



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
01/11/2022 4:49:21

MiTek USA, Inc.

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

Re: 3010432

SUMMIT/HAWTHORN RIDGE #144/MO

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

Pages or sheets covered by this seal: I49215958 thru I49216012

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

Missouri COA: Engineering 001193



December 13, 2021

Johnson, Andrew ,Engineer

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

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO	i49215958
3010432	A1	Common Supported Gable	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:10 2021 Page 1

ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-TiDsgle5nXvJTRRu071M4BpQAzXvMQ5BF0g2C7yAISB

32-0-0 32-10-8 0-10-8

Scale = 1:56.7

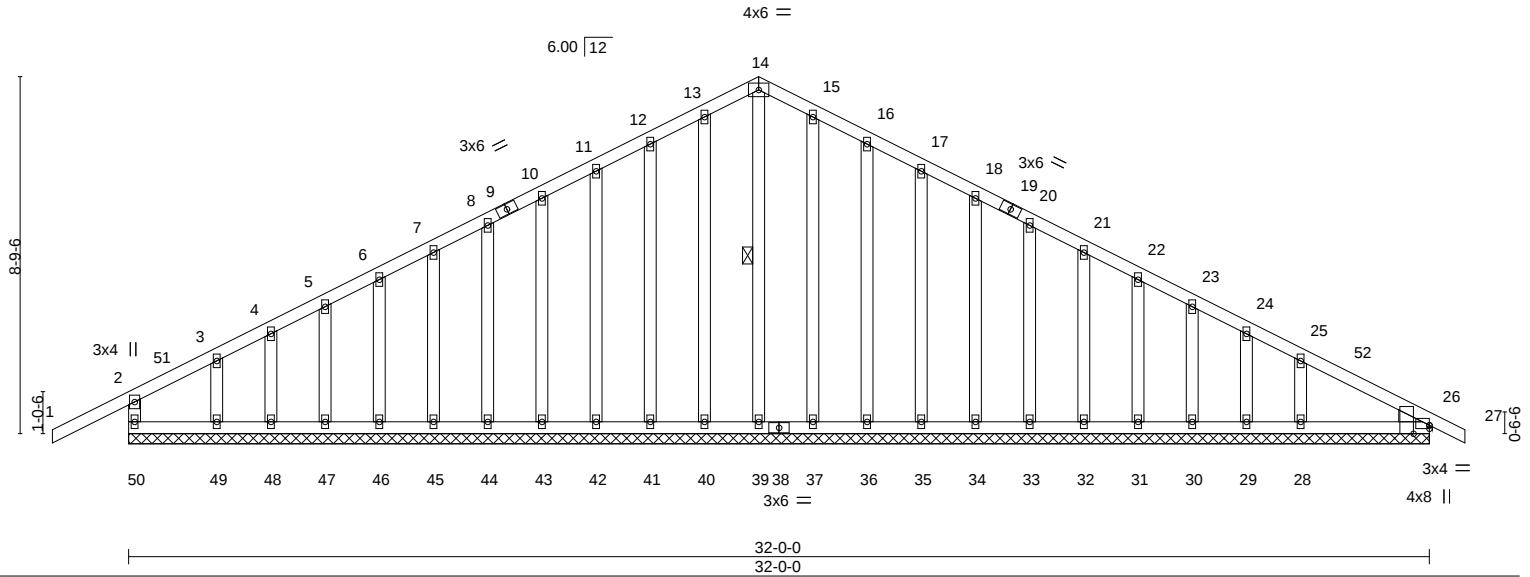


Plate Offsets (X,Y)-- [26:0-0-0,0-1-0], [26:0-2-8,Edge]

LOADING (psf)	SPACING-	CSL.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) 0.00	27	n/r	120		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.06	Vert(CT) 0.00	27	n/r	120			
BCLL 0.0	Rep Stress Incr YES	WB 0.11	Horz(CT) 0.01	26	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S							
								Weight: 196 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 14-39

REACTIONS.

All bearings 32-0-0.
(lb) - Max Horz 50=-127(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 50, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26
Max Grav All reactions 250 lb or less at joint(s) 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 37, 36, 35, 34, 33, 32, 31, 30, 29, 26 except 50=278(LC 1), 28=276(LC 1)

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

TOP CHORD 2-50=-250/158, 12-13=-106/260, 13-14=-113/279, 14-15=-113/279, 15-16=-106/260

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-10-8 to 1-1-8, Exterior(2N) 1-1-8 to 15-6-0, Corner(3R) 15-6-0 to 18-6-0, Exterior(2N) 18-6-0 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 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) 50, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 26.
- This truss 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 13, 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 #144/MO
3010432	A2	Common	6	1	I49215959

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:19 2021 Page 1
ID:0RfyeQ?mR?ggtbqdiWpgSizFyAv-iQFFZqlf1212pdd2WitX5hq2bQuzKbWJIM116yAIS2

Job Reference (optional)

1-10-8 4-7-12 10-0-13 15-6-0 20-11-5 26-4-10 32-0-0 32-10-8
1-10-8 4-7-12 5-5-1 5-5-3 5-5-5 5-5-5 5-7-6 0-10-8

Scale = 1:60.5

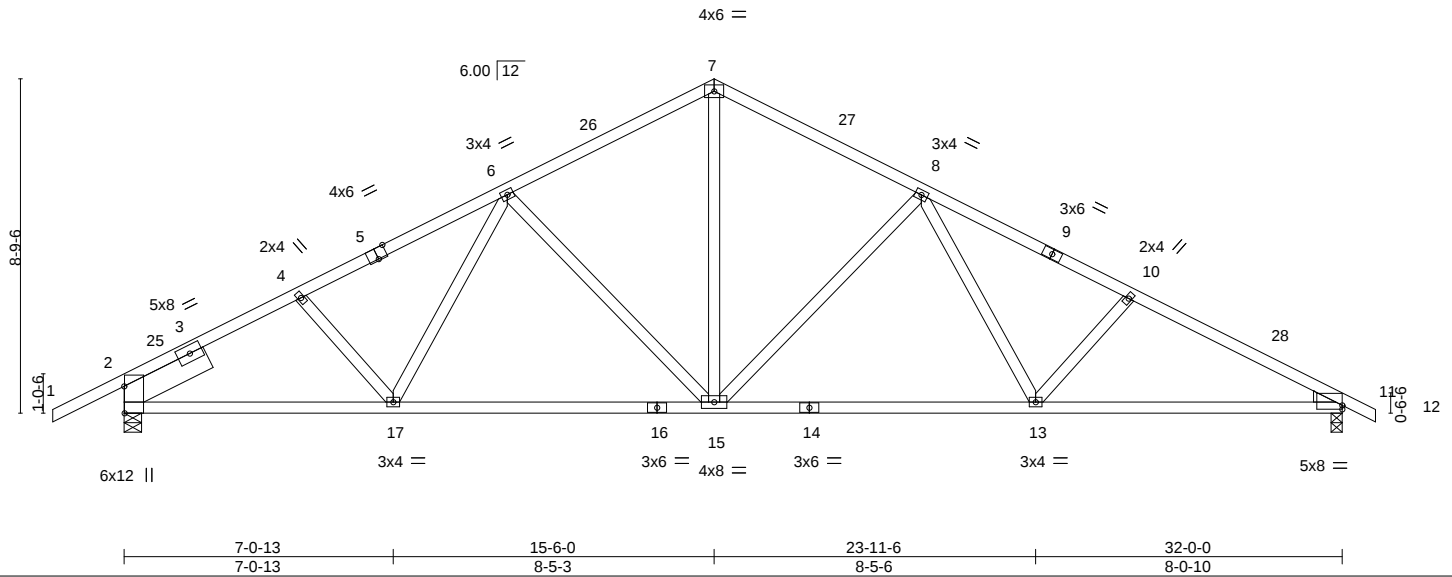


Plate Offsets (X,Y)-- [2:0-8-8,Edge], [5:0-3-0,Edge], [11:0-0-0,0-1-4]

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.79	Vert(LL) -0.16	15-17	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.36	15-17	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.73	Horz(CT) 0.10	11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 139 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-5,9-12: 2x4 SPF 1650F 1.5E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SP No.3
SLIDER Left 2x8 SP 2400F 2.0E 2-6-0

BRACING-

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

REACTIONS.

(size) 2=0-5-8, 11=0-3-8
Max Horz 2=140(LC 16)
Max Uplift 2=-212(LC 12), 11=-200(LC 13)
Max Grav 2=1574(LC 1), 11=1498(LC 1)

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

TOP CHORD 2-4=-2154/441, 4-6=-2050/284, 6-7=-1639/287, 7-8=-1635/290, 8-10=-2333/326,
10-11=-2573/336
BOT CHORD 2-17=-293/1805, 15-17=-206/1736, 13-15=-121/1824, 11-13=-221/2212
WEBS 6-15=-555/209, 7-15=-131/1040, 8-15=-663/224, 8-13=-62/435, 10-13=-313/164

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-10-8 to 1-1-8, Interior(1) 1-1-8 to 15-6-0, Exterior(2R) 15-6-0 to 18-6-0, Interior(1) 18-6-0 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=212, 11=200.
- This truss 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 13, 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 #144/MO
3010432	A3	COMMON GIRDER	1	2	l49215960

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:20 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-AdpenAmNQcAugzCpbDDiUlEzs?koikggYy5aZYyAIS1

5-4-5 10-5-3 15-6-0 20-11-5 23-8-0 26-4-10 32-0-0 32-10-8
5-4-5 5-0-13 5-0-13 5-5-5 2-8-11 2-8-11 5-7-6 0-10-8

Scale = 1:68.9

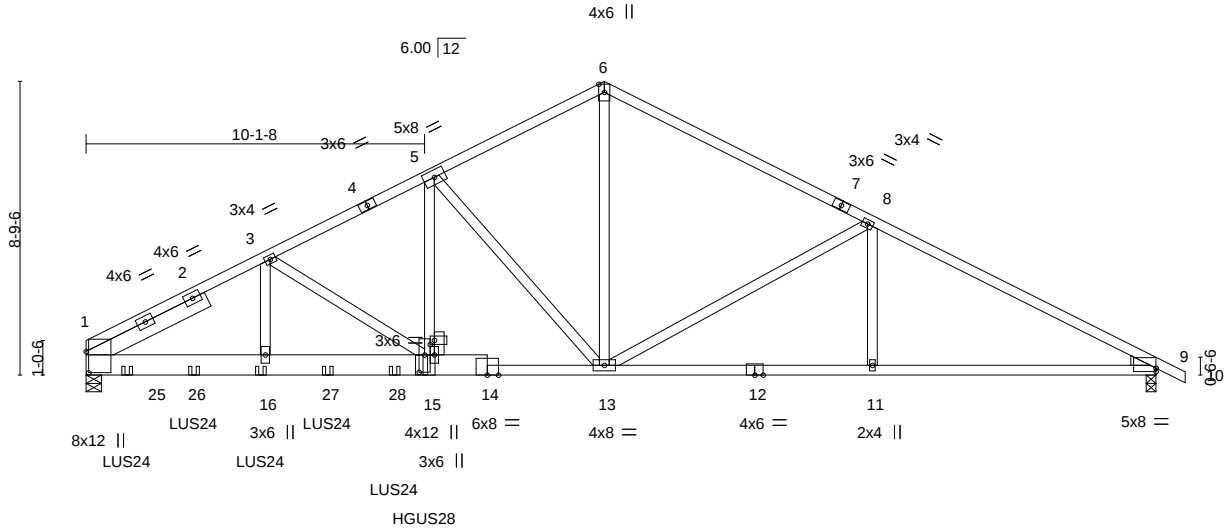


Plate Offsets (X,Y)--	[1:0-7-10,0-0-15], [9:0-0-0,0-1-4], [15:0-6-4,0-2-0], [17:0-1-8,0-1-8]
-----------------------	--

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.91	Vert(LL) -0.18	11-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.92	Vert(CT) -0.36	11-13	>999	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.93	Horz(CT) 0.11	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 318 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF 1650F 1.5E *Except* 1-4,7-10: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except* 1-14: 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	
WEDGE Right: 2x4 SP No.3	
SLIDER Left 2x6 SPF No.2 4-0-0	

REACTIONS.	(size) 1=0-5-8, 9=0-3-8
	Max Horz 1=-155(LC 30)
	Max Uplift 1=-666(LC 8), 9=-364(LC 9)
	Max Grav 1=5362(LC 1), 9=2780(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-3=-8329/1060, 3-5=-7320/947, 5-6=-4415/620, 6-8=-4468/605, 8-9=-5187/656
BOT CHORD	1-16=-971/7326, 15-16=-971/7326, 13-15=-802/6518, 11-13=-477/4510, 9-11=-477/4510
WEBS	3-16=-101/1032, 3-15=-1016/202, 5-15=-487/3882, 5-13=-4007/629, 6-13=-430/3432, 8-11=0/301, 8-13=-748/325

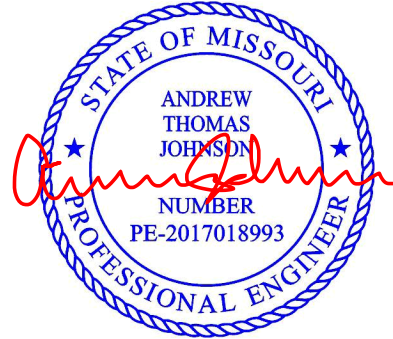
- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All 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=15ft; 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
 - 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=666, 9=364.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 1-2-12 from the left end to 9-2-12 to connect truss(es) to front face of bottom chord.
 - Use Simpson Strong-Tie HGUS28 (36-16d Girder, 6-16d Truss) or equivalent at 10-1-12 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the left, sloping 0.0 deg. down.
 - Fill all nail holes where hanger is in contact with lumber.

Continued on page 2

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

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

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



December 13, 2021



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	A3	COMMON GIRDER	1	2	I49215960

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

8.430 s Aug 16 2021 MiTek Industries, Inc.
Fri Dec 10 17:34:21 2021
Page 2
ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-epN0_Wn?Bvlll7n09wx1Wn8cP41RBwpncr75_yAIS0

LOAD CASE(S)
Standard

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

Uniform Loads (plf)

Vert: 1-6=-70, 6-10=-70, 18-22=-20

Concentrated Loads (lb)

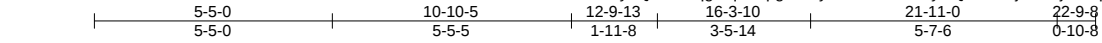
Vert: 16=-499(F) 15=-2704(F) 25=-499(F) 26=-499(F) 27=-499(F) 28=-499(F)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	A4	Roof Special	5	1	I49215961

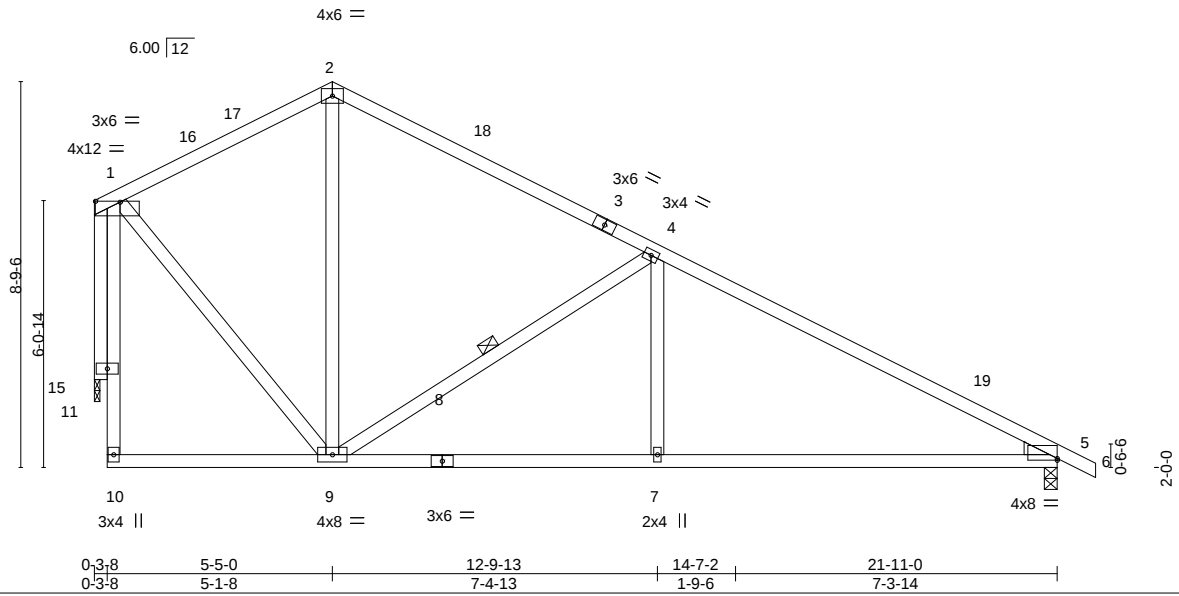
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:22 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-7?xOCsndyDQcvHLCjeFAZjJMGpUnAnjz?GaheRyAIS?



Scale = 1:52.4



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.63	Vert(LL) -0.13 7-14 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.32	Vert(CT) -0.30 7-14 >873 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.11 5 n/a n/a		
	Code IRC2018/TPI2014			Weight: 98 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 4-9

REACTIONS.

(size) 5=0-3-8, 15=0-1-8
Max Horz 15=-231(LC 13)
Max Uplift 5=-162(LC 13), 15=-125(LC 13)
Max Grav 5=1046(LC 1), 15=949(LC 1)

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

TOP CHORD 1-2=-618/208, 2-4=-685/192, 4-5=-1497/237
BOT CHORD 7-9=-104/1224, 5-7=-104/1224
WEBS 1-9=-80/645, 4-9=-882/262, 4-7=0/357, 1-15=-954/172

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-4 to 3-5-4, Interior(1) 3-5-4 to 5-5-0, Exterior(2R) 5-5-0 to 8-5-0, Interior(1) 8-5-0 to 22-9-8 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.
- Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=162, 15=125.
- This truss 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 13, 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



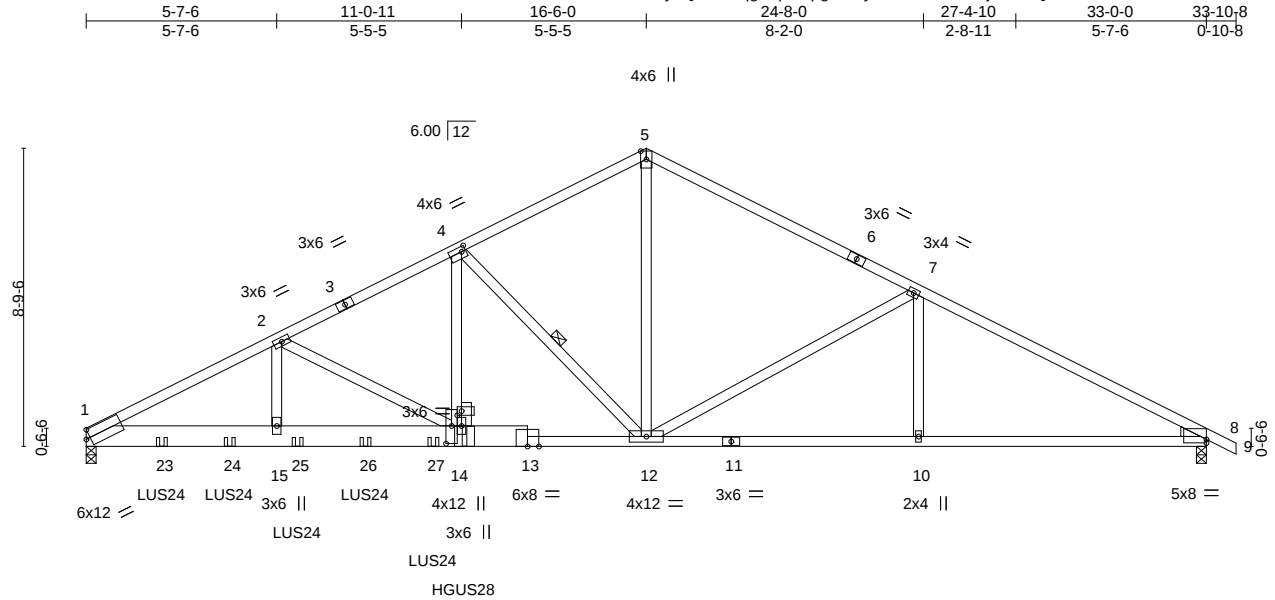
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	A5	Common Girder	1	2	49215962

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:23 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSizFyAv-bCvMPCoFjXYTXQwOHLmP6xsWBCkvwBW6EwKEAtyAIS_



Scale = 1:67.9

Plate Offsets (X,Y)--	[1:Edge,0-3-1], [4:0-1-8,0-1-12], [8:0-0-0,0-1-4], [14:0-6-4,0-2-0], [16:0-1-8,0-1-8]
-----------------------	---

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.78	Vert(LL) -0.21	14-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.97	Vert(CT) -0.41	10-12	>975	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.54	Horz(CT) 0.12	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 312 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 5-6,6-9: 2x4 SPF 1650F 1.5E	TOP CHORD Structural wood sheathing directly applied or 3-3-5 oc purlins.
BOT CHORD 2x4 SPF No.2 *Except* 1-13: 2x8 SP 2400F 2.0E, 11-13: 2x4 SPF 1650F 1.5E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 4-12
WEDGE Right: 2x4 SP No.3	

REACTIONS. (size) 1=0-3-8, 8=0-3-8
Max Horz 1=-144(LC 13)
Max Uplift 1=-665(LC 8), 8=-377(LC 9)
Max Grav 1=5309(LC 1), 8=2907(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-10263/1285, 2-4=-8212/1053, 4-5=-4696/647, 5-7=-4745/640, 7-8=-5455/684
BOT CHORD 1-15=-1203/9110, 14-15=-1203/9110, 12-14=-904/7276, 10-12=-502/4749,
8-10=-502/4749
WEBS 2-15=-146/1586, 2-14=-2090/341, 4-14=-543/4390, 4-12=-4514/697, 5-12=-454/3659,
7-10=0/298, 7-12=-740/329

- 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 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc, 2x4 - 1 row at 0-9-0 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=15ft; 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
 - 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=665, 8=377.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 2-2-12 from the left end to 10-2-12 to connect truss(es) to back face of bottom chord.
 - Use Simpson Strong-Tie HGUS28 (36-16d Girder, 6-16d Truss) or equivalent at 11-1-12 from the left end to connect truss(es) to back face of bottom chord, skewed 0.0 deg to the right, sloping 0.0 deg. down.
 - Fill all nail holes where hanger is in contact with lumber.

Continued on page 2

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



December 13, 2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	A5	Common Girder	1	2	I49215962

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

8.430 s Aug 16 2021 MiTek Industries, Inc.
Fri Dec 10 17:34:23 2021
Page 2
ID:0RfyeQ?mR?ggtbqdiWpgSizFyAv-bCVmPCoFjXYTXQwOHLmP6xsWBCkvBW6EwKEAtyAIS_

LOAD CASE(S)
Standard

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

Uniform Loads (plf)

Vert: 1-5=-70, 5-9=-70, 17-20=-20

Concentrated Loads (lb)

Vert: 14=-2688(B) 23=-499(B) 24=-499(B) 25=-499(B) 26=-499(B) 27=-499(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	A6	Common	2	1	I49215963

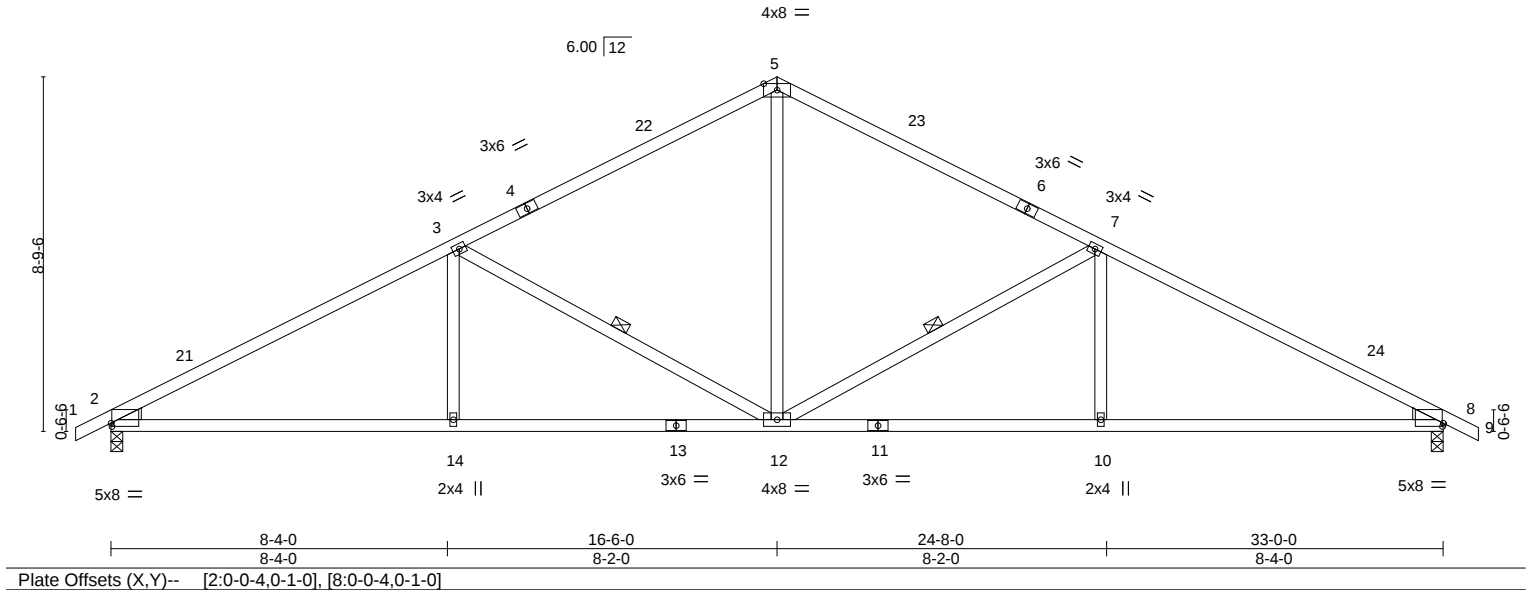
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:24 2021 Page 1

ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-3O38cYptUggJ9aVbq3Hee8Ojrc93ehyFTa3ohJyAIRz

0-10-8 5-7-6 8-4-0 11-0-11 16-6-0 21-11-5 24-8-0 27-4-10 33-0-0 33-10-8
0-10-8 5-7-6 2-8-11 2-8-11 5-5-5 5-5-5 2-8-11 2-8-11 5-7-6 0-10-8

Scale = 1:57.1



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.66	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.64	Vert(LL) -0.14 10-12 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.34	Vert(CT) -0.30 10-12 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.11 8 n/a n/a		
	Code IRC2018/TPI2014			Weight: 123 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 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.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-12, 3-12

REACTIONS.

(size) 2=0-3-8, 8=0-3-8
Max Horz 2=138(LC 12)
Max Uplift 2=-203(LC 12), 8=-203(LC 13)
Max Grav 2=1546(LC 1), 8=1546(LC 1)

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

TOP CHORD 2-3=-2589/317, 3-5=-1794/296, 5-7=-1794/296, 7-8=-2589/317
BOT CHORD 2-14=-313/2202, 12-14=-313/2202, 10-12=-180/2202, 8-10=-180/2202
WEBS 5-12=-88/962, 7-10=0/327, 7-12=-857/267, 3-14=0/327, 3-12=-857/266

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=15ft; 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 16-6-0, Exterior(2R) 16-6-0 to 19-6-0, Interior(1) 19-6-0 to 33-10-8 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=203, 8=203.
- This truss 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 13, 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

16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	A8	Roof Special	1	1	I49215965

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:26 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-?nAv1Dq80Sw1OufzyUK6kZU0aQmN6TGyYumCyAIRx

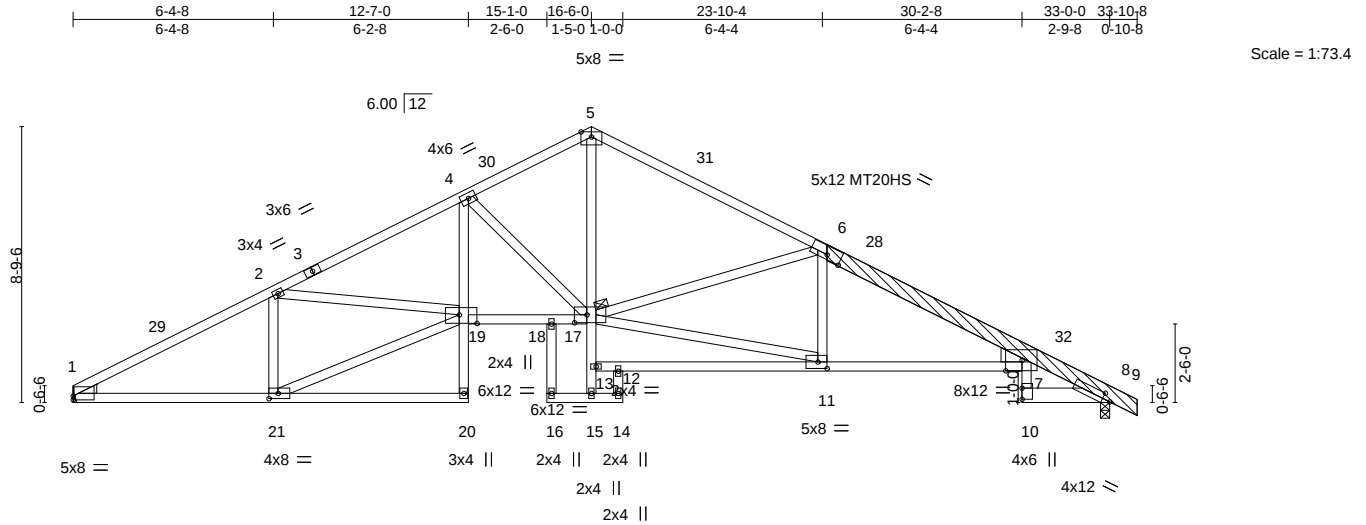


Plate Offsets (X,Y)--	[1:0-0-0,0-1-8], [6:0-5-8,0-1-12], [7:0-6-4,0-4-0], [8:0-3-0,0-2-4], [11:0-3-8,0-2-8], [17:0-4-12,0-3-0], [19:0-6-12,0-3-4], [21:0-3-8,0-2-0]
-----------------------	---

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.83	Vert(LL) -0.47	7-11	>836	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.97	Vert(CT) -0.88	7-11	>452	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.86	Horz(CT) 0.51	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 181 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 6-9: 2x6 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x4 SPF No.2 *Except* 7-13: 2x4 SPF 1650F 1.5E, 8-10: 2x6 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	JOINTS 1 Brace at Jt(s): 17
OTHERS 2x6 SPF 2100F 1.8E	
LBR SCAB 6-9 2x6 SPF 2100F 1.8E one side	
WEDGE	
Left: 2x4 SP No.3, Right: 2x6 SP No.2	

REACTIONS.	(size)	1=Mechanical, 8=0-3-8
Max Horz	1=-148(LC 13)	
Max Uplift	1=-185(LC 12), 8=-201(LC 13)	
Max Grav	1=1484(LC 1), 8=1550(LC 1)	

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-2672/328, 2-4=-3382/416, 4-5=-2393/326, 5-6=-2416/306, 6-7=-2987/345, 7-8=-861/142
BOT CHORD	1-21=-342/2294, 4-19=-116/937, 18-19=-300/2936, 17-18=-297/2895, 7-11=-224/2793, 7-10=-44/486
WEBS	13-15=0/316, 13-17=0/268, 5-17=-180/1704, 2-21=-832/194, 19-21=-373/2423, 2-19=0/651, 4-17=-1206/269, 6-11=-466/109, 11-17=-218/2711, 6-17=-833/295

- NOTES-**
- Attached 11-3-4 scab 6 to 9, front face(s) 2x6 SPF 2100F 1.8E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c. except : starting at 0-0-8 from end at joint 6, nail 2 row(s) at 7" o.c. for 2-0-0; starting at 6-3-6 from end at joint 6, nail 2 row(s) at 3" o.c. for 4-9-6.
 - 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=15ft; 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 16-6-0, Exterior(2R) 16-6-0 to 19-6-0, Interior(1) 19-6-0 to 33-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 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) 1=185, 8=201.
 - This truss 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 13, 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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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 always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, handling, erection and bracing of trusses and truss systems, see **ANSI/APA Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601.

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	A10	Roof Special	2	1	I49215967

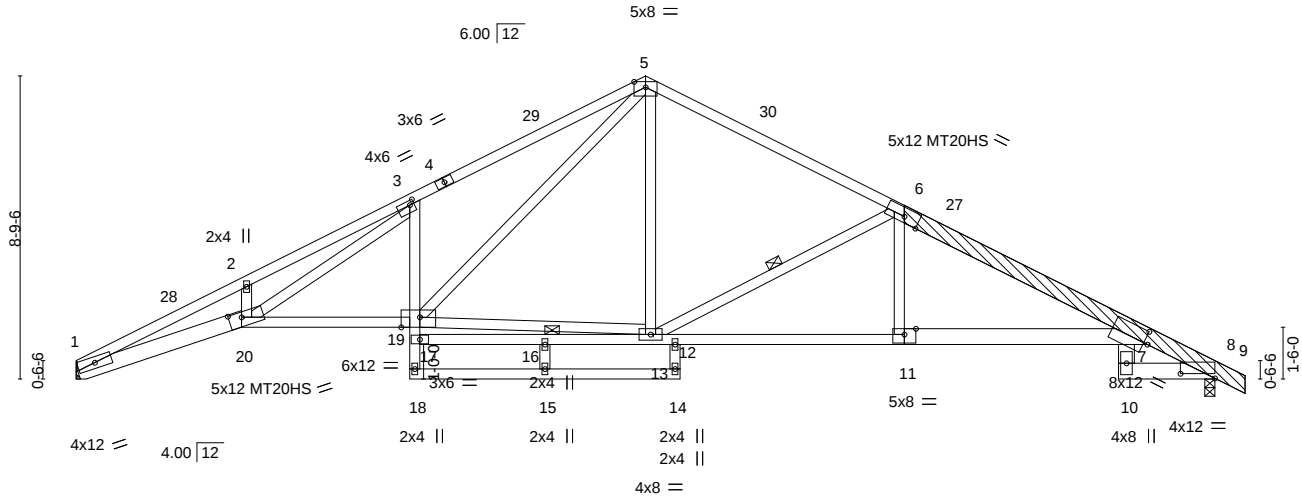
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:12 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-P4Kc5RgMJ8A0jkbH7Y4q9cvczn02qB7Uii99H0yAIS9

4-9-8	9-8-0	16-6-0	17-6-0	23-10-4	27-1-4	30-2-8	33-0-0	33-10-8
4-9-8	4-10-8	6-10-0	1-0-0	6-4-4	3-3-0	3-1-4	2-9-8	0-10-8

Scale = 1:66.8



4-9-8	9-8-0	13-7-0	16-6-0	17-6-0	23-10-4	30-2-8	33-0-0
4-9-8	4-10-8	3-11-0	2-11-0	1-0-0	6-4-4	6-4-4	2-9-8

Plate Offsets (X,Y)-- [3:0-1-8,0-1-8], [6:0-5-4,Edge], [7:0-1-6,0-4-4], [8:1-0-0,0-1-10], [19:0-6-8,Edge], [20:0-4-8,0-1-12]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.91	Vert(LL) -0.46	19-20	>855	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.85	Vert(CT) -0.85	19-20	>467	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.65	Horz(CT) 0.56	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 184 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-9: 2x6 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
1-20,7-11: 2x6 SPF 2100F 1.8E, 19-20: 2x4 SPF 1650F 1.5E
8-10: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
7-10: 2x6 SPF No.2
OTHERS 2x6 SPF 2100F 1.8E
LBR SCAB 6-9 2x6 SPF 2100F 1.8E one side

REACTIONS.

(size) 1=Mechanical, 8=0-3-8
Max Horz 1=-148(LC 13)
Max Uplift 1=-185(LC 12), 8=-201(LC 13)
Max Grav 1=1485(LC 1), 8=1552(LC 1)

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

TOP CHORD 1-2=-5743/727, 2-3=-5660/891, 3-5=-3302/563, 5-6=-2028/305, 6-7=-3050/346,
7-8=-717/128
BOT CHORD 1-20=-805/5243, 19-20=-371/2942, 3-19=-951/318, 16-17=-5/447, 13-16=-5/447,
12-13=-217/2770, 11-12=-217/2770, 7-11=-218/2767
WEBS 7-10=-36/408, 6-13=-1210/290, 6-11=0/347, 5-13=-75/598, 13-19=-86/1228,
5-19=-395/1710, 3-20=-508/2606

NOTES-

- Attached 11-3-4 scab 6 to 9, front face(s) 2x6 SPF 2100F 1.8E with 2 row(s) of 10d (0.131"x3") nails spaced 9" o.c.except : starting at 6-5-11 from end at joint 6, nail 2 row(s) at 2" o.c. for 4-7-1.
- 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=15ft; 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 16-6-0, Exterior(2R) 16-6-0 to 19-6-0, Interior(1) 19-6-0 to 33-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) 1=185, 8=201.
- This truss 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.

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-13
JOINTS 1 Brace at Jt(s): 16



December 13,2021

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 #144/MO
3010432	A11	Roof Special	1	1	I49215968

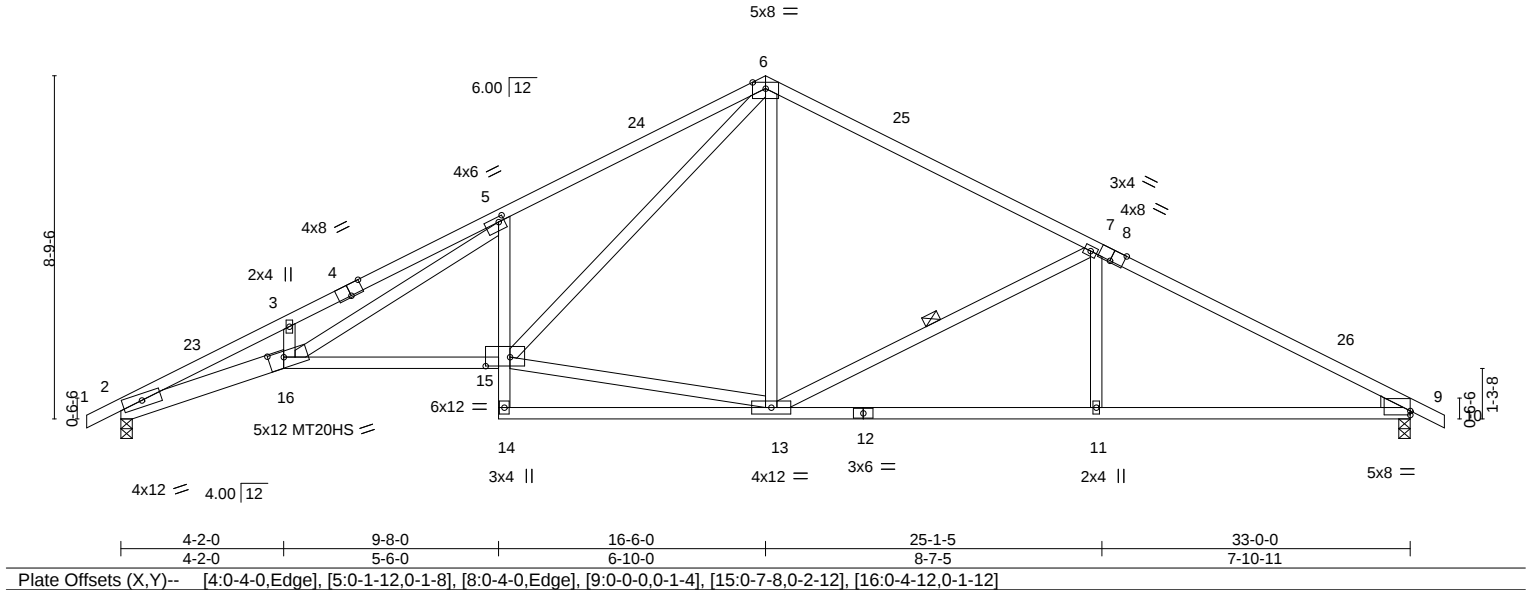
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:13 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-tHu_Jng_4SltKu9ThFb3iqRq2ANAZe2exMvipSyAIS8

0-10-8 4-2-0 9-8-0 16-6-0 21-11-5 25-1-5 27-4-10 33-0-0 33-10-8
0-10-8 4-2-0 5-6-0 6-10-0 5-5-5 3-2-0 2-3-5 5-7-6 0-10-8

Scale = 1:59.0



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.76	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.39 15-16 >999 240	MT20HS	148/108
BCLL 0.0	Lumber DOL 1.15	WB 0.67	Vert(CT) -0.72 15-16 >552 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.31 9 n/a n/a		
	Code IRC2018/TPI2014			Weight: 143 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
6-8,8-10: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-16: 2x6 SPF 2100F 1.8E, 15-16: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2
WEDGE
Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-13

REACTIONS.

(size) 2=0-3-8, 9=0-3-8
Max Horz 2=138(LC 12)
Max Uplift 2=-203(LC 12), 9=-203(LC 13)
Max Grav 2=1546(LC 1), 9=1546(LC 1)

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

TOP CHORD 2-3=-5569/780, 3-5=-5503/879, 5-6=-3146/546, 6-7=-1821/295, 7-9=-2620/324
BOT CHORD 2-16=-793/5069, 15-16=-358/2800, 5-15=-866/312, 11-13=-188/2237, 9-11=-188/2237
WEBS 13-15=-85/1428, 6-15=-396/1799, 6-13=-66/398, 7-11=0/318, 7-13=-860/271,
5-16=-508/2543

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=15ft; 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 16-6-0, Exterior(2R) 16-6-0 to 19-6-0, Interior(1) 19-6-0 to 33-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2 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) 2=203, 9=203.
- This truss 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 13, 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

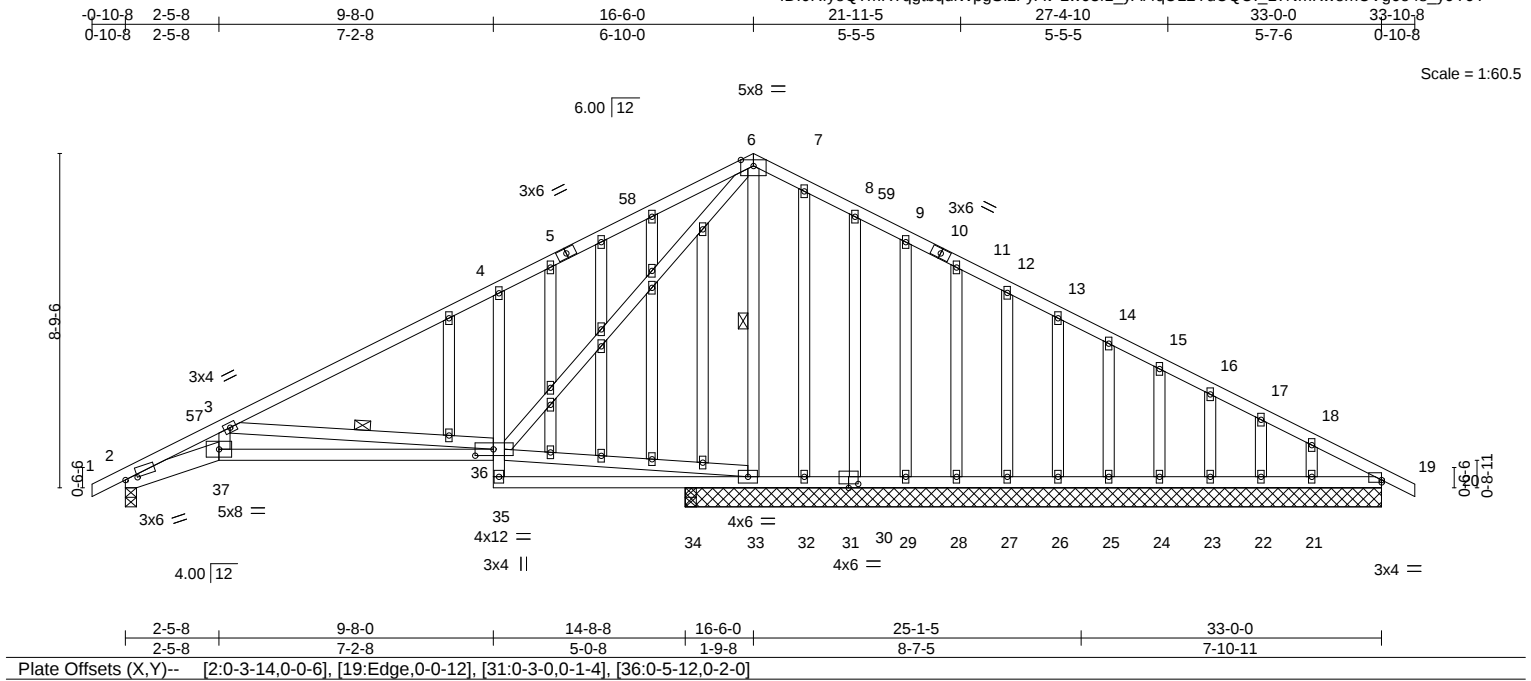


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 3010432	Truss A12	Truss Type GABLE	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #144/MO 149215969
----------------	--------------	---------------------	----------	----------	--

Builders First Source, Valley Center, KS 67147

ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-Lw03f1_yAi4qUL2YuUQUL_L?NmKwemUVg6o4s_y9Y9T
8.430 s Jul 16 2021 MiTek Industries, Inc. Mon Dec 13 13:30:56 2021 Page 1



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.52	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.47	Vert(LL) -0.09 36-37 >999 240		
BCLL 0.0	Lumber DOL 1.15	WB 0.53	Vert(CT) -0.21 36-37 >848 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.05 34 n/a n/a		
	Code IRC2018/TPI2014			Weight: 209 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
2-37: 2x6 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-36, 6-33

REACTIONS.

All bearings 18-3-8 except (jt=length) 2=0-3-8, 34=0-3-8.
(lb) - Max Horz 2=138(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21 except 33=300(LC 12),
19=284(LC 25), 19=188(LC 1)
Max Grav All reactions 250 lb or less at joint(s) 19, 32, 30, 29, 28, 27, 26, 25, 24, 23, 22, 34 except
2=523(LC 1), 33=1240(LC 1), 21=257(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-57=-1431/238, 3-57=-1388/240, 3-4=-262/138, 4-5=-258/189, 6-7=-41/620,
7-8=-37/602, 8-59=-46/589, 9-59=-51/573, 9-10=-61/591, 10-11=-67/568,
11-12=-83/591, 12-13=-98/591, 13-14=-114/591, 14-15=-129/591, 15-16=-145/591,
16-17=-161/593, 17-18=-174/583, 18-19=-200/613
BOT CHORD 2-37=-328/1322, 36-37=-333/1238, 4-36=-539/258, 32-33=-512/187, 31-32=-512/187,
30-31=-512/187, 29-30=-512/187, 28-29=-512/187, 27-28=-512/187, 26-27=-512/187,
25-26=-512/187, 24-25=-512/187, 23-24=-512/187, 22-23=-512/187, 21-22=-512/187,
19-21=-512/187
WEBS 3-37=0/433, 3-36=-1097/325, 33-36=-429/185, 6-36=-294/970, 6-33=-1246/290

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=15ft; 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 16-6-0, Exterior(2R) 16-6-0 to 19-6-0, Interior(1) 19-6-0 to 33-10-8 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.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21 except (jt=lb) 33=300, 19=284, 19=284.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2



December 13, 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 #144/MO	I49215969
3010432	A12	GABLE	1	1	Job Reference (optional)	

Builders First Source, Valley Center, KS 67147

8.430 s Jul 16 2021 MiTek Industries, Inc. Mon Dec 13 13:30:57 2021 Page 2
ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-p6aRtN?ax?Ch6VdkRCxjqBuA7Ag9NDkfumYdORy9Y9S

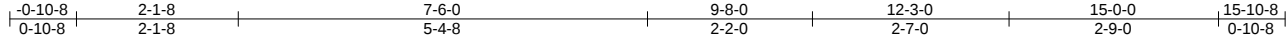
- NOTES-**
- 10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	A13	Roof Special	1	1	i49215970

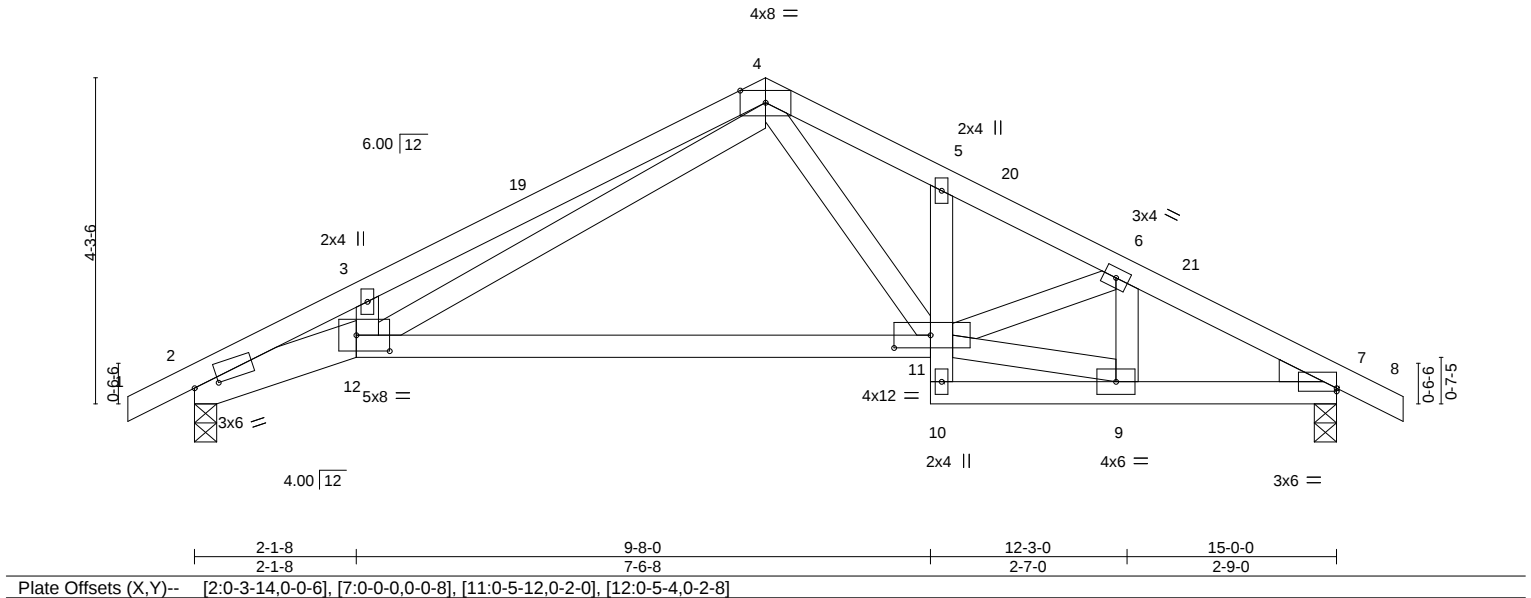
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:16 2021 Page 1

ID:0RfyQ?mR?ggtbqdiWpgSizFyAv-Isa7xpjsNNgSBMu2MN8mKS3OsOT7m4e4dK7NQnyAIS5



Scale = 1:30.3



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.12 11-12 >999 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.27 11-12 >664 180				
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.06 7 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 63 lb		FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
 BOT CHORD 2x4 SPF No.2 *Except*
 2-12: 2x6 SPF No.2
 WEBS 2x4 SPF No.2
 WEDGE
 Right: 2x4 SP No.3

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
 Max Horz 2=66(LC 16)
 Max Uplift 2=101(LC 12), 7=101(LC 13)
 Max Grav 2=736(LC 1), 7=736(LC 1)

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

TOP CHORD 2-3=-1990/410, 3-4=-2059/567, 4-5=-1189/341, 5-6=-1195/298, 6-7=-1072/264
 BOT CHORD 2-12=-332/1796, 11-12=-99/768, 7-9=-182/907
 WEBS 4-12=-331/1210, 4-11=-111/547, 9-11=-137/921, 6-9=-258/73

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-3-4, Interior(1) 2-3-4 to 7-6-0, Exterior(2R) 7-6-0 to 10-6-0, Interior(1) 10-6-0 to 15-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=101, 7=101.
- This truss 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 13,2021

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



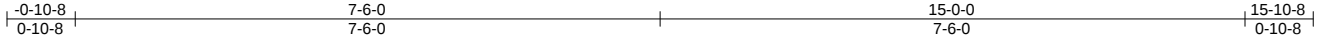
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	A14	Common Supported Gable	1	1	149215971

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:17 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-m28V88jU8hoJpVTEw5f?sgcg5ow3Vb8Ds_twyDyAIS4



Scale = 1:29.5

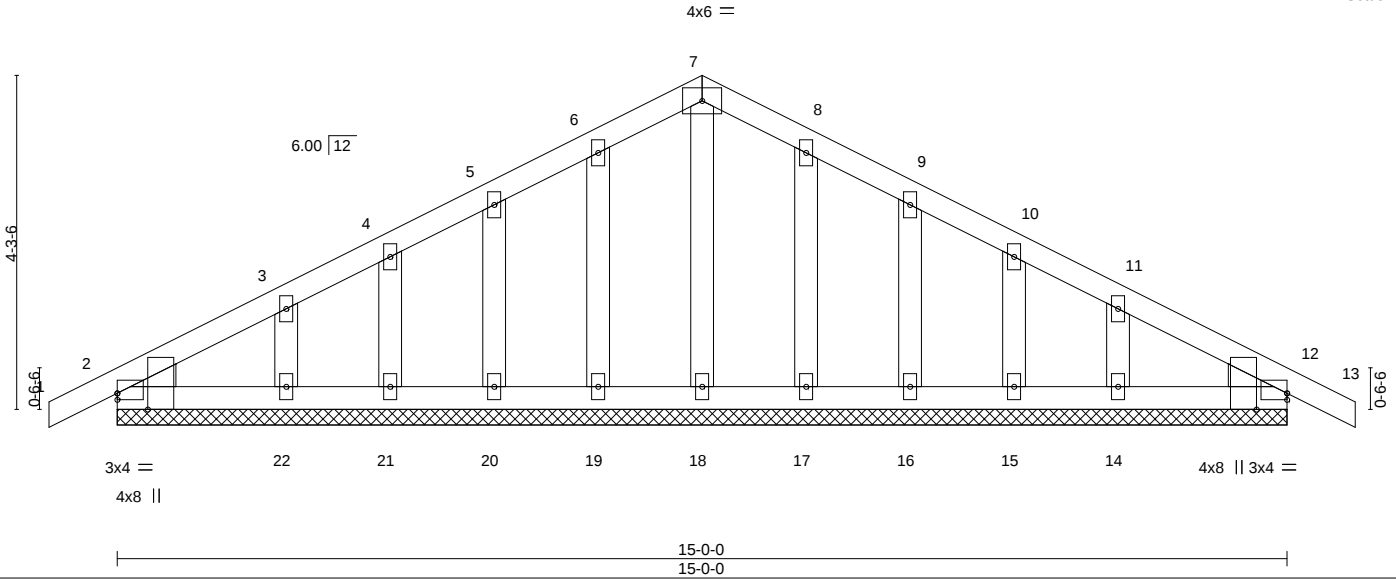


Plate Offsets (X,Y)-- [2:Edge,0-1-0], [2:0-2-8,Edge], [12:Edge,0-1-0], [12:0-2-8,Edge]

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)	-0.00	12	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	-0.00	12	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	12	n/a	n/a		
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S						Weight: 63 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 15-0-0.
 (lb) - Max Horz 2=66(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14
 Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 22, 17, 16, 15, 14

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-2-0, Exterior(2N) 2-2-0 to 7-6-0, Corner(3R) 7-6-0 to 10-6-0, Exterior(2N) 10-6-0 to 15-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 12, 19, 20, 21, 22, 17, 16, 15, 14.
- This truss 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 13, 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 #144/MO
3010432	B1	GABLE	1	1	149215972

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:30 2021 Page 1
ID:0RfyeQ?mR?ggtbqdiWpgSizFyAv-uYQQtbue4gRTtVzkBJO2uPetR1M_2U78rVX6vzyAIRt

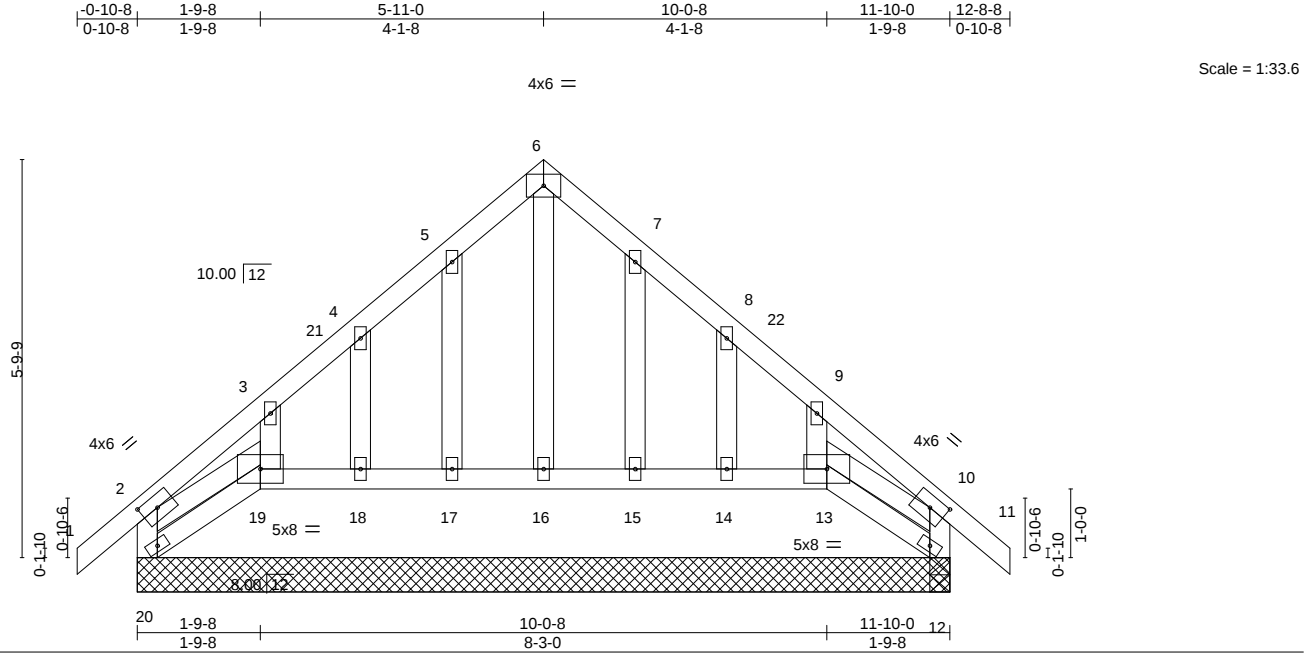


Plate Offsets (X,Y)-- [2:0-2-14,0-2-0], [10:0-2-14,0-2-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.07	Vert(LL) -0.00	13	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.03	Vert(CT) -0.00	13	>999	180			
BCLL 0.0	Rep Stress Incr YES		WB 0.04	Horz(CT) 0.00	12	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 59 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" oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing, Except: 6'-0" oc bracing: 19-20,12-13.

REACTIONS.

All bearings 11-10-0 except (jt=length) 12=0-3-8.
(lb) - Max Horz 20=-157(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 19, 13, 17, 18, 15, 14, 12 except 20=-104(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 20, 19, 13, 16, 17, 18, 15, 14, 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-11-4, Interior(1) 1-11-4 to 5-11-0, Exterior(2R) 5-11-0 to 8-11-0, Interior(1) 8-11-0 to 12-8-8 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 studs spaced at 1'-4" oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Bearing at joint(s) 20, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 13, 17, 18, 15, 14, 12 except (jt=lb) 20=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 13, 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 #144/MO
3010432	B2	ROOF SPECIAL	1	1	149215973

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:31 2021 Page 1
ID:0RfyeQ?mR?ggtbqdiWpgSizFyAv-Mk_o4xuHr_ZKVfXxl1vHRdB_fRbXnwtH49GfRPyAIRs



4x6 =

Scale = 1:37.1

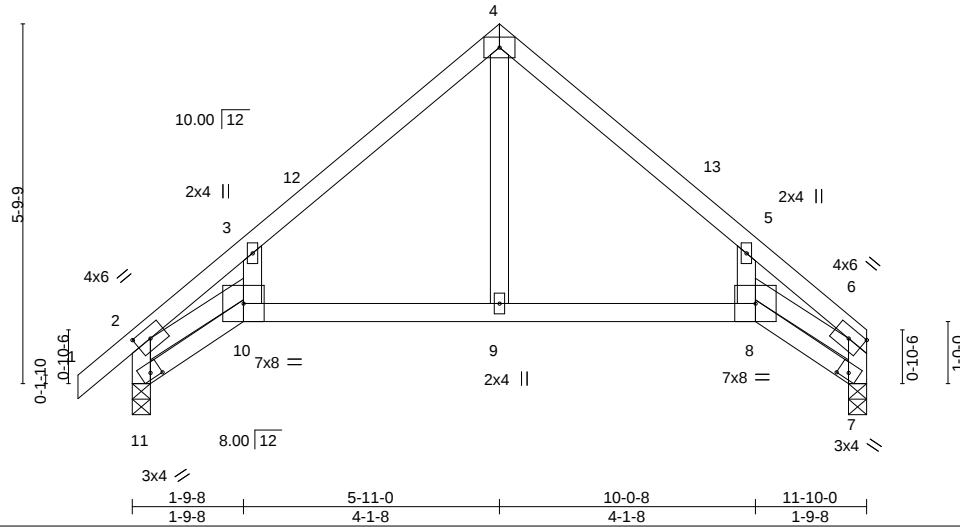


Plate Offsets (X,Y)-- [2:0-2-14,0-2-0], [7:0-2-0,0-1-3], [11:0-2-0,0-1-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.36	Vert(LL) -0.08	8-9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.13	8-9	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.07	Horz(CT) 0.15	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 46 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 11=0-3-8, 7=0-3-8
Max Horz 11=151(LC 11)
Max Uplift 11=-71(LC 12), 7=-51(LC 13)
Max Grav 11=594(LC 1), 7=516(LC 1)

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

TOP CHORD 2-3=-654/80, 3-4=-557/168, 4-5=-555/181, 5-6=-651/86, 2-11=-538/142, 6-7=-468/105
BOT CHORD 10-11=-196/256, 9-10=-41/423, 8-9=-41/423
WEBS 2-10=-33/321, 6-8=-56/313, 4-9=-38/280

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 1-11-4, Interior(1) 1-11-4 to 5-11-0, Exterior(2R) 5-11-0 to 8-11-0, Interior(1) 8-11-0 to 11-8-4 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) 11, 7 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) 11, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 13, 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 #144/MO
3010432	B3	Roof Special	5	1	I49215974

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:32 2021 Page 1
ID:0RfyeQ?mR?ggtbqdiWpgSizFyAv-qxYAIHvclhB6p67kRWzqk9QrxZWNCRIp0DzsyAIRr

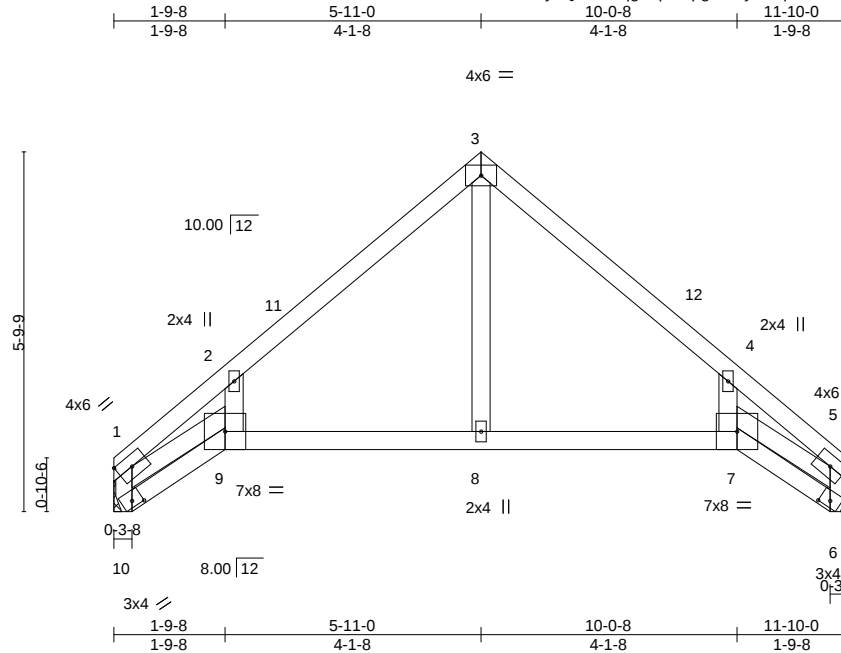


Plate Offsets (X,Y)-- [6:0-2-0,0-1-3], [10:0-2-0,0-1-3]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.36	Vert(LL) 0.09	8-9	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.47	Vert(CT) -0.13	7-8	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.07	Horz(CT) 0.15	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS					Weight: 45 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 10=Mechanical, 6=Mechanical
Max Horz 10=137(LC 9)
Max Uplift 10=-51(LC 12), 6=-51(LC 13)
Max Grav 10=519(LC 1), 6=519(LC 1)

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

TOP CHORD 1-2=-659/75, 2-3=-563/168, 3-4=-563/182, 4-5=-659/86, 1-10=-471/111, 5-6=-471/105
BOT CHORD 9-10=-184/253, 8-9=-42/428, 7-8=-42/428
WEBS 1-9=-31/300, 5-7=-55/318, 3-8=-38/282

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=15ft; 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 5-11-0, Exterior(2R) 5-11-0 to 8-11-0, Interior(1) 8-11-0 to 11-8-4 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.
- 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) 10, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 13, 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



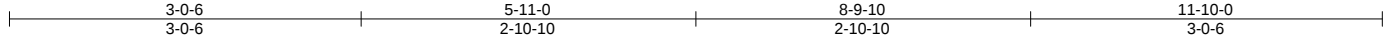
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	BOX1	FLAT GIRDER	1	1	l49215975

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:33 2021 Page 1
ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-175YVdwXMbp2kzhJsSylW2GDRECGfgtaXTImWlyAIRq

Job Reference (optional)



Scale = 1:19.9

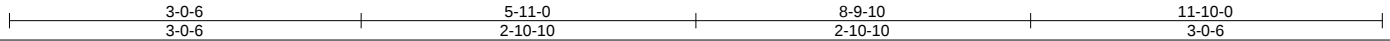
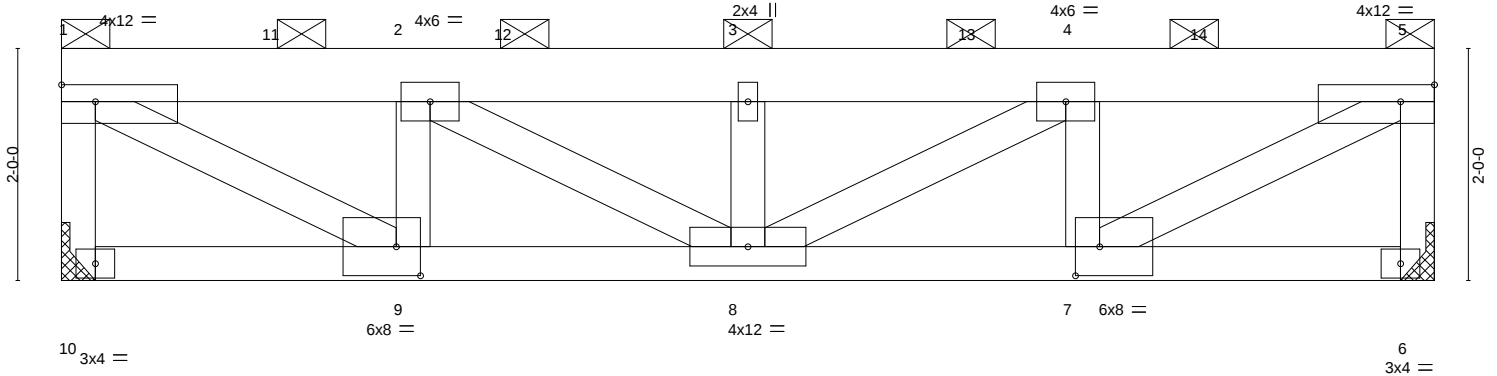


Plate Offsets (X,Y)-- [1:Edge,0-1-12], [5:Edge,0-1-12], [7:0-2-8,0-3-0], [9:0-2-8,0-3-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.79	Vert(LL) -0.10	8	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.80	Vert(CT) -0.19	8	>737	180			
BCLL 0.0	Rep Stress Incr NO		WB 0.74	Horz(CT) 0.04	6	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MS						Weight: 55 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2 *Except*
1-9,2-8,4-8,5-7: 2x4 SPF 1650F 1.5E

BRACING-

TOP CHORD 2-0-0 oc purlins (2-6-4 max.): 1-5, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-9-6 oc bracing.

REACTIONS.

(size) 10=Mechanical, 6=Mechanical
Max Horz 10=56(LC 5)
Max Uplift 10=-348(LC 4), 6=-347(LC 5)
Max Grav 10=2723(LC 1), 6=2710(LC 1)

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

TOP CHORD 1-10=-2651/352, 1-2=-4103/522, 2-3=-5461/685, 3-4=-5461/685, 4-5=-4105/523,
5-6=-2639/351
BOT CHORD 8-9=-547/4103, 7-8=-533/4105
WEBS 1-9=-582/4568, 2-9=-2234/320, 2-8=-201/1558, 3-8=-1455/212, 4-8=-202/1556,
4-7=-2236/320, 5-7=-582/4572

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=348, 6=347.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 879 lb down and 130 lb up at 1-10-12, 879 lb down and 130 lb up at 3-10-12, 879 lb down and 124 lb up at 5-10-12, and 879 lb down and 130 lb up at 7-10-12, and 879 lb down and 130 lb up at 9-10-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-5=-70, 6-10=-20



December 13, 2021

Continued on page 2

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	BOX1	FLAT GIRDER	1	1	I49215975

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:33 2021 Page 2
ID:0RfyeQ?mR?qqtbqdiWpgSlzFyAv-I75YVdwXMbp2kzhJsSylW2GDREcGfgtaXTImWlyAIRq

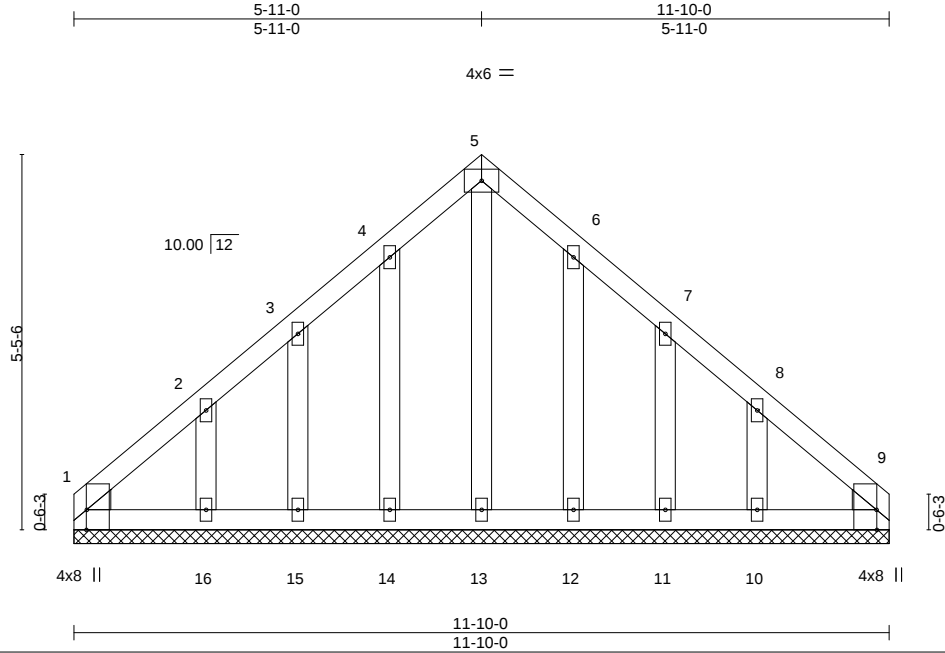
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 3=-879 11=-879 12=-879 13=-879 14=-879

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	C1	Common Supported Gable	1	1	I49215976

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:34 2021 Page 1
ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-mJfwjyx97vxvM7GWQ9T_2Fpauekt_Inkm7VJ2kyAIRp



Scale = 1:33.4

Plate Offsets (X,Y)--		[1:0-3-8,Edge], [9:0-3-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.04
TCDL 10.0	Lumber DOL	1.15	BC 0.04
BCLL 0.0	Rep Stress Incr	YES	WB 0.06
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-S
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) 0.00 9 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 56 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 11-10-0.
(lb) - Max Horz 1=120(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 14, 15, 16, 12, 11, 10, 1, 9
Max Grav All reactions 250 lb or less at joint(s) 13, 14, 15, 16, 12, 11, 10, 1, 9

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-0-0 to 3-3-0, Exterior(2N) 3-3-0 to 5-11-0, Corner(3R) 5-11-0 to 8-11-0, Exterior(2N) 8-11-0 to 11-10-0 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
- 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) 14, 15, 16, 12, 11, 10, 1, 9.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 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 13, 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

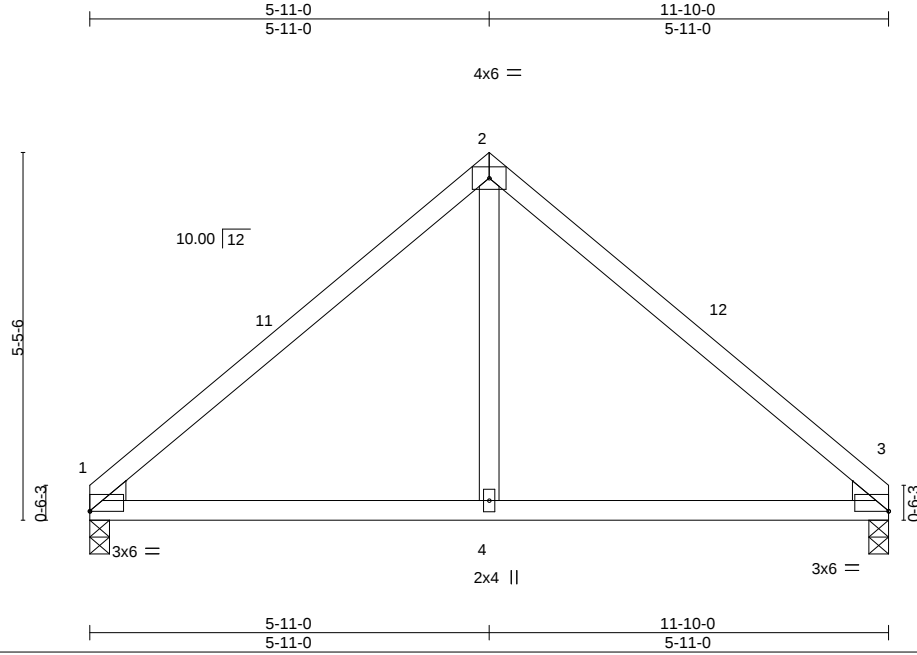


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	C2	Common	4	1	I49215977

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:35 2021 Page 1
ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-EVDJwJxnuD3mzHri_t_DbTMgf2?_jk0t?nEtaAyAIRO



Scale = 1:34.1

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

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 0.36	Vert(LL)	-0.04	4-7	>999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.30	Vert(CT)	-0.07	4-7	>999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.01	1	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 38 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 1=0-3-8, 3=0-3-8
Max Horz 1=-116(LC 10)
Max Uplift 1=-55(LC 12), 3=-55(LC 13)
Max Grav 1=533(LC 1), 3=533(LC 1)

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

TOP CHORD 1-2=-595/162, 2-3=-595/162
BOT CHORD 1-4=-18/365, 3-4=-18/365
WEBS 2-4=0/271

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-11-0, Exterior(2R) 5-11-0 to 8-11-0, Interior(1) 8-11-0 to 11-10-0 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
- 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.
- 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 13,2021

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



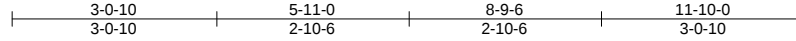
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	C3	COMMON GIRDER	1	2	149215978

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:36 2021 Page 1

ID:0RfyeQ?mR?qqtbqdiWpgSizFyAv-iinh8eyPfWBdbQQuXaVS8gutASCOS5h0DR_Q6dyAIRn



4x8 ||

Scale = 1:34.3

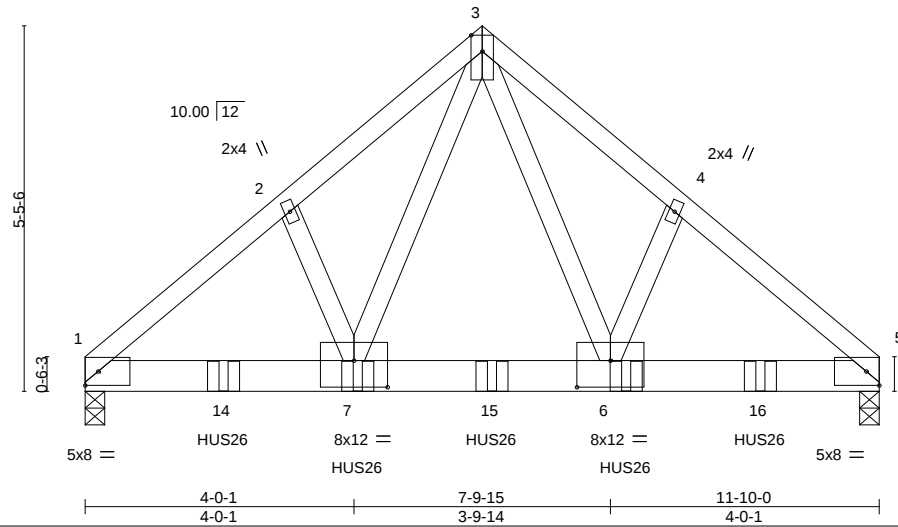


Plate Offsets (X,Y)-- [6:0-6-0,0-4-12], [7:0-6-0,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.25	Vert(LL)	-0.05	6-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.87	Vert(CT)	-0.09	6-7	>999	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.42	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS							
								Weight: 113 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-3-11 oc purlins.
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=-116(LC 4)
Max Uplift 1=-531(LC 8), 5=-545(LC 9)
Max Grav 1=4144(LC 1), 5=4252(LC 1)

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

TOP CHORD 1-2=-5259/691, 2-3=-5190/746, 3-4=-5189/746, 4-5=-5256/690
BOT CHORD 1-7=-550/4016, 6-7=-323/2752, 5-6=-495/4016
WEBS 3-6=-511/3399, 3-7=-511/3403

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 0-5-0 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=15ft; 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
- 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=531, 5=545.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 10-0-12 to connect truss(es) to back face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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



December 13, 2021

Continued on page 2

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	C3	COMMON GIRDER	1	2	I49215978

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:36 2021 Page 2
ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-iinh8eyPfWBdbQQuXaVS8gutASCOS5h0DR_Q6dyAIRn

LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 6=-1464(B) 7=-1464(B) 14=-1465(B) 15=-1474(B) 16=-1464(B)

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	CJ1	Diagonal Hip Girder	1	1	149215979

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:37 2021 Page 1
ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-AuL3L_z1QqJTDa?45I0hguR0KsfcBeKAS5j_f3yAIRm

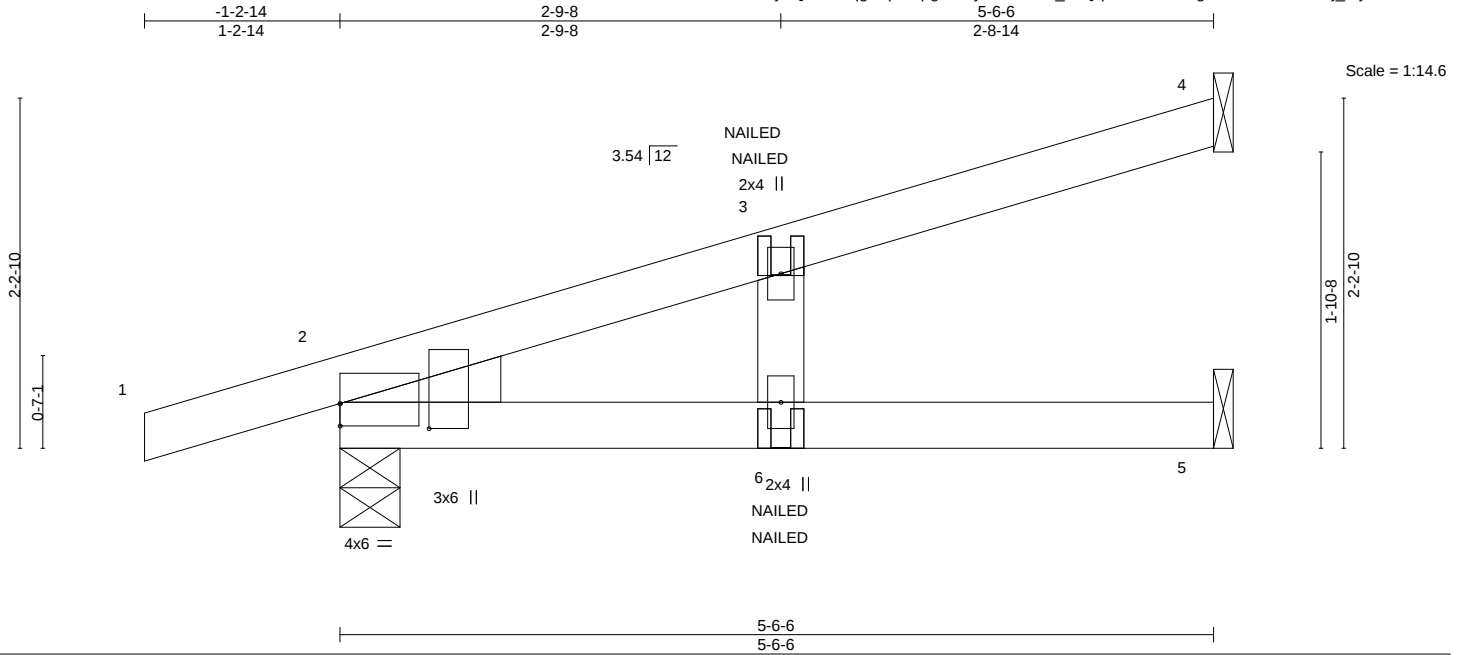


Plate Offsets (X,Y)-- [2:0-0-0,0-1-11], [2:0-1-14,0-6-12]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.35	Vert(LL)	-0.06	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.42	Vert(CT)	-0.11	6	>571	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.01	Horz(CT)	0.02	2	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 17 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

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-4-9, 5=Mechanical
Max Horz 2=77(LC 4)
Max Uplift 4=-51(LC 8), 2=-93(LC 4), 5=-13(LC 8)
Max Grav 4=147(LC 1), 2=350(LC 1), 5=96(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=15ft; 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) 4, 2, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-70, 5-7=-20
Concentrated Loads (lb)
Vert: 6=-14(F=-7, B=-7)



December 13, 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 #144/MO
3010432	CJ2	Diagonal Hip Girder	2	1	I49215980

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:37 2021 Page 1
ID:0RfyeQ?mR?qqtbqdiWpgSlzFyAv-AuL3L_z1QqJTDa?45i0hguRxcswBeSAS5j_f3yAIRm

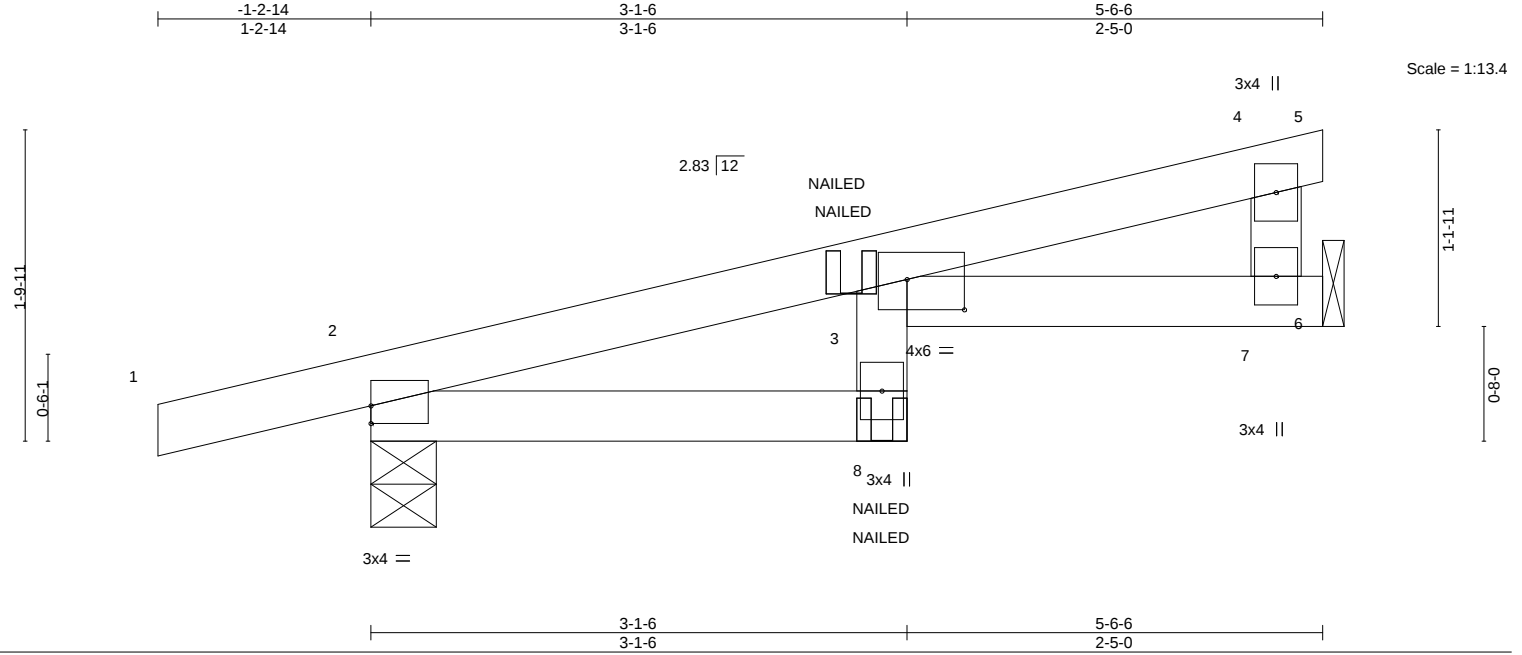


Plate Offsets (X,Y)--		[2:0-0-0,0-1-4], [3:0-4-0,0-2-2]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.65
TCDL 10.0	Lumber DOL	1.15	BC 0.40
BCLL 0.0	Rep Stress Incr	NO	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-MR
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.06 8 >980 240
			Vert(CT) -0.11 8 >555 180
			Horz(CT) 0.05 7 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 16 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 5-6-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 7=Mechanical, 2=0-4-9
Max Horz 2=47(LC 5)
Max Uplift 7=-48(LC 8), 2=-89(LC 4)
Max Grav 7=241(LC 1), 2=336(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=15ft; 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) 7, 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) "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 4-5=-20, 8-9=-20, 3-6=-20
- Concentrated Loads (lb)
Vert: 8=-6(F=-3, B=-3)



December 13, 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 #144/MO
3010432	D1	Roof Special Supported Gable	1	1	l49215981

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:39 2021 Page 1

ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-7HTpmg_jyRZBSu9TDi39IJWQTfQafY5TwPC4jyyAIRk

0-10-8 10-1-4 20-3-8 10-2-4
0-10-8 10-1-4

Scale = 1:39.1

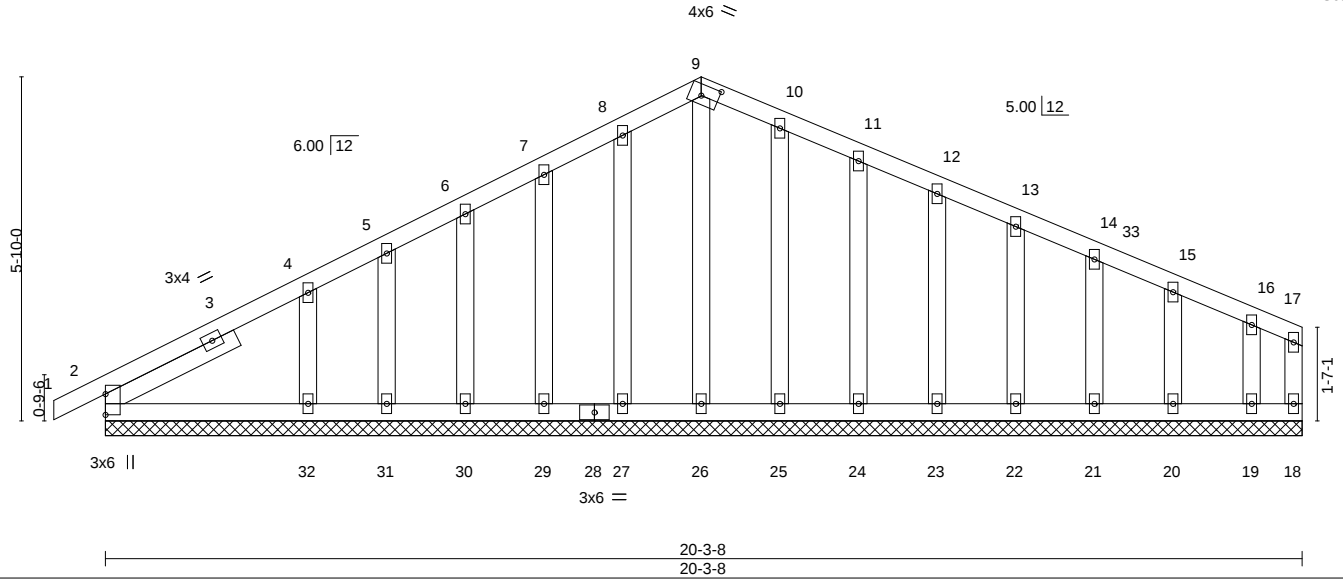


Plate Offsets (X,Y)--		[9:0-3-8,0-2-4]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.12	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.07	Vert(LL) -0.00 1 n/r 120
BCLL 0.0	Rep Stress Incr YES	WB 0.06	Vert(CT) 0.00 1 n/r 120
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.00 18 n/a n/a
		PLATES	
		MT20	
		GRIP	
		197/144	
		Weight: 103 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 Left 2x4 SPF No.2 2-6-0

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

REACTIONS. All bearings 20-3-8.
(lb) - Max Horz 2=90(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 18, 2, 27, 29, 30, 31, 32, 25, 24, 23, 22, 21, 20, 19
Max Grav All reactions 250 lb or less at joint(s) 18, 2, 26, 27, 29, 30, 31, 25, 24, 23, 22, 21, 20, 19 except 32=281(LC 25)

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=15ft; 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 10-1-4, Corner(3R) 10-1-4 to 13-1-4, Exterior(2N) 13-1-4 to 20-1-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 18, 2, 27, 29, 30, 31, 32, 25, 24, 23, 22, 21, 20, 19.
- This truss 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 13,2021

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 #144/MO
3010432	D2	Roof Special	1	1	149215982

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:41 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-3faaBM0YU3pvhCisK75dqkcjT0R7PkmNjhBoqyAIRi

0-10-8	5-2-6	5-7-2	10-1-4	15-0-10	20-3-8
0-10-8	5-2-6	0-4-12	4-6-2	4-11-6	5-2-14

Scale = 1:38.1

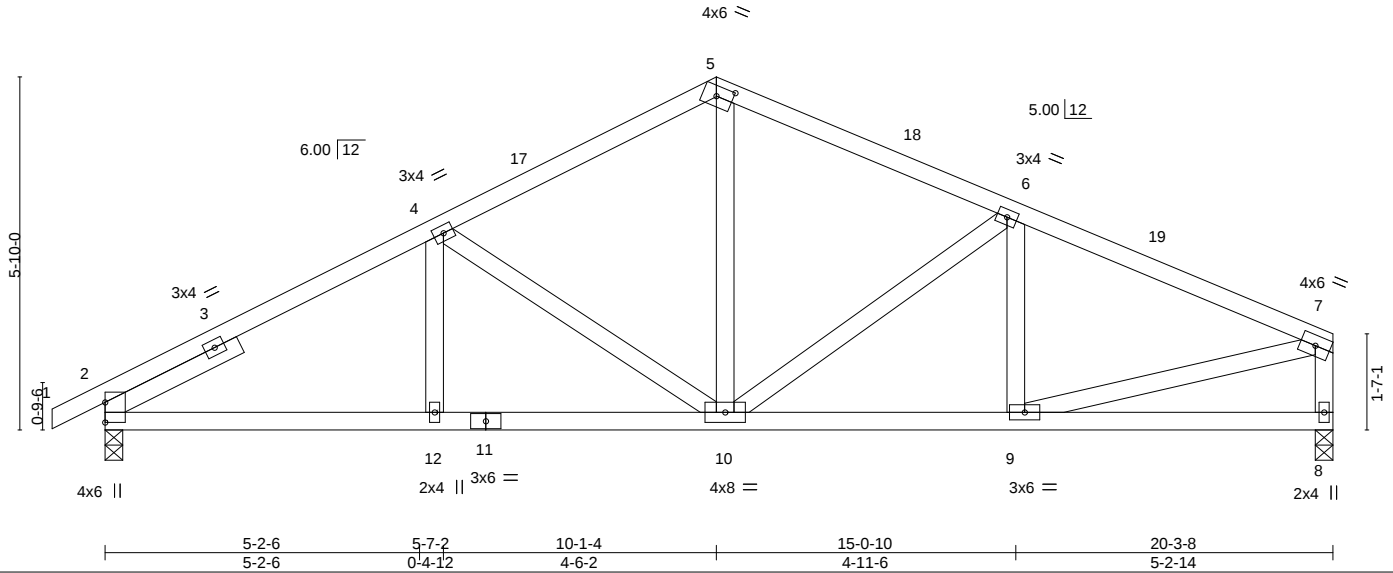


Plate Offsets (X,Y)-- [5:0-3-4,0-2-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.04	10-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.43	Vert(CT)	-0.09	10-12	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.03	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 85 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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 8=0-3-8
Max Horz 2=93(LC 16)
Max Uplift 2=-129(LC 12), 8=-114(LC 13)
Max Grav 2=969(LC 1), 8=905(LC 1)

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

TOP CHORD 2-4=-1335/262, 4-5=-1014/249, 5-6=-997/247, 6-7=-1197/236, 7-8=-850/184
BOT CHORD 2-12=-228/1147, 10-12=-228/1147, 9-10=-189/1046
WEBS 5-10=-79/448, 6-10=-300/115, 7-9=-157/971, 4-10=-407/147

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-1-4, Exterior(2R) 10-1-4 to 13-1-4, Interior(1) 13-1-4 to 20-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=129, 8=114.
- This truss 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 13, 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 #144/MO
3010432	D3	ROOF SPECIAL GIRDER	1	1	I49215983

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:43 2021 Page 1

ID:0RfyQ?mR?ggtbqdiWpgSlzFyAv-?2ikc12o0g4dxVSESY75w9hvkGaYbBt2q1AIsjyAIRg

-0-10-8 5-2-6 10-1-4 13-2-6 16-3-9 20-3-0 25-2-12 30-4-4 35-4-0 39-4-0 40-2-8
0-10-8 5-2-6 4-10-14 3-1-2 3-1-2 3-11-7 4-11-12 5-1-8 4-11-12 4-0-0 0-10-8

Scale = 1:72.3

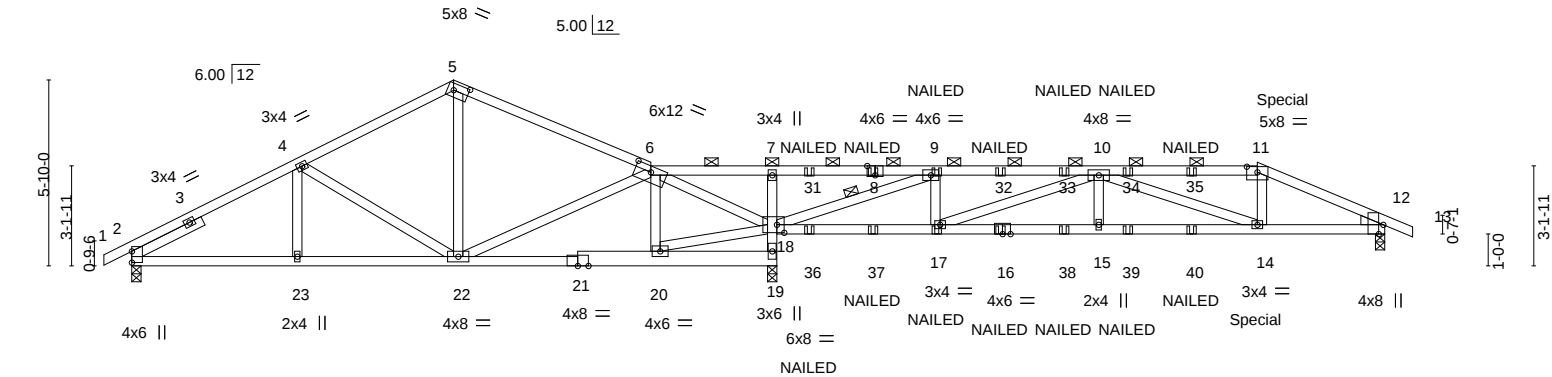


Plate Offsets (X,Y)--	[5:0-5-11,0-2-8], [6:0-6-0,0-2-4], [8:0-3-0,Edge], [11:0-4-0,0-2-2], [12:0-3-8,Edge], [18:0-2-12,0-3-0]
-----------------------	---

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.93	Vert(LL) -0.15	14-15	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.90	Vert(CT) -0.27	14-15	>848	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.71	Horz(CT) 0.06	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS						
							Weight: 165 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 3-9-5 oc purlins, except
BOT CHORD 2x4 SPF No.2 *Except*	2-0-0 oc purlins (3-9-5 max.): 6-11.
19-21: 2x6 SP 2400F 2.0E	Rigid ceiling directly applied or 3-5-5 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 9-18
WEDGE	
Right: 2x4 SPF No.2	
SLIDER Left 2x4 SPF No.2 2-6-0	

REACTIONS. (size) 2=0-3-8, 19=0-3-8, 12=0-3-8
Max Horz 19=105(LC 8)
Max Uplift 2=-173(LC 29), 19=-498(LC 9), 12=-263(LC 9)
Max Grav 2=776(LC 1), 19=2551(LC 1), 12=1103(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-956/259, 4-5=-660/230, 5-6=-670/243, 6-7=-389/1917, 7-9=-380/1893,
9-10=-1243/347, 10-11=-1788/472, 11-12=-2017/499
BOT CHORD 2-23=-155/845, 22-23=-155/845, 20-22=-265/419, 18-19=-2535/506, 7-18=-364/138,
17-18=-293/1243, 15-17=-589/2525, 14-15=-589/2525, 12-14=-407/1818
WEBS 4-22=-449/157, 6-22=-133/633, 9-18=-3268/768, 9-17=-85/681, 10-17=-1386/327,
10-15=0/327, 10-14=-785/209, 11-14=-52/423, 18-20=-233/454, 6-18=-2081/341

- 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=15ft; 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=173, 19=498, 12=263.
 - This truss is 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.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 203 lb down and 118 lb up at 35-4-0 on top chord, and 114 lb down and 59 lb up at 35-3-4 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).



December 13, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	D3	ROOF SPECIAL GIRDER	1	1	I49215983

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:43 2021 Page 2
ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-?2iKc12o0g4dxVSESY75w9hvkGaYbBt2q1AlsJyAIRg

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-5=-70, 5-6=-70, 6-11=-70, 11-13=-70, 19-24=-20, 18-28=-20
- Concentrated Loads (lb)
- Vert: 8=-34(F) 16=-46(F) 9=-34(F) 17=-46(F) 14=-114(F) 11=-82(F) 31=-34(F) 32=-34(F) 33=-34(F) 34=-34(F) 35=-34(F) 36=-46(F) 37=-46(F) 38=-46(F) 39=-46(F) 40=-46(F)

 **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 #144/MO
3010432	D4	Roof Special	1	1	I49215984

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:45 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-xRq40j33YHKLApdZzAZ?amKm4KQ31HLILfPxyAIRe

0-10-8 5-2-6 10-1-4 14-3-9 20-3-0 26-9-8 33-4-0 39-4-0 40-2-8
0-10-8 5-2-6 4-10-14 4-2-5 5-11-7 6-6-8 6-6-8 6-0-0 0-10-8

Scale = 1:72.3

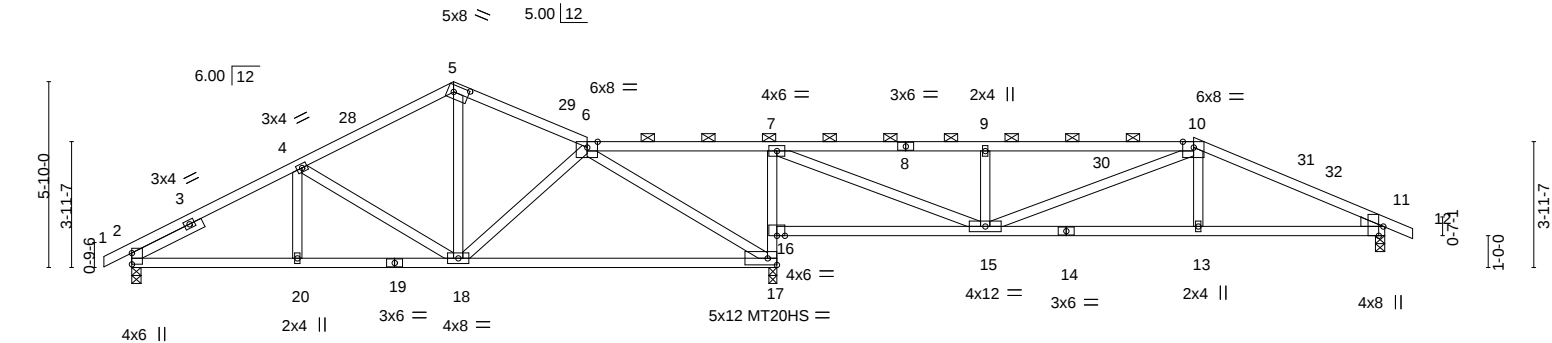


Plate Offsets (X,Y)--	[5:0-5-11,0-2-8], [6:0-3-14,Edge], [10:0-4-2,Edge], [11:0-3-8,Edge]
-----------------------	---

LOADING (psf)	SPACING-	CSL.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.58	Vert(LL) -0.22	17-18	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.68	Vert(CT) -0.46	17-18	>519	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.97	Horz(CT) 0.03	17	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 152 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-3-8, 11=0-3-8, 17=0-3-0
Max Horz 2=105(LC 12)
Max Uplift 2=-125(LC 12), 11=-164(LC 13), 17=-287(LC 13)
Max Grav 2=917(LC 1), 11=881(LC 26), 17=1870(LC 1)

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

TOP CHORD 2-4=-1237/181, 4-5=-934/170, 5-6=-904/171, 7-9=-1310/276, 9-10=-1312/278,
10-11=-1450/269
BOT CHORD 2-20=-184/1065, 18-20=-184/1065, 17-18=-78/803, 16-17=-1155/246, 7-16=-1078/269,
13-15=-180/1273, 11-13=-178/1279
WEBS 4-18=-383/161, 5-18=-32/432, 7-15=-287/1637, 9-15=-491/173, 6-17=-1160/175

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-1-4, Exterior(2R) 10-1-4 to 13-1-4, Interior(1) 13-1-4 to 33-4-0, Exterior(2R) 33-4-0 to 36-4-0, Interior(1) 36-4-0 to 40-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=125, 11=164, 17=287.
- This truss 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 13, 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 #144/MO
3010432	D5	Roof Special	1	1	I49215985

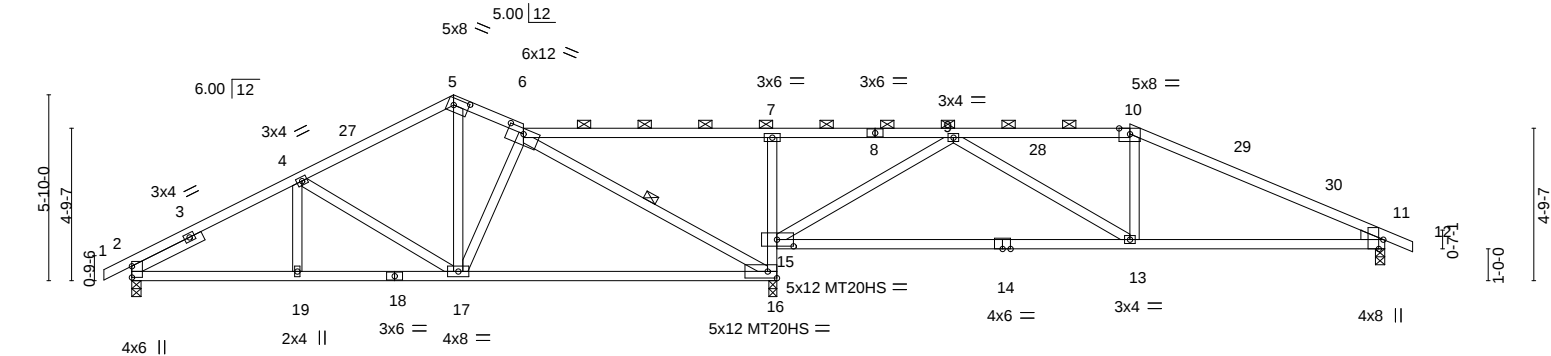
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:46 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-QdOTE34hIbSCozBp7hhoXnJR7UeXoVdVX?PyT2yAIRd

-0-10-8 5-2-6 10-1-4 12-3-9 20-3-0 25-9-8 31-4-0 39-4-0 40-2-8
0-10-8 5-2-6 4-10-14 2-2-5 7-11-7 5-6-8 5-6-8 8-0-0 0-10-8

Scale = 1:72.3



	5-2-6	10-1-4	12-3-9	20-1-8	20-3-0	25-9-8	31-4-0	39-4-0
	5-2-6	4-10-14	2-2-5	7-9-15	0-1-8	5-6-8	5-6-8	8-0-0
Plate Offsets (X,Y)--	[5:0-5-11,0-2-8], [6:0-6-0,0-2-0], [10:0-4-2,Edge], [11:0-3-8,Edge], [15:0-6-4,0-2-8]							

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.79	Vert(LL)	-0.35 13-15	>657	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(CT)	-0.69 13-15	>333	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr	YES	WB 0.90	Horz(CT)	0.03 16	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 152 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (5-3-4 max.): 6-10.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-16

REACTIONS.

(size) 2=0-3-8, 11=0-3-8, 16=0-3-0
Max Horz 2=105(LC 12)
Max Uplift 2=132(LC 12), 11=173(LC 13), 16=268(LC 13)
Max Grav 2=903(LC 1), 11=867(LC 26), 16=1898(LC 1)

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

TOP CHORD 2-4=-1213/192, 4-5=-902/174, 5-6=-873/201, 9-10=-1118/277, 10-11=-1302/254
BOT CHORD 2-19=-196/1046, 17-19=-196/1046, 16-17=-84/810, 15-16=-1232/262, 7-15=-525/184,
13-15=-146/756, 11-13=-144/1117
WEBS 4-17=-386/160, 5-17=-99/513, 6-16=-1141/136, 9-15=-1138/241, 9-13=-7/434

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-1-4, Exterior(2E) 10-1-4 to 12-3-9, Interior(1) 12-3-9 to 31-4-0, Exterior(2R) 31-4-0 to 34-4-0, Interior(1) 34-4-0 to 40-2-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=132, 11=173, 16=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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



December 13, 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 #144/MO
3010432	D6	Roof Special	1	1	l49215986

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:47 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-upyrRP5J3va3P7m?hOC14?ri8u?EX08elf8W?UyAIRc



4x6 =

Scale = 1:43.6

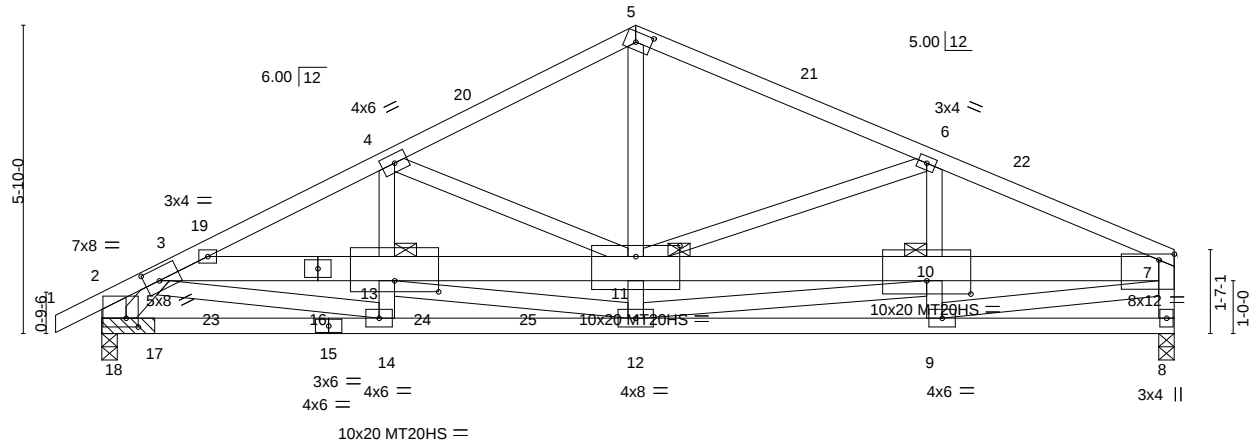


Plate Offsets (X,Y)--	[2:0-2-12,0-2-0], [3:0-3-4,0-2-12], [5:0-3-8,0-2-4], [7:0-3-8,0-1-5], [10:0-10-0,0-3-0], [11:0-10-0,0-2-8], [13:0-10-0,0-2-8]
-----------------------	---

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.39	Vert(LL) -0.04	9-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.66	Vert(CT) -0.17	11-13	>999	180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr NO	WB 0.69	Horz(CT) 0.05	8	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						
							Weight: 132 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF 1650F 1.5E *Except*
3-16,7-16: 2x6 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-18: 2x6 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 11, 13, 10

REACTIONS.

(size) 8=0-3-8, 18=(0-3-8 + bearing block) (req. 0-3-13)
Max Horz 18=80(LC 16)
Max Grav 8=1502(LC 1), 18=2431(LC 1)

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

TOP CHORD 2-3=-484/0, 3-4=-3428/0, 4-5=-1915/0, 5-6=-1874/0, 6-7=-2191/0, 7-8=-1456/0,
2-18=-441/0
BOT CHORD 14-18=0/2291, 12-14=0/2709, 9-12=0/1424, 3-13=0/346, 11-13=0/748, 10-11=-554/0,
7-10=0/556
WEBS 4-13=0/1153, 4-11=-1526/0, 5-11=0/1333, 6-11=-372/222, 7-9=0/1342, 12-13=-460/0,
10-12=0/979, 9-10=-306/0, 3-14=0/438, 3-18=-2767/0

NOTES-

- 1) 2x4 SPF 1650F 1.5E bearing block 12" long at jt. 18 attached to front face with 2 rows of 10d (0.131"x3") nails spaced 3" o.c. 8 Total fasteners. Bearing is assumed to be SPF 1650F 1.5E.
- 2) Unbalanced roof live loads have been considered for this design.
- 3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-1-4, Exterior(2R) 10-1-4 to 13-1-4, Interior(1) 13-1-4 to 20-1-8 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
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) 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, 25, 26, 27, 28 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) 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.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



December 13,2021

Continued on page 2

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

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO	i49215986
3010432	D6	Roof Special	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:47 2021 Page 2
ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-upyrRP5J3va3P7m?hOC14?ri8u?EX08elf8W?UyAIRc

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-5=-70, 5-7=-70, 8-18=-20, 3-7=-20
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-58, 2-5=-58, 5-7=-57, 8-18=-20, 3-7=-20
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-20, 2-5=-20, 5-7=-20, 8-18=-40, 3-7=-40
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=48, 2-19=26, 5-19=23, 5-21=30, 7-21=23, 8-18=-8, 3-7=-8
Horz: 1-2=-60, 2-19=-38, 5-19=-35, 5-21=42, 7-21=35, 7-8=32, 2-18=18
Drag: 7-8=0
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=17, 2-20=23, 5-20=30, 5-22=23, 7-22=26, 8-18=-8, 3-7=-8
Horz: 1-2=-29, 2-20=-35, 5-20=-42, 5-22=35, 7-22=38, 7-8=-18, 2-18=-32
Drag: 7-8=0
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-11, 2-5=-34, 5-7=-34, 8-18=-20, 3-7=-20
Horz: 1-2=-9, 2-5=14, 5-7=-14, 7-8=-29, 2-18=-21
Drag: 7-8=0
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-29, 2-5=-34, 5-7=-34, 8-18=-20, 3-7=-20
Horz: 1-2=9, 2-5=14, 5-7=-14, 7-8=21, 2-18=29
Drag: 7-8=0
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=11, 2-5=-1, 5-7=12, 8-18=-8, 3-7=-8
Horz: 1-2=-23, 2-5=-11, 5-7=24, 7-8=19, 2-18=15
Drag: 7-8=0
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-5=10, 5-7=14, 8-18=-8, 3-7=-8
Horz: 1-2=-17, 2-5=-22, 5-7=26, 7-8=-15, 2-18=-19
Drag: 7-8=0
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-14, 2-5=-20, 5-7=-6, 8-18=-20, 3-7=-20
Horz: 1-2=-6, 2-5=-0, 5-7=14, 7-8=9, 2-18=26
Drag: 7-8=0
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-3, 2-5=-8, 5-7=-4, 8-18=-20, 3-7=-20
Horz: 1-2=-17, 2-5=-12, 5-7=16, 7-8=-26, 2-18=-9
Drag: 7-8=0
Concentrated Loads (lb)
Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)
- 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

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.**

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 #144/MO	i49215986
3010432	D6	Roof Special	1	1	Job Reference (optional)	

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:47 2021 Page 3
ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-upyrRP5J3va3P7m?hOC14?ri8u?EX08elf8W?UyAIRc

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=19, 2-5=25, 5-7=9, 8-18=-8, 3-7=-8
Horz: 1-2=-31, 2-5=-37, 5-7=21, 7-8=18, 2-18=13
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=9, 5-7=25, 8-18=-8, 3-7=-8
Horz: 1-2=-16, 2-5=-21, 5-7=37, 7-8=-13, 2-18=-18
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=8, 2-5=14, 5-7=4, 8-18=-8, 3-7=-8
Horz: 1-2=-20, 2-5=-26, 5-7=16, 7-8=14, 2-18=6
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-1, 2-5=4, 5-7=14, 8-18=-8, 3-7=-8
Horz: 1-2=-11, 2-5=-16, 5-7=26, 7-8=-6, 2-18=-14
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=11, 2-5=6, 5-7=-10, 8-18=-20, 3-7=-20
Horz: 1-2=-31, 2-5=-26, 5-7=10, 7-8=7, 2-18=23
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-4, 2-5=-10, 5-7=6, 8-18=-20, 3-7=-20
Horz: 1-2=-16, 2-5=-10, 5-7=26, 7-8=-23, 2-18=-7
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90

Uniform Loads (plf)

Vert: 1-2=-20, 2-5=-20, 5-7=-20, 8-18=-20, 3-7=-20

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 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: 1-2=-53, 2-5=-57, 5-7=-47, 8-18=-20, 3-7=-20
Horz: 1-2=-4, 2-5=-0, 5-7=10, 7-8=7, 2-18=19
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 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: 1-2=-45, 2-5=-49, 5-7=-46, 8-18=-20, 3-7=-20
Horz: 1-2=-13, 2-5=-9, 5-7=12, 7-8=-19, 2-18=-7
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 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: 1-2=-34, 2-5=-38, 5-7=-50, 8-18=-20, 3-7=-20
Horz: 1-2=-24, 2-5=-20, 5-7=8, 7-8=5, 2-18=17
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 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: 1-2=-46, 2-5=-50, 5-7=-38, 8-18=-20, 3-7=-20
Horz: 1-2=-12, 2-5=-8, 5-7=20, 7-8=-17, 2-18=-5
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

- 23) Dead + 0.6 C-C Wind Min. Down: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

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 #144/MO
3010432	D6	Roof Special	1	1	I49215986
Job Reference (optional)					

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:47 2021 Page 4
ID:0RfyeQ?mR?qqtbqdiWpgSlzFyAv-upyrRP5J3va3P7m?hOC14?ri8u?EX08elf8W?UyAIRc

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=4, 2-5=-28, 5-7=-28, 8-18=-8, 3-7=-8
Horz: 1-2=-16, 2-5=16, 5-7=-16, 7-8=-16, 2-18=-16
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

24) Dead + 0.6 C-C Wind Min. Upward: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=4, 5-7=4, 8-18=-8, 3-7=-8
Horz: 1-2=-16, 2-5=-16, 5-7=16, 7-8=16, 2-18=16
Drag: 7-8=0

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

25) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-70, 2-5=-70, 5-7=-20, 8-18=-20, 3-7=-20

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

26) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-5=-20, 5-7=-70, 8-18=-20, 3-7=-20

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

27) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-58, 2-5=-58, 5-7=-20, 8-18=-20, 3-7=-20

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

28) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-5=-20, 5-7=-57, 8-18=-20, 3-7=-20

Concentrated Loads (lb)

Vert: 16=-423(B) 23=-423(B) 24=-423(B) 25=-423(B)

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



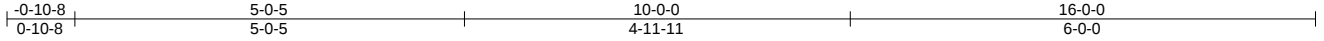
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	D7	Half Hip	1	1	I49215987

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:48 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-M0VDfif5xqCiw1GLCE5jGdCOt9HMgGSmn_Ju3XwyAIRb



Scale = 1:29.7

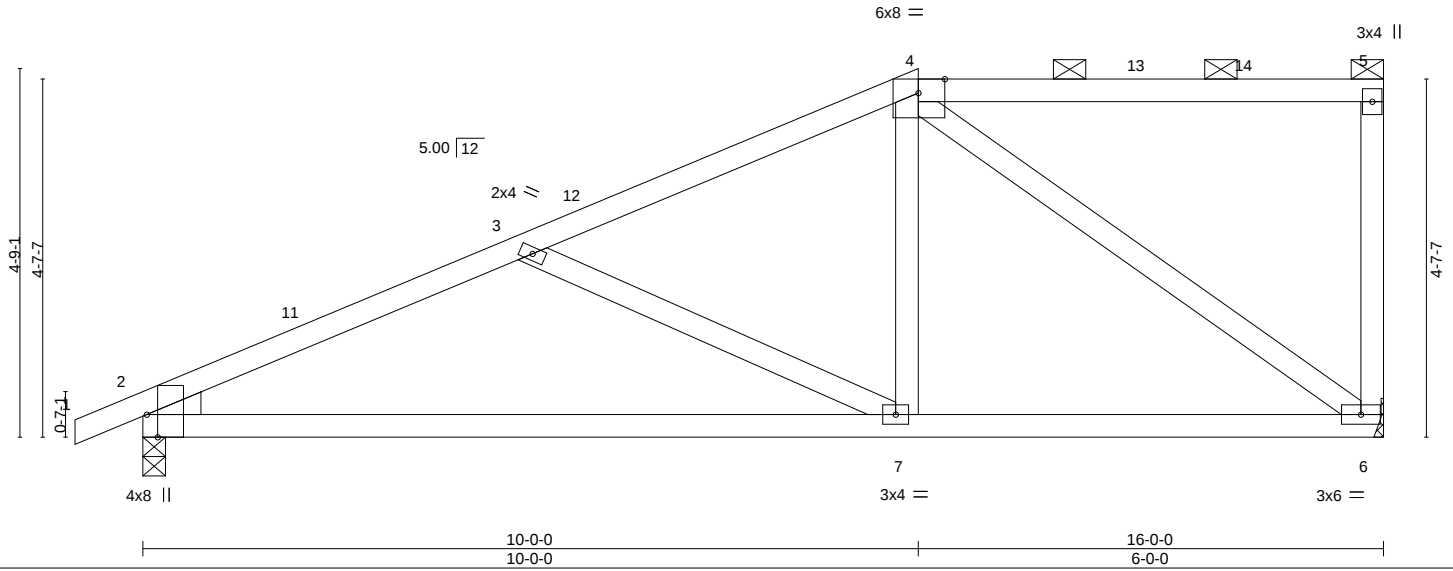


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [4:0-4-2,Edge]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.44	Vert(LL)	-0.15	7-10	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.58	Vert(CT)	-0.30	7-10	>639	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.73	Horz(CT)	0.02	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 63 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (6-0-0 max.): 4-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEDGE	
Left: 2x4 SPF No.2	

REACTIONS. (size) 2=0-3-8, 6=Mechanical
 Max Horz 2=172(LC 11)
 Max Uplift 2=118(LC 12), 6=113(LC 9)
 Max Grav 2=776(LC 1), 6=712(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1186/211, 3-4=-786/156
 BOT CHORD 2-7=-338/1054, 6-7=-199/657
 WEBS 3-7=-424/178, 4-7=-4/425, 4-6=-780/187

- 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-0-0, Exterior(2R) 10-0-0 to 14-2-15, Interior(1) 14-2-15 to 15-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - 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) 2=118, 6=113.
 - This truss 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 13, 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



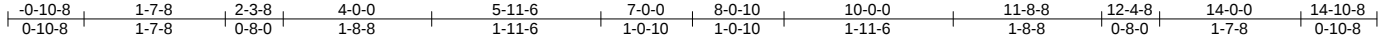
16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	D8	Hip Girder	1	1	I49215988

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:50 2021 Page 1

ID:0RfyQ?mR?ggtbqdiWpgSlzFyAv-I0dz4R7BMqydGaUaMWlkidT5v5ymkVR4RdNACpyAIRZ



Scale = 1:26.5

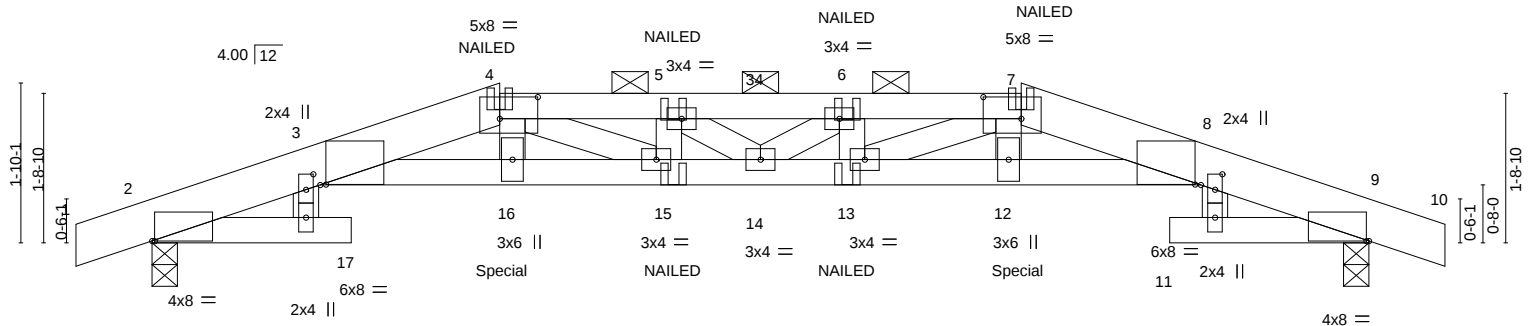


Plate Offsets (X,Y)--	[2:0-0-6,0-0-0], [3:0-0-13,0-0-1], [4:0-5-4,0-3-0], [7:0-5-4,0-3-0], [8:0-0-13,0-0-1], [9:0-0-6,0-0-0], [18:0-2-2,0-1-0], [20:0-2-2,0-1-0]
-----------------------	--

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	L/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.94	Vert(LL) -0.31	14	>534	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.99	Vert(CT) -0.57	14	>296	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.14	Horz(CT) 0.27	9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-MS					Weight: 57 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP 2400F 2.0E *Except* 4-7: 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-5-15 oc purlins, except
BOT CHORD 2x4 SPF No.2 *Except* 3-8: 2x4 SPF 1650F 1.5E	2-0-0 oc purlins (2-1-7 max.): 4-7.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 7-2-7 oc bracing.

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=25(LC 8)
Max Uplift 2=-245(LC 4), 9=-245(LC 5)
Max Grav 2=1079(LC 1), 9=1079(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-23=-287/99, 3-4=-4312/936, 4-5=-4818/1040, 5-6=-4869/1038, 6-7=-4818/1026,
7-8=-4312/917, 8-9=-287/94
BOT CHORD 3-16=-892/4260, 15-16=-908/4340, 14-15=-1002/4818, 13-14=-988/4818,
12-13=-868/4340, 8-12=-852/4260
WEBS 4-16=-87/427, 7-12=-86/427, 7-13=-129/583, 4-15=-129/583

- 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=15ft; 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=245, 9=245.
 - This truss 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.
 - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 260 lb down and 101 lb up at 4-0-0, and 260 lb down and 101 lb up at 9-11-4 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
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



December 13, 2021

Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	D8	Hip Girder	1	1	I49215988

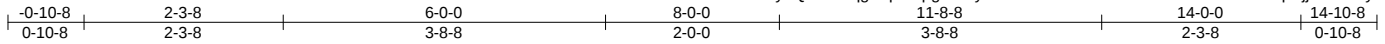
Builders FirstSource (Valley Center),
Valley Center, KS - 67147,
8.430 s Aug 16 2021 MiTek Industries, Inc.
Fri Dec 10 17:34:50 2021
Page 2
ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-IOdz4R7BMqydGaUaMWlkidT5v5ymkVR4RdNAcpyAIRZ

LOAD CASE(S)
Standard
Uniform Loads (plf)
Vert: 1-4=-70, 4-7=-70, 7-10=-70, 17-22=-20, 25-28=-20, 11-31=-20
Concentrated Loads (lb)
Vert: 4=-37(F) 7=-37(F) 16=-260(F) 12=-260(F) 5=-37(F) 15=-47(F) 6=-37(F) 13=-47(F)

Job 3010432	Truss D9	Truss Type Hip	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #144/MO 149215989
----------------	-------------	-------------------	----------	----------	--

Builders First Source, Valley Center, KS 67147

8.430 s Jul 16 2021 MiTek Industries, Inc. Mon Dec 13 14:04:08 2021 Page 1
ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-08N6kA5T3k2BTTKOar9d12rJmI7lMpSij0LumXy9XgL



Scale = 1:26.5

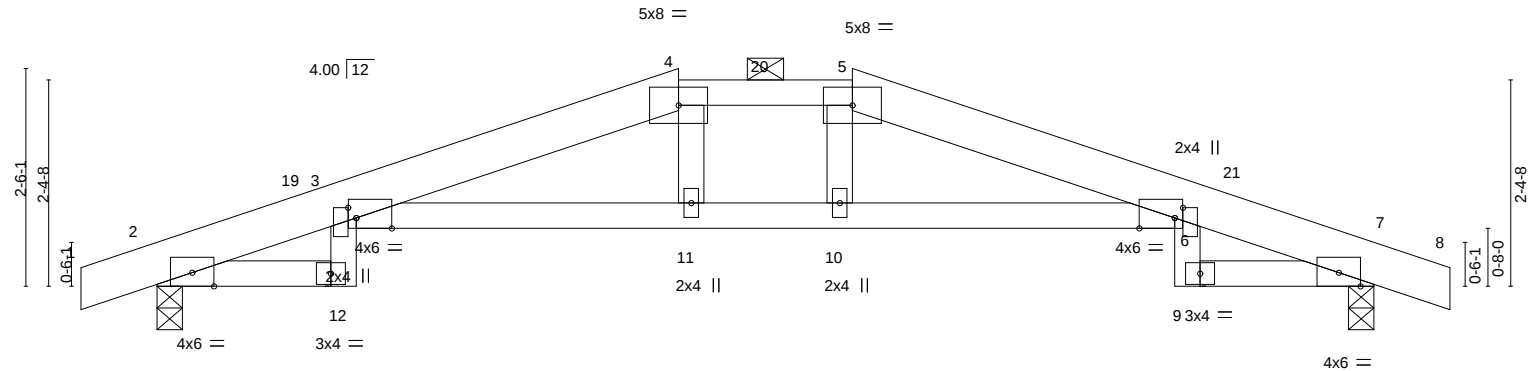


Plate Offsets (X,Y)--	[3:0-4-14,Edge], [3:0-1-7,0-1-2], [6:0-4-14,Edge], [6:0-1-7,0-1-2]
-----------------------	--

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 0.90	Vert(LL)	-0.20	3-11	>838	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.83	Vert(CT)	-0.37	3-11	>458	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	0.22	7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS							
									Weight: 48 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2 *Except*
4-5: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (4-5-9 max.): 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
Max Horz 2=-36(LC 13)
Max Uplift 2=-130(LC 8), 7=-130(LC 9)
Max Grav 2=691(LC 1), 7=691(LC 1)

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

TOP CHORD 2-19=-348/127, 3-19=-324/128, 3-4=-1657/493, 4-20=-1618/515, 5-20=-1618/515,
5-6=-1657/506, 6-21=-324/127, 7-21=-348/125
BOT CHORD 3-11=-422/1611, 10-11=-418/1618, 6-10=-419/1611

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 6-0-0, Exterior(2E) 6-0-0 to 8-0-0, Exterior(2R) 8-0-0 to 12-2-15, Interior(1) 12-2-15 to 14-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=130, 7=130.
- This truss 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 13, 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

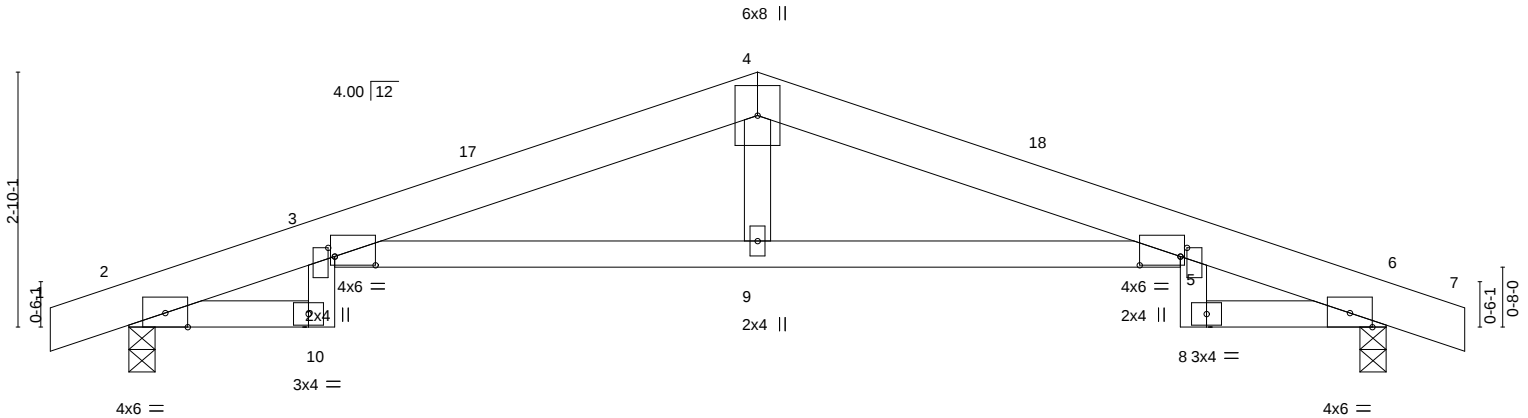
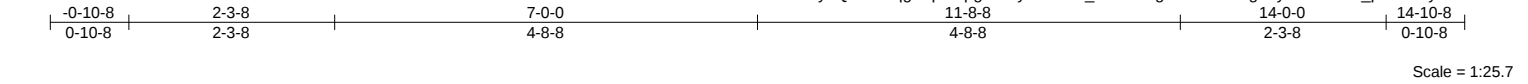


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 3010432	Truss D9A	Truss Type Roof Special	Qty 1	Ply 1	SUMMIT/HAWTHORN RIDGE #144/MO 149215990
----------------	--------------	----------------------------	----------	----------	--

Builders First Source, Valley Center, KS 67147

8.430 s Jul 16 2021 MiTek Industries, Inc. Mon Dec 13 14:09:57 2021 Page 1
ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-IHz2_VKNsz0gr6WTXewSgeoyhRDvfeS4_pNSWoy9Xau



	2-3-8	7-0-0	11-8-8	14-0-0
	2-3-8	4-8-8	4-8-8	2-3-8
Plate Offsets (X,Y)--	[3:0-5-7,0-1-3], [3:0-1-3,0-0-14], [5:0-5-7,0-1-3], [5:0-1-3,0-0-14]			

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15		TC 0.90	Vert(LL) -0.21	3-9	>803	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15		BC 0.83	Vert(CT) -0.38	3-9	>437	180			
BCLL 0.0	Rep Stress Incr YES		WB 0.05	Horz(CT) 0.23	6	n/a	n/a			
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS							
									Weight: 49 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 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) 2=0-3-8, 6=0-3-8
Max Horz 2=-42(LC 13)
Max Uplift 2=-124(LC 8), 6=-124(LC 9)
Max Grav 2=691(LC 1), 6=691(LC 1)

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

TOP CHORD 2-3=-348/123, 3-17=-1574/399, 4-17=-1533/415, 4-18=-1533/419, 5-18=-1574/402,
5-6=-348/118
BOT CHORD 3-9=-326/1521, 5-9=-326/1521

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-12, Interior(1) 2-1-12 to 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 14-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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=124, 6=124.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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 13, 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 3010432	Truss D10	Truss Type ROOF SPECIAL	Qty 2	Ply 1	SUMMIT/HAWTHORN RIDGE #144/MO 149215991
----------------	--------------	----------------------------	----------	----------	--

Builders First Source, Valley Center, KS 67147

8.430 s Jul 16 2021 MiTek Industries, Inc. Mon Dec 13 14:19:22 2021 Page 1
ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-F_ceZi9npZCV7xC37oYy3oiWqB2uWBJFvDkrsZy9XS3

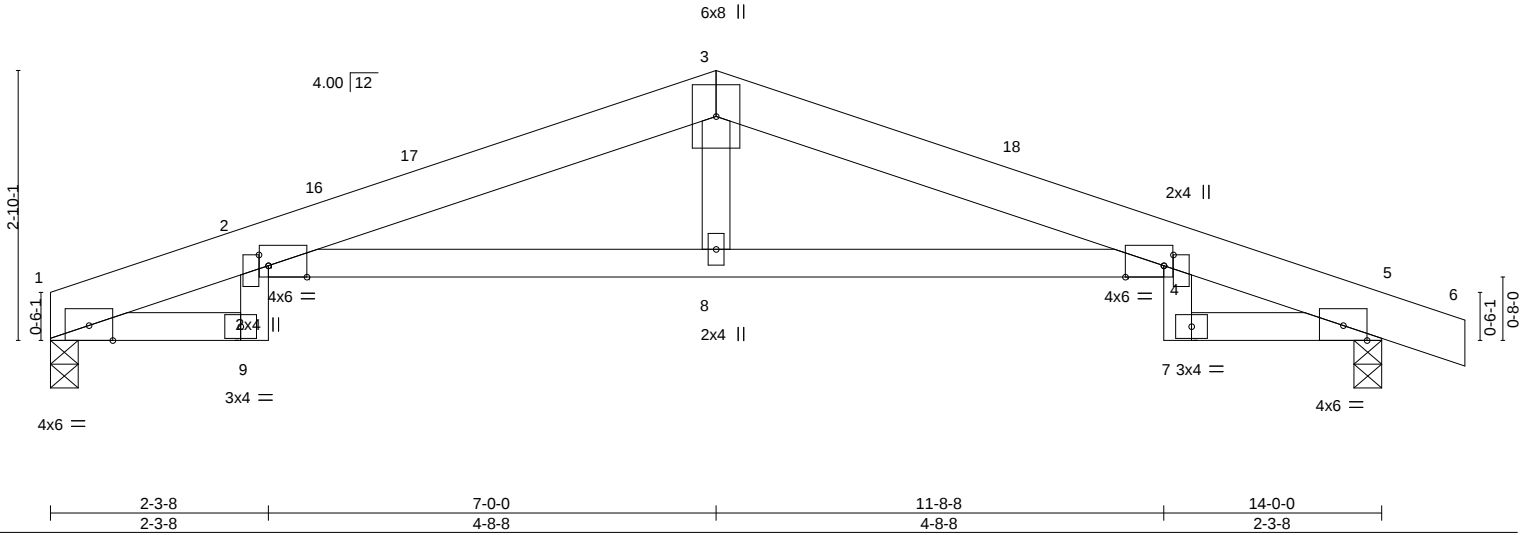


Plate Offsets (X,Y)--		[2:0-4-14,Edge], [2:0-1-6,0-1-3], [4:0-4-14,Edge], [4:0-1-6,0-1-3]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.21 2-8	>787	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.39 2-8	>430	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.23 5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-AS						Weight: 47 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SPF No.2
BOT CHORD 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=-46(LC 13)
Max Uplift 1=-91(LC 8), 5=-124(LC 9)
Max Grav 1=628(LC 1), 5=693(LC 1)

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

TOP CHORD 1-2=-355/130, 2-16=-1583/413, 16-17=-1564/414, 3-17=-1542/429, 3-18=-1543/422,
4-18=-1584/405, 4-5=-349/118
BOT CHORD 2-9=-55/257, 2-8=-331/1531, 4-8=-331/1531

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=15ft; 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 7-0-0, Exterior(2R) 7-0-0 to 10-0-0, Interior(1) 10-0-0 to 14-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 91 lb uplift at joint 1 and 124 lb uplift at joint 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 13, 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

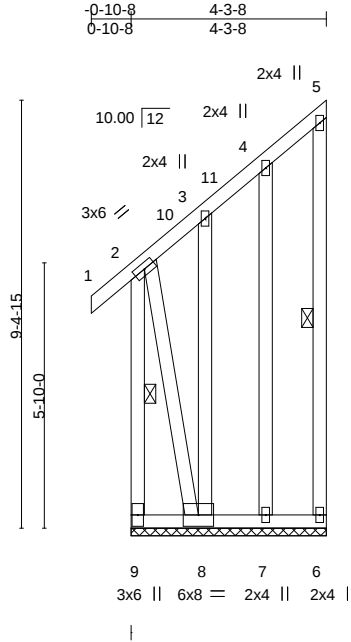
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	E1	GABLE	2	1	I49215992

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:52 2021 Page 1

Job Reference (optional)

ID:0RfyeQ?mR?ggtbqdiWpgSizFyAv-EnkV69SuRCLWuezTxoCn2ZYavt0CJsNvwsGghyAIRX



Scale = 1:50.7

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 0.48	Vert(LL)	0.00	1-2	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	1-2	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.53	Horz(CT)	-0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 52 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-0-6 oc bracing.
WEBS 1 Row at midpt 2-9, 5-6

REACTIONS.

All bearings 4-3-8.
(lb) - Max Horz 9=-194(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 6, 7 except 9=-415(LC 10), 8=-519(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 6, 7 except 9=551(LC 9), 8=533(LC 10)

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

TOP CHORD 2-9=-1693/812, 2-3=-254/134
BOT CHORD 8-9=-434/225
WEBS 2-8=-885/1705

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 4-1-12 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7 except (jt=lb) 9=415, 8=519.
- This truss 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 13, 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 #144/MO
3010432	E2	Monopitch	5	1	I49215993

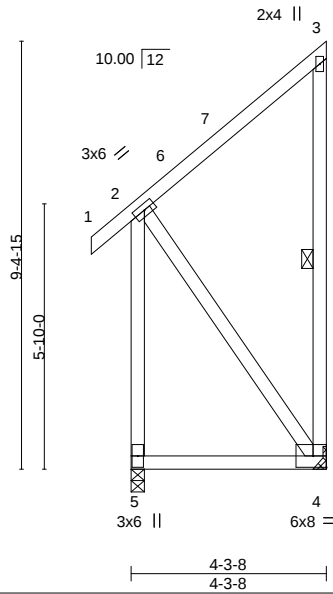
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:53 2021 Page 1

Job Reference (optional)

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-izJ6iS94fIKC72D91fJRK5fslBOWmoX8abqD8yAIRW

-0-10-8 4-3-8
0-10-8 4-3-8



Scale = 1:50.7

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 0.76	Vert(LL)	-0.02	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.16	Vert(CT)	-0.03	4-5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.49	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 36 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-4

REACTIONS.

(size) 5=0-3-8, 4=Mechanical
Max Horz 5=325(LC 9)
Max Uplift 5=-209(LC 8), 4=-370(LC 9)
Max Grav 5=470(LC 20), 4=380(LC 10)

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

TOP CHORD 2-3=-276/241, 3-4=-239/253, 2-5=-662/471
BOT CHORD 4-5=-560/467
WEBS 2-4=-596/780

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 (jt=lb) 5=209, 4=370.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 13, 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



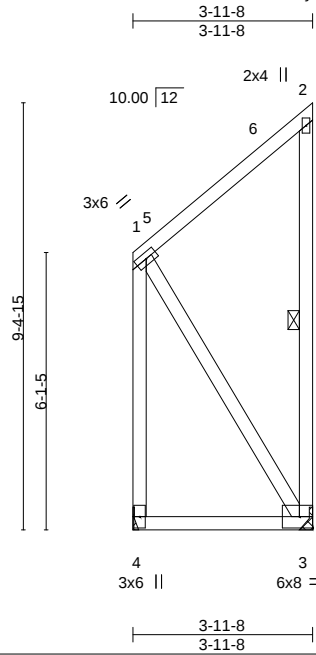
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	E3	Monopitch	1	1	I49215994

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:53 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSizFyAv-izJ6iS94fIKC72D91fJRKG5fIBpwmZX8abqD8yAIRW



Scale = 1:50.8

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 0.76	Vert(LL)	-0.01	3-4	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.02	3-4	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.50	Horz(CT)	-0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MP						Weight: 35 lb	FT = 20%

LUMBER-

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

REACTIONS.

(size) 4=Mechanical, 3=Mechanical
Max Horz 4=312(LC 9)
Max Uplift 4=-256(LC 8), 3=-385(LC 9)
Max Grav 4=438(LC 11), 3=396(LC 10)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-269/239, 2-3=-236/252, 1-4=-721/560
BOT CHORD 3-4=-507/440
WEBS 1-3=-605/756

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 3-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 (jt=lb) 4=256, 3=385.
- 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.

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-3-12 oc bracing.
WEBS 1 Row at midpt 2-3



December 13, 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

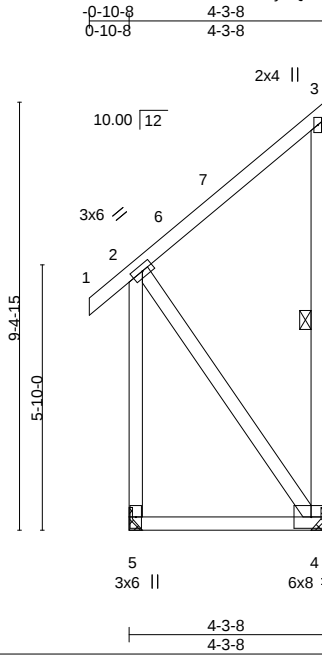
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	E4	Monopitch	4	1	I49215995

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:54 2021 Page 1

Job Reference (optional)

ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-B9tUvoAiQ2S3lBoMbMqgsTeqciWdfD2gMELNlayAIRV



Scale = 1:50.7

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.76	Vert(LL)	-0.02	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.16	Vert(CT)	-0.03	4-5	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.49	Horz(CT)	-0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS						Weight: 36 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, except end verticals.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 3-4

REACTIONS.

(size) 5=Mechanical, 4=Mechanical
Max Horz 5=325(LC 9)
Max Uplift 5=-209(LC 8), 4=-370(LC 9)
Max Grav 5=470(LC 20), 4=380(LC 10)

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

TOP CHORD 2-3=-276/241, 3-4=-239/253, 2-5=-662/471
BOT CHORD 4-5=-560/467
WEBS 2-4=-596/780

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 (jt=lb) 5=209, 4=370.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 13, 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

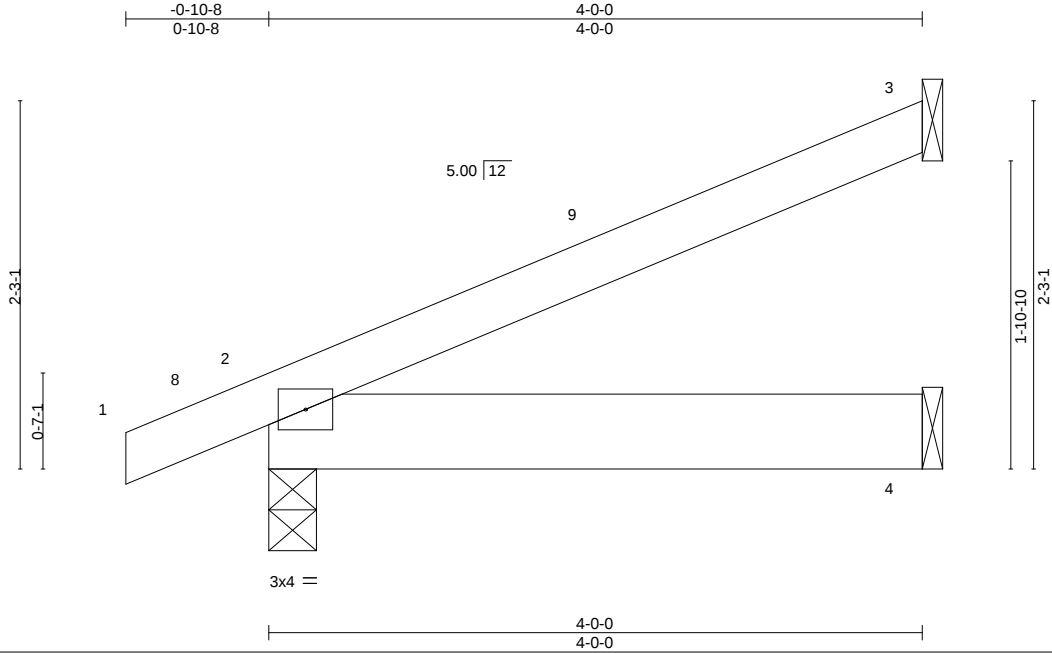
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	J1	Jack-Open	8	1	49215996

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:54 2021 Page 1

ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-B9tUvoAiQ2S3lBoMbMqgsTezBiXYfKggMELNlayAIRV



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL) 0.01	4-7	>999	240		MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT) -0.01	4-7	>999	180			
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-AS							

Weight: 13 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=72(LC 12)
Max Uplift 3=45(LC 12), 2=35(LC 12), 4=1(LC 12)
Max Grav 3=104(LC 1), 2=245(LC 1), 4=82(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 13, 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

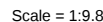
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:55 2021 Page 1
ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-fMRs78BKBmawNLNY93LvPhBAT6u5Onvpbu4xH0yAIRU



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 1-10-15 oc purlins.
BOT CHORD	2x6 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
 Max Horiz 2=40(LC 12)
 Max Uplift 3=-19(LC 12), 2=-28(LC 8), 4=-1(LC 12)
 Max Grav 3=44(LC 1), 2=161(LC 1), 4=38(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TC DL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 13, 2021



Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for 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 personnel injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Code**

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

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 #144/MO
3010432	K1	Jack-Open	4	1	

I49215998

Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:56 2021 Page 1
ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-7Y_FKUCyygin?Vykis8xujHSWBb7E9zqYqUqSyAIRT

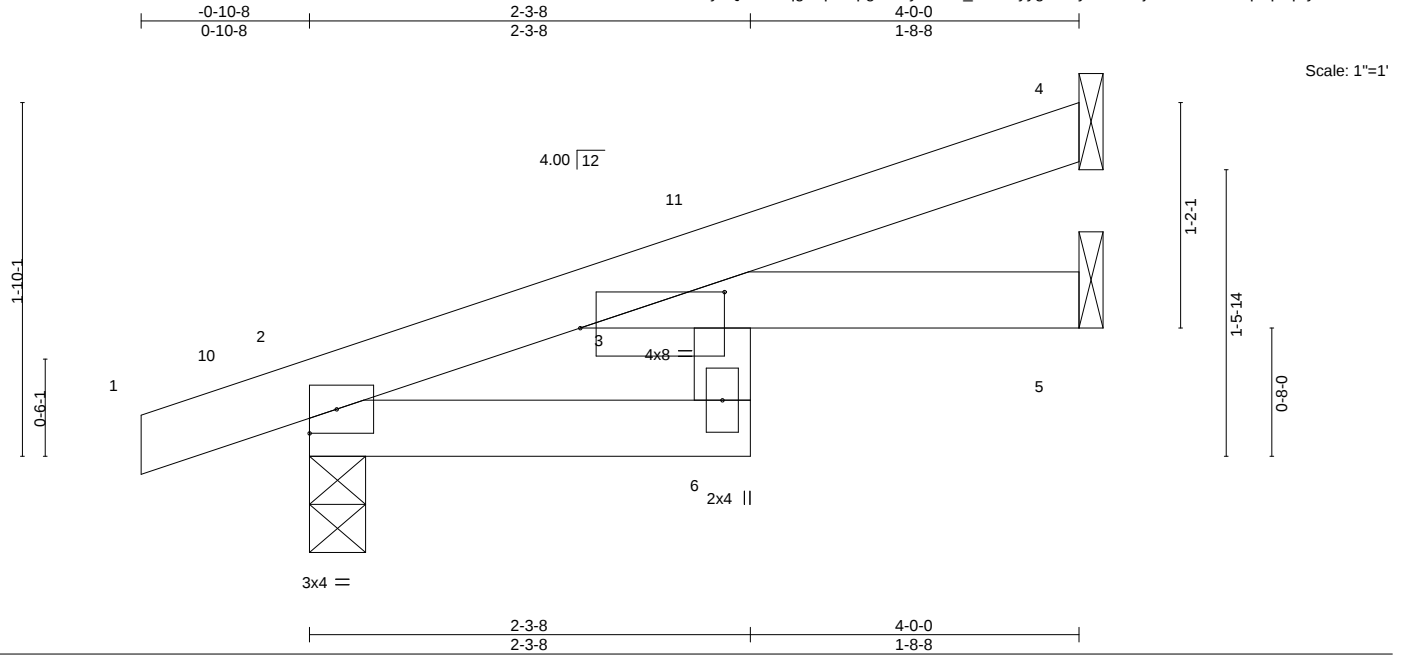


Plate Offsets (X,Y)-- [3:0-9-0,0-2-4]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	0.03	6	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.19	Vert(CT)	-0.05	6	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.02	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						Weight: 12 lb	FT = 20%

LUMBER-

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

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=62(LC 8)
Max Uplift 4=-34(LC 12), 2=-56(LC 8), 5=-5(LC 12)
Max Grav 4=107(LC 1), 2=249(LC 1), 5=70(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



December 13, 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

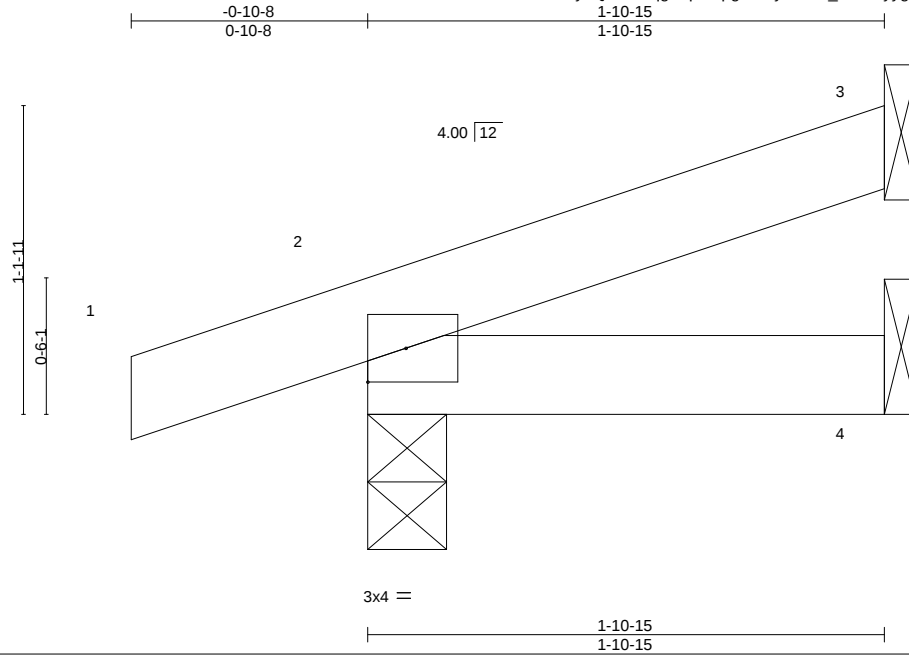


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	K2	Jack-Open	4	1	I49215999

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:56 2021 Page 1
ID:0RfyeQ?mR?ggtbqdiWpgSizFyAv-7Y_FKUCyygin?Vykis8xujLEWEE7E9zqYqUqSyAIRT



Scale = 1:8.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	-0.00	7	>999	180		
BCLL 0.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP						Weight: 6 lb	FT = 20%
	Code IRC2018/TPI2014								

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=37(LC 8)
Max Uplift 3=-21(LC 12), 2=-48(LC 8)
Max Grav 3=51(LC 1), 2=161(LC 1), 4=33(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.
- 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 13, 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 #144/MO
3010432	LG1	GABLE	1	1	I49216000

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:57 2021 Page 1

ID:0RtyeQ?mR?qgtbqdiWpgSizFyAv-bkYdYqCajzqecfXwGUNNU6GVWwZmsf862CZ1MvyAIRS

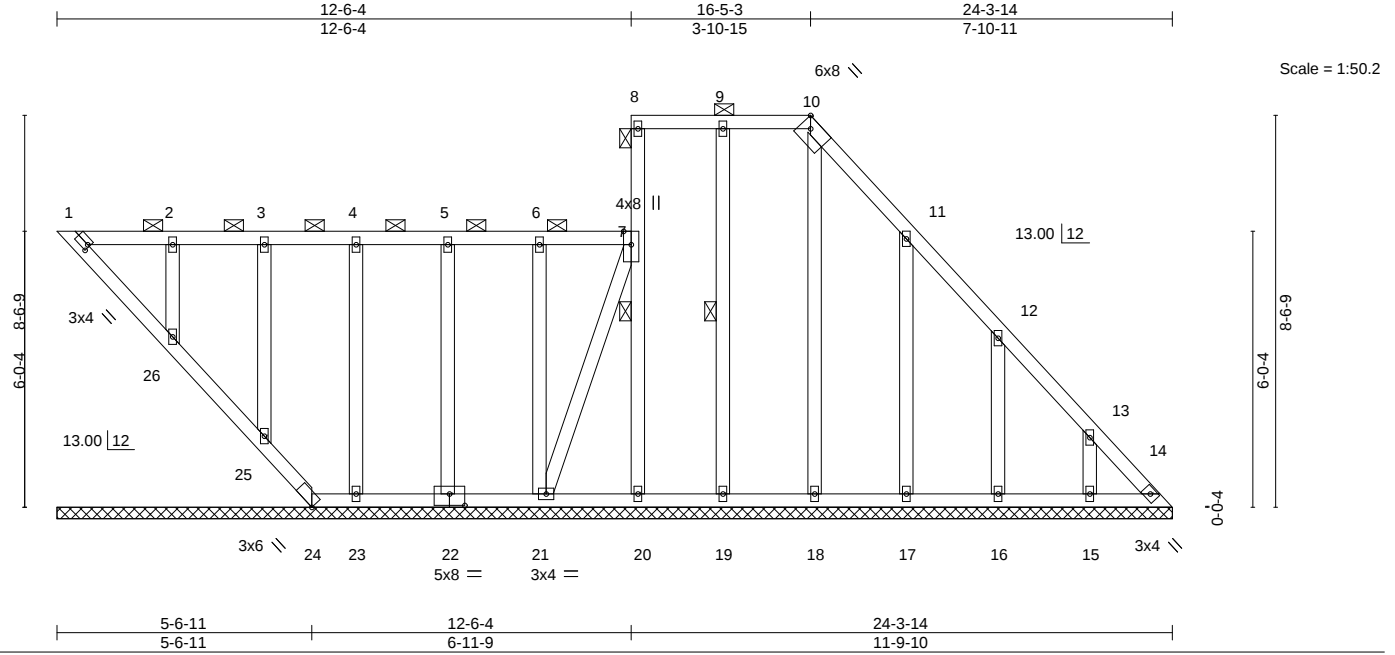


Plate Offsets (X,Y)-- [1:0-0-10,0-1-8], [10:0-2-9,Edge], [22:0-4-0,0-3-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.08	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.07	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.15	Horz(CT)	0.02	14	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 134 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 2-0-0 oc purlins (6-0-0 max.): 1-7, 8-10.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
WEBS 2x4 SPF No.2	10-0-0 oc bracing: 19-20,18-19.
OTHERS 2x4 SPF No.2	WEBS 1 Row at midpt 8-20, 9-19

REACTIONS. All bearings 24-3-14.
 (lb) - Max Horz 1=-302(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 21, 22, 23, 25, 26, 19, 18 except 20=-104(LC 13), 24=-291(LC 13), 17=-133(LC 13), 16=-116(LC 13), 15=-115(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 20, 24, 21, 22, 23, 25, 26, 19, 18, 17, 16, 15 except 1=283(LC 13), 14=290(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 12-13=-302/239, 13-14=-407/321
 BOT CHORD 1-26=-330/392, 25-26=-323/393, 24-25=-323/402, 23-24=-211/262, 22-23=-211/262, 21-22=-211/262, 20-21=-235/303, 19-20=-225/295, 18-19=-225/295, 17-18=-226/296, 16-17=-226/296, 15-16=-226/296, 14-15=-226/296

- 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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-0 to 3-4-0, Interior(1) 3-4-0 to 16-5-3, Exterior(2R) 16-5-3 to 19-5-3, Interior(1) 19-5-3 to 23-11-14 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 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 100 lb uplift at joint(s) 1, 14, 21, 22, 23, 25, 26, 19, 18 except (jt=lb) 20=104, 24=291, 17=133, 16=116, 15=115.
 - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 25, 26.
 - This truss 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 13, 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



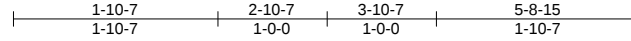
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	LG2	Lay-In Gable	1	1	I49216001

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:58 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-3x6?IADCUHyVEp67qCuc1JphzJwjb8OGHSJbuLyAIRR



Scale = 1:21.1

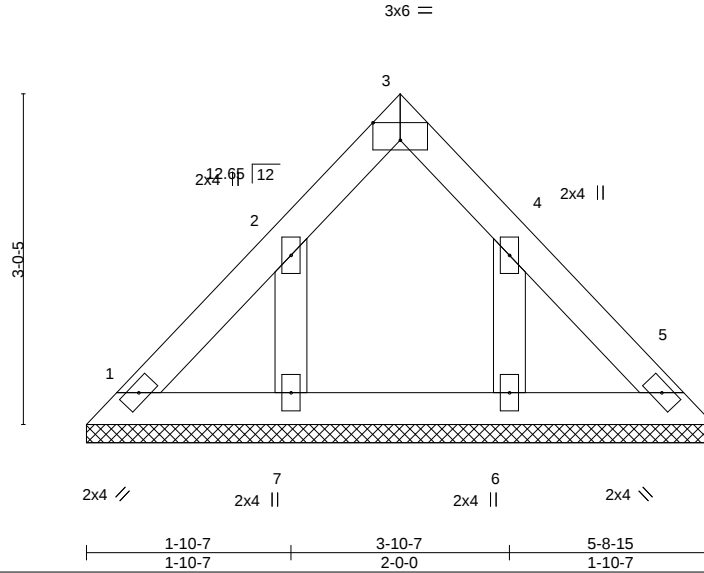


Plate Offsets (X,Y)-- [3:Edge,0-1-15]											
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0		Plate Grip DOL	1.15	TC 0.04		Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0		Lumber DOL	1.15	BC 0.02		Vert(CT)	n/a	-	n/a	999	
BCLL 0.0		Rep Stress Incr	YES	WB 0.02		Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0		Code	IRC2018/TPI2014	Matrix-P							
										Weight: 18 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 5-8-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 5-8-15.
(lb) - Max Horz 1=64(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 7, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 6

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=4.2psf; h=15ft; 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) 7, 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 13, 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 #144/MO
3010432	M1	GABLE	1	1	149216002

Builders FirstSource (Valley Center),

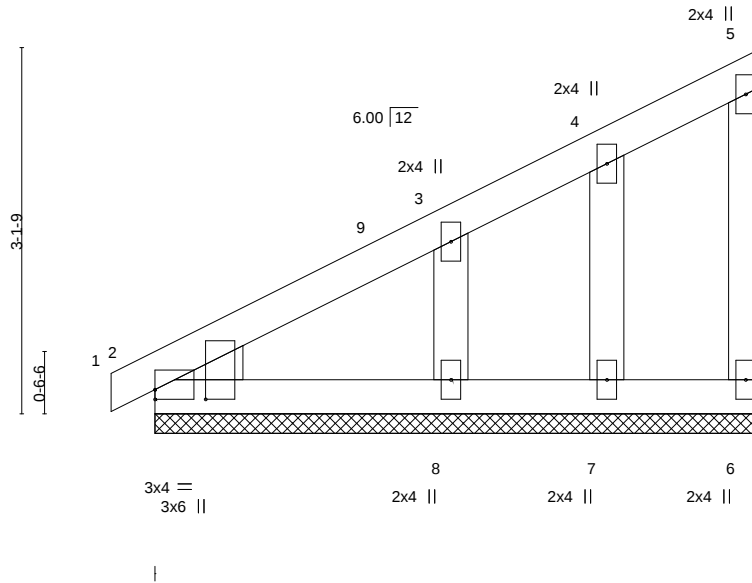
Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:34:59 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-X7gNzWErFb5MszgJOvQrZWLR_jGhKbBPWW28QnyAIRQ

0-4-8
0-4-8

5-2-6
5-2-6



Scale = 1:19.7

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.08	Vert(LL)	-0.00	1	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	0.00	1	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 20 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

REACTIONS.

All bearings 5-2-6.
(lb) - Max Horz 2=102(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 6, 7, 8
Max Grav All reactions 250 lb or less at joint(s) 6, 2, 7, 8

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-258/135
WEBS 3-8=-175/265

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-4-8 to 2-6-6, Exterior(2N) 2-6-6 to 5-0-10 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) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 7, 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



December 13, 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 #144/MO
3010432	M2	Monopitch	6	1	I49216003

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:35:00 2021 Page 1

ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-?JElArFT?uDDT6FVxdx46kuyR7Yh329ZlAoizEyAIRP

0-4-8 5-2-6
0-4-8 5-2-6

Scale = 1:20.2

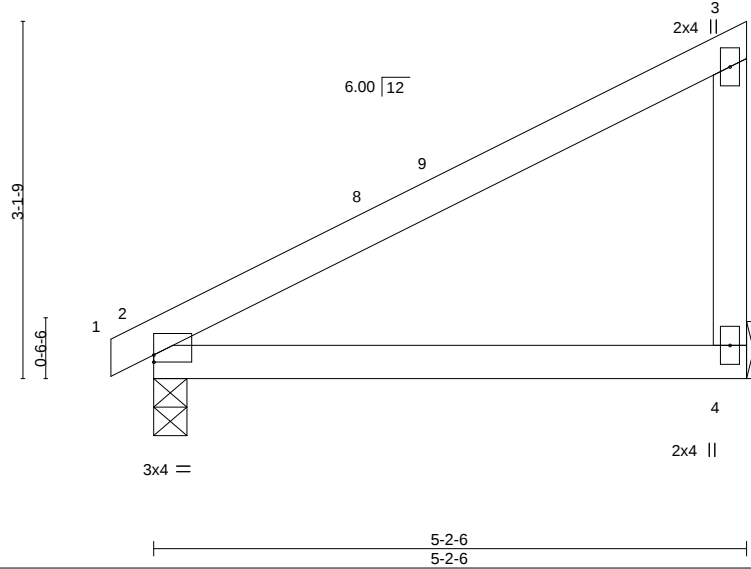


Plate Offsets (X,Y)-- [2:0-0-0,0-0-12]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.36	Vert(LL)	0.04	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.25	Vert(CT)	-0.07	4-7	>889	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	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
WEBS 2x4 SPF No.2

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=103(LC 11)
Max Uplift 4=-55(LC 12), 2=-35(LC 12)
Max Grav 4=226(LC 1), 2=255(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-4-8 to 2-7-8, Interior(1) 2-7-8 to 5-0-10 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 13, 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 #144/MO
3010432	M3	Monopitch	6	1	l49216004

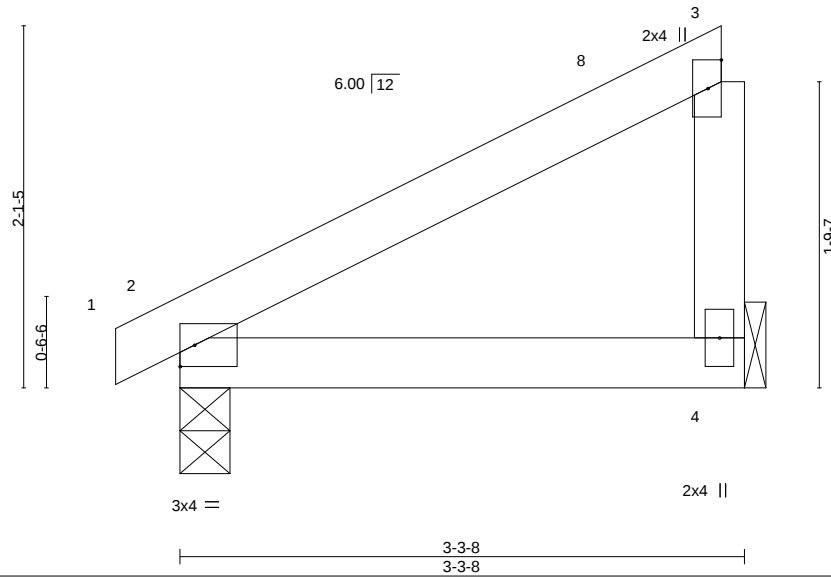
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:35:00 2021 Page 1

ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-?JEIARFT?uDDT6FVxdx46ku?t7a2329ZlAoizEyAIRP

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

Scale = 1:13.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.14	Vert(LL)	-0.01	4-7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.10	Vert(CT)	-0.01	4-7	>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: 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 3-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=68(LC 11)
Max Uplift 4=-35(LC 12), 2=-24(LC 12)
Max Grav 4=140(LC 1), 2=169(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-4-8 to 2-7-8, Interior(1) 2-7-8 to 3-1-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.



December 13, 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

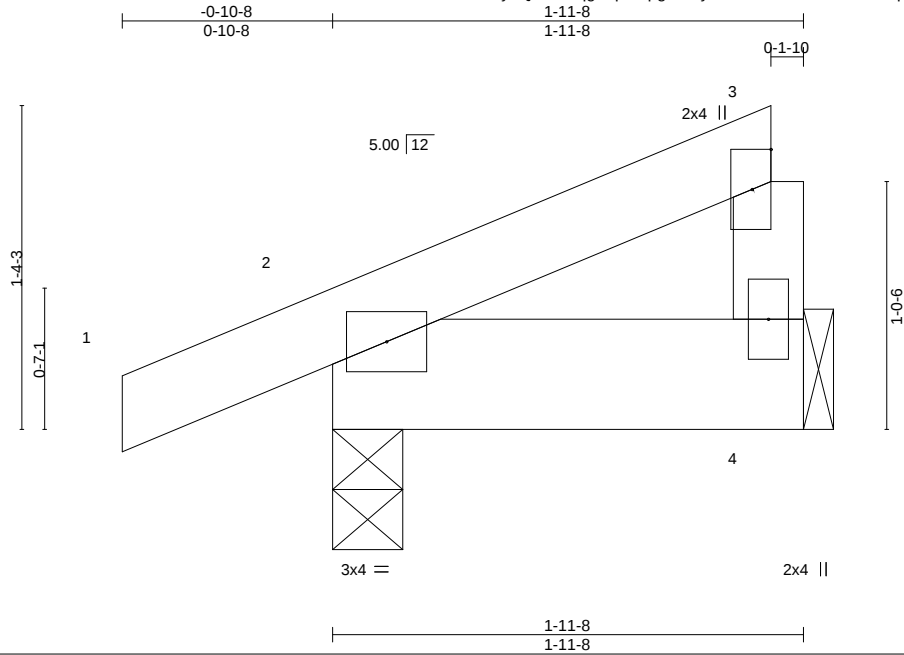
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	M4	Monopitch	6	1	I49216005

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:35:01 2021 Page 1

ID:0RfyeQ?mR?ggtbqdiWpgSizFyAv-TWo8NBG5mCL45GqiVKSJexRCyXxXoVPizqXFVgyAIRO



Scale = 1:9.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.05	Vert(LL)	-0.00	7	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	-0.00	7	>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: 8 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-11-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 2=0-3-8
Max Horz 2=42(LC 11)
Max Uplift 4=-15(LC 12), 2=-33(LC 8)
Max Grav 4=67(LC 1), 2=158(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; 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) 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.



December 13,2021

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 #144/MO
3010432	V1	Valley	1	1	149216006

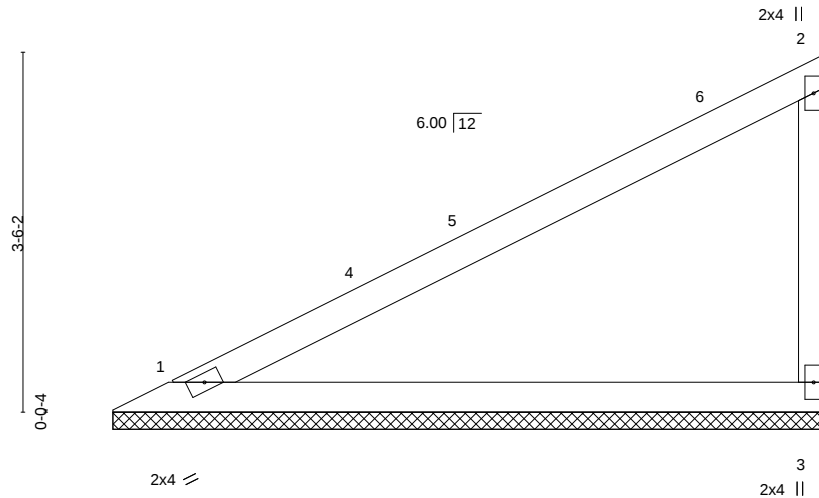
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:35:01 2021 Page 1

ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-TWo8NBG5mCL45GqiVKSJexR0XXrBoVPizqXFVgyAIRO

7-0-3
7-0-3

Scale = 1:22.5



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 0.78	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.42	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: 19 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=6-11-11, 3=6-11-11
Max Horz 1=117(LC 9)
Max Uplift 1=-34(LC 12), 3=-58(LC 12)
Max Grav 1=281(LC 1), 3=281(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=15ft; 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 6-10-7 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 13, 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



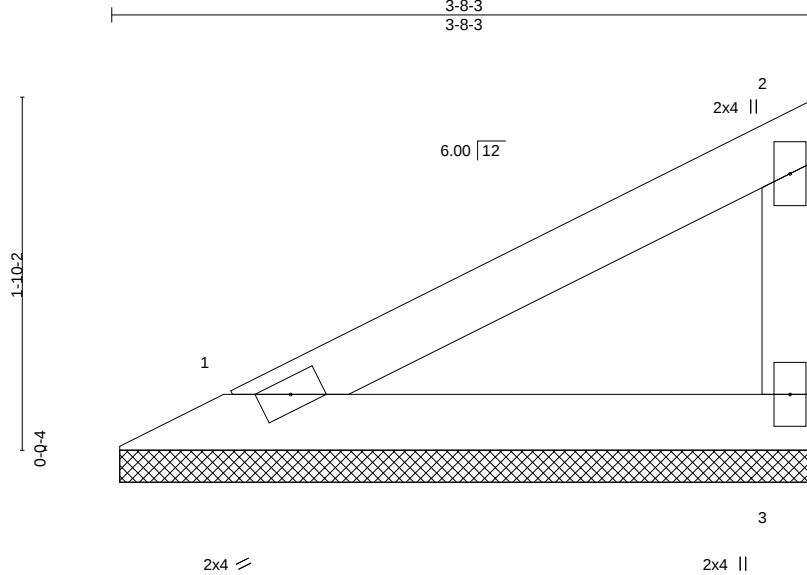
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	V2	Valley	1	1	I49216007

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:35:02 2021 Page 1

ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-yiMWbXGjXVTWjQPu32zYB9zKAxGlXyerCUHo16yAIRN



Scale: 1"=1'

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 9 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 3-8-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-7-11, 3=3-7-11
Max Horz 1=55(LC 9)
Max Uplift 1=-17(LC 12), 3=-30(LC 12)
Max Grav 1=131(LC 1), 3=131(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=15ft; 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 13, 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 #144/MO
3010432	V3	Valley	1	1	I49216008

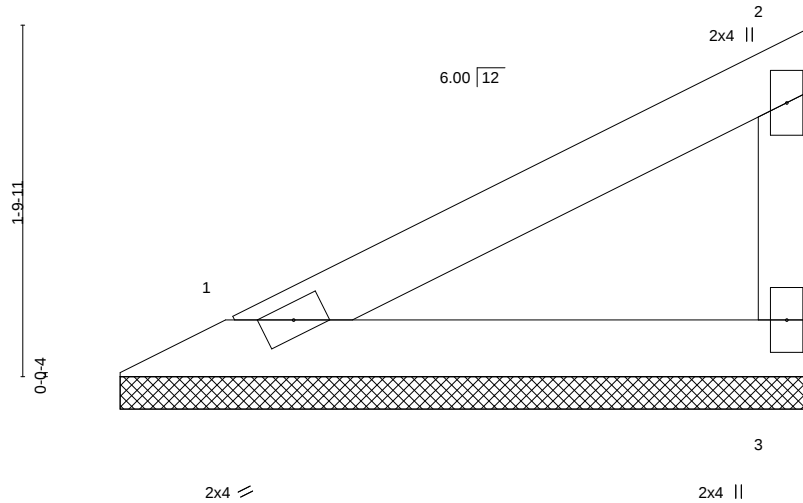
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:35:02 2021 Page 1

ID:0RfyeQ?mR?gqtbqdiWpgSlzFyAv-yiMWbXGjXVTWjQPu32zYB9zKlxGpXyerCUHo16yAIRN

3-7-6
3-7-6

Scale = 1:11.8



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 9 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 3-7-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=3-6-14, 3=3-6-14
Max Horz 1=53(LC 9)
Max Uplift 1=-16(LC 12), 3=-30(LC 12)
Max Grav 1=128(LC 1), 3=128(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=15ft; 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 13, 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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	V4	Valley	1	1	I49216009

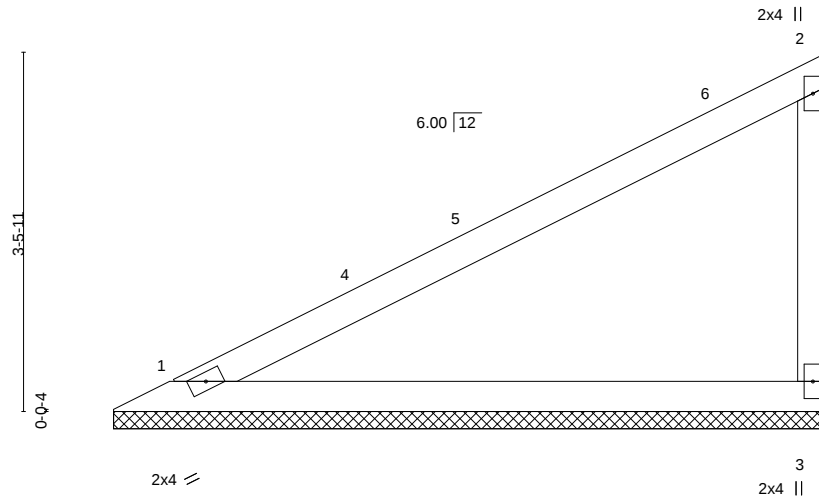
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:35:03 2021 Page 1

ID:0RfyeQ?mR?qgtbqdiWpgSlzFyAv-QuvuotHLpbnKa_4dlUnkMWMKKXpGPu?R80MZZyAIRM

6-11-6
6-11-6

Scale = 1:22.3



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 0.76	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.41	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: 19 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=6-10-14, 3=6-10-14
Max Horz 1=116(LC 9)
Max Uplift 1=-34(LC 12), 3=-58(LC 12)
Max Grav 1=278(LC 1), 3=278(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-9-10 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 13, 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

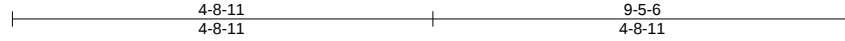


16023 Swingley Ridge Rd
Chesterfield, MO 63017

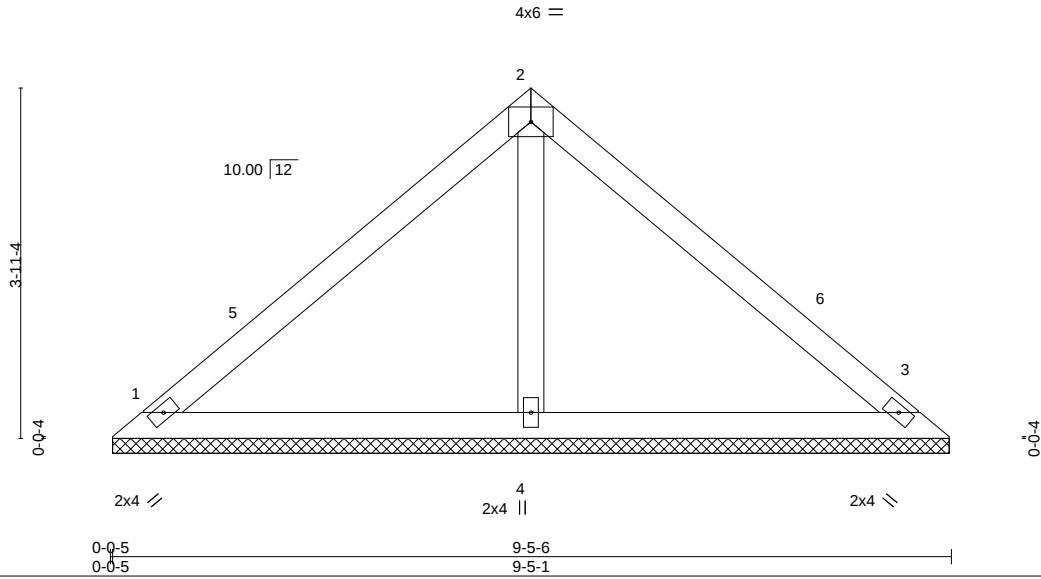
Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	V5	Valley	1	1	I49216010

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:35:04 2021 Page 1
ID:0RfyeQ?mR?qgtbqdiWpgSizFyAv-u5TG0DlZ37jeykZHAS?0Ga3ezkx??sG8fomv6?yAIRL



Scale = 1:25.9



LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.26		Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.16		Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.06		Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 27 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=9-4-12, 3=9-4-12, 4=9-4-12
Max Horz 1=-84(LC 8)
Max Uplift 1=-32(LC 13), 3=-42(LC 13), 4=-20(LC 12)
Max Grav 1=206(LC 1), 3=206(LC 1), 4=367(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 4-8-11, Exterior(2R) 4-8-11 to 7-8-11, Interior(1) 7-8-11 to 9-0-9 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
- 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 13, 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

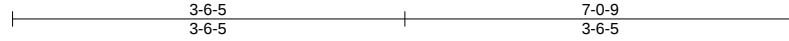


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	V6	Valley	1	1	I49216011

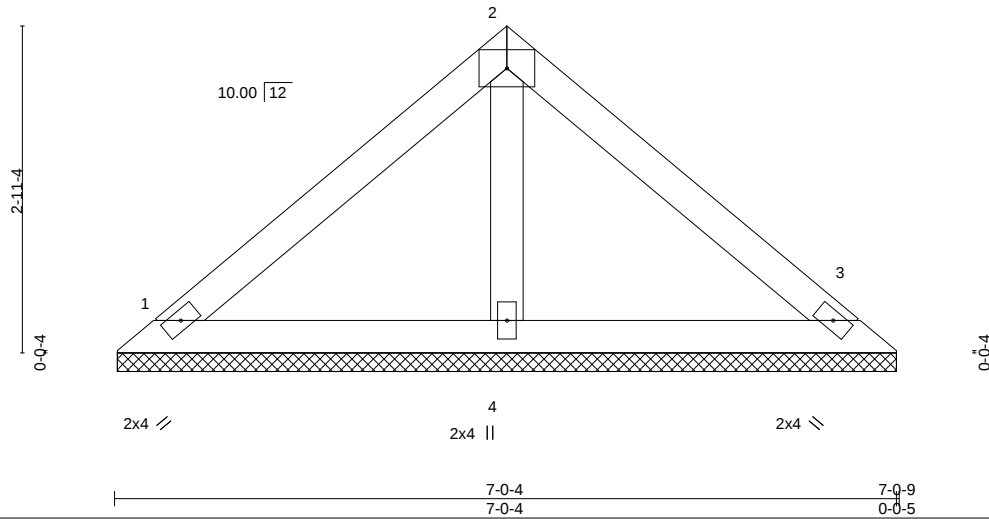
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:35:04 2021 Page 1
ID:0RfyeQ?mR?qqtbqdiWpgSlzFyAv-u5TG0Dlz37jeykZHAS?0Ga3gDkyA?sl8fomv6?yAIRL



4x6 =

Scale = 1:20.7



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	2-0-0	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Lumber DOL 1.15	WB 0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P							
	Code IRC2018/TPI2014							Weight: 20 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=6-11-15, 3=6-11-15, 4=6-11-15
Max Horz 1=-61(LC 8)
Max Uplift 1=-30(LC 13), 3=-38(LC 13)
Max Grav 1=162(LC 1), 3=162(LC 1), 4=239(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=15ft; 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.



December 13, 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



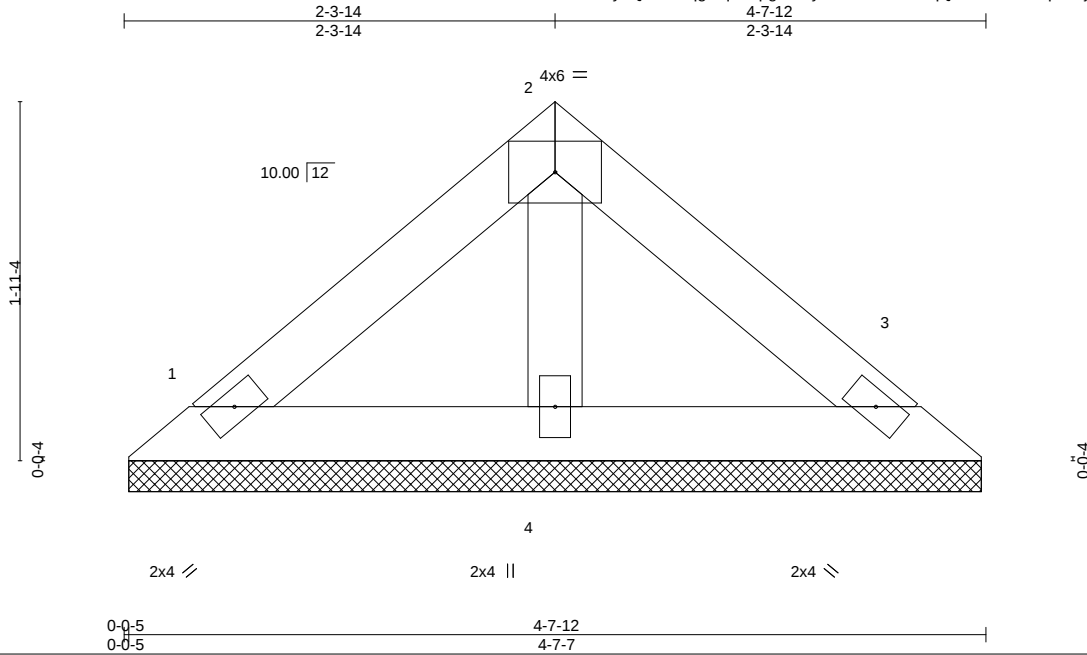
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	SUMMIT/HAWTHORN RIDGE #144/MO
3010432	V7	Valley	1	1	I49216012

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Aug 16 2021 MiTek Industries, Inc. Fri Dec 10 17:35:05 2021 Page 1
ID:0RfyeQ?mR?ggtbqdiWpgSlzFyAv-MH1eDZJbqQrVau8TkAXFpnbsj8JCkJBuSVSeRyAIRK



Scale = 1:12.4

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 0.01	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 4-7-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 1=4-7-3, 3=4-7-3, 4=4-7-3
Max Horz 1=38(LC 9)
Max Uplift 1=-19(LC 13), 3=-23(LC 13)
Max Grav 1=99(LC 1), 3=99(LC 1), 4=147(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=15ft; 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.



December 13, 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

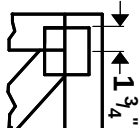
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



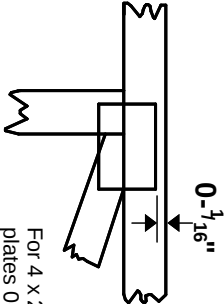
16023 Swingley Ridge Rd
Chesterfield, MO 63017

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 2012 software or upon request.**

PLATE SIZE

4 X 4

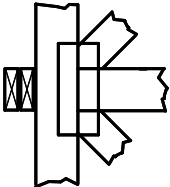
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



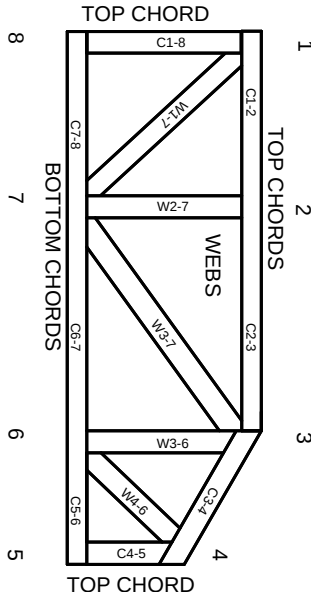
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: 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.

© 2012 MiTek® All Rights Reserved



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.