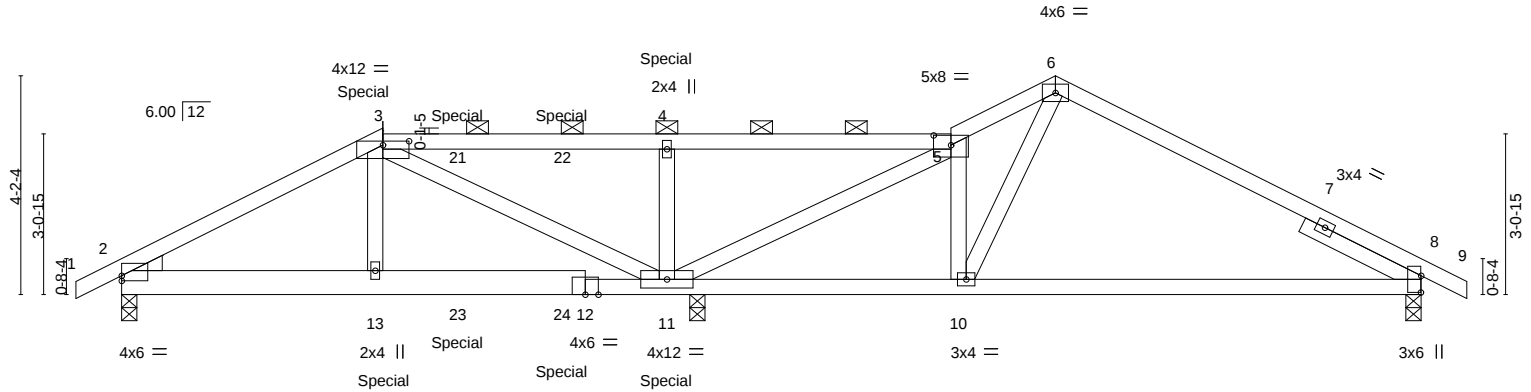
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:18 2021 Page 1

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0-10-8	5-0-0	7-11-4	8-0-2	10-5-4	11-0-4	15-10-8	17-10-8	21-2-12	24-10-8	25-9-0
0-10-8	5-0-0	2-11-4	0-0-14	2-5-2	0-7-0	4-10-4	2-0-0	3-4-4	3-7-12	0-10-8

Scale = 1:44.1



	5-0-0	8-0-2	11-0-4	15-10-8	17-10-8	20-2-12	24-10-8
	5-0-0	3-0-2	3-0-2	4-10-4	2-0-0	2-4-4	4-7-12
Plate Offsets (X,Y)--	[2:0-0-0,0-1-3], [3:0-6-0,0-0-15], [5:0-4-0,0-2-4], [8:0-3-13,0-0-1]						

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.69	Vert(LL) -0.12	10-19	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.54	Vert(CT) -0.26	10-19	>657	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.65	Horz(CT) -0.02	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 97 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 5-5-11 oc purlins, except
BOT CHORD 2x4 SPF No.2 *Except*	2-0-0 oc purlins (6-0-0 max.): 3-5.
2-12: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	
WEDGE	
Left: 2x4 SP No.3	
SLIDER Right 2x4 SPF No.2 2-6-0	

REACTIONS.	(size) 2=0-3-8, 8=0-3-8, 11=0-3-8
	Max Horz 2=69(LC 8)
	Max Uplift 2=-194(LC 8), 8=-161(LC 30), 11=-463(LC 8)
	Max Grav 2=689(LC 1), 8=681(LC 1), 11=1611(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-942/300, 5-6=-823/278, 6-8=-655/197
BOT CHORD	2-13=-241/776, 11-13=-240/762, 10-11=-114/731, 8-10=-66/575
WEBS	3-13=-24/380, 5-11=-868/115, 3-11=-973/323, 4-11=-623/300, 6-10=-107/370

- 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; 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=194, 8=161, 11=463.
 - This truss 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.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 132 lb down and 90 lb up at 5-0-0, 132 lb down and 90 lb up at 6-5-4, and 132 lb down and 90 lb up at 8-5-4, and 132 lb down and 90 lb up at 10-5-4 on top chord, and 157 lb down and 86 lb up at 5-0-0, 48 lb down and 20 lb up at 6-5-4, and 48 lb down and 20 lb up at 8-5-4, and 48 lb down and 20 lb up at 10-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 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



December 21, 2021

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	C3	Roof Special Girder	1	1	I49347632

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:18 2021 Page 2
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LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-3=-70, 3-5=-70, 5-6=-70, 6-9=-70, 14-17=-20
Concentrated Loads (lb)
Vert: 3=-82(F) 13=-157(F) 11=-45(F) 4=-82(F) 21=-82(F) 22=-82(F) 23=-45(F) 24=-45(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	C4	Hip Girder	1	1	l49347633

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:19 2021 Page 1
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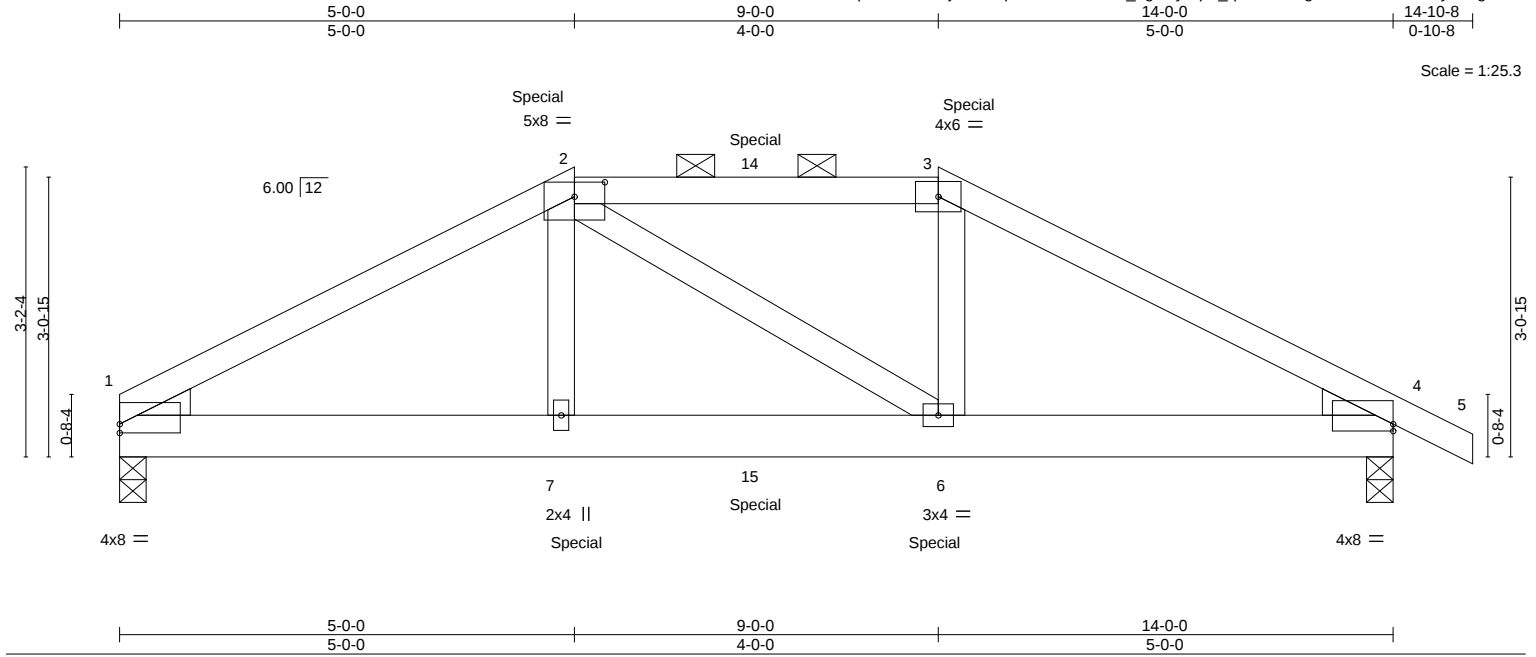


Plate Offsets (X,Y)-- [1:0-0-0,0-1-3], [2:0-4-0,0-1-15], [4:0-0-0,0-0-15]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.53	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.61	Vert(CT)	-0.09	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.10	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MS							Weight: 56 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-7 oc purlins, except
2-0-0 oc purlins (4-0-12 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 4=0-3-8
Max Horz 1=-58(LC 34)
Max Uplift 1=-336(LC 8), 4=-357(LC 9)
Max Grav 1=1111(LC 1), 4=1176(LC 1)

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

TOP CHORD 1-2=-1887/603, 2-3=-1591/567, 3-4=-1879/600
BOT CHORD 1-7=-509/1619, 6-7=-505/1598, 4-6=-465/1611
WEBS 2-7=-93/403, 3-6=-97/408

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; 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) 1=336, 4=357.
- This truss 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 106 lb down and 90 lb up at 5-0-0, and 82 lb down and 82 lb up at 7-0-0, and 106 lb down and 90 lb up at 9-0-0 on top chord, and 338 lb down and 162 lb up at 5-0-0, and 48 lb down and 20 lb up at 7-0-0, and 338 lb down and 162 lb up at 8-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-5=-70, 8-11=-20



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Continued on page 2

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	C4	Hip Girder	1	1	I49347633

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:19 2021 Page 2
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LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-82(F) 7=-338(F) 6=-338(F) 2=-82(F) 14=-82(F) 15=-45(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	CJ1	Diagonal Hip Girder	3	1	l49347634

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:20 2021 Page 1
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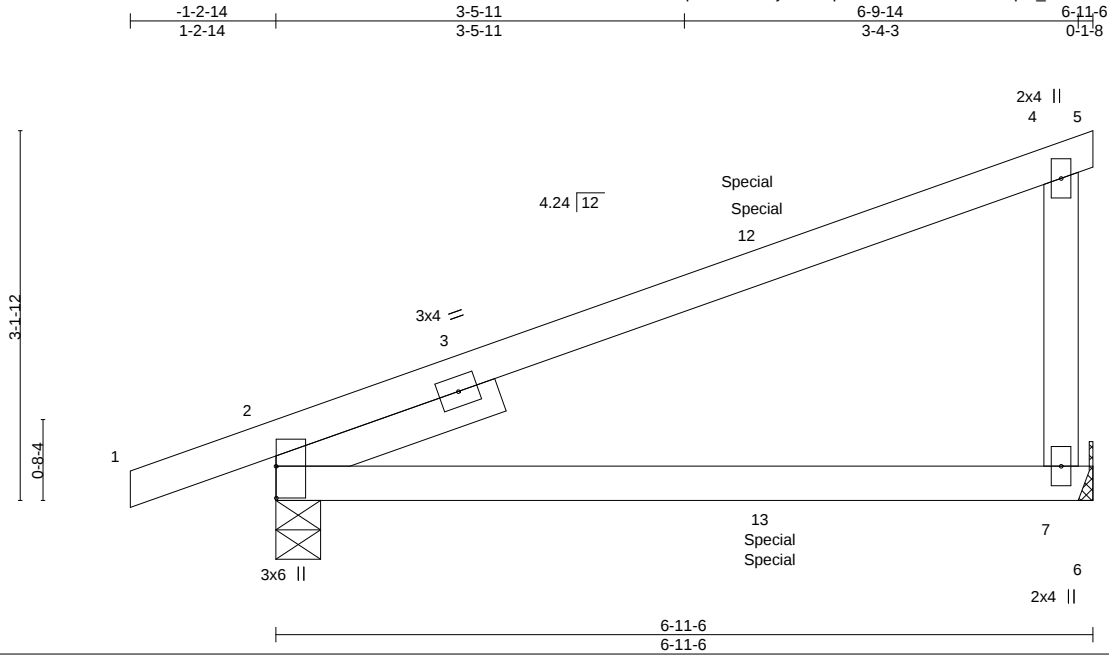


Plate Offsets (X,Y)-- [2:Edge,0-0-1]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.79	Vert(LL)	0.14	7-10	>581	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.55	Vert(CT)	-0.24	7-10	>336	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.04	Horz(CT)	0.05	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 23 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x4 SPF No.2 2-0-0

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) 2=0-4-9, 7=Mechanical
Max Horz 2=123(LC 4)
Max Uplift 2=-112(LC 4), 7=-114(LC 8)
Max Grav 2=405(LC 1), 7=321(LC 1)

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

TOP CHORD 2-4=-358/54

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) except (it=lb) 2=112, 7=114.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 22 lb down and 52 lb up at 4-2-8, and 22 lb down and 52 lb up at 4-2-8 on top chord, and 22 lb down and 18 lb up at 4-2-8, and 22 lb down and 18 lb up at 4-2-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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, 4-5=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 13=-28(F=-14, B=-14)



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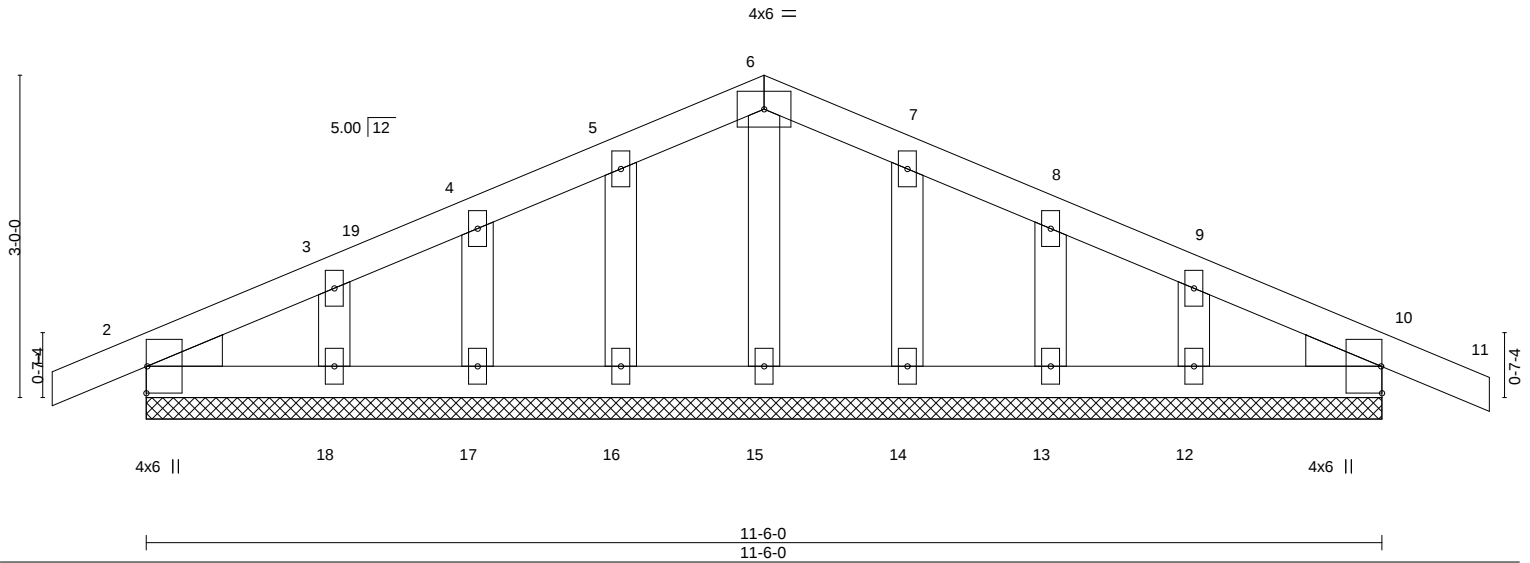
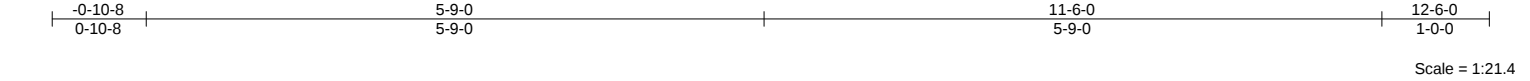


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	D1	Common Supported Gable	1	1	149347635

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:21 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 0.06	Vert(LL)	-0.00	11	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	11	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 43 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 11-6-0.
(lb) - Max Horz 2=-50(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 18, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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 2-1-8, Exterior(2N) 2-1-8 to 5-9-0, Corner(3R) 5-9-0 to 8-9-0, Exterior(2N) 8-9-0 to 12-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 10, 16, 17, 18, 14, 13, 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 21, 2021

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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



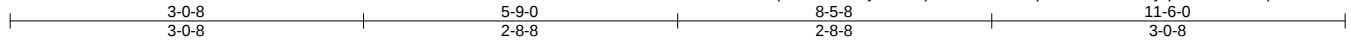
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	D2	Roof Special	4	1	l49347636

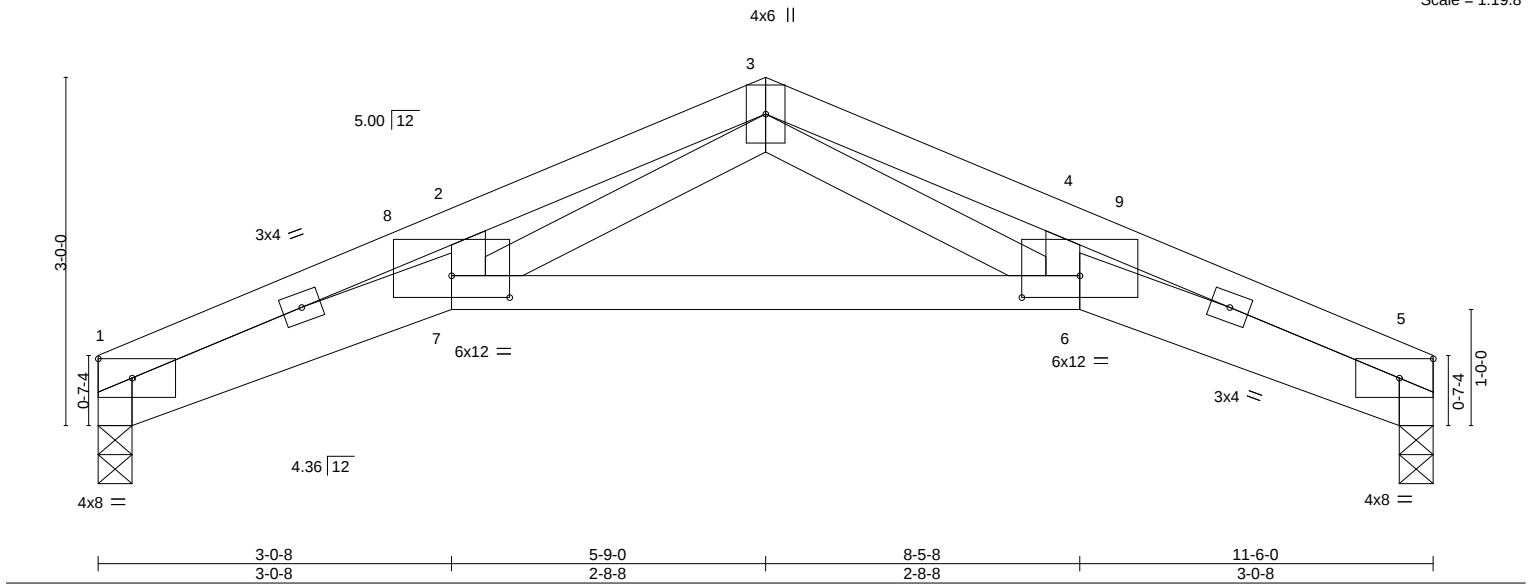
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:22 2021 Page 1
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Job Reference (optional)



Scale = 1:19.8



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.11 6-7 >999 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.23 6-7 >596 180				
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.09 5 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 40 lb		FT = 20%	

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 5=0-3-8
Max Horz 1=-41(LC 13)
Max Uplift 1=-85(LC 12), 5=-85(LC 13)
Max Grav 1=504(LC 1), 5=504(LC 1)

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

TOP CHORD 1-2=-1880/697, 2-3=-1830/784, 3-4=-1830/773, 4-5=-1880/685
BOT CHORD 1-7=-629/1725, 6-7=-281/833, 5-6=-605/1725
WEBS 3-6=-416/1010, 3-7=-423/1010

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) 0-1-12 to 3-2-4, Interior(1) 3-2-4 to 5-9-0, Exterior(2R) 5-9-0 to 8-9-0, Interior(1) 8-9-0 to 11-4-4 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.
- 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.



December 21, 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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	D3	Roof Special Girder	1	2	Job Reference (optional)

I49347637

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:24 2021 Page 1
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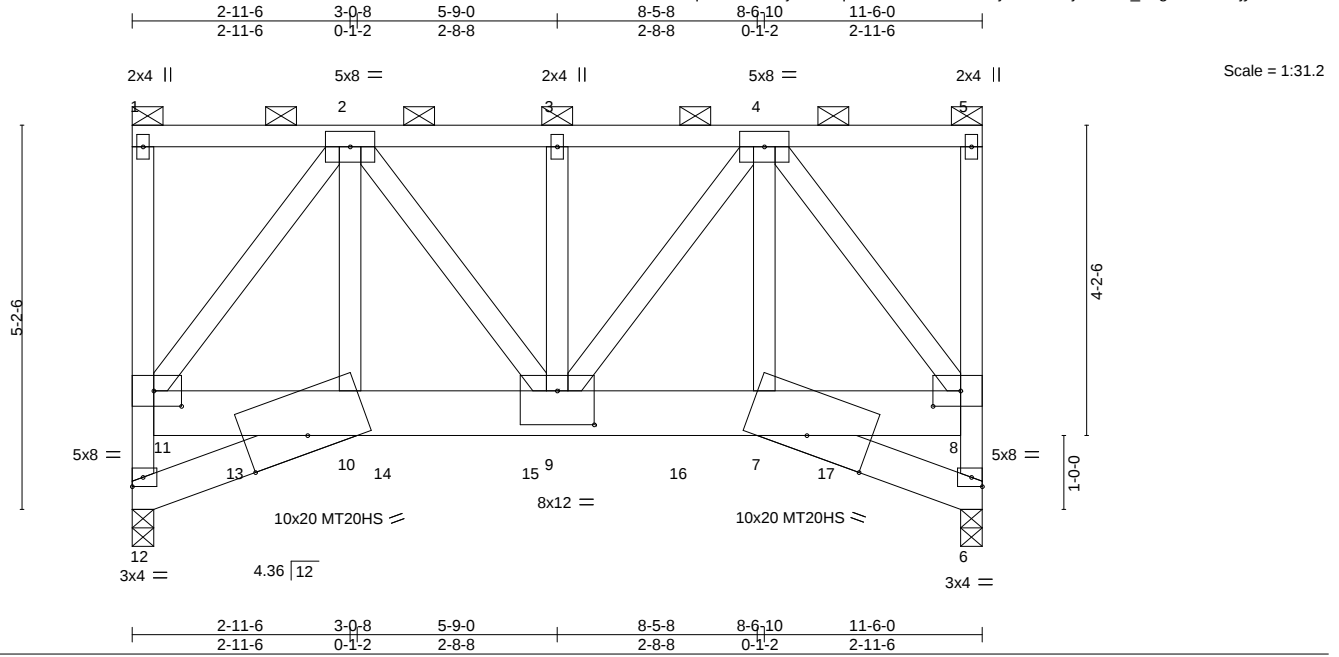


Plate Offsets (X,Y)-- [8:0-4-8,0-2-8], [9:0-6-0,0-5-8], [11:0-4-8,0-2-8]

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) -0.00	10	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.18	Vert(CT) -0.04	9	>999	180		MT20HS	148/108
BCLL 0.0	Rep Stress Incr NO	WB 0.39	Horz(CT) 0.03	6	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS							
								Weight: 197 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x6 SPF No.2 *Except*
8-11: 2x8 SP 2400F 2.0E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-5, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 12=0-3-8, 6=0-3-8
Max Horz 12=186(LC 9)
Max Grav 12=4080(LC 1), 6=3703(LC 1)

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

TOP CHORD 11-12=-4040/0, 2-3=-3311/0, 3-4=-3311/0, 6-8=-3656/0
BOT CHORD 10-12=-168/450, 10-11=0/2248, 9-10=0/2509, 7-9=0/2378, 7-8=0/2248
WEBS 4-9=0/1606, 2-9=0/1514, 4-7=0/1709, 2-10=0/1874, 2-11=-3944/0, 4-8=-3882/0

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s). The design/selection of such connection device(s) is the responsibility of others.



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Continued on page 2

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	D3	Roof Special Girder	1	2	Job Reference (optional)

I49347637

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

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LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-70, 10-12=-20, 7-10=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-58, 10-12=-20, 7-10=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-20, 10-12=-40, 7-10=-40, 6-7=-40
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=76, 10-12=-8, 7-10=-8, 6-7=-8
Horz: 1-12=23, 5-6=38
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=76, 10-12=-8, 7-10=-8, 6-7=-8
Horz: 1-12=-38, 5-6=-23
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=-34, 10-12=-20, 7-10=-20, 6-7=-20
Horz: 1-12=-26, 5-6=-35
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=-34, 10-12=-20, 7-10=-20, 6-7=-20
Horz: 1-12=35, 5-6=26
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=29, 10-12=-8, 7-10=-8, 6-7=-8
Horz: 1-12=17, 5-6=22
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=29, 10-12=-8, 7-10=-8, 6-7=-8
Horz: 1-12=-22, 5-6=-17
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=9, 10-12=-20, 7-10=-20, 6-7=-20
Horz: 1-12=28, 5-6=10
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=9, 10-12=-20, 7-10=-20, 6-7=-20
Horz: 1-12=-10, 5-6=-28
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=29, 10-12=-8, 7-10=-8, 6-7=-8
Horz: 1-12=14, 5-6=20
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=29, 10-12=-8, 7-10=-8, 6-7=-8
Horz: 1-12=-20, 5-6=-14
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)

Continued on page 3

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	D3	Roof Special Girder	1	2	i49347637

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:24 2021 Page 3
ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-EuL6EI2iUSjFlbB9nNtj90x16h_03gRPdC?s8jy76db

LOAD CASE(S) Standard

- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=16, 10-12=-8, 7-10=-8, 6-7=-8
Horz: 1-12=7, 5-6=15
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=16, 10-12=-8, 7-10=-8, 6-7=-8
Horz: 1-12=-15, 5-6=-7
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=9, 10-12=-20, 7-10=-20, 6-7=-20
Horz: 1-12=26, 5-6=8
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=9, 10-12=-20, 7-10=-20, 6-7=-20
Horz: 1-12=-8, 5-6=-26
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-5=-20, 10-12=-20, 7-10=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 19) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=-36, 10-12=-20, 7-10=-20, 6-7=-20
Horz: 1-12=21, 5-6=7
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 20) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=-36, 10-12=-20, 7-10=-20, 6-7=-20
Horz: 1-12=-7, 5-6=-21
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 21) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=-36, 10-12=-20, 7-10=-20, 6-7=-20
Horz: 1-12=19, 5-6=6
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 22) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=-36, 10-12=-20, 7-10=-20, 6-7=-20
Horz: 1-12=-6, 5-6=-19
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 23) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=-28, 10-12=-8, 7-10=-8, 6-7=-8
Horz: 1-12=-16, 5-6=-16
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(F)
- 24) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-5=4, 10-12=-8, 7-10=-8, 6-7=-8
Horz: 1-12=16, 5-6=16
Concentrated Loads (lb)
Vert: 13=-1355(F) 14=-1355(F) 15=-1355(F) 16=-1355(F) 17=-1355(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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	J1	Jack-Open	7	1	I49347638

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

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ID:VPVqvFnP0P0b1j2tZr1OqezdKbx-i5vURE3KFmr6MlmLK5OyiEUBR5IAoDpYssIPgAy76da

-0-10-8 0-10-8 5-0-0 5-0-0

Scale = 1:18.8

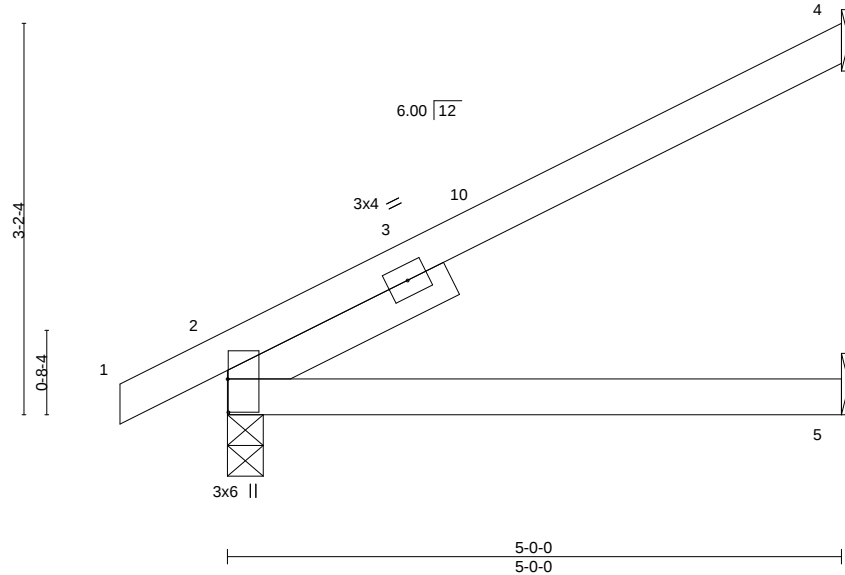


Plate Offsets (X,Y)-- [2:0-3-4,0-0-1]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.32	Vert(LL)	0.04	5-8	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.06	5-8	>963	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.02	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 16 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=116(LC 12)
Max Uplift 4=-82(LC 12), 2=-39(LC 12)
Max Grav 4=152(LC 1), 2=289(LC 1), 5=88(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-11-4 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) 4, 2.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss 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.



December 21, 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

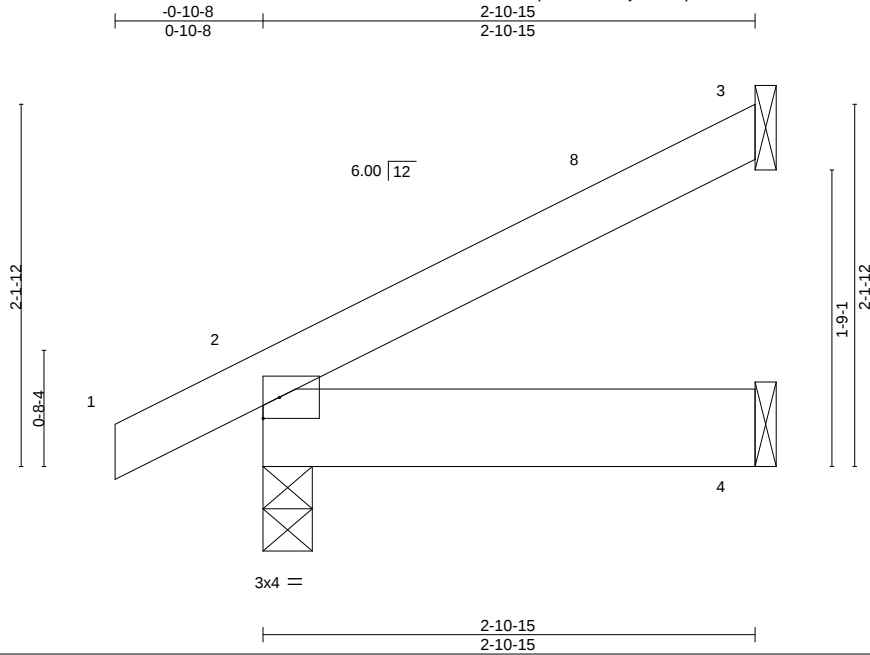


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	J2	Jack-Open	5	1	l49347639

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:25 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-i5vUR3KFmr6MmLK5OyiEUFASLGoDpYssIPgAy76da



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.08	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) -0.00 7 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Vert(CT) -0.00 4-7 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP	Horz(CT) -0.00 3 n/a n/a		
	Code IRC2018/TPI2014			Weight: 10 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-15 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=73(LC 12)
Max Uplift 3=-43(LC 12), 2=-31(LC 12), 4=-4(LC 12)
Max Grav 3=76(LC 1), 2=199(LC 1), 4=58(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 2-10-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.



December 21, 2021

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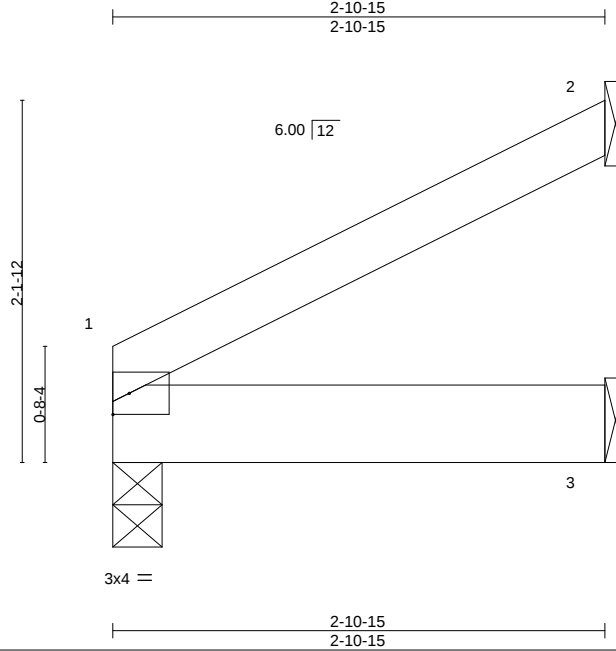
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	J3	Jack-Open	1	1	l49347640

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:26 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-AHTsf_4z03zz_vLYuovBER1QrVhNXg3h5WUyCcy76dZ



Scale = 1:13.6

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.09	Vert(LL)	-0.00	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	-0.00	3-6	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 9 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=0-3-8, 2=Mechanical, 3=Mechanical
Max Horz 1=58(LC 12)
Max Uplift 1=-9(LC 12), 2=-44(LC 12), 3=-6(LC 12)
Max Grav 1=128(LC 1), 2=79(LC 1), 3=60(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) 1, 2, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 21, 2021

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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

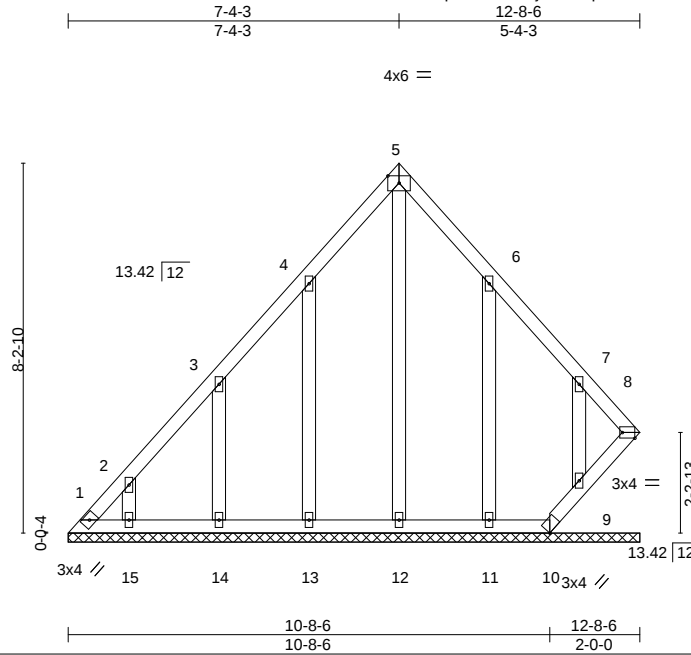


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	LG1	GABLE	1	1	I49347641

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:27 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-eT1FsK5bnN5qc3wkSVQnfZbxu1xG5FrJAEWk2y76dY



Scale = 1:51.2

Plate Offsets (X,Y)-- [5:Edge,0-1-14], [8:Edge,0-1-8]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.13	Horz(CT)	0.00	8	n/a	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 65 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 12-8-6.
(lb) - Max Horz 1=204(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-111(LC 10), 8=-125(LC 11), 10=-148(LC 13),
13=-146(LC 12), 14=-148(LC 12), 15=-122(LC 12), 11=-153(LC 13), 9=-122(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 10, 12, 13, 14, 15, 11, 9 except 8=266(LC 13)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-319/220

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) 0-3-15 to 3-4-3, Interior(1) 3-4-3 to 7-4-3, Exterior(2R) 7-4-3 to 10-4-3, Interior(1) 10-4-3 to 12-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- 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 111 lb uplift at joint 1, 125 lb uplift at joint 8, 148 lb uplift at joint 10, 146 lb uplift at joint 13, 148 lb uplift at joint 14, 122 lb uplift at joint 15, 153 lb uplift at joint 11 and 122 lb uplift at joint 9.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8, 9.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 21, 2021

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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

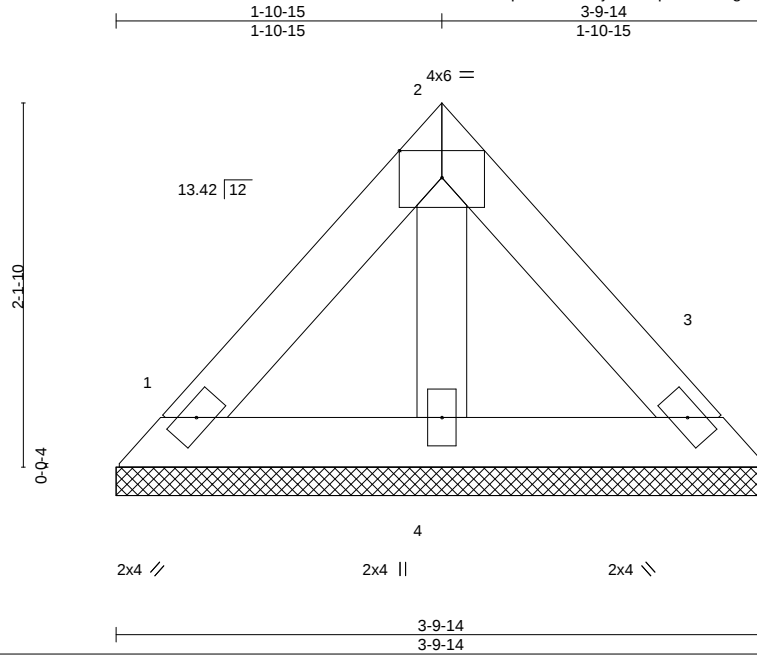


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	LG2	GABLE	1	1	149347642

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:28 2021 Page 1
ID:VPVqvFnP0P0b1j2tZr1OqezdKbx-6gbd3g5DYhDhDDVw0DxfKs6n_INM?ap_Yqz3HUy76dX



Scale = 1:13.5

Plate Offsets (X,Y)-- [2:Edge,0-1-14]											
LOADING (psf)	SPACING-		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 0.02	Vert(CT)	n/a	-	n/a	999			
BCLL 0.0	Rep Stress Incr	YES	WB 0.01	Horz(CT)	0.00	3	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 12 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 3-9-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-9-14, 3=3-9-14, 4=3-9-14
Max Horz 1=48(LC 9)
Max Uplift 1=-26(LC 13), 3=-22(LC 13)
Max Grav 1=89(LC 1), 3=89(LC 1), 4=107(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 26 lb uplift at joint 1 and 22 lb uplift at joint 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.



December 21, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

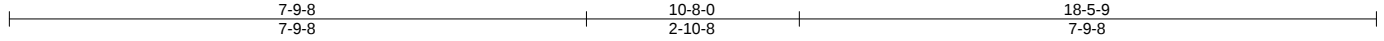
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V2	GABLE	1	1	l49347644

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:35 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrIQeqzdKbx-P0WGX3Bcvq6hZXGwBZl6Lvw47k67kV09QAx0ay76dQ

Job Reference (optional)



Scale = 1:31.1

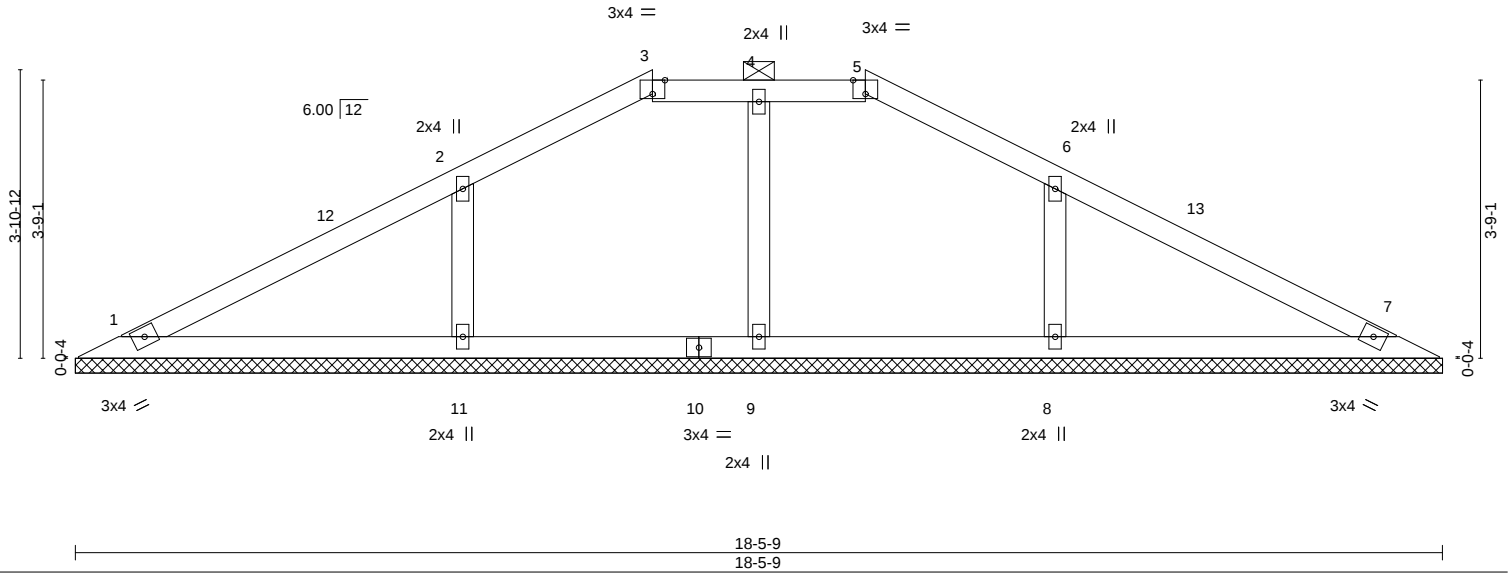


Plate Offsets (X,Y)-- [3:0-2-0,Edge], [5:0-2-0,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 51 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD 2x4 SPF No.2		TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD 2x4 SPF No.2			2-0-0 oc purlins (6-0-0 max.): 3-5.
OTHERS 2x4 SPF No.2		BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 18-5-9.
 (lb) - Max Horz 1=-61(LC 17)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 9 except 11=-148(LC 12), 8=-146(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=254(LC 1), 11=447(LC 25), 8=447(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-11=-336/180, 6-8=-336/179

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-9-8, Exterior(2E) 7-9-8 to 10-8-0, Exterior(2R) 10-8-0 to 14-10-15, Interior(1) 14-10-15 to 17-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 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, 7, 9 except (jt=lb) 11=148, 8=146.
- This truss 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.



December 21, 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

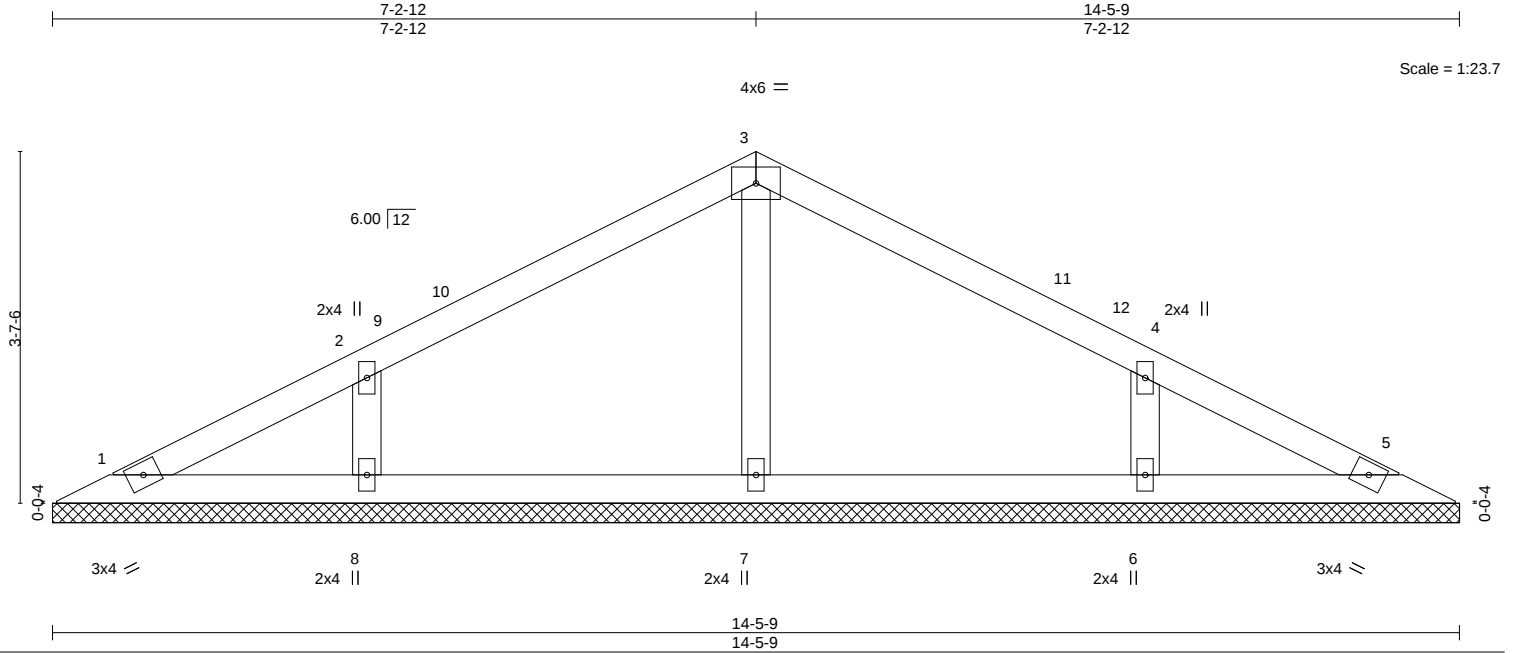


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V3	GABLE	1	1	149347645

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:39 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-InlnNRE6y3c72vq191eEGB3dGk6l3YVc4188AMy76dM



LOADING (psf)	SPACING-	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: 39 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 14-5-9.
(lb) - Max Horz 1=58(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7 except 8=127(LC 12), 6=127(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=318(LC 1), 8=357(LC 25), 6=357(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-283/196, 4-6=-283/196

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-2-12, Exterior(2R) 7-2-12 to 10-2-12, Interior(1) 10-2-12 to 13-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=127, 6=127.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 21, 2021

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



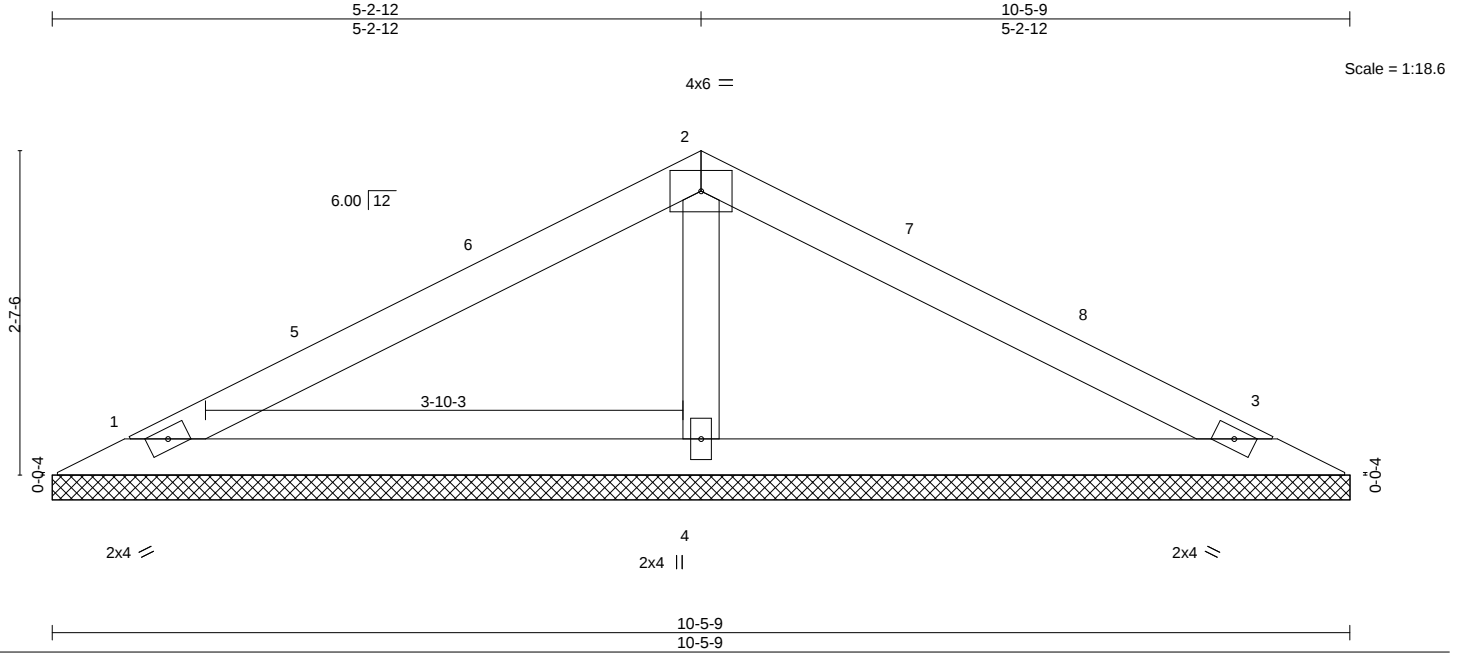
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V4	GABLE	1	1	l49347646

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:39 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrlQqezdKbx-InlnNRE6y3c72vq191eEGB3bMk5X3YZc4188AMy76dM

Job Reference (optional)



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 0.29	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=10-5-9, 3=10-5-9, 4=10-5-9
Max Horz 1=-41(LC 17)
Max Uplift 1=-45(LC 12), 3=-52(LC 13), 4=-48(LC 12)
Max Grav 1=191(LC 25), 3=191(LC 26), 4=451(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-312/188

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-2-12, Exterior(2R) 5-2-12 to 8-2-12, Interior(1) 8-2-12 to 9-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.



December 21, 2021

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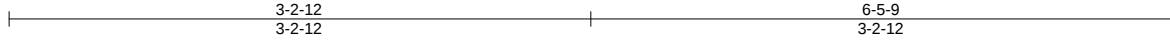


16023 Swingley Ridge Rd
Chesterfield, MO 63017

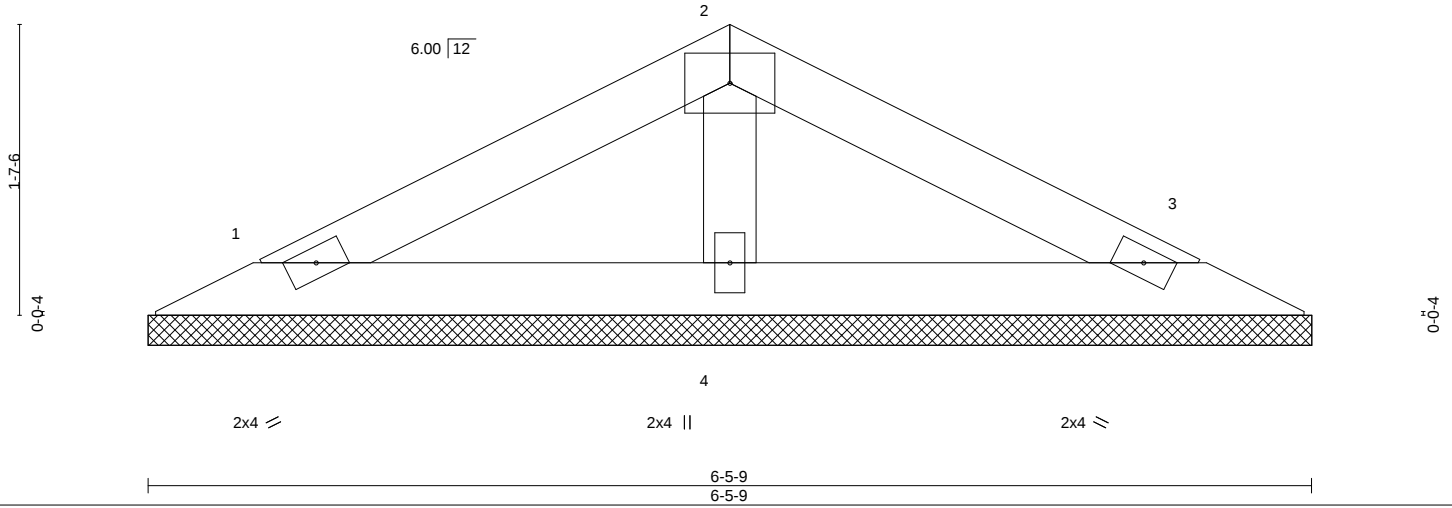
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V5	GABLE	1	1	149347647

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:40 2021 Page 1
ID:VPVqvFnP0P0b1j2Zr1OqezdKbx-mzJ9bnFijNk_f3PEjk9TpOcp8Tdo?9Ijhtioy76dL



Scale = 1:12.8



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 0.12	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 15 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=6-5-9, 3=6-5-9, 4=6-5-9
Max Horz 1=-23(LC 13)
Max Uplift 1=-31(LC 12), 3=-35(LC 13), 4=-16(LC 12)
Max Grav 1=119(LC 1), 3=119(LC 1), 4=230(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.



December 21, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V7	Valley	1	1	l49347648

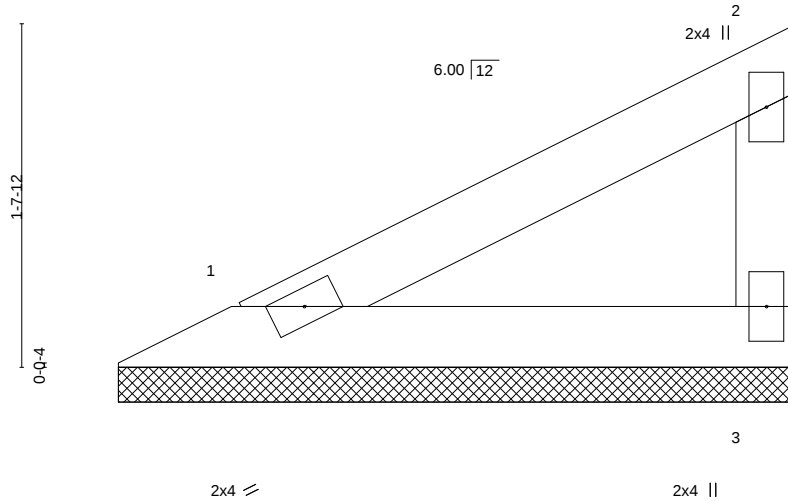
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:41 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-EAtXo6FNUgsrHC_QGSgiLc9_jYpqXSmvXLdFEEy76dK

3-3-8
3-3-8

Scale = 1:11.0



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 0.11	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 8 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-3-0, 3=3-3-0
Max Horz 1=53(LC 9)
Max Uplift 1=-19(LC 12), 3=-32(LC 12)
Max Grav 1=113(LC 1), 3=113(LC 1)

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

NOTES-

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



December 21, 2021

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



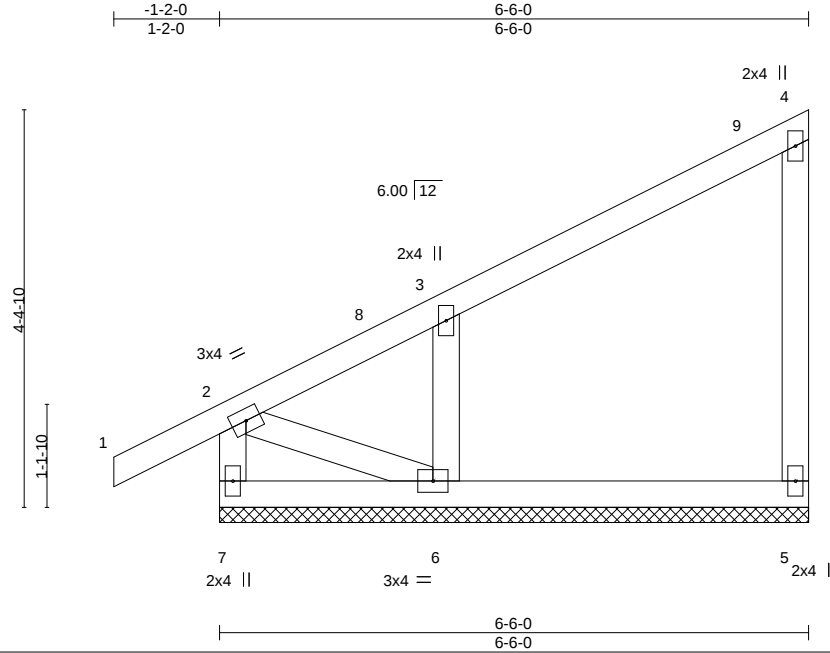
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V8	Valley	1	1	i49347649

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:42 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-iMRv?SG?F__ivMZcq9Bxuph8Cx8SGvD2m?Mpmgy76dJ



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 0.19	Vert(LL)	0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.00	1	n/r	120		
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-P						Weight: 27 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.

(size) 5=6-6-0, 7=6-6-0, 6=6-6-0
Max Horz 7=167(LC 11)
Max Uplift 5=-34(LC 9), 7=-22(LC 8), 6=-153(LC 12)
Max Grav 5=143(LC 1), 7=180(LC 20), 6=333(LC 1)

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

TOP CHORD 2-3=-258/156
BOT CHORD 6-7=-325/214
WEBS 3-6=-251/256, 2-6=-166/293

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) -1-2-0 to 1-10-0, Interior(1) 1-10-0 to 6-4-4 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) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7 except (jt=lb) 6=153.
- 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.



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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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V9	Valley	1	1	I49347650

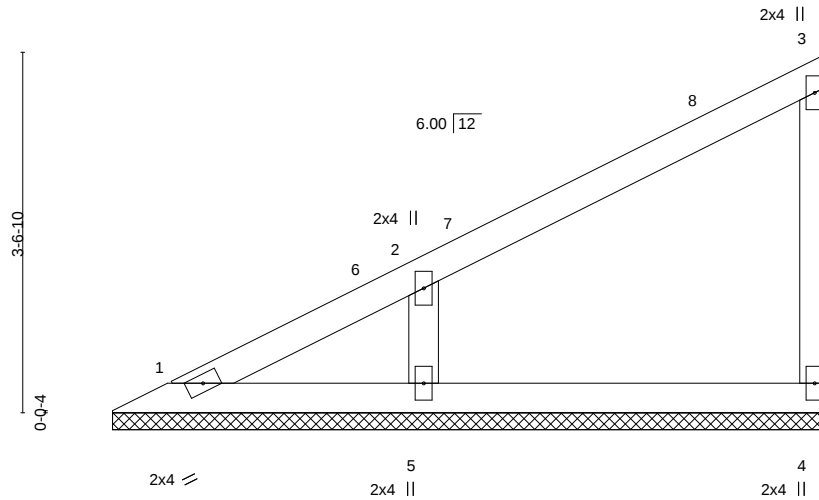
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:42 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-iMRv?SG?F_ivMZcq9Bxuph8Hx8SGvl2m?Mpmgy76dJ

7-1-5
7-1-5

Scale = 1:22.7



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 0.19	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 21 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.

(size) 1=7-0-13, 4=7-0-13, 5=7-0-13
Max Horz 1=132(LC 9)
Max Uplift 4=30(LC 9), 5=-123(LC 12)
Max Grav 1=76(LC 20), 4=140(LC 1), 5=370(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-288/264

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-11-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=123.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 21, 2021

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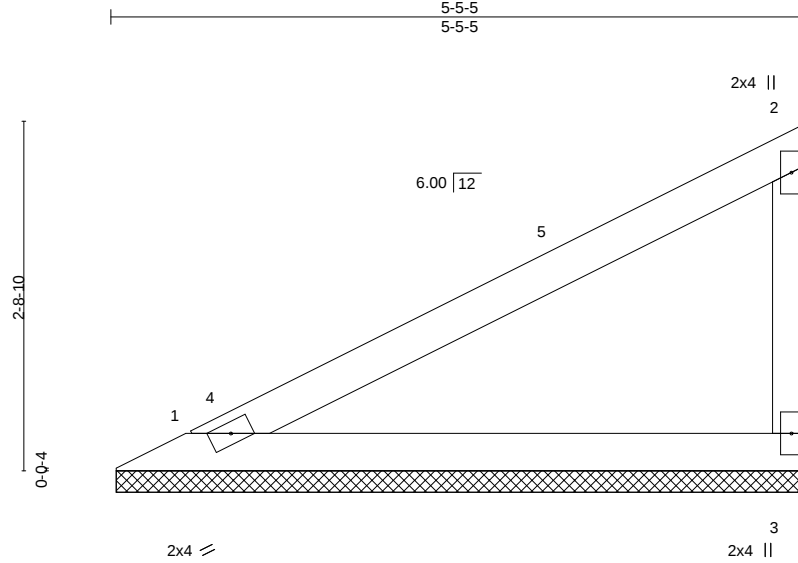
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V10	Valley	1	1	l49347651

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:30 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-32iNUM7T4ITPTWeJ7e_7PHB0i60gSU2H?8SALNy76dV



Scale = 1:17.9

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 0.42	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.22	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=5-4-13, 3=5-4-13
Max Horz 1=97(LC 9)
Max Uplift 1=-35(LC 12), 3=-60(LC 12)
Max Grav 1=210(LC 1), 3=210(LC 1)

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

NOTES-

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



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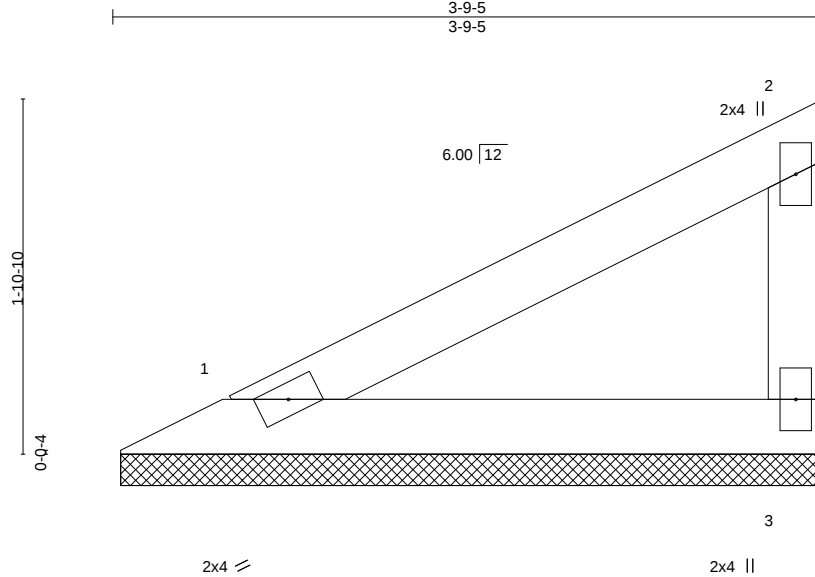
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V11	Valley	1	1	I49347652

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:30 2021 Page 1

ID:VPVqvFnP0P0b1j2tZr1OqezdKbx-32iNUM7T4ITPTWeJ7e_7PHB4j62qSU2H?8SALNy76dV



Scale = 1:12.2

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 0.09	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: 10 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-9-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-8-13, 3=3-8-13
Max Horz 1=63(LC 9)
Max Uplift 1=-23(LC 12), 3=-38(LC 12)
Max Grav 1=135(LC 1), 3=135(LC 1)

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

NOTES-

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



December 21,2021

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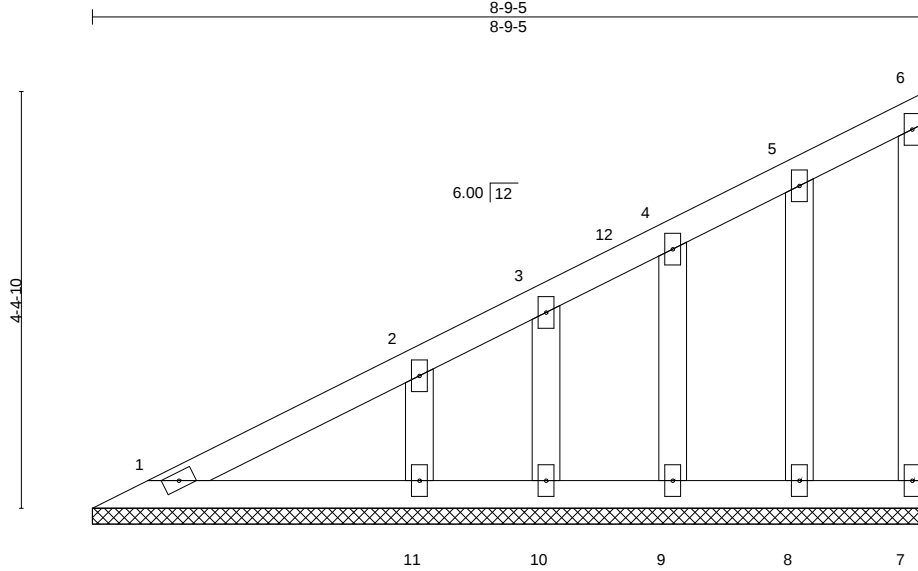
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V12	Valley	1	1	149347653

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:31 2021 Page 1

ID:VPVqvFnP0P0b1j2tZr1OqezdKbx-XFGlii85cccF4gDVhLVMxVkfFOWOdBxdQEoCjtpy76dU



Scale = 1:24.3

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 0.16	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 35 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 8-9-5.
(lb) - Max Horz 1=167(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9, 10, 11
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 8, 9, 10 except 11=259(LC 1)

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

TOP CHORD 1-2=-350/183

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-7-7 to 3-5-5, Exterior(2N) 3-5-5 to 8-7-9 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9, 10, 11.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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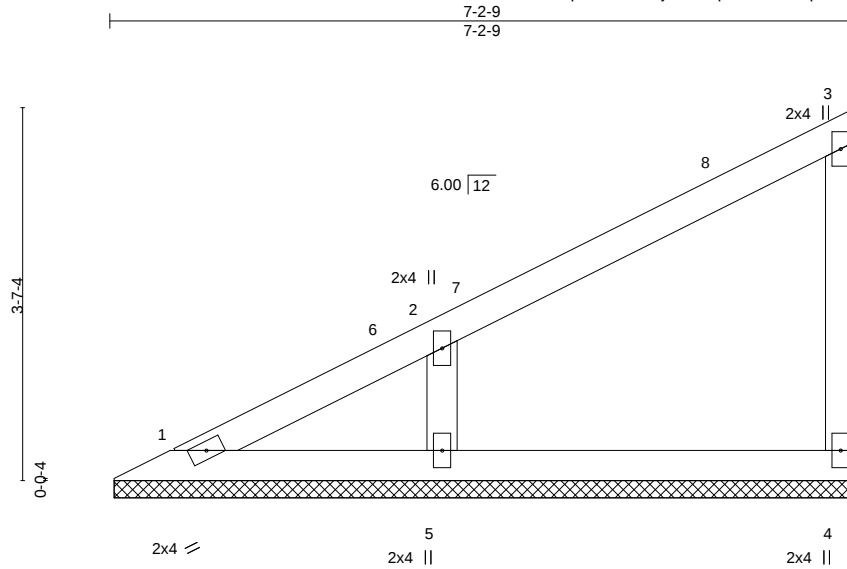


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V13	Valley	1	1	l49347654

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:32 2021 Page 1
ID:VPVqvFnP0P0b1j2tZr1OqezdKbx-?Rq8v19jcvk6iqohF30bUiHQmvj6wOqaTSxHQGy76dT



Scale = 1:22.3

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.19	Vert(LL)	n/a	-	999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.10	Vert(CT)	n/a	-	999		
BCLL 0.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	-0.00	4	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P						
	Code IRC2018/TPI2014						Weight: 21 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.

(size) 1=7-2-1, 4=7-2-1, 5=7-2-1
Max Horz 1=134(LC 9)
Max Uplift 4=30(LC 9), 5=123(LC 12)
Max Grav 1=81(LC 20), 4=140(LC 1), 5=374(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-290/263

NOTES-

- 1) 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 7-0-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=123.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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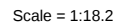
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:32 2021 Page 1
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LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 5-6-9 oc purlins, except end verticals.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2		

REACTIONS. (size) 1=5-6-1, 3=5-6-1
 Max Horz 1=100(LC 9)
 Max Uplift 1=-36(LC 12), 3=-61(LC 12)
 Max Grav 1=215(LC 1), 3=215(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=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 5-4-13 zone; cantilever left and right exposed; and vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 21, 2021



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



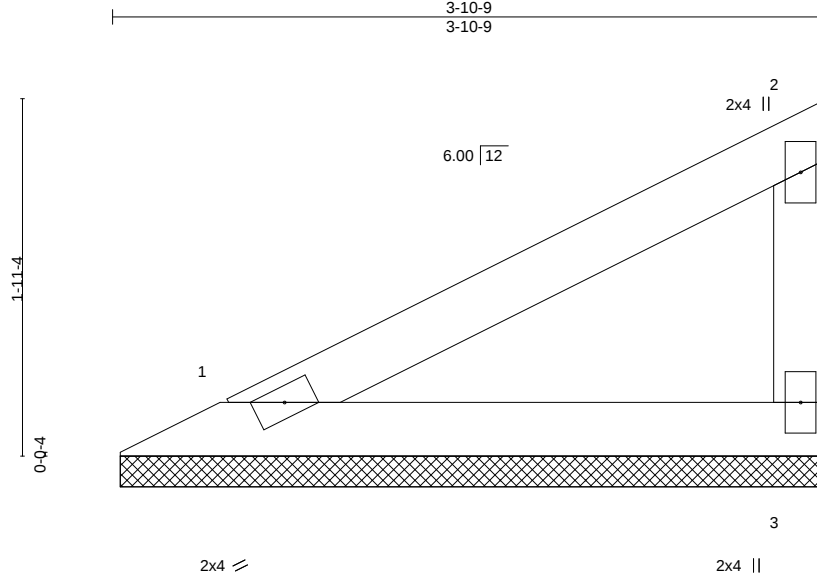
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V15	Valley	1	1	I49347656

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:33 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-TdOW7N9MNDszK_NuomXq1wpblJ3Rfroji6hqiy76dS



Scale = 1:12.5

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 0.09	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: 10 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-10-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-10-1, 3=3-10-1
Max Horz 1=65(LC 9)
Max Uplift 1=-23(LC 12), 3=-40(LC 12)
Max Grav 1=140(LC 1), 3=140(LC 1)

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

NOTES-

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



December 21, 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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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



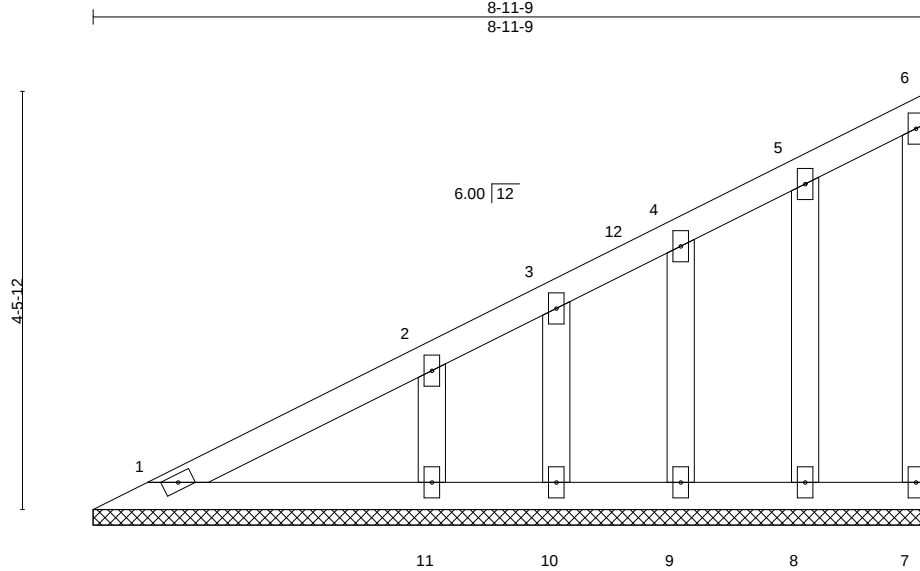
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V17	Valley	1	1	l49347657

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:33 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrOqezdKbx-TdOW7N9MNDszK_NuomXq1wpblJ4_fr4ji6hqiy76dS



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	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 0.05	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 36 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 8-11-9.
(lb) - Max Horz 1=171(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9, 10, 11
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 8, 9, 10 except 11=278(LC 1)

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

TOP CHORD 1-2=-353/186
WEBS 2-11=-215/262

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-7-7 to 3-7-9, Exterior(2N) 3-7-9 to 8-9-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable requires continuous bottom chord bearing.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9, 10, 11.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 21, 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



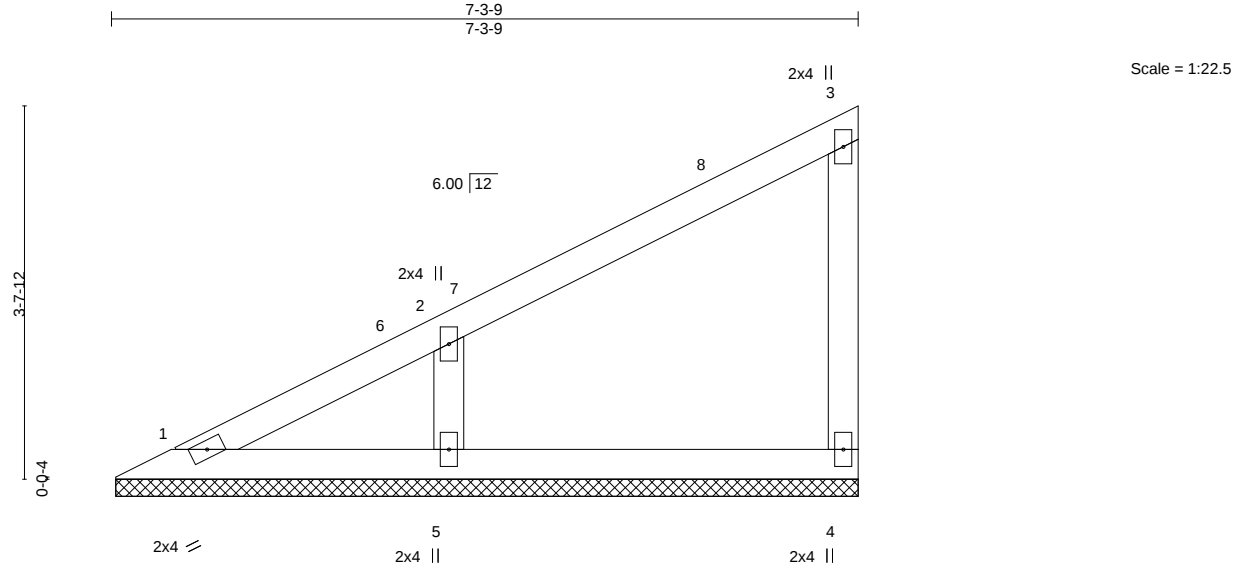
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V18	Valley	1	1	I49347658

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:34 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-xpyuKjA_8X_qx8y4MT23Z7MmEjPaOHJtmQNU8y76dR



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 0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 21 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.

(size) 1=7-3-1, 4=7-3-1, 5=7-3-1
Max Horz 1=136(LC 9)
Max Uplift 4=-30(LC 9), 5=-124(LC 12)
Max Grav 1=85(LC 20), 4=139(LC 1), 5=377(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-293/263

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) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 7-1-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=124.
- 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.



December 21, 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



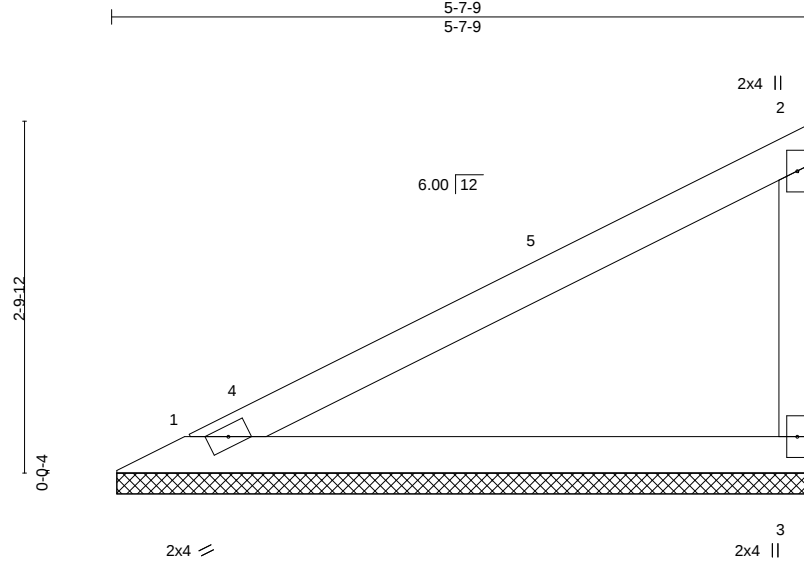
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V19	Valley	1	1	l49347659

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:35 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrIQezdKbx-P0WGX3Bcvq6hZHxGwBZI6Lvss7jX7KH09QAx0ay76dQ



Scale = 1:18.4

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 0.45	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.24	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-7-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=5-7-1, 3=5-7-1
Max Horz 1=101(LC 9)
Max Uplift 1=-37(LC 12), 3=-62(LC 12)
Max Grav 1=218(LC 1), 3=218(LC 1)

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

NOTES-

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



December 21, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:36 2021 Page 1
 ID:VPVqvFnP0P0b1j2tZrIQezdKbx-tC3elPCeG8EYBR6TUu5XeYR5SX5wsBpAO3vUZ1y76dP
 7-9-13
 7-9-13



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

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) 0-7-9 to 3-9-13, Interior(1) 3-9-13 to 7-8-1 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
- 2) Gable requires continuous bottom chord bearing.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=127.
- 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.



December 21.2021

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

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



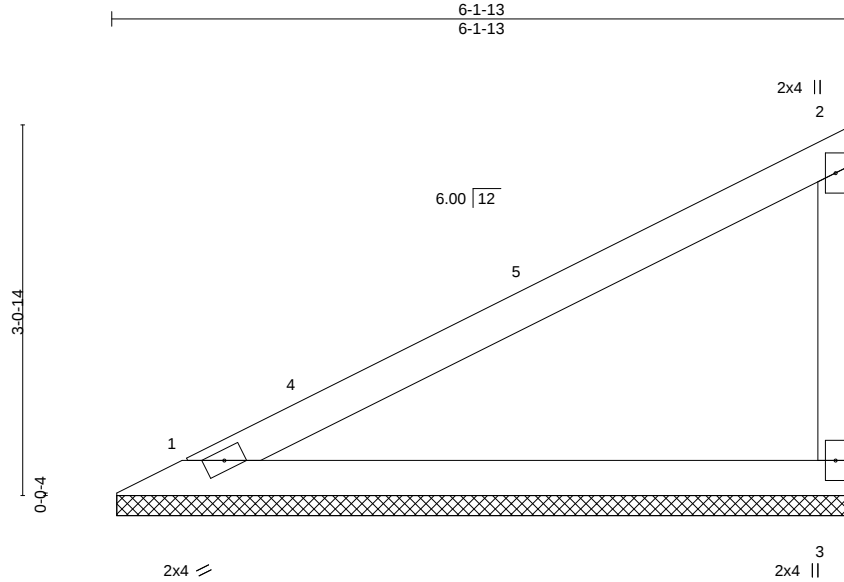
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V21	Valley	1	1	I49347661

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:37 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrlQeqzdKbx-M0d0yICsRSMPobhf1ccmBm_BcwN2benJdjf25Ty76dO



Scale = 1:19.1

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 0.57	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	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
WEBS 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.

(size) 1=6-1-5, 3=6-1-5
Max Horz 1=112(LC 9)
Max Uplift 1=-41(LC 12), 3=-69(LC 12)
Max Grav 1=242(LC 1), 3=242(LC 1)

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

NOTES-

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



December 21, 2021

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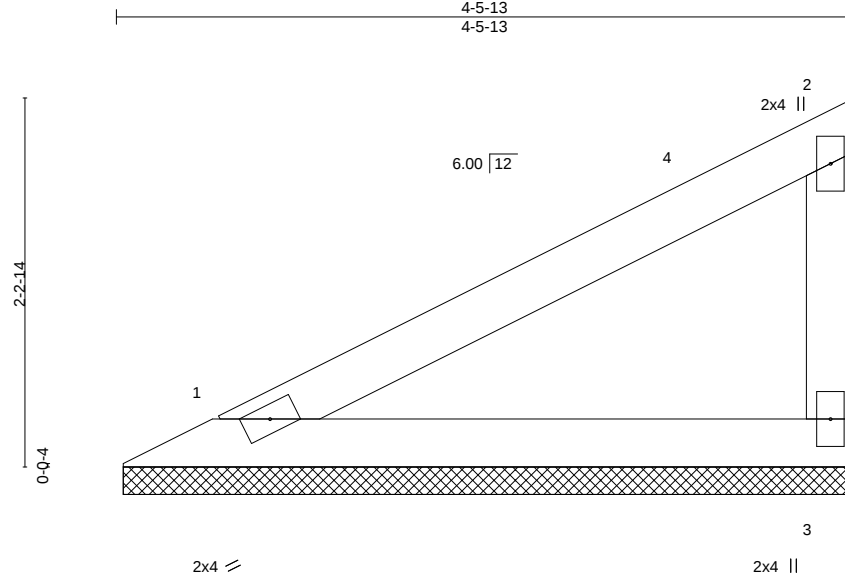
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V22	Valley	1	1	49347662

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:37 2021 Page 1

ID:VPVqvFnP0P0b1j2tZrIOqezdKbx-MOD0ylCsRSMPObhf1ccmBm_GUwPhbenJdf25Ty76dO



Scale = 1:14.0

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 0.25	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.14	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: 12 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-5-5, 3=4-5-5
Max Horz 1=77(LC 9)
Max Uplift 1=-28(LC 12), 3=-48(LC 12)
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-

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



December 21, 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

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

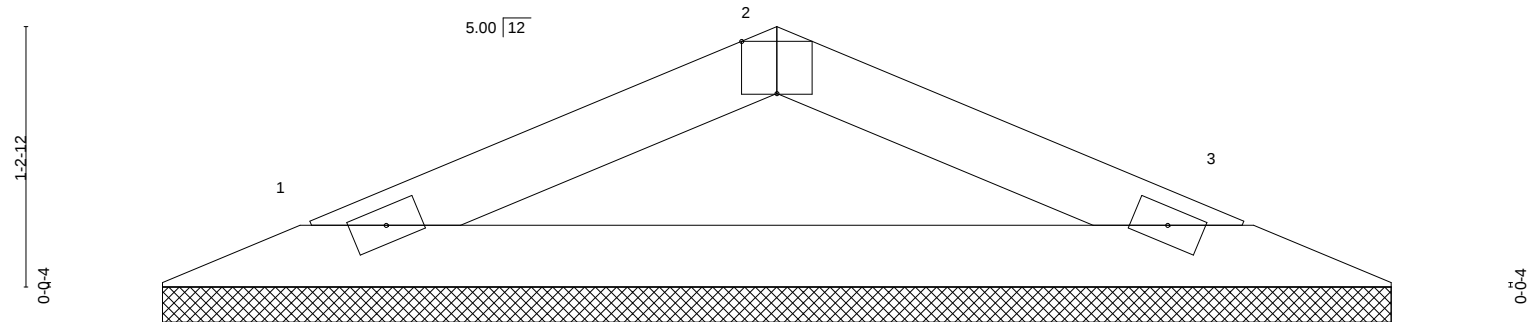
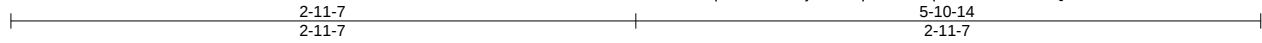


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #140/MO
3022527	V23	Valley	1	1	I49347663

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 09:28:38 2021 Page 1
ID:VPVqvFnP0P0b1j2tZrIQezdKbx-qbBPA5DUBIUGQIFrbJ7?kzXTaKkok51SrNObdvy76dN



0-0-10		5-10-14	
0-0-10		5-10-4	
Plate Offsets (X,Y)--		[2:0-2:0,Edge]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.10	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.21	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: 12 lb FT = 20%	

LUMBER-

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

REACTIONS.

(size) 1=5-9-10, 3=5-9-10
Max Horz 1=-16(LC 13)
Max Uplift 1=-33(LC 12), 3=-33(LC 13)
Max Grav 1=198(LC 1), 3=198(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.



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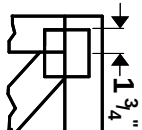
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



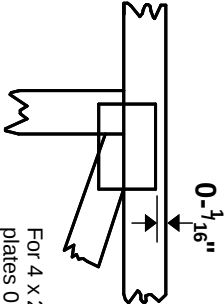
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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

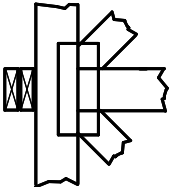
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



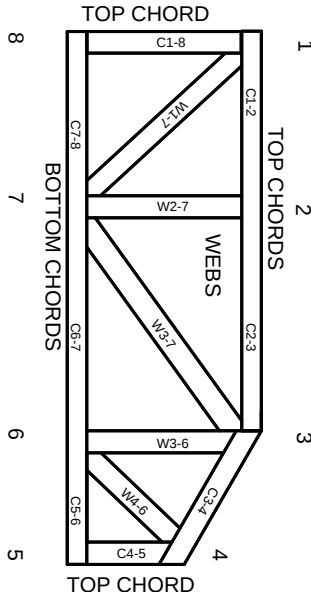
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: 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/TP1 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 Tor 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.