



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

Re: 2731383
Summit/103 Woodside

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: I45408119 thru I45408175

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

Missouri COA: Engineering 001193



Scott M. Sevier

March 30, 2021

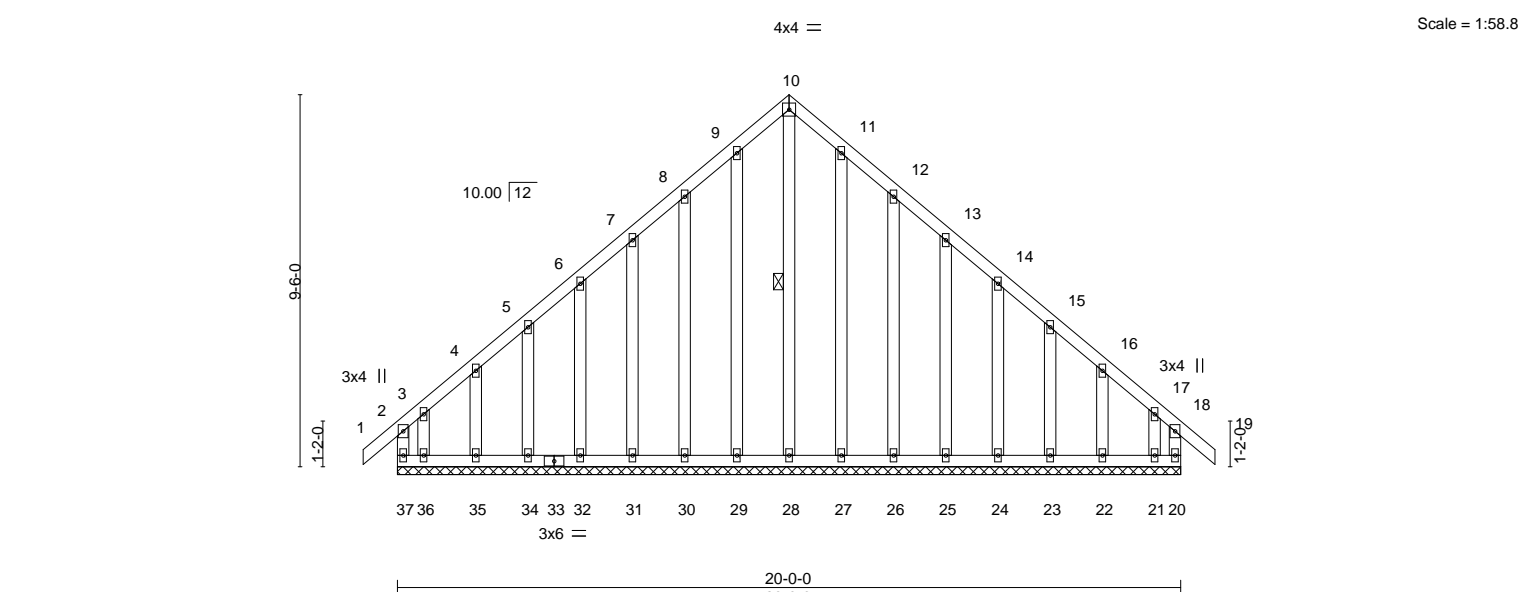
Sevier, Scott, Engineer

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

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	A1	Common Supported Gable	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

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

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07/21/2021



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	-0.00	19	n/r	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	-0.00	19	n/r		
BCLL 0.0	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.00	20	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R					Weight: 139 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 10-28
OTHERS 2x4 SPF No.2	

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz 37=-245(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 29, 30, 31, 32, 34, 35, 27, 26, 25, 24, 23, 22 except 37=-284(LC 10), 20=-208(LC 11), 36=-294(LC 9), 21=-253(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 29, 30, 31, 32, 34, 35, 27, 26, 25, 24, 23, 22, 21 except 37=364(LC 9), 20=293(LC 8), 28=251(LC 13), 36=301(LC 10)

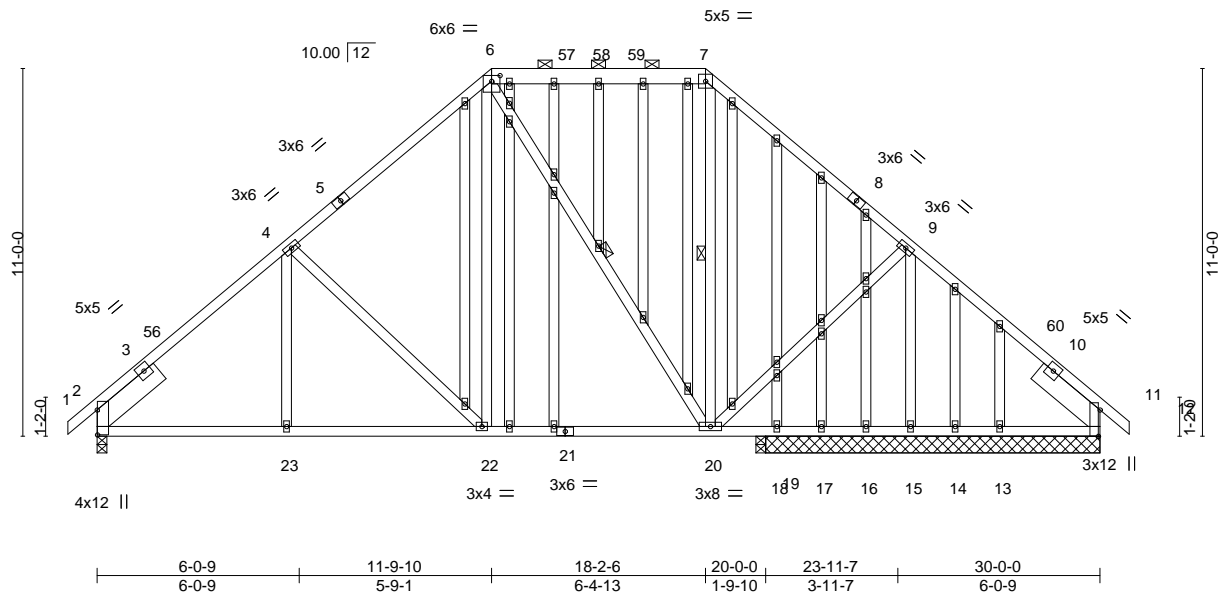
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 8-9=-142/280, 9-10=-156/309, 10-11=-156/309, 11-12=-142/280
WEBS 10-28=-319/123

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 2-0-0, Exterior(2N) 2-0-0 to 10-0-0, Corner(3R) 10-0-0 to 13-0-0, Exterior(2N) 13-0-0 to 20-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 1-4-0 oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 29, 30, 31, 32, 34, 35, 27, 26, 25, 24, 23, 22 except (jt=lb) 37=284, 20=208, 36=294, 21=253.
 - 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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Job 2731383	Truss A2	Truss Type GABLE	Qty 1	Ply 1	Summit/103 Woodside
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
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Job Reference (optional)					
ID:afncquyrevCNcuoa4gu?3GzRAYZ-yPYVDFmM?ArYhdp3j7zH_5Kn4B6dZAmqLosNzW1BF					
07/21/2021					



Scale = 1:68.9

Plate Offsets (X,Y)-- [2:0-8-15,0-0-2], [6:0-3-0,0-2-1], [11:0-9-7,Edge]									
LOADING (psf)		SPACING 2-0-0		CSI		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.05 20-22 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.11 20-22 >999 180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	-0.03 2 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS				Weight: 269 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
SLIDER Left 2x8 SP 2400F 2.0E -t 2-6-0, Right 2x8 SP 2400F 2.0E -t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-20, 7-20

REACTIONS.

All bearings 10-0-0 except (jt=length) 2=0-3-8, 19=0-3-8.
(lb) - Max Horz 2=248(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 15, 14, 13, 19 except 2=164(LC 12),
11=169(LC 13), 18=382(LC 1)
Max Grav All reactions 250 lb or less at joint(s) 18, 17, 16, 14, 13 except
2=1138(LC 1), 15=1058(LC 1), 11=374(LC 26), 19=498(LC 1), 11=339(LC 1)

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

TOP CHORD 2-4=-1219/205, 4-6=-953/246, 6-7=-449/266, 7-9=-727/255
BOT CHORD 2-23=-203/874, 22-23=-203/874, 20-22=-98/628
WEBS 4-22=-362/218, 6-22=-90/413, 6-20=-419/112, 9-20=-81/484, 9-15=-1016/72

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 11-9-10, Exterior(2R) 11-9-10 to 16-0-8, Interior(1) 16-0-8 to 18-2-6, Exterior(2R) 18-2-6 to 22-5-5, Interior(1) 22-5-5 to 30-10-8 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.
- Provide adequate drainage to prevent water ponding.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 14, 13, 19 except (jt=lb) 2=164, 11=169, 18=382, 11=169.
- 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.



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or 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/TPI 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/103 Woodside
2731383	A3	PIGGYBACK BASE	7	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
Job Reference (optional)					

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DEVELOPMENT SERVICES

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0-10-8 6-0-9 11-9-10 18-2-6 23-11-7 30-0-0 30-10-8
0-10-8 6-0-9 5-9-1 6-4-13 5-9-1 6-0-9 0-10-8

Scale: 3/16"=1'

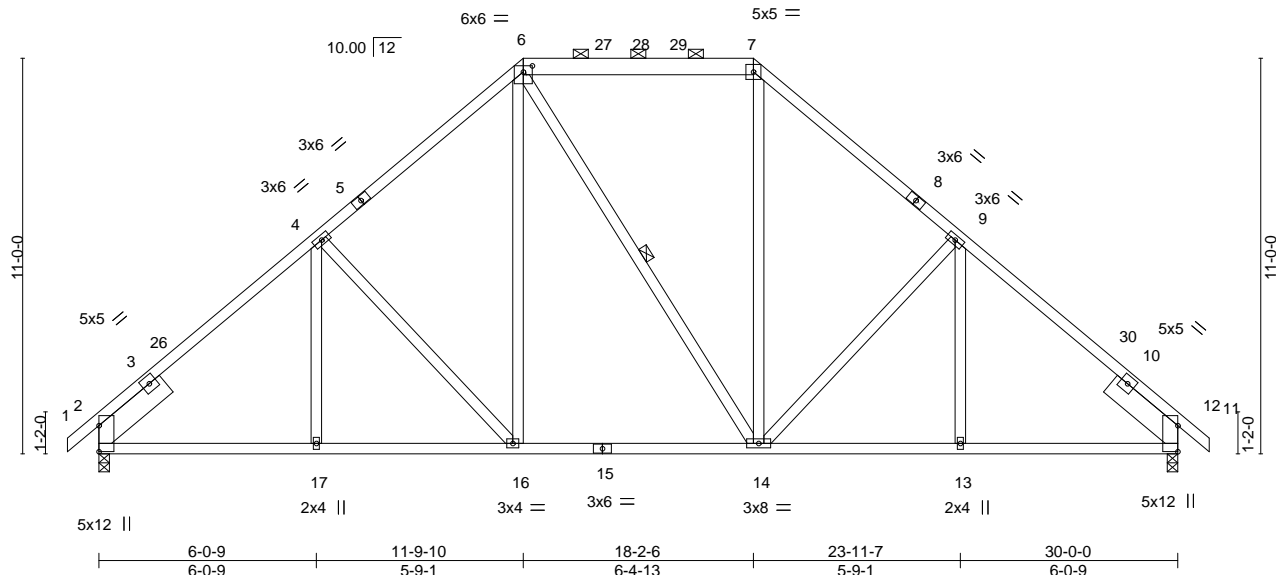


Plate Offsets (X,Y)--		[6:0-3-0,0-2-1]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.69	Vert(LL)	-0.08 16-17	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.66	Vert(CT)	-0.16 16-17	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.38	Horz(CT)	0.09 11	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 167 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-7: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x8 SP 2400F 2.0E -t 2-6-0, Right 2x8 SP 2400F 2.0E -t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 6-14

REACTIONS.

(size) 2=0-3-8, 11=0-3-8
Max Horz 2=248(LC 11)
Max Uplift 2=-171(LC 12), 11=-171(LC 13)
Max Grav 2=1411(LC 1), 11=1411(LC 1)

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

TOP CHORD 2-4=-1585/215, 4-6=-1330/263, 6-7=-928/266, 7-9=-1330/263, 9-11=-1584/215
BOT CHORD 2-17=-202/1115, 16-17=-202/1115, 14-16=-83/927, 13-14=-50/1115, 11-13=-50/1115
WEBS 4-16=-333/220, 6-16=-101/385, 7-14=-82/385, 9-14=-332/220

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 11-9-10, Exterior(2R) 11-9-10 to 16-0-8, Interior(1) 16-0-8 to 18-2-6, Exterior(2R) 18-2-6 to 22-5-5, Interior(1) 22-5-5 to 30-10-8 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=171, 11=171.
- 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.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	A4	PIGGYBACK BASE	3	1	Job Reference (optional)

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

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DEVELOPMENT SERVICES

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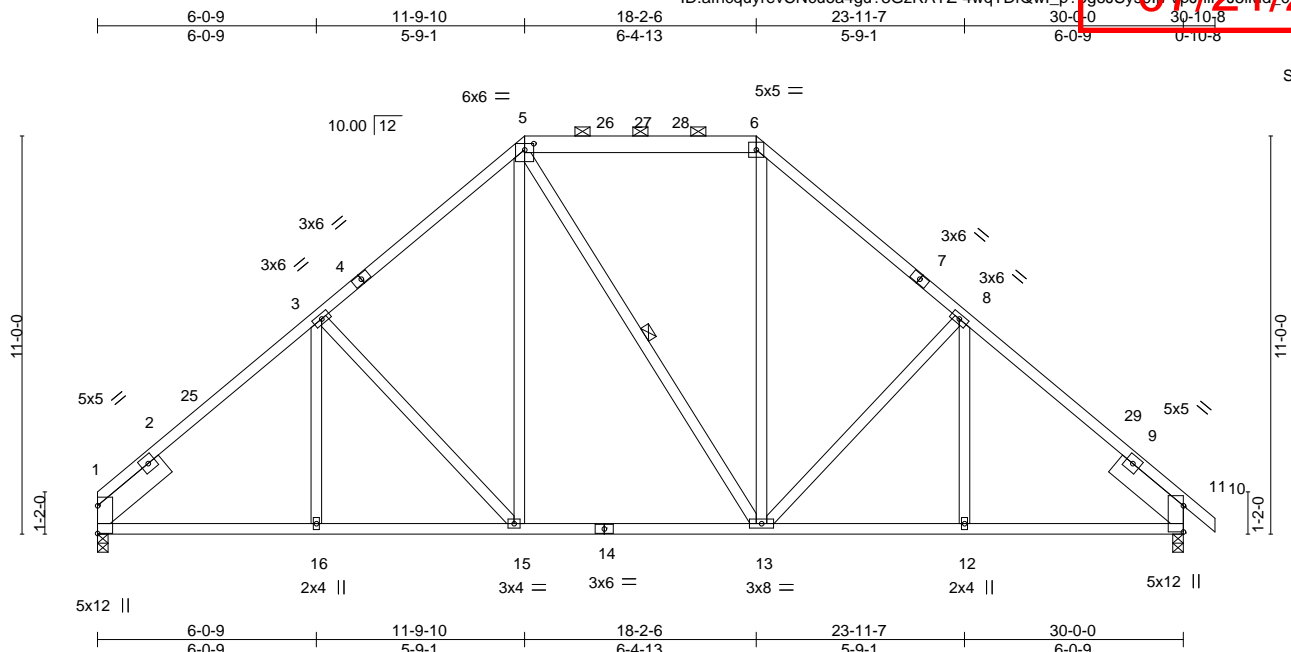


Plate Offsets (X,Y)-- [5:0-3-0,0-2-1]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.08 15-16 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.16 15-16 >999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.09 10 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 166 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x8 SP 2400F 2.0E -t 2-6-0, Right 2x8 SP 2400F 2.0E -t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 5-13

REACTIONS.

(size) 1=0-3-8, 10=0-3-8
Max Horz 1=242(LC 10)
Max Uplift 1=155(LC 12), 10=171(LC 13)
Max Grav 1=1349(LC 1), 10=1412(LC 1)

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

TOP CHORD 1-3=1589/214, 3-5=1333/263, 5-6=929/265, 6-8=1332/263, 8-10=1585/215
BOT CHORD 1-16=201/1120, 15-16=201/1120, 13-15=83/929, 12-13=50/1116, 10-12=50/1116
WEBS 3-15=337/219, 5-15=101/386, 6-13=82/385, 8-13=332/220

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 11-9-10, Exterior(2R) 11-9-10 to 16-0-8, Interior(1) 16-0-8 to 18-2-6, Exterior(2R) 18-2-6 to 22-5-5, Interior(1) 22-5-5 to 30-10-8 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) 1=155, 10=171.
- 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.



March 30, 2021

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Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	B1	Common Supported Gable	1	1	
Job Reference (optional)					

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

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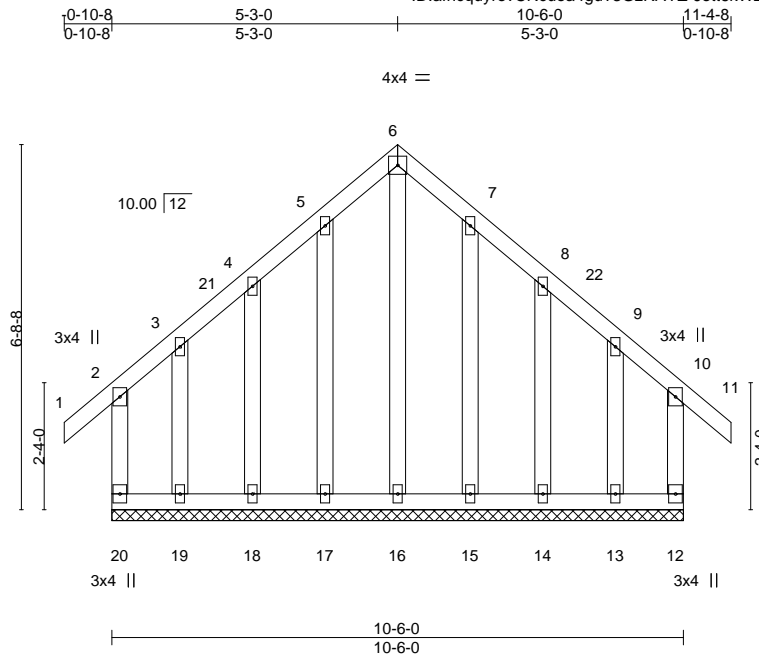
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LEE'S SUMMIT, MISSOURI

07/21/2021



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	-0.00	11	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	-0.00	11	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.22	Horz(CT)	-0.00	12	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-R						Weight: 69 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 10-6-0.

(lb) - Max Horz 20=192(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 17, 18, 15, 14 except 20=200(LC 8), 12=194(LC 9), 19=210(LC 9), 13=205(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 16, 17, 18, 15, 14 except 20=257(LC 20), 12=252(LC 19), 19=279(LC 10), 13=273(LC 11)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=95/260, 5-6=124/313, 6-7=124/313, 7-8=94/259
WEBS 6-16=317/80

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 5-3-0, Corner(3R) 5-3-0 to 8-3-0, Exterior(2N) 8-3-0 to 11-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 18, 15, 14 except (jt=lb) 20=200, 12=194, 19=210, 13=205.
- 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.



March 30, 2021

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

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

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

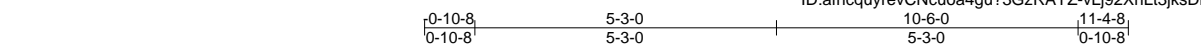


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	B2	Common	2	1	

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

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:36:34 2021 Page 1
ID:afncquyrevCNCuo4gu?3GzRAYZ-vLj92XhLt3jksDNklHmPkaal/3ofXy14PU1RiJH2W10h



4x4 =

Scale = 1:40.1

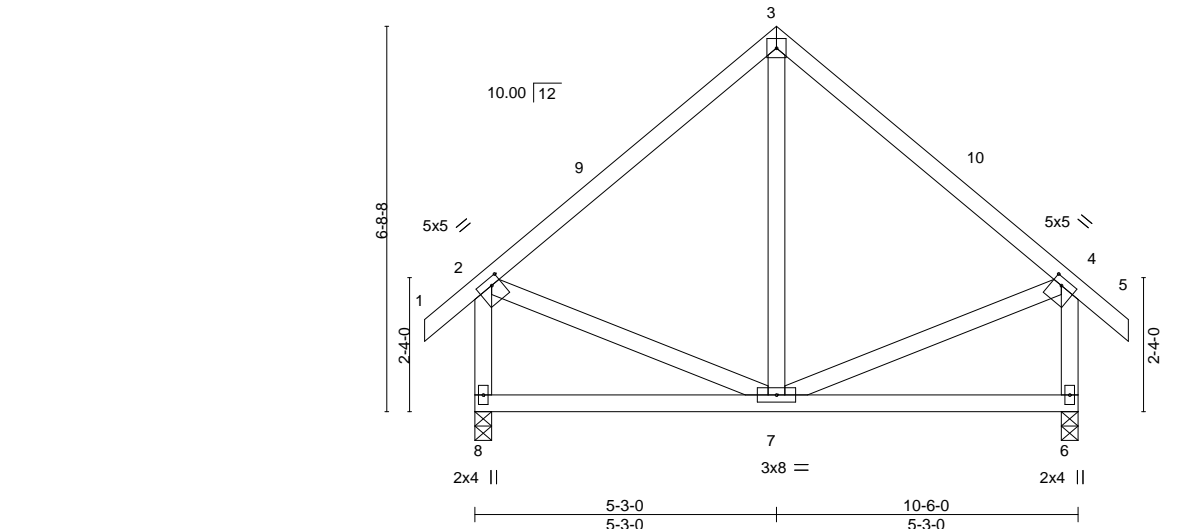


Plate Offsets (X,Y)-- [2:0-2-0,0-1-8], [4:0-2-0,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.01	7-8	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.03	7-8	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 54 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	

REACTIONS. (size) 8=0-3-8, 6=0-3-8
Max Horz 8=-192(LC 10)
Max Uplift 8=-60(LC 12), 6=-60(LC 13)
Max Grav 8=531(LC 1), 6=531(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-381/156, 3-4=-381/156, 2-8=-482/195, 4-6=-482/195

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 5-3-0, Exterior(2R) 5-3-0 to 8-3-0, Interior(1) 8-3-0 to 11-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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) 8, 6.
 - 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.



March 30, 2021

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	B3	Common	1	1	
Job Reference (optional)					

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:36:37 2021 Page 1

ID:afncquyrevCNcuoa4gu?3GzRAYZ-JwPlhYkDA_5Jjg6J_PK6MC014o0nIMxrkPwMwzW10e

0-10-8 5-3-0 10-9-8 11-4-8
0-10-8 5-3-0 5-6-8 0-7-0

4x6 =

Scale = 1:43.2

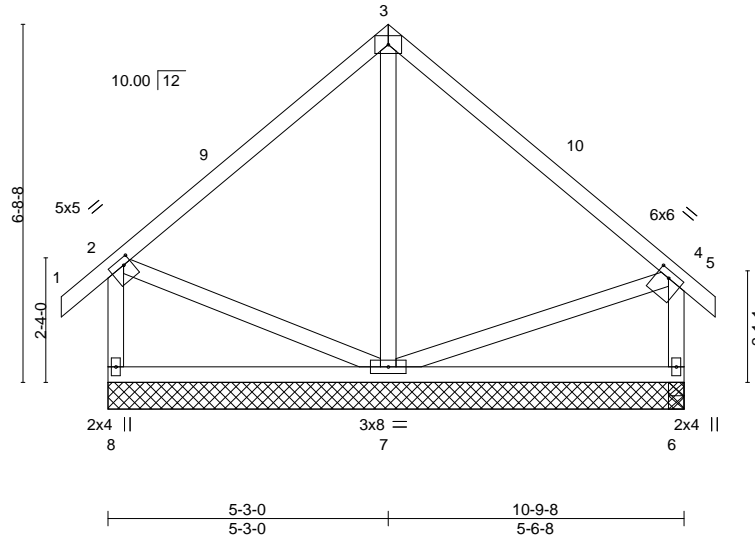


Plate Offsets (X,Y)-- [2:0-1-12,0-1-8], [4:0-2-12,0-1-8]

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 0.33	Vert(LL)	-0.02	6-7	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	-0.04	6-7	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.18	Horz(CT)	0.00	6	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
									Weight: 54 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.

All bearings 10-9-8.
(lb) - Max Horz 8=-189(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 8, 6, 7
Max Grav All reactions 250 lb or less at joint(s) except 8=350(LC 1), 6=337(LC 1), 6=337(LC 1), 7=381(LC 1)

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

TOP CHORD 2-8=-306/150, 4-6=-288/138
WEBS 3-7=-256/51

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 5-3-0, Exterior(2R) 5-3-0 to 8-3-0, Interior(1) 8-3-0 to 11-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 8, 6, 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 30, 2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	B4	Roof Special	4	1	
Job Reference (optional)					

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

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:36:39 2021 Page 1

ID:afncquyrevCNcuoa4gu?3GzRAYZ-FIX25EIUibL1y_F5qMaRiIQzKADLDBPT?V2W10c

0-10-8 1-7-8 5-3-0 9-2-0 10-9-8
0-10-8 1-7-8 3-7-8 3-11-0 1-7-8

4x6 =

Scale = 1:40.1

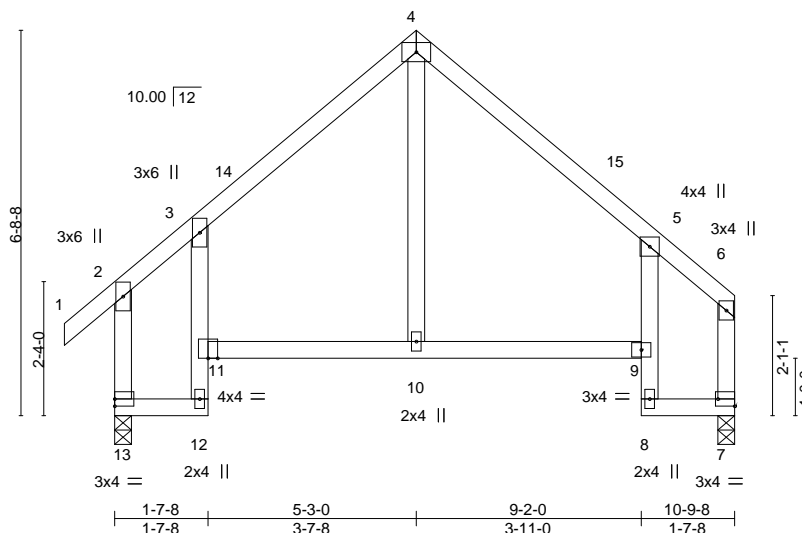


Plate Offsets (X,Y)-- [7:Edge,0-1-8]

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 0.29	Vert(LL)	0.05 10-11	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.34	Vert(CT)	-0.07 9-10	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.05 7	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 47 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) 13=0-3-8, 7=0-3-8
Max Horz 13=183(LC 9)
Max Uplift 13=59(LC 12), 7=46(LC 12)
Max Grav 13=547(LC 1), 7=469(LC 1)

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

TOP CHORD 2-3=-319/139, 3-4=-408/176, 4-5=-401/192, 5-6=-327/97, 2-13=-432/152, 6-7=-353/101
BOT CHORD 10-11=-75/289, 9-10=-75/289

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 5-3-0, Exterior(2R) 5-3-0 to 8-3-0, Interior(1) 8-3-0 to 10-7-12 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) 13, 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.



March 30, 2021

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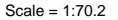
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Inc. Tue Mar 30 08:45:44 2021 Page 1
fics 48 MOiGgZ1QWuFeAzv0lr
23-6-0 34 1 8



LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2, 3-4, 5-7.
BOT CHORD	2x4 SPF No.2		
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
SLIDER	Right 2x6 SPF No.2 -I 2-7-4		6-0-0 oc bracing: 27-28,19-21,18-19.

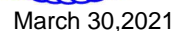
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 26-28=-1292/88, 2-3=-1609/18, 3-4=-1189/79, 4-5=-1562/22, 5-6=-96/304, 6-33=-70/277, 33-34=-71/278, 34-35=-72/279, 7-35=-72/280, 7-36=-828/461, 36-37=-916/465, 8-37=-1073/472, 8-9=-288/117

BOT CHORD 26-39=-99/1112, 25-39=-99/1112, 24-25=-163/1117, 24-40=-163/1117, 40-41=-163/1117, 23-41=-163/1117, 23-42=-10/1224, 42-43=-10/1224, 43-44=-10/1224, 22-44=-10/1224, 22-45=0/778, 45-46=0/778, 21-46=0/778, 21-47=0/987, 20-47=0/987, 15-18=-230/836, 18-20=-1742/327, 6-20=-522/370, 14-15=-240/682, 14-49=-243/748, 49-50=-243/748, 13-50=-243/748, 13-51=-636/1824, 51-52=-636/1824, 12-52=-636/1824, 8-12=-4/260, 9-11=-318/913

WEBS 2-23=-56/275, 3-23=0/526, 4-22=0/502, 5-22=-204/543, 7-13=-164/649, 8-13=-1083/399, 7-15=-1195/367, 2-26=-1509/146, 5-20=-1534/15

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=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
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 106 lb uplift at joint 28, 559 lb uplift at joint 18 and 368 lb uplift at joint 9.
- 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.



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



Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2731383	C1	Roof Special Girder	1	2	Job Reference (optional)	8.430 s Nov 18 2020 MiTek Industries, Inc. Tue Mar 30 08:45:44 2021 Page 2 ID:afncquyrevCNcuoa4gu?3GzRAYZ-D8i4rwjbfvd_YHy_fuss48MOIGpZDQVUpeAzV0lr

NOTES-

11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 165 lb down and 152 lb up at 21-5-4, 153 lb down and 128 lb up at 23-5-4, 153 lb down and 123 lb up at 25-5-4, 143 lb down and 97 lb up at 27-5-4, and 136 lb down and 83 lb up at 29-5-4, and 132 lb down and 97 lb up at 31-5-4 on top chord, and 107 lb down and 68 lb up at 2-0-12, 83 lb down and 56 lb up at 4-0-12, 155 lb down at 6-0-12, 162 lb down at 8-0-12, 162 lb down at 9-10-0, 162 lb down at 11-7-4, 155 lb down at 13-7-4, 83 lb down and 56 lb up at 15-7-4, 107 lb down and 68 lb up at 17-7-4, 69 lb down and 27 lb up at 21-6-4, 68 lb down and 57 lb up at 23-5-4, 68 lb down and 57 lb up at 25-5-4, 69 lb down and 49 lb up at 27-5-4, and 74 lb down and 28 lb up at 29-5-4, and 94 lb down and 35 lb up at 31-4-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 5-7=-70, 7-10=-70, 27-28=-20, 21-25=-20, 18-19=-20, 16-17=-20, 12-14=-20, 11-29=-20
- Concentrated Loads (lb)
- Vert: 16=-50(B) 12=-77(B) 8=-82(B) 33=-115(B) 34=-103(B) 35=-103(B) 36=-93(B) 37=-86(B) 38=-61(B) 40=-78(B) 41=-155(B) 42=-162(B) 43=-162(B) 44=-162(B) 45=-155(B) 46=-78(B) 47=-61(B) 49=-62(B) 50=-62(B) 51=-67(B) 52=-74(B)

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	C2	Roof Special	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

8.430 s Mar 22 2021 MiTek Industries, Inc.

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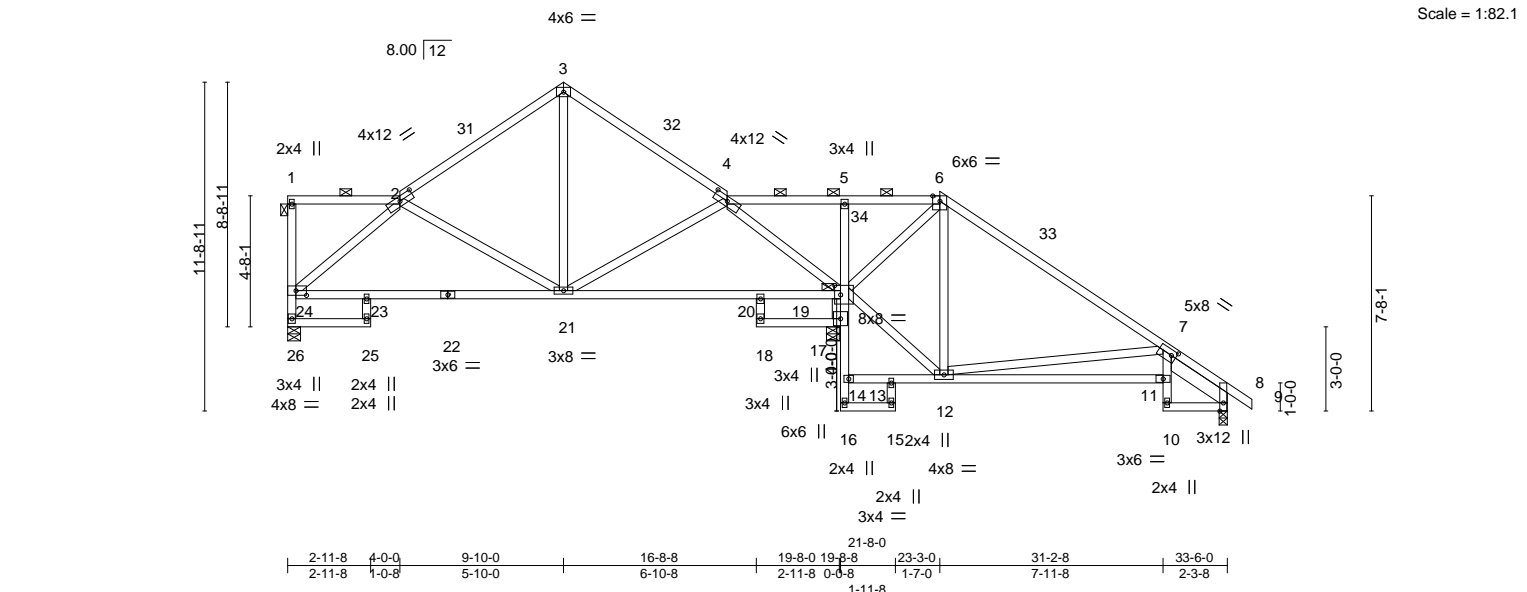


Plate Offsets (X,Y)--	[2:0-6-0,0-1-14], [4:0-6-0,0-1-14], [6:0-3-1,Edge], [7:0-2-2,0-2-4], [19:0-2-8,0-4-0], [24:0-4-8,0-2-0]					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl
TCLL 25.0	Plate Grip DOL	1.15	TC 0.57	Vert(LL)	-0.16 21-23	>999 240
TCDL 10.0	Lumber DOL	1.15	BC 0.60	Vert(CT)	-0.32 21-23	>729 180
BCLL 0.0	Rep Stress Incr	YES	WB 0.93	Horz(CT)	0.11 17	n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS			
Weight: 179 lb						FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2 *Except* 6-9: 2x4 SP 2400F 2.0E	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-2, 4-6.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SPF No.2	
SLIDER Right 2x6 SPF No.2 -t 2-7-4	

REACTIONS. (size) 26=0-5-8, 17=0-5-8, 8=0-3-8
 Max Horz 26=-306(LC 8)
 Max Uplift 26=-113(LC 12), 17=-241(LC 13), 8=-110(LC 13)
 Max Grav 26=701(LC 1), 17=1954(LC 1), 8=430(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 24-26=-659/114, 2-3=-582/119, 3-4=-582/129, 6-7=-40/308, 7-8=-135/257,
 4-5=-105/954, 5-6=-104/986
 BOT CHORD 23-24=-144/677, 21-23=-144/677, 19-20=-57/267, 17-19=-1918/259, 13-14=-318/0,
 11-12=-226/702, 8-10=-120/381
 WEBS 2-21=-264/114, 3-21=-29/268, 4-21=0/415, 4-19=-1292/190, 6-12=-94/302,
 7-12=-826/356, 2-24=-733/187, 6-19=-1184/336

- NOTES-**
 1) Unbalanced roof live loads have been considered for this design.
 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 9-10-0, Exterior(2R) 9-10-0 to 12-10-0, Interior(1) 12-10-0 to 23-3-0, Exterior(2R) 23-3-0 to 26-3-0, Interior(1) 26-3-0 to 34-4-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 3) Provide adequate drainage to prevent water ponding.
 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 113 lb uplift at joint 26, 241 lb uplift at joint 17 and 110 lb uplift at joint 8.
 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30,2021

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	C4	Hip	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:39:23 2021 Page 1

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07/21/2021

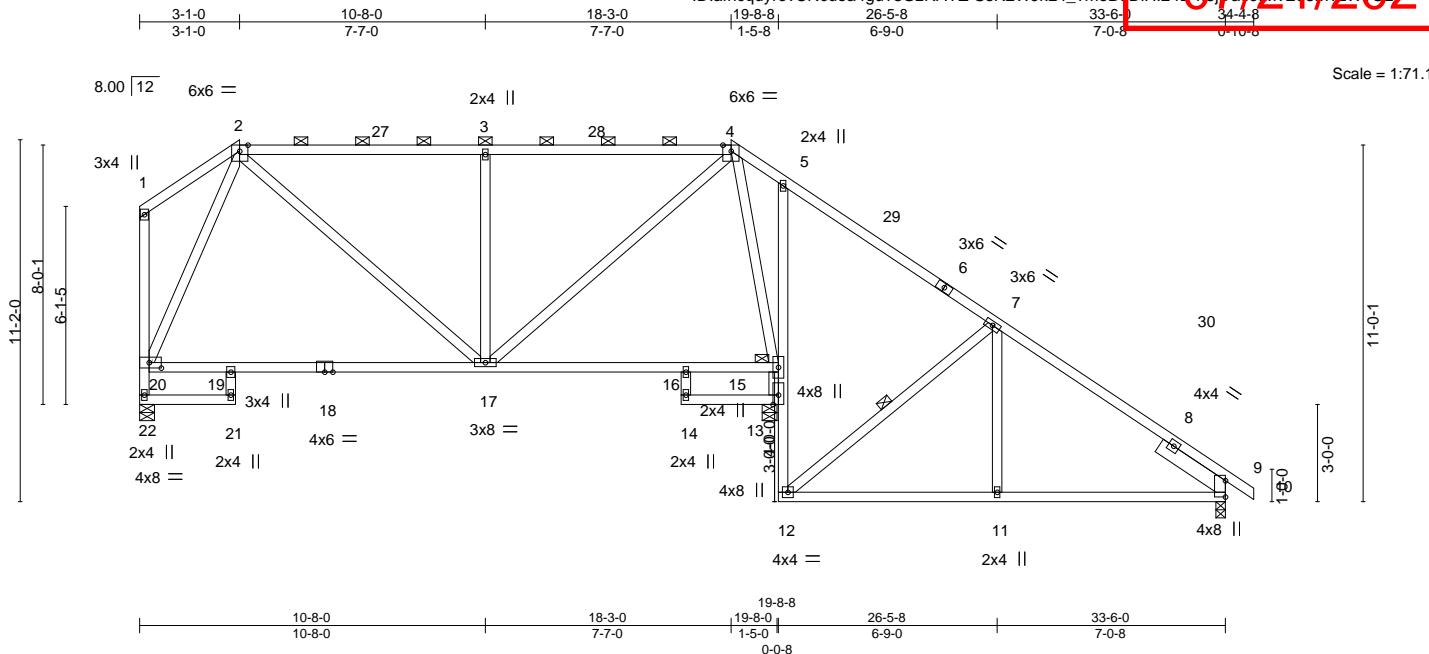


Plate Offsets (X,Y)--		[2:0-3-1,Edge], [4:0-3-1,Edge], [20:0-4-8,0-2-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.77
TCDL 10.0	Lumber DOL	1.15	BC 0.66
BCLL 0.0	Rep Stress Incr	YES	WB 0.70
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.23 17-19 >999 240
			Vert(CT) -0.47 17-19 >498 180
			Horz(CT) 0.14 13 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 174 lb FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x6 SPF No.2 - t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-10-6 max.): 2-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 7-12

REACTIONS.

(size) 22=0-5-8, 13=0-5-8, 9=0-3-8
Max Horz 22=-312(LC 8)
Max Uplift 22=-185(LC 12), 13=-18(LC 13), 9=-240(LC 13)
Max Grav 22=870(LC 25), 13=1553(LC 1), 9=651(LC 20)

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

TOP CHORD 2-3=-710/233, 3-4=-710/233, 4-5=-173/410, 5-7=-167/343, 7-9=-588/331, 20-22=-823/181
BOT CHORD 19-20=-43/382, 17-19=-151/423, 12-13=-101/418, 13-15=-1086/106, 5-15=-306/135, 11-12=-150/425, 9-11=-150/425
WEBS 7-12=-582/202, 7-11=0/304, 3-17=-606/212, 2-17=-178/513, 2-20=-748/303, 4-17=-163/722, 4-15=-836/254

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 3-1-0, Exterior(2R) 3-1-0 to 7-3-15, Interior(1) 7-3-15 to 18-3-0, Exterior(2R) 18-3-0 to 22-5-15, Interior(1) 22-5-15 to 34-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 185 lb uplift at joint 22, 18 lb uplift at joint 13 and 240 lb uplift at joint 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.
- 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.



March 30, 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/103 Woodside
2731383	C5	Piggyback Base	1	1	

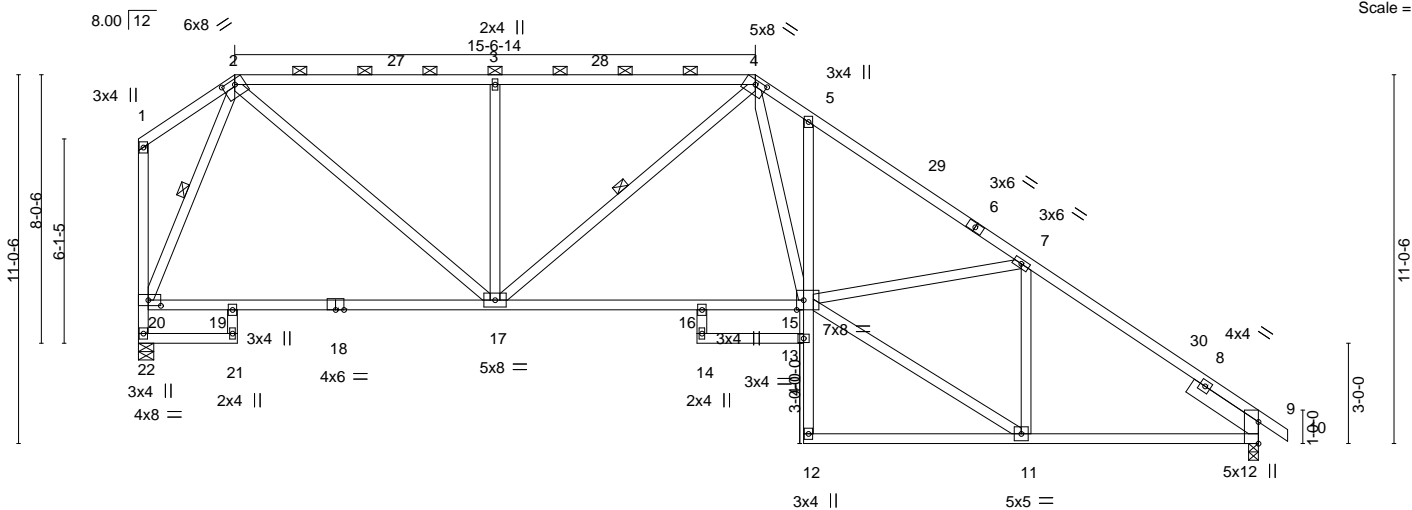
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:39:41 2021 Page 1

ID:afncquyrevCNcuoa4gu?3GzRAYZ-wJWslTyerWGCoYAgm3dGp?tkDzjis/gq21V5MyzWV/Nm

2-10-9 10-8-0 16-8-8 18-5-7 19-10-12 26-6-10 33-6-0 34-4-8
2-10-9 7-9-7 6-0-8 1-8-15 1-5-5 6-7-14 6-11-6 0-10-6



Scale = 1:68.9

	2-11-8	10-8-0	16-8-8	18-5-7 19-10-12	26-6-10	33-6-0
	2-11-8	7-8-8	6-0-8	1-8-15 1-5-5	6-7-14	6-11-6

Plate Offsets (X, Y)-- [2:0-4-8,0-1-12], [4:0-4-0,0-1-9], [15:0-2-8,Edge], [20:0-4-8,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.91	Vert(LL)	-0.24 17-19	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.86	Vert(CT)	-0.51 17-19	>790	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.49	Horz(CT)	0.22 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS					Weight: 179 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x6 SPF No.2 - t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-3-3 max.): 2-4.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 2-20, 4-17

REACTIONS.

(size) 22=0-5-8, 9=0-3-8
Max Horz 22=-311(LC 8)
Max Uplift 22=-156(LC 12), 9=-250(LC 13)
Max Grav 22=1500(LC 1), 9=1563(LC 1)

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

TOP CHORD 2-3=-1695/244, 3-4=-1695/244, 4-5=-2611/448, 5-7=-2722/370, 7-9=-2016/347, 20-22=-1454/152
BOT CHORD 19-20=-37/606, 17-19=-144/608, 16-17=-31/1855, 15-16=-12/1782, 5-15=-328/156, 9-11=-164/1576
WEBS 3-17=-608/215, 7-11=-874/154, 11-15=-191/1833, 7-15=-98/601, 2-20=-1438/309, 2-17=-186/1491, 4-17=-305/131, 4-15=-217/1293

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 2-10-9, Exterior(2R) 2-10-9 to 7-7-7, Interior(1) 7-7-7 to 18-5-7, Exterior(2R) 18-5-7 to 23-2-5, Interior(1) 23-2-5 to 34-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 156 lb uplift at joint 22 and 250 lb uplift at joint 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.
- 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.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	C6	Piggyback Base	4	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
Job Reference (optional)					

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

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ID:afncquyrevCNCuo4gu?3GzRAYZ-hs?l_C2fyzH3lBnDk88hktC4kl653tHRWfULW1ne

07/21/2021

Scale = 1:81.8

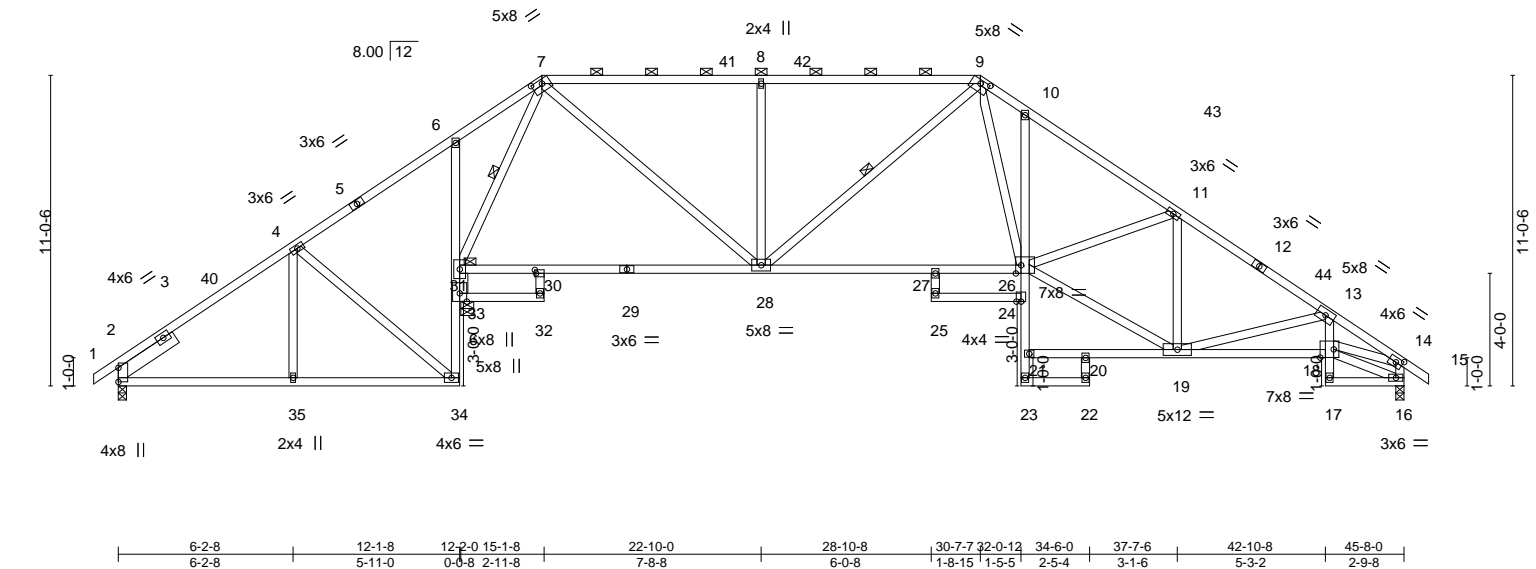


Plate Offsets (X,Y)--		[7:0-4-8,0-1-12], [9:0-4-0,0-1-9], [14:0-2-14,0-2-0], [18:0-5-12,0-3-8], [26:0-2-4,Edge], [30:0-0-8,0-1-8]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.82	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.75	Vert(LL) -0.18 27-28 >999 240
BCLL 0.0	Rep Stress Incr YES	WB 0.52	Vert(CT) -0.39 27-28 >999 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) 0.13 16 n/a n/a
		PLATES MT20	
		GRIP 197/144	
		Weight: 244 lb FT = 20%	

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Left 2x6 SPF No.2 - t 2-6-0

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-3-12 max.): 7-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 9-28, 7-31

REACTIONS.

(size) 2=0-3-8, 33=0-5-8, 16=0-3-8
Max Horz 2=269(LC 11)
Max Uplift 2=182(LC 13), 33=217(LC 12), 16=301(LC 13)
Max Grav 2=539(LC 25), 33=2139(LC 1), 16=1557(LC 1)

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

TOP CHORD 2-4=-442/312, 4-6=-182/376, 6-7=-167/423, 7-8=-1647/417, 8-9=-1647/417,
9-10=-2507/564, 10-11=-2645/506, 11-13=-2274/469, 13-14=-2775/523, 14-16=-1509/300
BOT CHORD 2-35=-162/348, 34-35=-162/348, 33-34=-100/381, 31-33=-1699/201, 6-31=-309/162,
32-33=-251/0, 30-31=-38/685, 28-30=-93/542, 27-28=-73/1821, 26-27=-40/1780,
18-19=-428/2402, 13-18=0/262
WEBS 4-35=0/285, 4-34=-541/191, 7-28=-138/1466, 8-28=-608/215, 9-28=-281/42,
7-31=-1520/193, 9-26=-211/1208, 11-19=-725/124, 13-19=-607/194, 19-26=-248/2079,
11-26=-94/345, 14-18=-374/2138

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 3-8-5, Interior(1) 3-8-5 to 15-0-9, Exterior(2R) 15-0-9 to 21-6-1, Interior(1) 21-6-1 to 30-7-7, Exterior(2R) 30-7-7 to 37-0-15, Interior(1) 37-0-15 to 46-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- All plates are 3x4 MT20 unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 182 lb uplift at joint 2, 217 lb uplift at joint 33 and 301 lb uplift at joint 16.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	C7	Piggyback Base	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

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

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07/21/2021

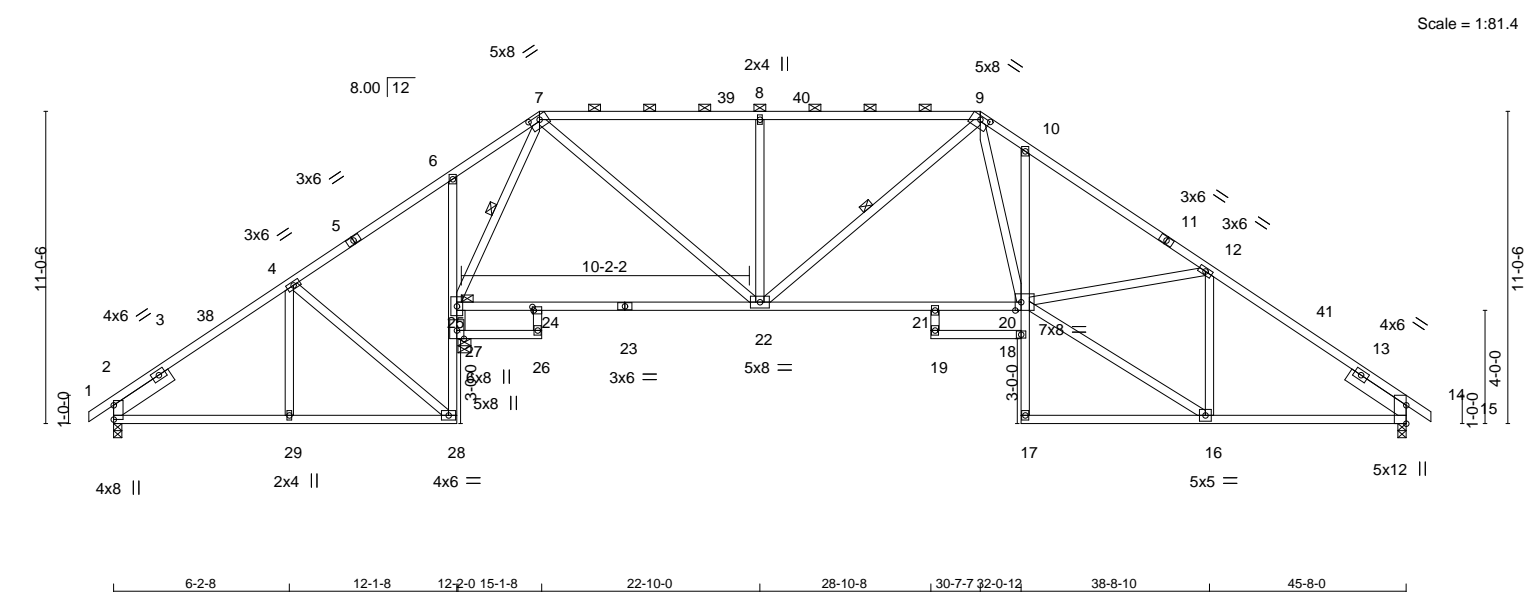


Plate Offsets (X,Y)--		[7:0-4-8,0-1-12], [9:0-4-0,0-1-9], [20:0-2-8,Edge], [24:0-0-8,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.83
TCDL 10.0	Lumber DOL	1.15	BC 0.78
BCLL 0.0	Rep Stress Incr	YES	WB 0.52
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
		DEFL.	in (loc) l/defl L/d
		Vert(LL)	-0.18 21-22 >999 240
		Vert(CT)	-0.41 21-22 >979 180
		Horz(CT)	0.12 14 n/a n/a
		PLATES	MT20
		GRIP	197/144
		Weight:	233 lb
		FT =	20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins (3-3-7 max.): 7-9.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.
SLIDER Left 2x6 SPF No.2 -t 2-6-0, Right 2x6 SPF No.2 -t 2-6-0	WEBS 1 Row at midpt 7-25, 9-22

REACTIONS. (size) 2=0-3-8, 27=0-5-8, 14=0-3-8
Max Horz 2=-250(LC 10)
Max Uplift 2=-190(LC 13), 27=-230(LC 12), 14=-301(LC 13)
Max Grav 2=538(LC 25), 27=2146(LC 1), 14=1553(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-428/324, 4-6=-162/389, 6-7=-146/437, 7-8=-1658/423, 8-9=-1658/423,
9-10=-2590/588, 10-12=-2699/511, 12-14=-2001/427
BOT CHORD 2-29=-164/347, 28-29=-164/347, 27-28=-101/381, 25-27=-1707/192, 6-25=-309/163,
24-25=-34/686, 22-24=-87/544, 21-22=-69/1835, 20-21=-51/1778, 10-20=-330/185,
14-16=-228/1564
WEBS 4-29=0/285, 4-28=-540/193, 8-22=-609/215, 12-16=-868/193, 7-25=-1529/182,
7-22=-138/1478, 9-20=-238/1298, 9-22=-288/42, 16-20=-257/1825, 12-20=-83/593

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-8-5, Interior(1) 3-8-5 to 15-0-9, Exterior(2R) 15-0-9 to 21-6-1, Interior(1) 21-6-1 to 30-7-7, Exterior(2R) 30-7-7 to 37-0-15, Interior(1) 37-0-15 to 46-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are 3x4 MT20 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 2, 230 lb uplift at joint 27 and 301 lb uplift at joint 14.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30,2021

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	C8	Piggyback Base	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

07/21/2021

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

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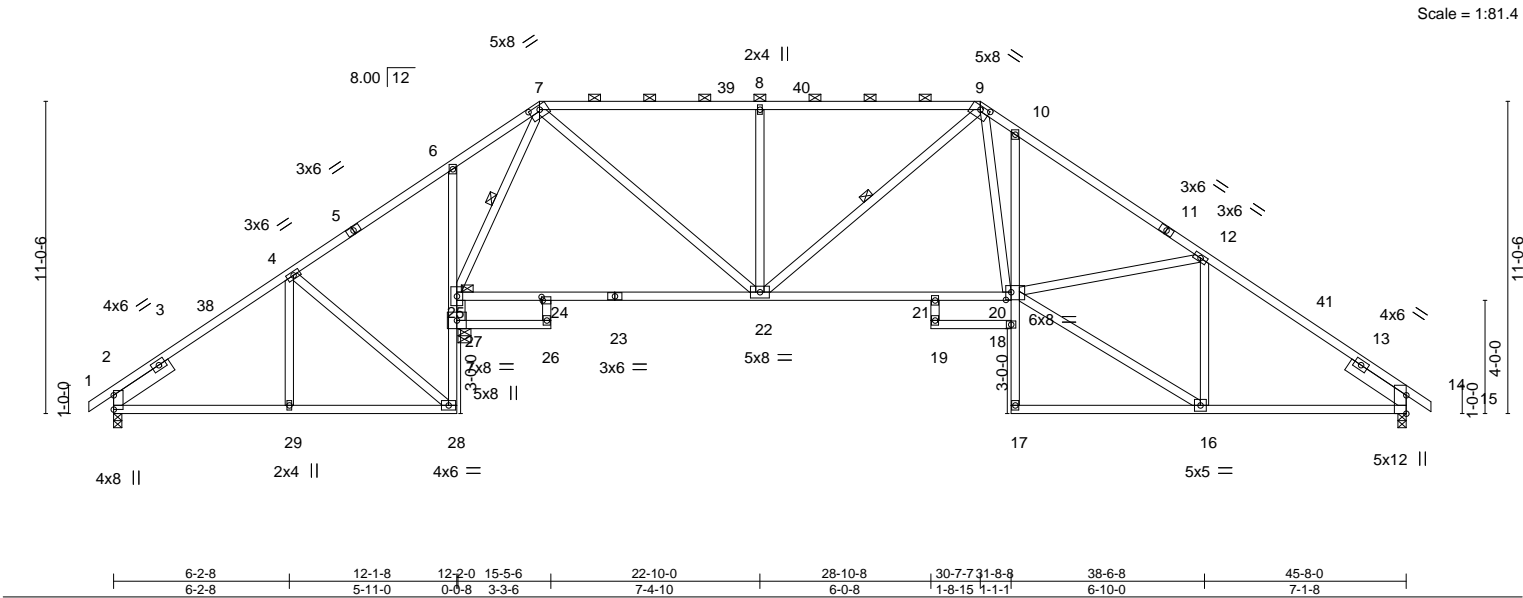
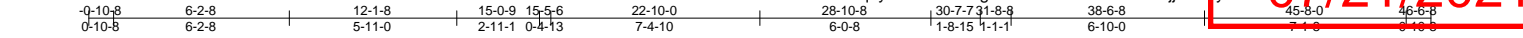


Plate Offsets (X,Y)--		[7:0-4-8,0-1-12], [9:0-4-0,0-1-9], [20:0-2-4,0-3-4], [24:0-0-8,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.82
TCDL 10.0	Lumber DOL	1.15	BC 0.77
BCLL 0.0	Rep Stress Incr	YES	WB 0.52
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
		DEFL.	in (loc) l/defl L/d
		Vert(LL)	-0.18 22-24 >999 240
		Vert(CT)	-0.38 21-22 >999 180
		Horz(CT)	0.12 14 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 234 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied, except
BOT CHORD	2x4 SPF No.2		2-0-0 oc purlins (3-3-7 max.): 7-9.
WEBS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied.
SLIDER	Left 2x6 SPF No.2 -t 2-6-0, Right 2x6 SPF No.2 -t 2-6-0	WEBS	1 Row at midpt 9-22, 7-25

REACTIONS. (size) 2=0-3-8, 27=0-5-8, 14=0-3-8
Max Horz 2=-250(LC 10)
Max Uplift 2=-190(LC 13), 27=-230(LC 12), 14=-301(LC 13)
Max Grav 2=538(LC 25), 27=2147(LC 1), 14=1553(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-428/324, 4-6=-162/389, 6-7=-147/437, 7-8=-1656/423, 8-9=-1656/423,
9-10=-2497/579, 10-12=-2620/503, 12-14=-2000/427
BOT CHORD 2-29=-164/347, 28-29=-164/347, 27-28=-101/381, 25-27=-1707/192, 6-25=-309/163,
24-25=-37/680, 22-24=-87/544, 21-22=-69/1840, 20-21=-52/1788, 10-20=-338/200,
14-16=-226/1562
WEBS 4-29=0/285, 4-28=-540/193, 7-22=-138/1476, 8-22=-607/215, 9-22=-295/42,
16-20=-255/1809, 12-20=-94/527, 12-16=-834/190, 7-25=-1528/183, 9-20=-236/1255

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-8-5, Interior(1) 3-8-5 to 15-0-9, Exterior(2R) 15-0-9 to 21-6-1, Interior(1) 21-6-1 to 30-7-7, Exterior(2R) 30-7-7 to 37-0-15, Interior(1) 37-0-15 to 46-6-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are 3x4 MT20 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 190 lb uplift at joint 2, 230 lb uplift at joint 27 and 301 lb uplift at joint 14.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30,2021

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	C9	Piggyback Base	1	1	

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AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:46:44 2021 Page 3

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28-0-8

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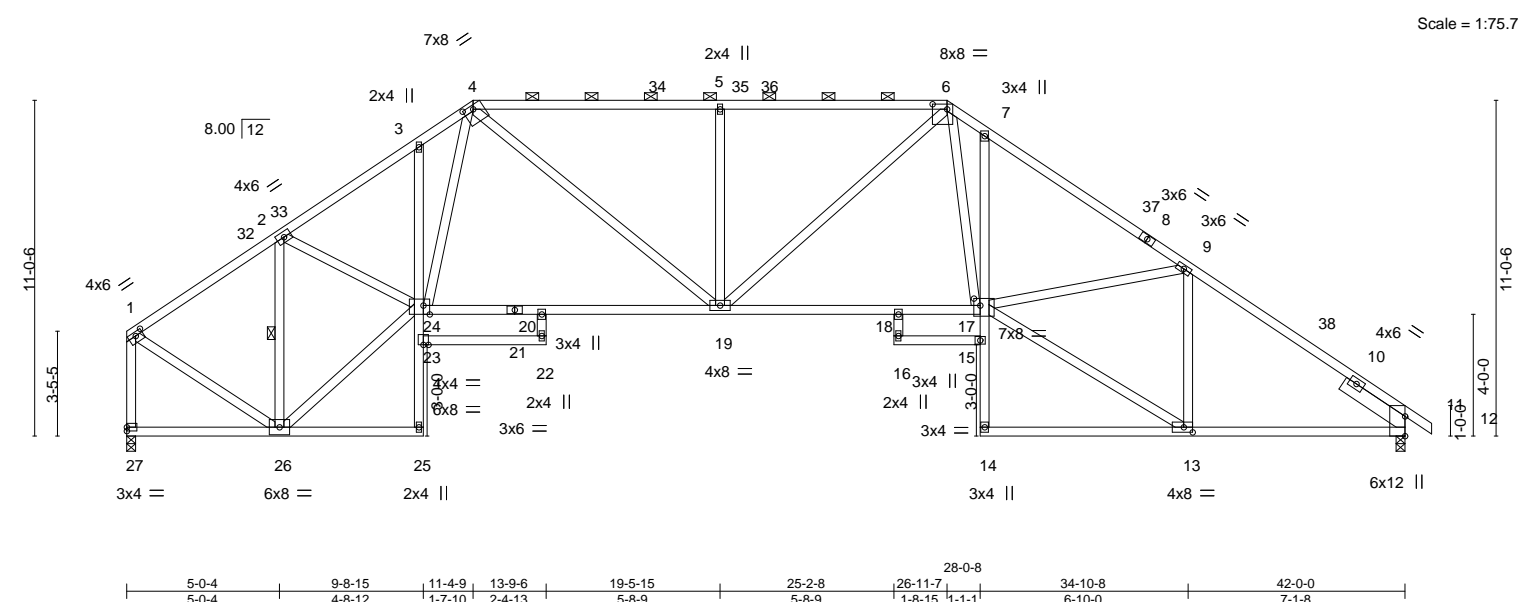


Plate Offsets (X, Y)--		[1:0-3-0,0-1-8], [4:0-4-0,0-1-9], [6:0-5-12,0-2-0], [13:0-3-8,0-2-0], [17:0-2-8,0-2-12], [24:0-2-8,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.92
TCDL 10.0	Lumber DOL	1.15	BC 0.89
BCLL 0.0	Rep Stress Incr	YES	WB 0.59
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS
		DEFL.	in (loc) l/defl L/d
		Vert(LL)	-0.30 18-19 >999 240
		Vert(CT)	-0.62 18-19 >815 180
		Horz(CT)	0.42 11 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 235 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD	TOP CHORD
2x4 SPF No.2 *Except*	Structural wood sheathing directly applied, except end verticals, and
4-6,8-12: 2x4 SPF 1650F 1.5E	2-0-0 oc purlins (2-10-11 max.): 4-6.
BOT CHORD	BOT CHORD
2x4 SPF No.2 *Except*	Rigid ceiling directly applied.
11-14: 2x4 SPF 1650F 1.5E	WEBS
2x4 SPF No.2	1 Row at midpt 2-26
SLIDER	
Right 2x6 SPF No.2 t-2-6-0	

REACTIONS.	(size) 27=0-3-8, 11=0-3-8
	Max Horz 27=294(LC 10)
	Max Uplift 27=226(LC 12), 11=266(LC 13)
	Max Grav 27=1883(LC 1), 11=1945(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-1626/213, 2-3=-3108/409, 3-4=-2988/452, 4-5=-2996/350, 5-6=-2996/350, 6-7=-3616/485, 7-9=-3709/405, 9-11=-2616/372, 1-27=-1833/239
BOT CHORD	26-27=-219/272, 20-24=-265/2226, 19-20=-294/2317, 18-19=-100/2703, 17-18=-90/2592, 7-17=-367/194, 11-13=-182/2057
WEBS	2-26=-1842/264, 4-19=-223/996, 5-19=-600/214, 6-19=-231/588, 9-13=-1151/162, 1-26=-143/1494, 4-24=-129/824, 6-17=-224/1496, 13-17=-206/2359, 9-17=-146/952, 24-26=-260/1693, 2-24=-119/1384

- 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 4-4-2, Interior(1) 4-4-2 to 11-4-9, Exterior(2R) 11-4-9 to 17-3-13, Interior(1) 17-3-13 to 26-11-7, Exterior(2R) 26-11-7 to 32-10-11, Interior(1) 32-10-11 to 42-10-8 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.
 - The Fabrication Tolerance at joint 4 = 12%, joint 6 = 12%
 - 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 226 lb uplift at joint 27 and 266 lb uplift at joint 11.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 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.



March 30,2021

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	C10	Piggyback Base	1	1	

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DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

07/21/2021

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Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021

MiTek Industries, Inc

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26-11-7

28-0-8

34-10-8

42-0-0

42-10-8

7-1-8

0-10-8

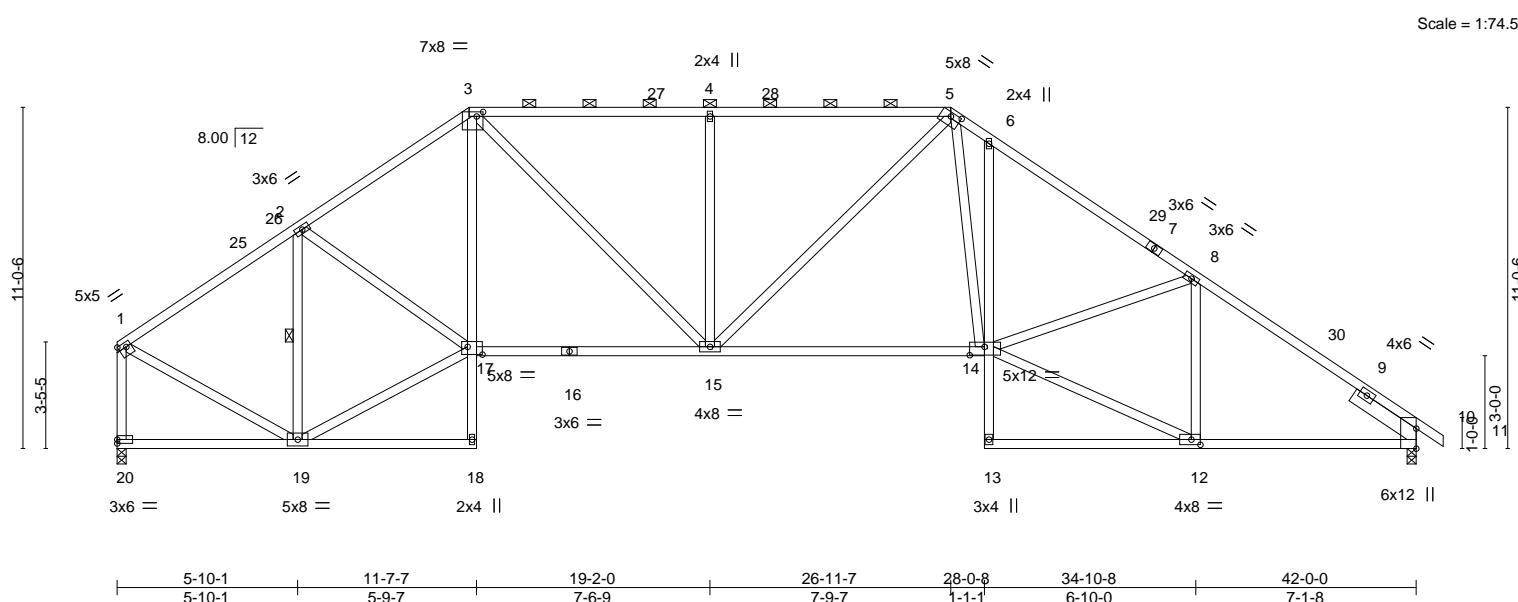


Plate Offsets (X,Y)--		[1:Edge,0-1-12], [3:0-2-8,0-1-12], [5:0-4-0,0-1-9], [12:0-3-8,0-2-0], [14:0-5-12,0-3-4], [17:0-5-12,0-3-0]			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.92	Vert(LL) -0.24	14-15 >999 240
TCDL 10.0	Lumber DOL	1.15	BC 0.82	Vert(CT) -0.56	14-15 >901 180
BCLL 0.0	Rep Stress Incr	YES	WB 0.65	Horz(CT) 0.29	10 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS		
				PLATES	GRIP
				MT20	197/144
				Weight: 226 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 3-5,7-11: 2x4 SPF 1650F 1.5E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (3-6-5 max.): 3-5.
BOT CHORD	2x4 SPF No.2 *Except* 10-13: 2x4 SPF 1650F 1.5E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 2-19
SLIDER	Right 2x6 SPF No.2 -t 2-6-0		

REACTIONS. (size) 20=0-3-8, 10=0-3-8
Max Horz 20=294(LC 10)
Max Uplift 20=226(LC 12), 10=266(LC 13)
Max Grav 20=1883(LC 1), 10=1945(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1731/229, 2-3=-2558/376, 3-4=-2595/334, 4-5=-2595/334, 5-6=-3110/480,
6-8=-3202/401, 8-10=-2617/372, 1-20=-1829/243
BOT CHORD 19-20=-216/277, 15-17=-259/2041, 14-15=-90/2367, 6-14=-364/193, 10-12=-182/2057
WEBS 3-17=-69/447, 2-19=-1346/218, 17-19=-239/1536, 2-17=-58/828, 3-15=-218/901,
4-15=-609/219, 5-15=-210/512, 12-14=-199/2239, 8-12=-855/137, 1-19=-134/1505,
5-14=-217/1219, 8-14=-146/578

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-4-2, Interior(1) 4-4-2 to 11-4-9, Exterior(2R) 11-4-9 to 17-3-13, Interior(1) 17-3-13 to 26-11-7, Exterior(2R) 26-11-7 to 32-10-11, Interior(1) 32-10-11 to 42-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) The Fabrication Tolerance at joint 5 = 16%
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=226, 10=266.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	C11	PIGGYBACK BASE	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
Job Reference (optional)					

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DEVELOPMENT SERVICES

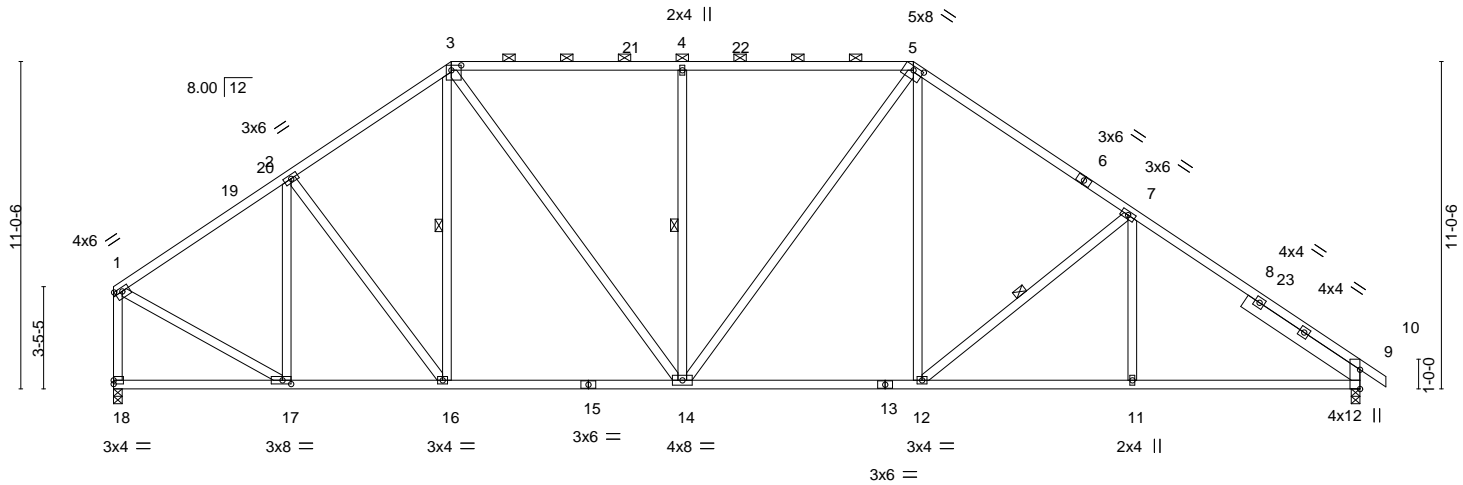
LEE'S SUMMIT, MISSOURI

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5-10-1 11-4-9 19-2-0 26-11-7 34-4-0 42-0-0 42-10-8
5-10-1 5-6-9 7-9-7 7-9-7 7-4-8 7-8-0 0-10-8

6x6 =

Scale = 1:77.6



5-10-1 11-4-9 19-2-0 26-11-7 34-4-0 42-0-0
5-10-1 5-6-9 7-9-7 7-9-7 7-4-8 7-8-0

Plate Offsets (X,Y)-- [1:0-3-0,0-1-8], [3:0-4-0,0-2-0], [5:0-4-0,0-1-9], [17:0-3-8,0-1-8]

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 0.98	Vert(LL)	-0.12 11-12	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.66	Vert(CT)	-0.27 12-14	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.10 9	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
Weight: 221 lb									FT = 20%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except*
1-3: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x6 SPF No.2 - t 4-8-10

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (4-2-2 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-16, 4-14, 7-12

REACTIONS.

(size) 18=0-3-8, 9=0-3-8
Max Horz 18=-290(LC 8)
Max Uplift 18=-226(LC 12), 9=-266(LC 13)
Max Grav 18=1883(LC 1), 9=1945(LC 1)

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

TOP CHORD 1-2=-1727/230, 2-3=-1875/326, 3-4=-1870/337, 4-5=-1870/337, 5-7=-2215/383,
7-9=-2728/371, 1-18=-1827/245
BOT CHORD 17-18=-222/272, 16-17=-221/1356, 14-16=-189/1462, 12-14=-64/1717, 11-12=-174/2078,
9-11=-174/2078
WEBS 2-17=-643/120, 2-16=-144/311, 3-14=-197/793, 4-14=-622/229, 5-14=-204/440,
5-12=-84/482, 7-12=-520/235, 7-11=0/301, 1-17=-142/1519

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-4-2, Interior(1) 4-4-2 to 11-4-9, Exterior(2R) 11-4-9 to 17-3-13, Interior(1) 17-3-13 to 26-11-7, Exterior(2R) 26-11-7 to 32-10-11, Interior(1) 32-10-11 to 42-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 18=226, 9=266.
- 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.



March 30, 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/103 Woodside
2731383	C12	PIGGYBACK BASE	2	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:37:09 2021 Page 1					
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Job Reference (optional)					

RELEASE FOR CONSTRUCTION

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DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

07/21/2021

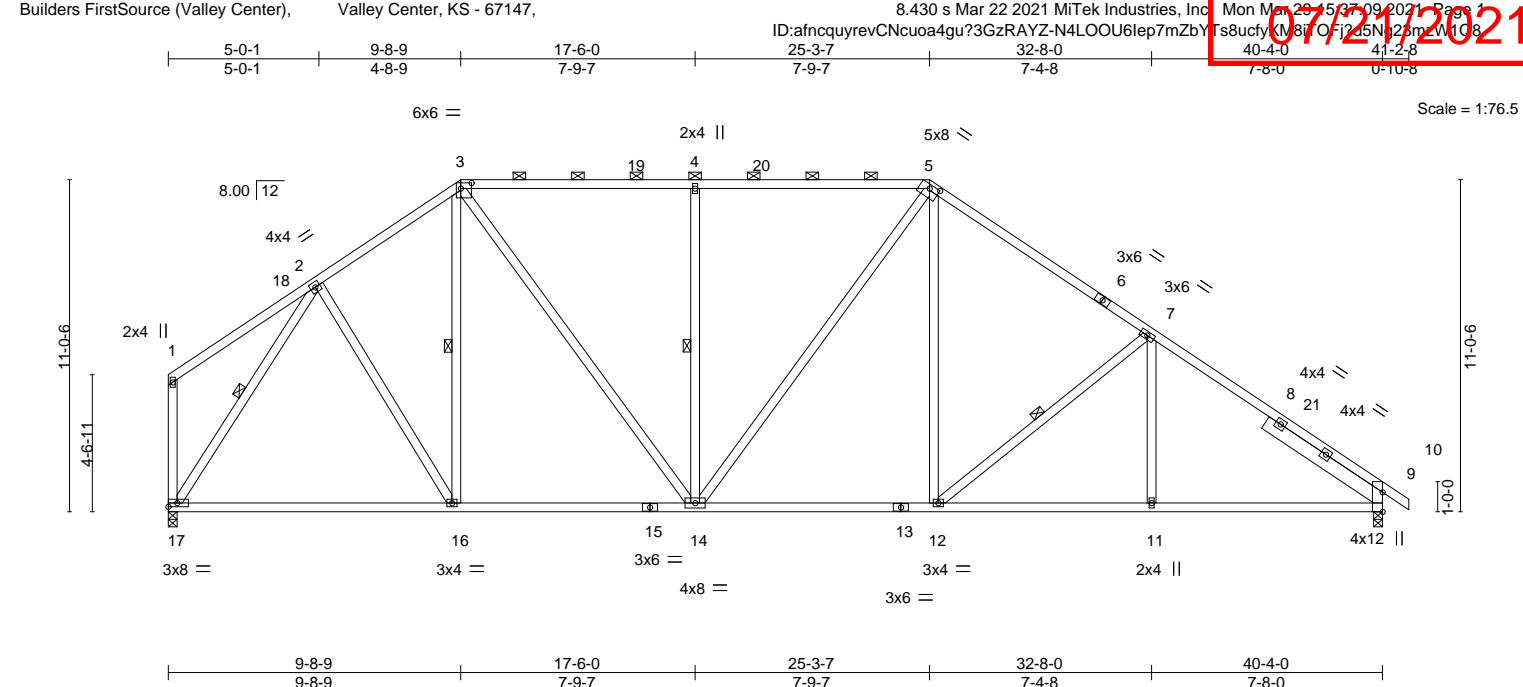


Plate Offsets (X,Y)-- [3:0-4-4,0-2-4], [5:0-4-0,0-1-9]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.95	Vert(LL)	-0.22 16-17	>999	240
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT)	-0.44 16-17	>999	180
BCLL 0.0	Rep Stress Incr	YES	WB 0.68	Horz(CT)	0.10 9	n/a	n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S				
				PLATES	GRIP		
				MT20	197/144		
				Weight: 213 lb	FT = 20%		

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except*	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-5.
BOT CHORD	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 3-16, 4-14, 7-12, 2-17
SLIDER	Right 2x6 SPF No.2 -t 4-8-10		

REACTIONS.	
(size)	17=0-3-8, 9=0-3-8
Max Horz	17=-303(LC 10)
Max Uplift	17=-212(LC 12), 9=-261(LC 13)
Max Grav	17=1808(LC 1), 9=1870(LC 1)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-1600/279, 3-4=-1709/326, 4-5=-1709/326, 5-7=-2090/373, 7-9=-2601/362
BOT CHORD	16-17=-214/1017, 14-16=-180/1254, 12-14=-61/1612, 11-12=-167/1980, 9-11=-167/1980
WEBS	2-16=-120/530, 3-16=-260/183, 3-14=-202/848, 4-14=-623/229, 5-14=-203/351, 5-12=-83/493, 7-12=-528/236, 7-11=0/299, 2-17=-1841/219

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 9-8-9, Exterior(2R) 9-8-9 to 15-5-0, Interior(1) 15-5-0 to 25-3-7, Exterior(2R) 25-3-7 to 30-11-14, Interior(1) 30-11-14 to 41-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 17=212, 9=261.
 - 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.



March 30,2021

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	C13	PIGGYBACK BASE	3	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
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Job Reference (optional)					

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145408439

07/21/2021

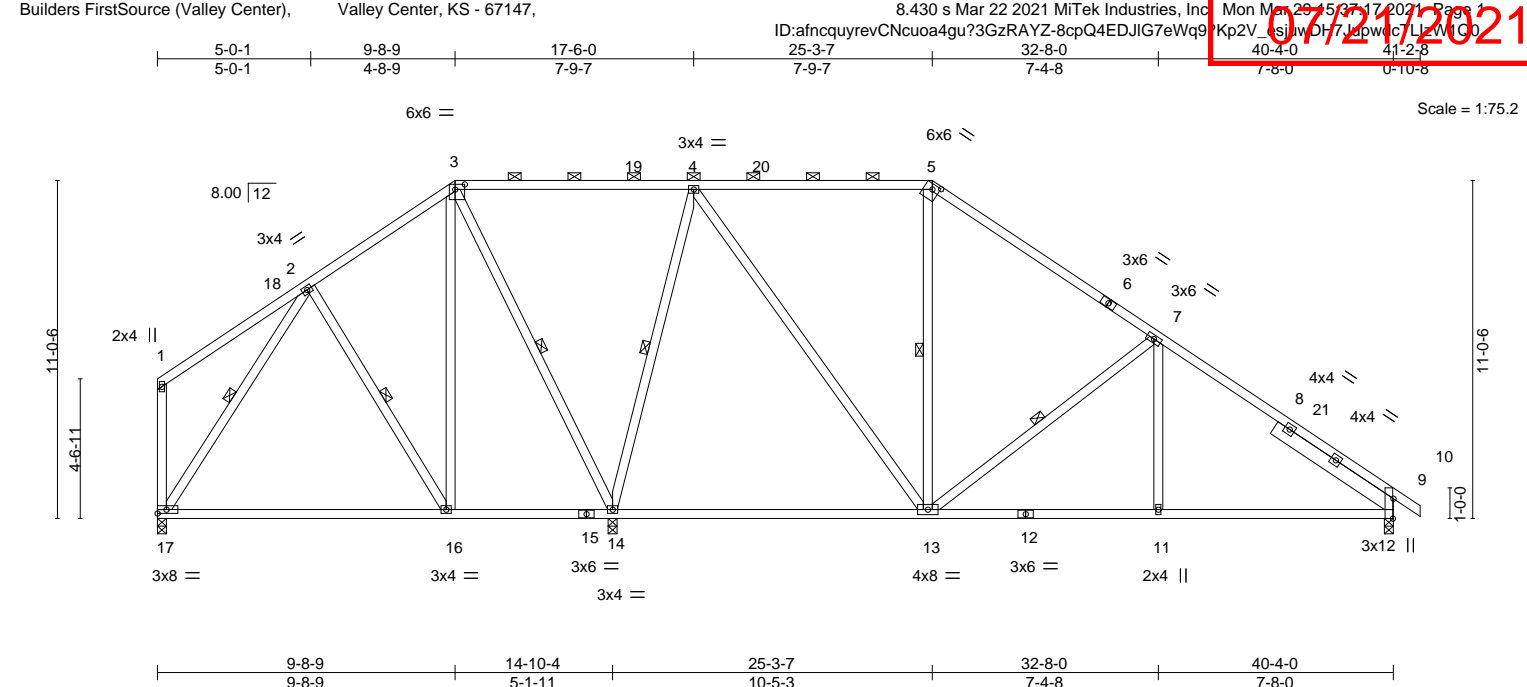


Plate Offsets (X,Y)--		[3:0-3-12,0-2-0], [5:0-2-12,0-2-0], [9:0-7-13,Edge]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.90	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.65	Vert(LL) -0.25 13-14 >999 240
BCLL 0.0	Rep Stress Incr YES	WB 0.75	Vert(CT) -0.50 13-14 >616 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Horz(CT) 0.03 9 n/a n/a
		PLATES MT20	
		GRIP 197/144	
		Weight: 213 lb FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied or 4-11-2 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SPF No.2	WEBS 1 Row at midpt 2-16, 3-14, 4-14, 5-13, 7-13, 2-17
SLIDER Right 2x6 SPF No.2 -t 4-8-10	

REACTIONS. (size) 14=0-3-8, 17=0-3-8, 9=0-3-8
Max Horz 17=-303(LC 8)
Max Uplift 14=-137(LC 12), 17=-125(LC 12), 9=-229(LC 13)
Max Grav 14=2096(LC 1), 17=530(LC 25), 9=1109(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=0/294, 4-5=-541/322, 5-7=-805/313, 7-9=-1355/311
BOT CHORD 16-17=-167/293, 11-13=-126/993, 9-11=-126/993
WEBS 2-16=-259/137, 3-16=-50/371, 3-14=-731/109, 4-14=-1317/231, 4-13=-100/807, 7-13=-604/246, 7-11=-0/293, 2-17=-328/119

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 9-8-9, Exterior(2R) 9-8-9 to 15-5-0, Interior(1) 15-5-0 to 25-3-7, Exterior(2R) 25-3-7 to 30-11-14, Interior(1) 30-11-14 to 41-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) The Fabrication Tolerance at joint 5 = 16%
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=137, 17=125, 9=229.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30, 2021

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	C14	Piggyback Base	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
Job Reference (optional)					

RELEASE FOR CONSTRUCTION

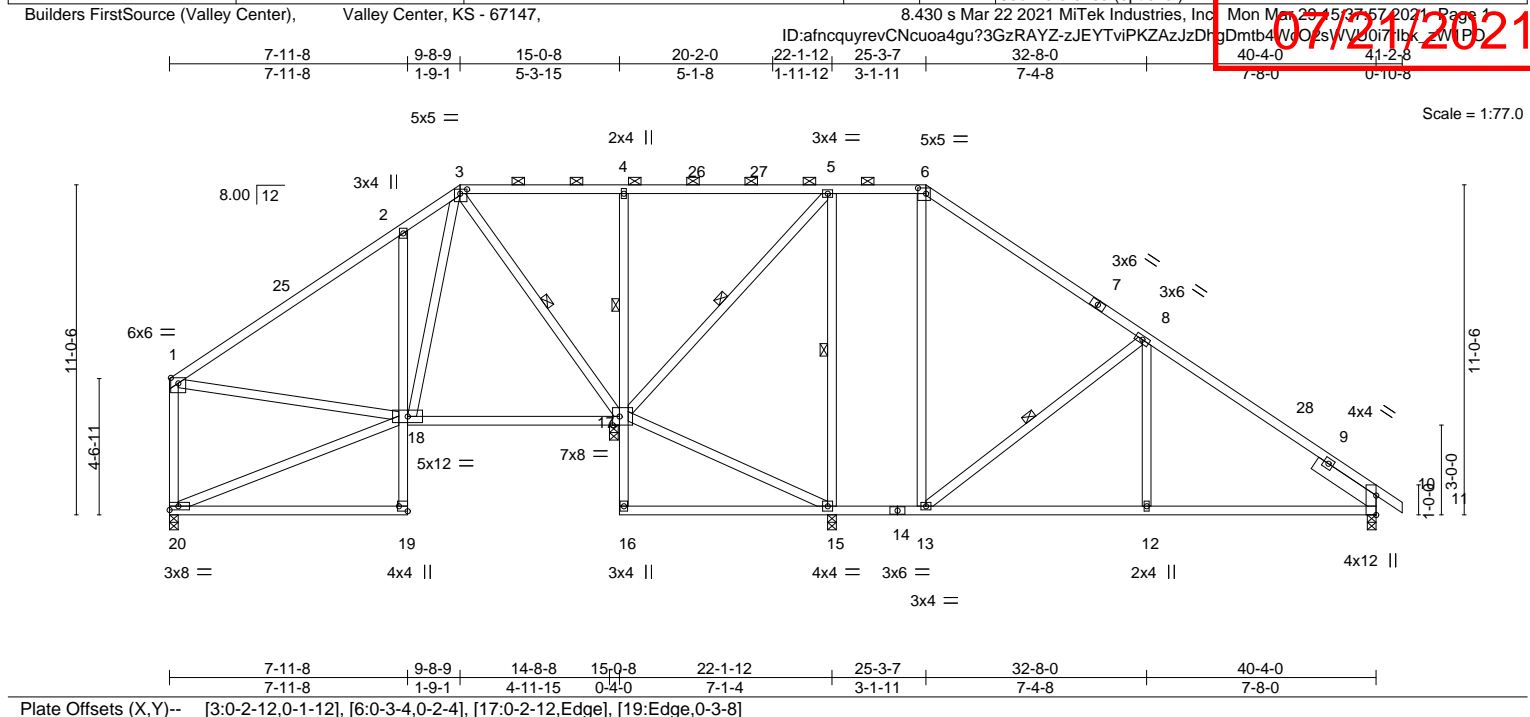
AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

145408440

07/21/2021



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 0.73	Vert(LL)	-0.18 12-13	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.66	Vert(CT)	-0.39 12-13	>563	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.42	Horz(CT)	0.10 10	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
Weight: 228 lb									FT = 20%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x6 SPF No.2 - t 2-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-0-4 max.): 3-6.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 4-17
WEBS 1 Row at midpt 3-17, 5-17, 8-13, 5-15

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 20=-307(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) except 17=-204(LC 12), 15=-490(LC 20), 10=-278(LC 13), 20=-126(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 15 except 17=1839(LC 1), 10=1399(LC 26), 20=834(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-907/118, 2-3=-845/260, 3-4=-422/243, 4-5=-418/247, 5-6=-936/393, 6-8=-1266/398, 8-10=-1764/393, 1-20=-775/131
BOT CHORD 2-18=-471/266, 17-18=-4/518, 4-17=-471/176, 13-15=-6/924, 12-13=-194/1372, 10-12=-194/1372
WEBS 3-17=-430/230, 15-17=-11/1018, 5-17=-861/218, 6-13=-90/370, 8-13=-594/239, 8-12=0/309, 3-18=-211/651, 18-20=-228/300, 1-18=-28/594, 5-15=-79/332

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-2-2, Interior(1) 4-2-2 to 9-8-9, Exterior(2R) 9-8-9 to 15-2-4, Interior(1) 15-2-4 to 25-3-7, Exterior(2R) 25-3-7 to 30-11-14, Interior(1) 30-11-14 to 41-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 204 lb uplift at joint 17, 490 lb uplift at joint 15, 278 lb uplift at joint 10 and 126 lb uplift at joint 20.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30,2021

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/TPI 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/103 Woodside
2731383	C15	Hip	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:36:15 2021 Page 1					
ID:afncquyrevCncuaa4gu?3GzRAYZ-RmKLF3wi55RP7kb9j?45KtG3SJ3PXiILGfNz2V1196					
Job Reference (optional)					

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45408441

07/21/2021

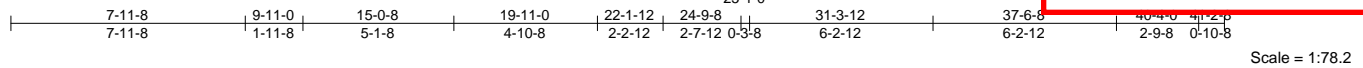


Plate Offsets (X,Y)--		[3:0-3-1,Edge], [6:0-3-1,Edge], [22:Edge,0-3-8]	
LOADING (psf)	SPACING	CSI	DEFL.
TCLL 25.0	Plate Grip DOL 1.15	TC 0.54	in (loc) l/defl L/d
TCDL 10.0	Lumber DOL 1.15	BC 0.49	Vert(LL) -0.11 22-23 >999 240
BCLL 0.0	Rep Stress Incr YES	WB 0.78	Vert(CT) -0.22 22-23 >832 180
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS	Horz(CT) -0.05 18 n/a n/a
		Weight: 240 lb FT = 20%	

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 "Except"
9-12: 2x6 SPF No.2
WEBS 2x4 SPF No.2
SLIDER Right 2x6 SPF No.2 -t 3-0-1

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 3-6.
BOT CHORD Rigid ceiling directly applied. Except:
1 Row at midpt 4-20
WEBS 1 Row at midpt 3-20, 5-18, 6-16

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 23=-308(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) except 20=-368(LC 9), 10=-239(LC 13), 23=-191(LC 13), 18=-203(LC 13)
Max Grav All reactions 250 lb or less at joint(s) except 20=823(LC 25), 10=700(LC 26), 23=639(LC 25), 18=1701(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-628/212, 2-3=-552/345, 3-4=-156/373, 4-5=-158/378, 5-6=-33/389, 6-7=-686/535, 7-9=-631/349, 1-23=-579/198
BOT CHORD 2-21=-453/252, 20-21=-84/286, 19-20=-350/109, 4-20=-482/168, 18-19=-288/63, 13-14=-362/1066, 10-12=-183/559
WEBS 5-19=-101/480, 7-14=-479/269, 9-14=-672/253, 1-21=-80/359, 21-23=-229/300, 3-21=-182/672, 3-20=-552/148, 16-18=-1530/276, 5-16=-749/207, 6-16=-792/69, 6-14=-300/921

- 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 9-11-0, Exterior(2R) 9-11-0 to 14-1-15, Interior(1) 14-1-15 to 25-1-0, Exterior(2R) 25-1-0 to 29-3-15, Interior(1) 29-3-15 to 41-2-8 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.
 - 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 368 lb uplift at joint 20, 239 lb uplift at joint 10, 191 lb uplift at joint 23 and 203 lb uplift at joint 18.
 - 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.



March 30, 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/103 Woodside
2731383	C16	Hip	1	1	

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES

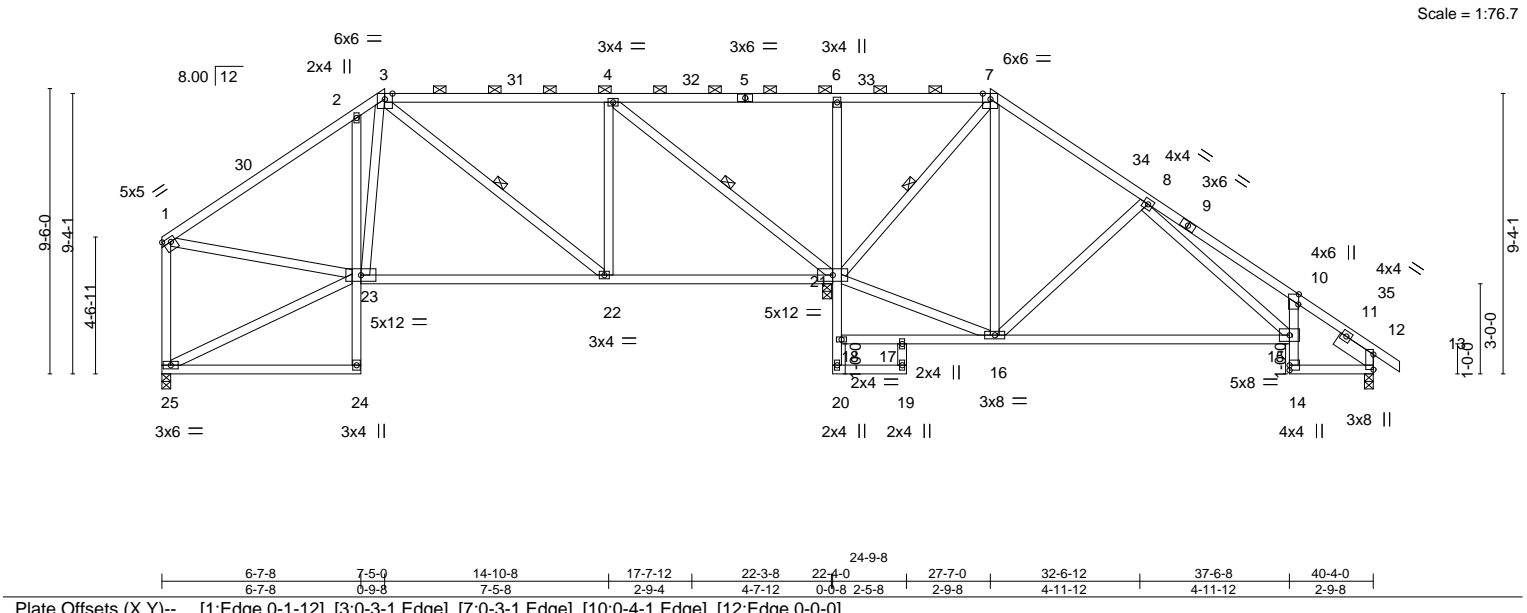
LEE'S SUMMIT, MISSOURI

07/21/2021

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:36:18 2021 Page 1

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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.23 15-16 >920 240	MT20		197/144	
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.49 15-16 >440 180				
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.06 12 n/a n/a				
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							
										Weight: 224 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 5-7: 2x4 SPF 1650F 1.5E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-7.
BOT CHORD	2x4 SPF No.2 *Except* 21-23: 2x4 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 7-21, 4-21, 3-22
SLIDER	Right 2x6 SPF No.2 -t 1-6-0		

REACTIONS. (size) 12=0-3-8, 25=0-3-8, 21=0-3-8
Max Horz 25=-269(LC 10)
Max Uplift 12=-138(LC 13), 25=-162(LC 12), 21=-233(LC 13)
Max Grav 12=573(LC 26), 25=847(LC 25), 21=2351(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-941/250, 2-3=-799/269, 3-4=-531/251, 4-6=0/832, 6-7=0/844, 8-10=-1028/299,
10-12=-544/170, 1-25=-798/175
BOT CHORD 2-23=-298/167, 22-23=-256/650, 21-22=-268/529, 6-21=-471/172, 15-16=-8/287,
10-15=-304/135, 12-14=-75/398
WEBS 3-23=-106/453, 23-25=-189/261, 7-16=-135/549, 7-21=-1178/224, 8-16=-487/219,
8-15=-126/702, 4-22=0/470, 4-21=-1479/191, 3-22=-340/37, 1-23=-107/667

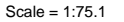
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-5-0, Exterior(2R) 7-5-0 to 11-7-15, Interior(1) 11-7-15 to 27-7-0, Exterior(2R) 27-7-0 to 31-9-15, Interior(1) 31-9-15 to 41-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 12, 162 lb uplift at joint 25 and 233 lb uplift at joint 21.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30,2021

07/21/2021

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LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2 *Except* 7-10: 2x4 SP 2400F 2.0E	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-7.
BOT CHORD	2x4 SPF No.2 *Except* 18-20: 2x4 SP 2400F 2.0E	BOT CHORD	Rigid ceiling directly applied.
WEBS	2x4 SPF No.2	WEBS	1 Row at midpt 7-18, 4-18
SLIDER	Right 2x6 SPF No.2 -t 3-2-7	JOINTS	1 Brace at Jt(s): 22

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

TOP CHORD 1-2=-970/239, 2-3=-749/221, 3-4=-772/232, 4-6=-4/913, 6-7=0/903, 7-8=-402/172,
1-25=-838/172

BOT CHORD 21-22=-296/980, 19-21=-310/956, 18-19=-233/467, 6-18=-518/190, 12-13=-235/968,
9-11=-122/521

WEBS 22-24=0/267, 7-13=-3/392, 8-13=-812/297, 1-22=-117/755, 7-18=-1289/200,
3-22=-262/212, 3-19=-388/116, 4-19=-25/607, 4-18=-1499/260

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=4.2psf; h=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 4-11-0, and Exterior(2R) 4-11-0 to 9-1-15, Interior(1) 9-1-15 to 30-1-0, Exterior(2R) 30-1-0 to 34-3-15, Interior(1) 34-3-15 to 41-2-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) All plates are 3x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 153 lb uplift at joint 9, 168 lb uplift at joint 25 and 239 lb uplift at joint 18.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R502.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30, 2021



WARNING – verify design parameters and NOTES ON THIS AND INCLUDED WITHIN KEY EXCERPTS TO AISC MHP-433 (Rev. 3/15/2020) 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/103 Woodside	RELEASE FOR CONSTRUCTION AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
2731383	C18	Half Hip Girder	1	2	Job Reference (optional)	07/21/2021

NOTES-

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 158 lb down and 147 lb up at 0-1-12, 146 lb down and 152 lb up at 2-3-4, 146 lb down and 152 lb up at 4-3-4, 146 lb down and 152 lb up at 6-3-4, 130 lb down and 116 lb up at 8-3-4, 130 lb down and 116 lb up at 10-3-4, 130 lb down and 116 lb up at 12-3-4, 130 lb down and 116 lb up at 14-3-4, 130 lb down and 108 lb up at 16-3-4, 130 lb down and 116 lb up at 18-3-4, 130 lb down and 116 lb up at 20-3-4, 146 lb down and 152 lb up at 22-3-4, 146 lb down and 152 lb up at 24-3-4, 135 lb down and 111 lb up at 26-3-4, 135 lb down and 111 lb up at 28-3-4, 135 lb down and 111 lb up at 30-3-4, 135 lb down and 111 lb up at 32-3-4, 140 lb down and 86 lb up at 34-3-4, and 140 lb down and 76 lb up at 36-3-4, and 132 lb down and 97 lb up at 38-3-4 on top chord, and 69 lb down and 27 lb up at 2-3-4, 69 lb down and 27 lb up at 4-3-4, 69 lb down and 27 lb up at 6-5-12, 83 lb down and 67 lb up at 8-3-4, 83 lb down and 67 lb up at 10-3-4, 83 lb down and 67 lb up at 12-3-4, 83 lb down and 67 lb up at 14-3-4, 83 lb down and 67 lb up at 16-3-4, 83 lb down and 67 lb up at 18-3-4, 83 lb down and 67 lb up at 20-3-4, 69 lb down and 27 lb up at 24-3-4, 72 lb down and 70 lb up at 26-3-4, 72 lb down and 70 lb up at 28-3-4, 72 lb down and 70 lb up at 30-3-4, 72 lb down and 70 lb up at 32-3-4, 73 lb down and 60 lb up at 34-3-4, and 70 lb down and 39 lb up at 36-3-4, and 94 lb down and 35 lb up at 38-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-8=-70, 8-12=-70, 24-25=-20, 21-23=-20, 19-20=-20, 14-17=-20, 13-26=-20

Concentrated Loads (lb)

Vert: 1=-145(F) 4=-82(F) 24=-50(F) 2=-115(F) 5=-115(F) 22=-82(F) 3=-82(F) 6=-99(F) 30=-115(F) 31=-115(F) 32=-82(F) 33=-82(F) 34=-82(F) 36=-82(F) 37=-82(F) 38=-115(F) 39=-99(F) 40=-99(F) 41=-99(F) 42=-90(F) 43=-90(F) 44=-82(F) 45=-50(F) 46=-50(F) 47=-82(F) 48=-82(F) 49=-82(F) 50=-82(F) 51=-82(F) 52=-82(F) 53=-50(F) 55=-65(F) 56=-65(F) 57=-65(F) 58=-65(F) 59=-70(F) 60=-70(F) 61=-77(F)

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	CJ1	Jack-Open	2	1	
Job Reference (optional)					

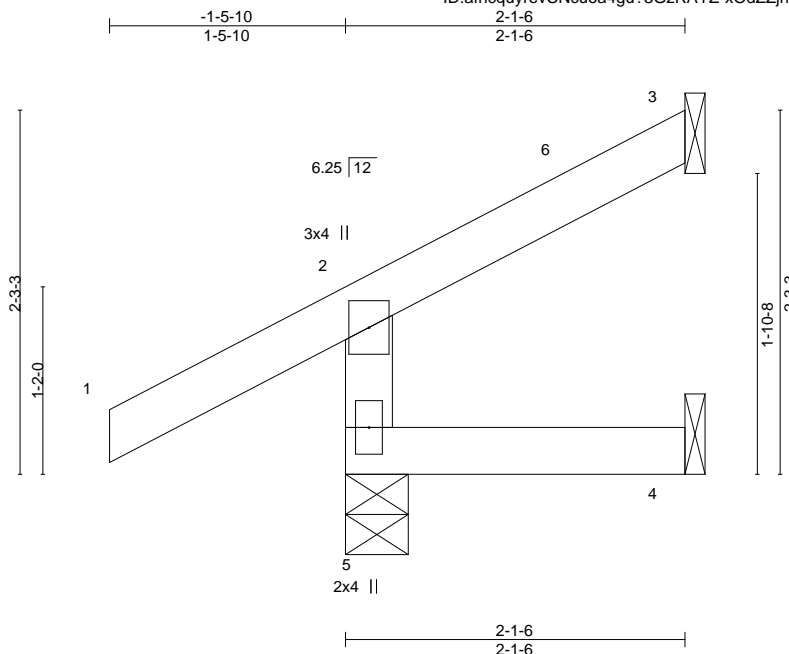
Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:46:49 2021 Page 1

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07/21/2021



Scale = 1:14.3

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	0.00	5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	4-5	>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-MR						Weight: 8 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-1-6 oc purlins, except end verticals.

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

REACTIONS.

(size) 5=0-4-11, 3=Mechanical, 4=Mechanical

Max Horz 5=54(LC 9)

Max Uplift 5=-29(LC 12), 3=-30(LC 12), 4=-3(LC 9)

Max Grav 5=247(LC 1), 3=31(LC 19), 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) -1-5-10 to 1-6-6, Interior(1) 1-6-6 to 2-0-10 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 29 lb uplift at joint 5, 30 lb uplift at joint 3 and 3 lb uplift at joint 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.



March 30, 2021

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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 2060116023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	CJ2	Jack-Open	2	1	Job Reference (optional)

Builders FirstSource (Valley Center),

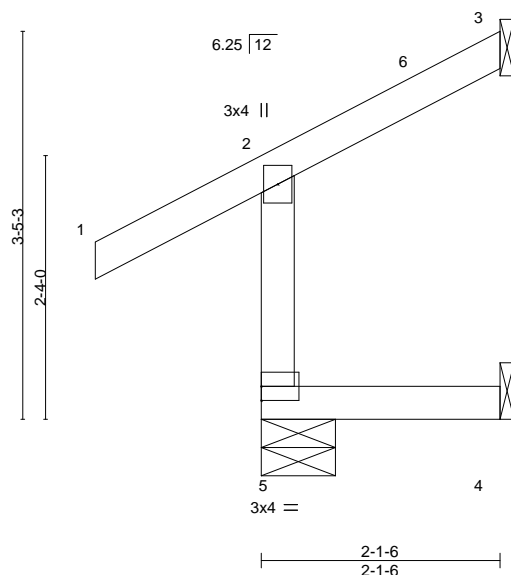
Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:46:49 2021 Page 1

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-1-5-10 2-1-6
1-5-10 2-1-6

Scale = 1:20.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.20	Vert(LL)	-0.00	4-5	>999	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.17	Vert(CT)	-0.00	4-5	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.04	3	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-MR						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 2-1-6 oc purlins, except end verticals.

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

REACTIONS. (size) 5=0-7-14, 3=Mechanical, 4=Mechanical
 Max Horz 5=76(LC 9)
 Max Uplift 5=2(LC 12), 3=44(LC 12), 4=26(LC 9)
 Max Grav 5=247(LC 1), 3=35(LC 19), 4=36(LC 10)

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) -1-5-10 to 1-6-6, Interior(1) 1-6-6 to 2-0-10 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 2 lb uplift at joint 5, 44 lb uplift at joint 3 and 26 lb uplift at joint 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.



March 30, 2021

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

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



16023 Swingley Ridge Rd
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	HF1	GABLE	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
8.430 s Mar 22 2021 MiTek Industries, Inc					
Job Reference (optional)					
ID:afncquyrevCNCuo4gu?3GzRAYZ-tnlJ_PoYM05GBiW					

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AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

4540847

07/21/2021

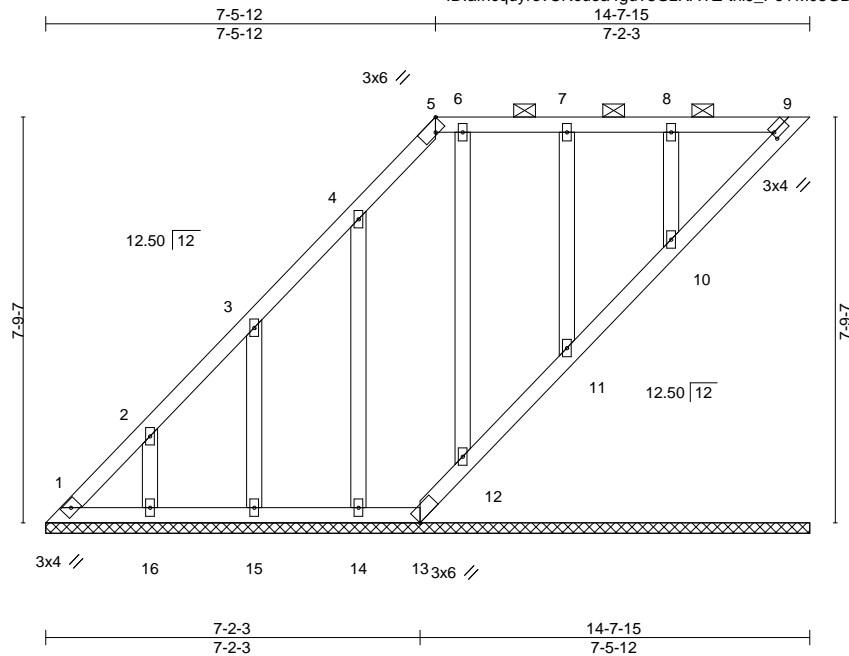


Plate Offsets (X,Y)-- [5:0-2-8,Edge], [9:0-0-9,0-1-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d			PLATES	GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 67 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, except 2-0-0 oc purlins (6-0-0 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

All bearings 14-7-15.
(lb) - Max Horz 1=275(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 13, 12, 11, 10 except 16=113(LC 12), 15=116(LC 12), 14=101(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 16, 15, 14, 12, 11, 10

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-289/236

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) 0-4-2 to 3-4-2, Interior(1) 3-4-2 to 7-5-12, Exterior(2R) 7-5-12 to 10-5-12, Interior(1) 10-5-12 to 14-3-13 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 9, 13, 12, 11, 10 except (jt=lb) 16=113, 15=116, 14=101.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 12, 11, 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	HF2	GABLE	1	1	Job Reference (optional)

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

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

07/21/2021

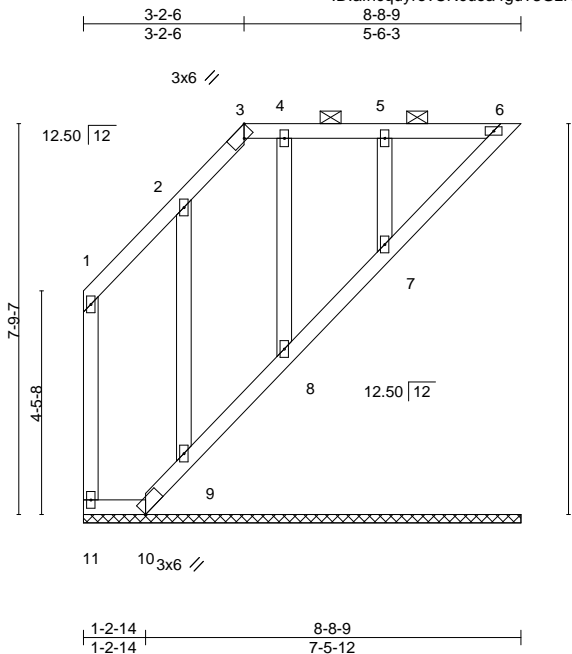


Plate Offsets (X,Y)--	[3:0-2-8,Edge]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.11	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.07	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	-0.00	6	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 43 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 6-7.

REACTIONS.

All bearings 8-8-9.
(lb) - Max Horz 11=-152(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 11, 10, 9, 8, 7 except 6=-125(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 11, 6, 10, 9, 8, 7

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 9-10=-274/263, 8-9=-276/264, 7-8=-275/265, 6-7=-277/258

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 3-2-6, Exterior(2R) 3-2-6 to 6-0-0, Interior(1) 6-0-0 to 8-4-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 11, 10, 9, 8, 7 except (jt=lb) 6=125.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 9, 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	HF3	GABLE	2	1	
Job Reference (optional)					

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

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RELEASE FOR CONSTRUCTION

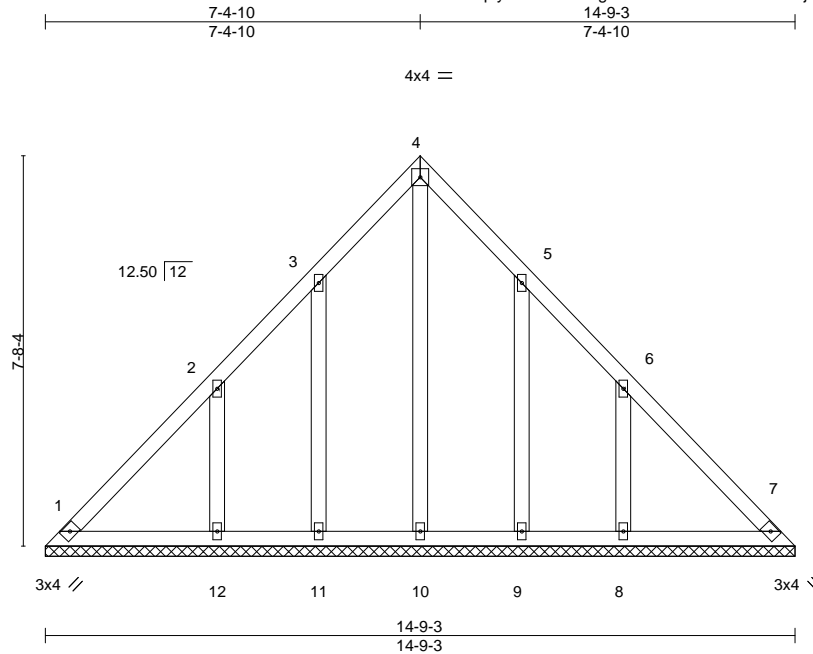
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DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45408449

07/21/2021



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 0.10	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.12	Horz(CT)	0.00	7	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 66 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 14-9-3.
(lb) - Max Horz 1=-174(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 11, 9 except 12=-175(LC 12), 8=-175(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 9 except 12=306(LC 19), 8=306(LC 20)

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-2 to 3-4-10, Interior(1) 3-4-10 to 7-4-10, Exterior(2R) 7-4-10 to 10-4-10, Interior(1) 10-4-10 to 14-5-1 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 7, 11, 9 except (jt=lb) 12=175, 8=175.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	HF4	GABLE	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
Job Reference (optional)					

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DEVELOPMENT SERVICES

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22-3-7 14-9-12 29-9-3 7-5-12

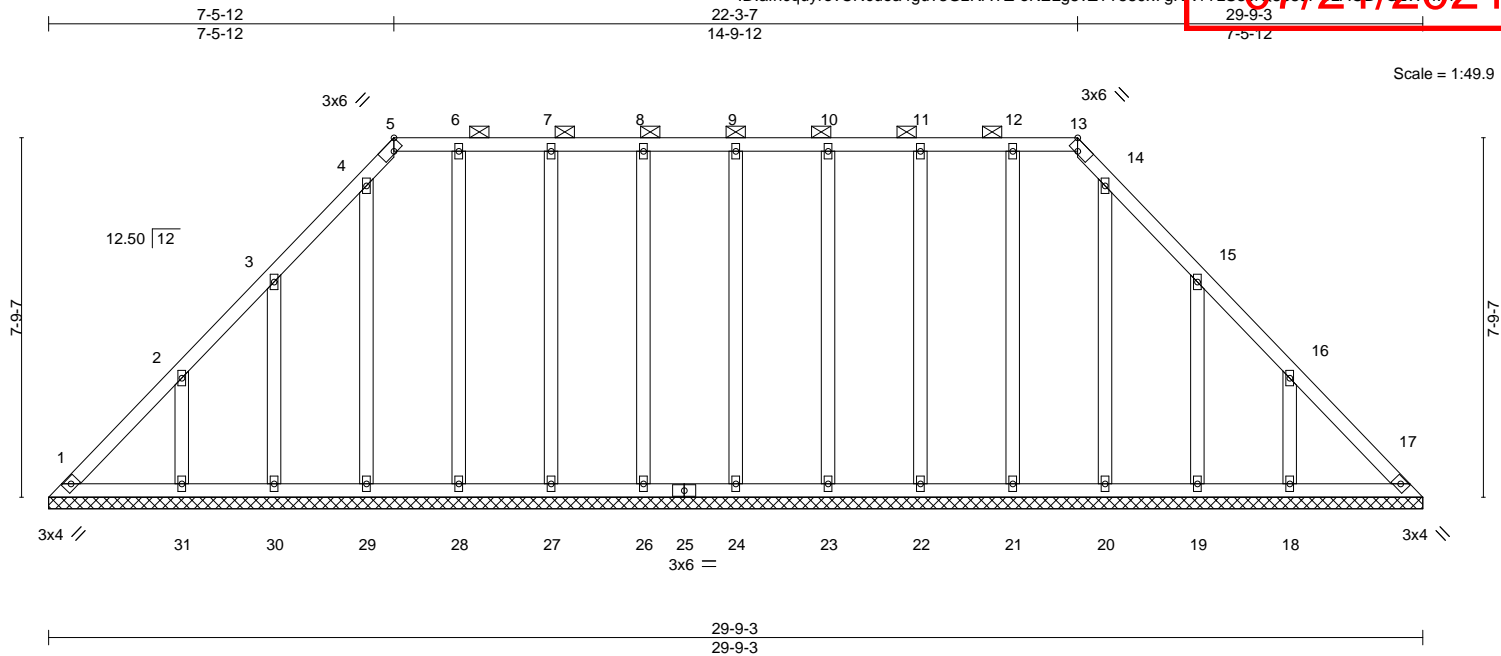


Plate Offsets (X,Y)--		[5:0-2-8,Edge], [13:0-2-8,Edge]	
LOADING (psf)		SPACING-	2-0-0
TCLL	25.0	Plate Grip DOL	1.15
TCDL	10.0	Lumber DOL	1.15
BCLL	0.0	Rep Stress Incr	YES
BCDL	10.0	Code	IRC2018/TPI2014
		CSI.	
		TC	0.08
		BC	0.05
		WB	0.14
		Matrix-S	
		DEFL.	
		in (loc)	l/defl L/d
		Vert(LL)	n/a - n/a 999
		Vert(CT)	n/a - n/a 999
		Horz(CT)	0.01 17 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 163 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SPF No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD	2x4 SPF No.2	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 5-13.
OTHERS	2x4 SPF No.2		Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.		All bearings 29-9-3.
(lb) - Max Horz		1=178(LC 8)
Max Uplift		All uplift 100 lb or less at joint(s) 1, 17, 24, 26, 27, 28, 29, 23, 22, 21, 20 except 30=114(LC 12), 31=147(LC 12), 19=118(LC 13), 18=147(LC 13)
Max Grav		All reactions 250 lb or less at joint(s) 1, 17, 24, 26, 27, 28, 29, 30, 23, 22, 21, 20, 19 except 31=264(LC 19), 18=263(LC 20)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-2 to 3-4-2, Interior(1) 3-4-2 to 7-5-12, Exterior(2R) 7-5-12 to 11-8-10, Interior(1) 11-8-10 to 22-3-7, Exterior(2R) 22-3-7 to 26-6-6, Interior(1) 26-6-6 to 29-5-1 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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, 17, 24, 26, 27, 28, 29, 23, 22, 21, 20 except (jt=lb) 30=114, 31=147, 19=118, 18=147.
 - 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.



March 30,2021

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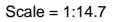
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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Chesterfield, MO 63017

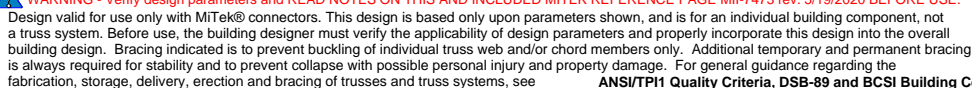
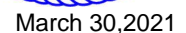
ID:afncquyrevCNcuoa4gu?3GzRAYZ-aiM55qwq?5MsOFH2R.s303t8C9Dpmb6nRTtKEJzW1MW



Weight: 7 lb FT = 20%

TOP CHORD	Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

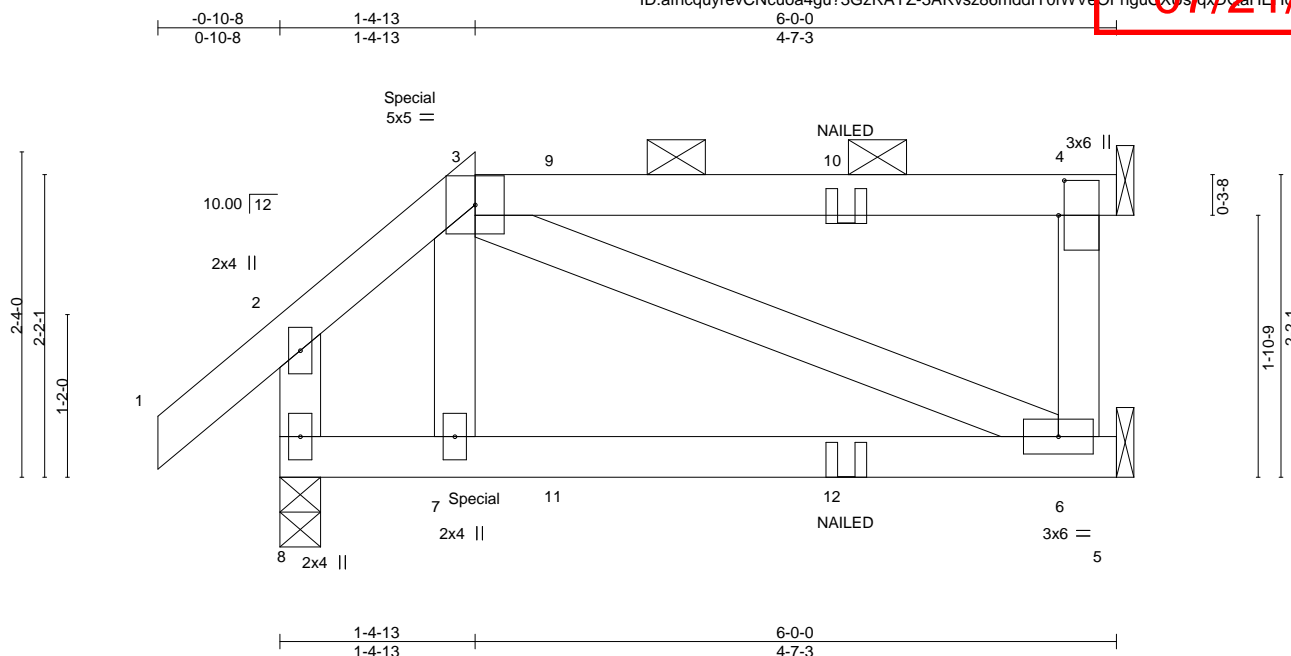
- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions 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) 5, 3, 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.



Job Reference (optional)

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:41:19 2021 Page 1

ID:afncguyvrevCNcypa4qu?3GzRAYZ-3ARvsz86mddIY0fWVeOFnquCXUjsqxDQaHEHdGzW ME



07/21/2021

Weight: 25 lb FT = 20%

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

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins: 3-4.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

(size) 8=0-3-8, 6=Mechanical, 4=Mechanical
Max Horz 8=61(LC 8)
Max Uplift 8=-75(LC 8), 6=-15(LC 8), 4=-63(LC 4)
Max Grav 8=324(LC 1), 6=134(LC 3), 4=152(LC 1)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDDL=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
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6, 4.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 51 lb down and 31 lb up at 1-4-13, and 59 lb down and 41 lb up at 2-0-12 on top chord, and 10 lb down and 9 lb up at 1-4-13, and 16 lb down and 13 lb up at 2-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-70, 3-4=-70, 5-8=-20
Concentrated Loads (lb)
Vert: 7=5(F) 11=1(F) 12=1(F)



March 30, 2021



WARNING: Velly design parameters are listed below and included with the key reference to AISC M14-15 167, § 9.5.2020 by ONE USE. Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for the 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/TPI 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/103 Woodside
2731383	M3	Jack-Open	1	1	Job Reference (optional)

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:41:24 2021 Page 1

ID:afncquyrevCNcuaa4gu?3GzRAYZ-P7FowhCFa9FbfnYTBzQUkb4kUau/CasjZ/2VUzW1N9

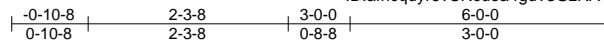
RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

07/21/2021



4x12 MT20HS ==

Scale = 1:26.4

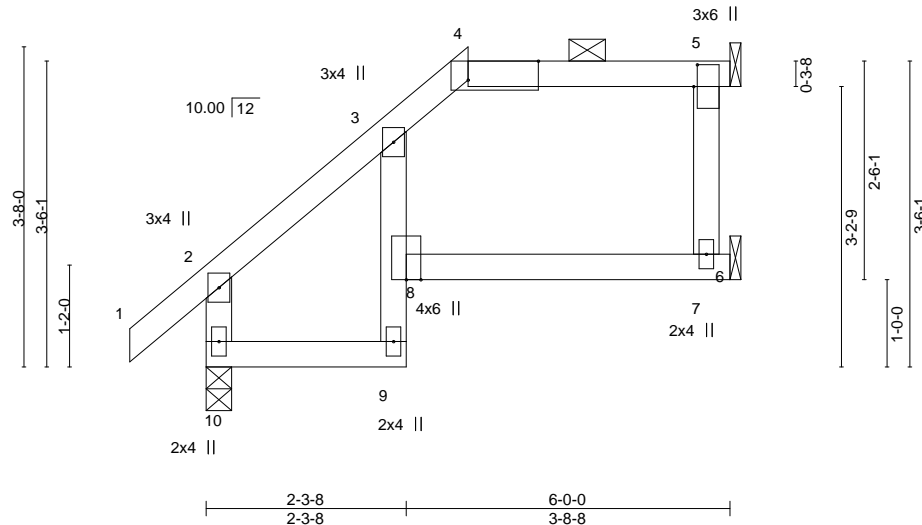


Plate Offsets (X,Y)-- [4:0-9-11,Edge], [5:0-3-0,0-0-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES GRIP		
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	0.10	7-8	>679	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.12	7-8	>542	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.16	5	n/a	n/a	Weight: 22 lb FT = 20%	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS								

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, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 10=0-3-8, 5=Mechanical, 7=Mechanical
Max Horz 10=98(LC 12)
Max Uplift 10=-24(LC 12), 5=-50(LC 9), 7=-8(LC 12)
Max Grav 10=329(LC 1), 5=156(LC 1), 7=112(LC 3)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-286/143

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-10, Interior(1) 2-0-10 to 3-0-0, Exterior(2E) 3-0-0 to 5-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 5, 7.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



March 30, 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/103 Woodside
2731383	M4	Jack-Open	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 15:44:27 2021 Page 1					
Job Reference (optional)					

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

ID:afncquyrevCNCuo4gu?3GzRAYZ-qiwWYIE714dAWEC2zJX76MDZRibY2cPWIA6pZW1M6
07/21/2021

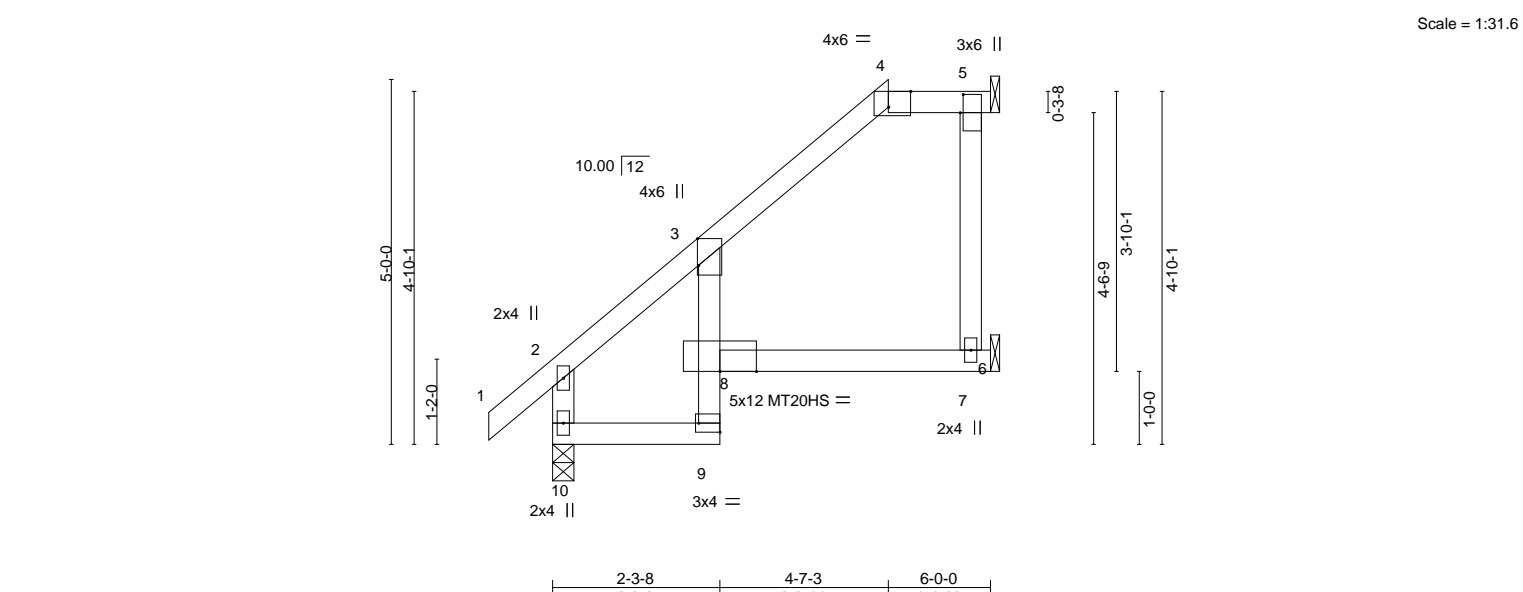


Plate Offsets (X,Y)--		[3:0-4-6,Edge], [4:0-3-11,Edge], [5:0-3-0,0-0-8], [9:Edge,0-1-8]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.41	Vert(LL) 0.11 7-8 >619 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.46	Vert(CT) -0.16 7-8 >425 180	MT20HS	148/108
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) -0.17 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 24 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied, except
BOT CHORD 2x4 SPF No.2	2-0-0 oc purlins: 4-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.

REACTIONS.	(size) 10=0-3-8, 7=Mechanical, 5=Mechanical
	Max Horz 10=159(LC 12)
	Max Uplift 7=-29(LC 12), 5=-64(LC 12)
	Max Grav 10=329(LC 1), 7=107(LC 3), 5=163(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD	9-10=-253/100
WEBS	2-10=-252/144

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 2-0-10, Interior(1) 2-0-10 to 4-7-3, Exterior(2E) 4-7-3 to 5-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 5.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



March 30, 2021

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	M5	Jack-Open	2	1	
Job Reference (optional)					

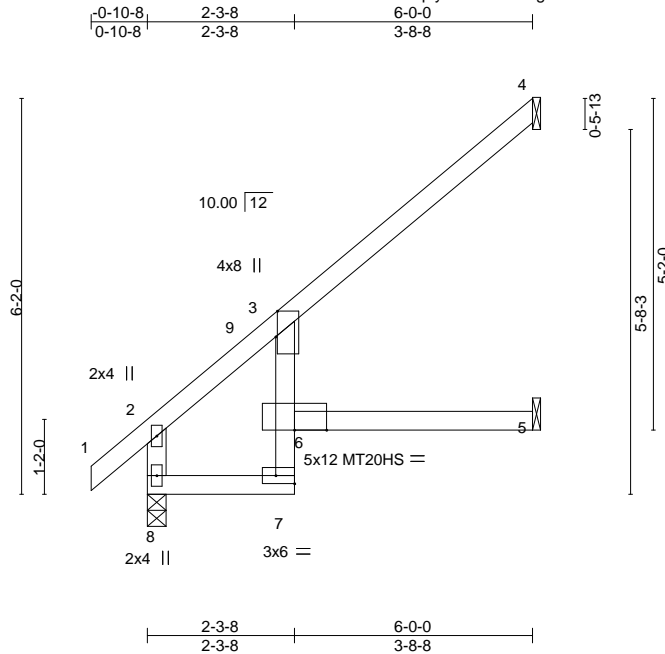
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:41:45 2021 Page 1

ID:afncquyrevCNcuoa4gu?3GzRAYZ-IA0kKSQecucg?eW05rLnzjoYj0whvFYHxkm2V11u

07/21/2021



Scale = 1:35.9

Plate Offsets (X,Y)--		[3:0-4-13,Edge], [7:Edge,0-1-8]			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	0.12 5-6 >576 240
TCDL 10.0	Lumber DOL	1.15	BC 0.52	Vert(CT)	-0.17 5-6 >404 180
BCLL 0.0	Rep Stress Incr	YES	WB 0.03	Horz(CT)	-0.13 4 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS		
				PLATES	GRIP
				MT20	197/144
				MT20HS	148/108
				Weight: 21 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 4=Mechanical, 8=0-3-8, 5=Mechanical
Max Horz 8=204(LC 12)
Max Uplift 4=-114(LC 12), 5=-37(LC 12)
Max Grav 4=184(LC 19), 8=338(LC 1), 5=98(LC 3)

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

BOT CHORD 7-8=-308/129
WEBS 2-8=-259/122

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 2-0-10, Interior(1) 2-0-10 to 5-11-4 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) All plates are MT20 plates unless otherwise indicated.
- 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) 5 except (jt=lb) 4=114.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 30, 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/103 Woodside
2731383	M6	Jack-Open	7	1	
Job Reference (optional)					

Builders FirstSource (Valley Center),

Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:42:06 2021 Page 1

ID:afncquyrevCNcua4gu73GzRAYZ-ACngk2ibh3YdhE1Y10kGBakFbQuJKPLN57Gz2ZW11U

0-10-8 3-1-10 6-0-0
0-10-8 3-1-10 2-10-6

07/21/2021

Scale = 1:35.9

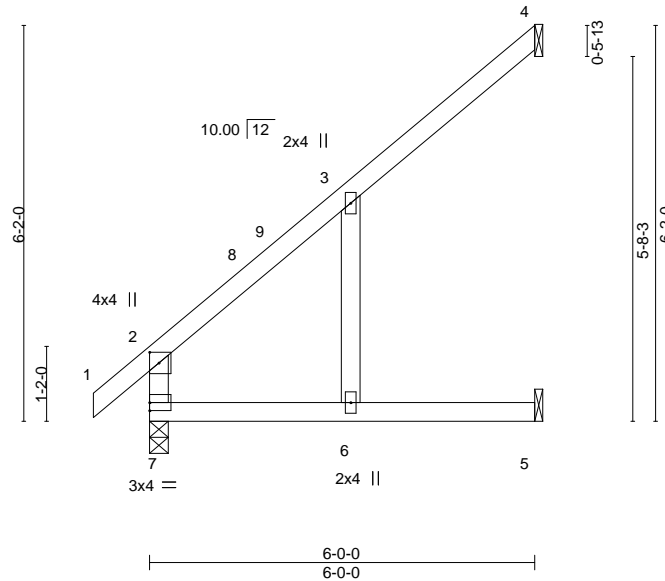


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]

LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	2-0-0	TC 0.34		Vert(LL)	0.18	6-7	>391	240	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.50		Vert(CT)	-0.16	6	>447	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.03		Horz(CT)	-0.12	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 22 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) 7=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 7=192(LC 12)
Max Uplift 4=102(LC 12), 5=48(LC 12)
Max Grav 7=338(LC 1), 4=160(LC 19), 5=117(LC 19)

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

TOP CHORD 2-3=-273/100

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 5-11-4 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) 5 except (jt=lb) 4=102.
- 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.



March 30, 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 2060116023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	M7	Jack-Open	4	1	
Job Reference (optional)					

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

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:42:12 2021 Page 1

ID:afncquyrevCNCuo4gu?3GzRAYZ-?M8x_5nMHvInP9U6GggRraA?DKvgEmbaaBicW1UP

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

Scale = 1:20.8

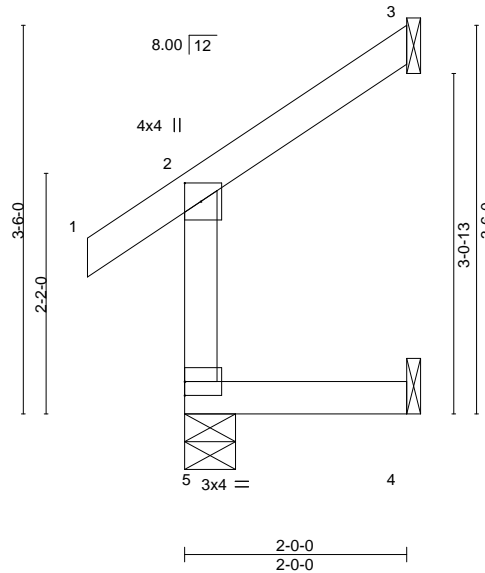


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	0.01 4-5 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.00 4-5 >999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.04 3 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR					Weight: 8 lb FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=0-5-8, 3=Mechanical, 4=Mechanical
Max Horz 5=74(LC 9)
Max Uplift 3=-57(LC 12), 4=-25(LC 9)
Max Grav 5=174(LC 1), 3=65(LC 19), 4=45(LC 10)

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, 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.



March 30, 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/103 Woodside
2731383	M8	Jack-Open Girder	2	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:42:19 2021 Page 1

ID:afncquyrevCNCuo4gu?3GzRAYZ-Ij3bSUtd3AnIEF20ESJDfNU2Ovt42GNmSyozW1

RELEASE FOR CONSTRUCTION

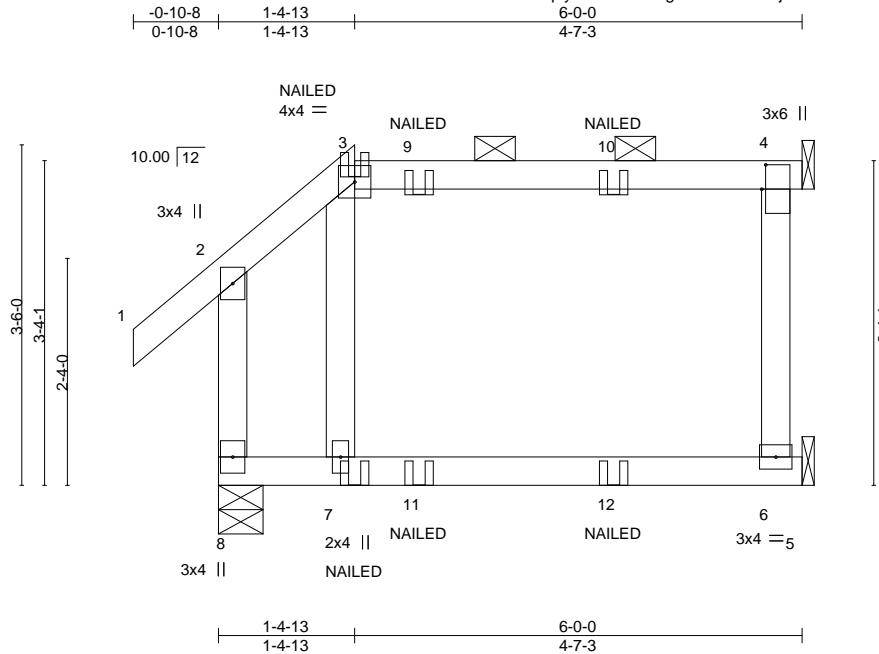
AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45408458

07/21/2021



Scale = 1:23.7

Plate Offsets (X,Y)-- [4:0-3-0,0-0-8]									
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	0.30	Vert(LL)	0.04 6-7 >999	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.05 6-7 >999	180	
BCLL	0.0	Rep Stress Incr	NO	WB	0.02	Horz(CT)	-0.11 4 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-MR					Weight: 24 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, and 2-0-0 oc purlins: 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 8=0-5-8, 4=Mechanical, 6=Mechanical
Max Horz 8=118(LC 5)
Max Uplift 8=142(LC 8), 4=-99(LC 5), 6=-48(LC 5)
Max Grav 8=354(LC 38), 4=168(LC 1), 6=119(LC 3)

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; 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.
- 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) 4, 6 except (jt=lb) 8=142.
- 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 3-4=-70, 5-8=-20
Concentrated Loads (lb)
Vert: 7=4(B) 11=1(B) 12=1(B)



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	M9	Jack-Open	2	1	
Job Reference (optional)					

Builders FirstSource (Valley Center), Valley Center, KS - 67147, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:46:22 2021 Page 1

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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45408459

07/21/2021

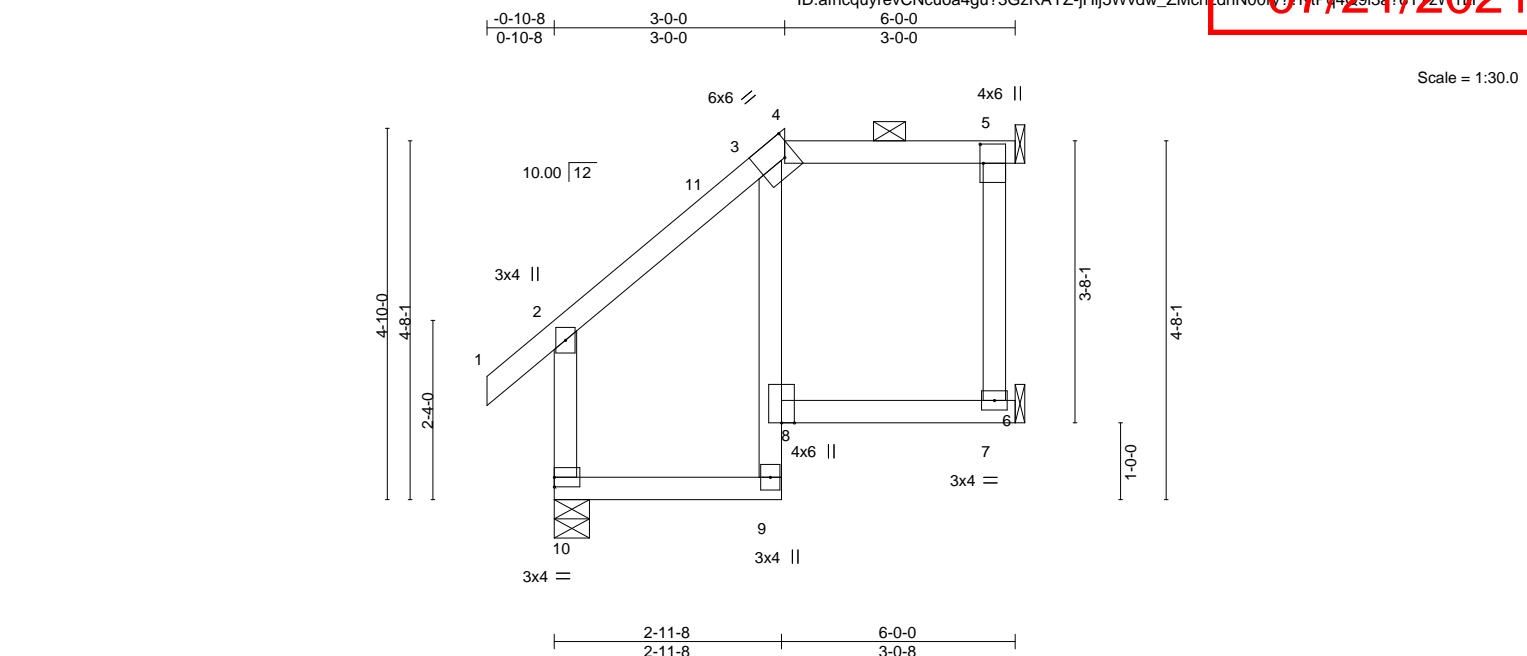


Plate Offsets (X,Y)--		[4:0-1-11,Edge], [5:0-3-0,0-0-8]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) 0.04 8 >999 240	MT20	197/144
TCDL 10.0	Lumber DOL 1.15	BC 0.32	Vert(CT) -0.05 9 >999 180		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(CT) -0.11 5 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014	Matrix-AS		Weight: 27 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: 4-5.
WEBS 2x4 SPF No.2	BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 10=0-5-8, 5=Mechanical, 7=Mechanical
Max Horz 10=151(LC 9)
Max Uplift 10=34(LC 12), 5=-58(LC 9), 7=-36(LC 9)
Max Grav 10=329(LC 25), 5=152(LC 1), 7=110(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-274/162

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 3-0-0, Exterior(2E) 3-0-0 to 5-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 5, 7.
 - 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



March 30, 2021

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	M10	Jack-Open	2	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:41:03 2021 Page 1

ID:afncquyrevCNcuaa4gu73GzRAYZ-X5TsVvY4XicZdYRRZH5U8IDW3 SC4b4dmRGZWML

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

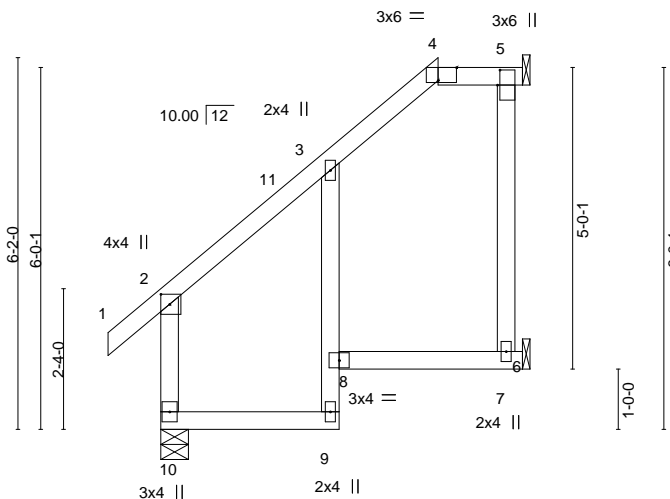
DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

07/21/2021

0-0-10-8 2-11-8 4-7-3 6-0-0
0-10-8 2-11-8 1-7-11 1-4-13

Scale = 1:38.2



2-11-8 4-7-3 6-0-0
2-11-8 1-7-11 1-4-13

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

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 0.24	Vert(LL)	-0.03	8	>999	240	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.20	Vert(CT)	-0.05	9	>999	180	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	7	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS						
								Weight: 29 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, and 2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 10=0-5-8, 5=Mechanical, 7=Mechanical
Max Horz 10=104(LC 20), 5=-144(LC 19)
Max Uplift 10=-121(LC 12)
Max Grav 10=405(LC 25), 7=175(LC 1)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-10=-337/284, 2-3=-261/267, 3-4=-215/319, 4-5=-201/318

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 4-7-3, Exterior(2E) 4-7-3 to 5-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 10=121.
- 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.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	M11	Jack-Open	3	1	
Job Reference (optional)					

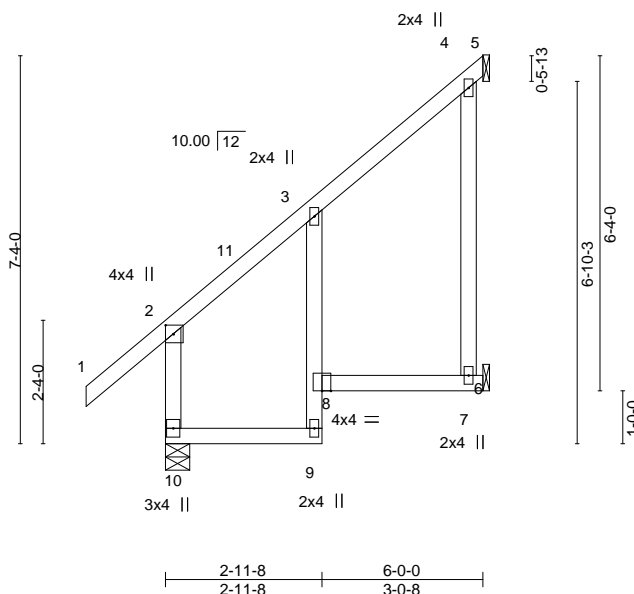
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:41:05 2021 Page 1

ID:afncquyrevCNCuo4gu?3GzRAYZ-TTbcwBzK3JsHstgqi7yDjtrQ7eybTnM5X4-W1MS

-1-6-0 2-11-8 6-0-0
1-6-0 2-11-8 3-0-8



Scale = 1:43.6

Plate Offsets (X,Y)--		[2:0-2-0,0-1-12]									
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	0.32	Vert(LL)	0.09	8	>787	240	MT20 197/144
TCDL	10.0	Lumber DOL 1.15		BC	0.26	Vert(CT)	-0.09	8	>720	180	
BCLL	0.0	Rep Stress Incr YES		WB	0.10	Horz(CT)	0.02	7	n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS							Weight: 31 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=0-5-8, 5=Mechanical, 7=Mechanical
Max Horz 10=58(LC 1), 5=224(LC 12)
Max Uplift 10=211(LC 12)
Max Grav 10=486(LC 19), 7=182(LC 1)

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

TOP CHORD 2-10=404/364, 2-3=-289/350, 3-4=-255/430, 4-5=-178/317

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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 5-11-4 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) n/a
- 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=211.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	M12	Jack-Open	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:41:06 2021 Page 1					
Job Reference (optional)					

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45408462

07/21/2021

0-10-8 3-0-0 6-0-0
0-10-8 3-0-0 3-0-0

4x12 MT20HS =

Scale = 1:26.4

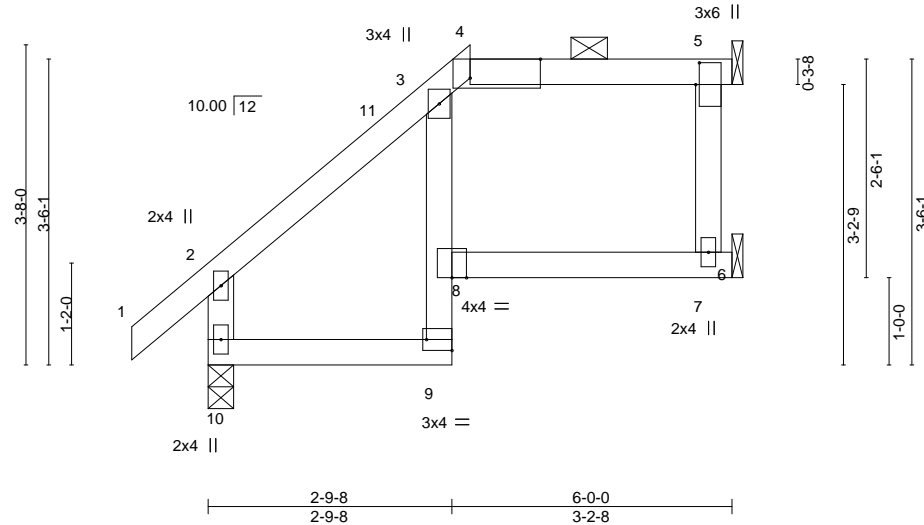


Plate Offsets (X,Y)--	[4:0-9-11,Edge], [5:0-3-0,0-0-8], [9:Edge,0-1-8]				
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) l/defl L/d
TCLL 25.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL)	-0.09 8 >710 240
TCDL 10.0	Lumber DOL	1.15	BC 0.32	Vert(CT)	-0.17 8 >395 180
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00 7 n/a n/a
BCDL 10.0	Code IRC2018/TPI2014		Matrix-AS		
				PLATES	GRIP
				MT20	197/144
				MT20HS	148/108
				Weight: 23 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
2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 10=0-3-8, 7=Mechanical, 5=Mechanical
Max Horz 10=38(LC 25), 5=98(LC 12)
Max Uplift 10=-79(LC 12), 7=-17(LC 9)
Max Grav 10=351(LC 25), 7=228(LC 1)

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

WEBS 2-10=-263/218

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 3-0-0, Exterior(2E) 3-0-0 to 5-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	M13	Jack-Open	1	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:41:08 2021 Page 1

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
45408463

07/21/2021

0-10-8 2-9-8 4-7-3 6-0-0
0-10-8 2-9-8 1-9-11 1-4-13

Scale = 1:31.6

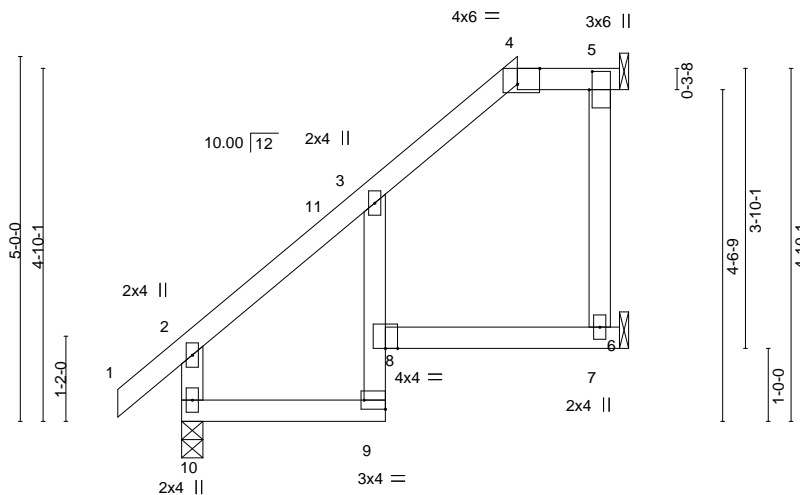


Plate Offsets (X,Y)--	[4:0-3-11,Edge], [5:0-3-0,0-0-8], [9:Edge,0-1-8]			
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES
TCLL 25.0	2-0-0	TC 0.39	in (loc) l/defl L/d	MT20
TCDL 10.0	Plate Grip DOL 1.15	BC 0.36	Vert(LL) -0.10 8 >689 240	GRIP 197/144
BCLL 0.0	Lumber DOL 1.15	WB 0.04	Vert(CT) -0.17 8 >385 180	
BCDL 10.0	Rep Stress Incr YES	Matrix-AS	Horz(CT) 0.02 7 n/a n/a	
	Code IRC2018/TPI2014			Weight: 25 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
2-0-0 oc purlins: 4-5.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 10=0-3-8, 7=Mechanical, 5=Mechanical
Max Horz 10=21(LC 12), 5=138(LC 12)
Max Uplift 10=110(LC 12)
Max Grav 10=324(LC 25), 7=256(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 4-7-3, Exterior(2E) 4-7-3 to 5-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=110.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



March 30,2021

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

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	M14	Jack-Open	4	1	
Job Reference (optional)					

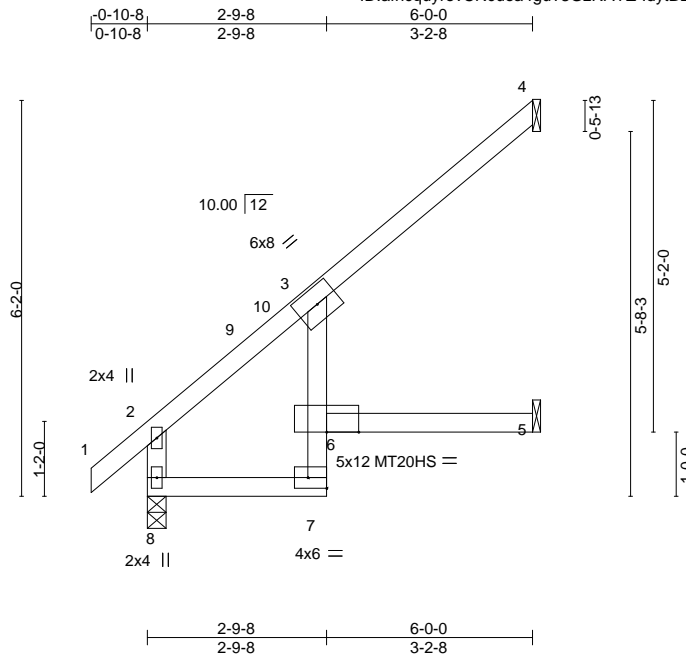
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:44:11 2021 Page 1

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07/21/2021



Scale = 1:35.9

Plate Offsets (X,Y)-- [7:Edge,0-2-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.41	Vert(LL)	-0.11 7 >645	240	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.19 7 >359	180	MT20HS 148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.21 4 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-AS					
								Weight: 21 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.
BOT CHORD Rigid ceiling directly applied.

REACTIONS.

(size) 4=Mechanical, 8=0-3-8, 5=Mechanical
Max Horz 8=204(LC 12)
Max Uplift 4=101(LC 12), 5=50(LC 12)
Max Grav 4=178(LC 19), 8=338(LC 1), 5=97(LC 19)

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

BOT CHORD 7-8=-308/129
WEBS 2-8=-259/122

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 5-11-4 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) All plates are MT20 plates unless otherwise indicated.
- 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) 5 except (jt=lb) 4=101.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	M15	Jack-Open	7	1	Job Reference (optional)

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

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:41:16 2021 Page 1

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RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

07/21/2021

0-10-8 3-1-12 6-0-0
0-10-8 3-1-12 2-10-4

Scale = 1:36.0

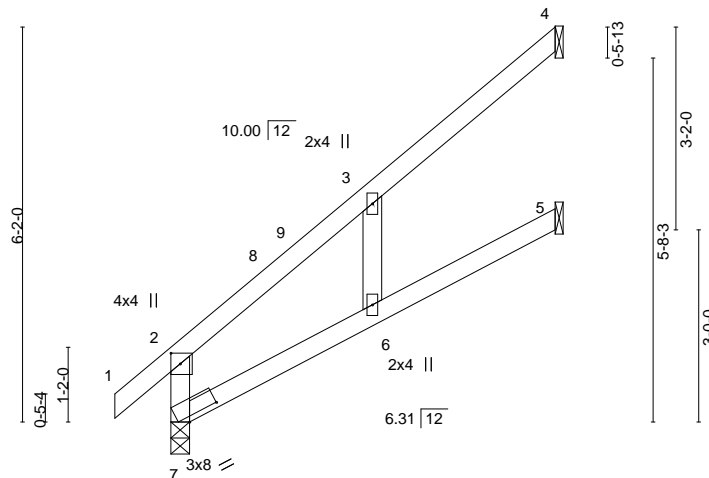


Plate Offsets (X,Y)--		[2:0-2-0,0-1-12], [7:0-6-2,0-1-0]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.38
TCDL 10.0	Lumber DOL	1.15	BC 0.49
BCLL 0.0	Rep Stress Incr	YES	WB 0.03
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-AS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.19 6-7 >359 240
			Vert(CT) -0.17 6 >418 180
			Horz(CT) -0.14 4 n/a n/a
			PLATES GRIP
			MT20 197/144
			Weight: 21 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, 5=Mechanical, 7=0-3-8
Max Horz 7=191(LC 12)
Max Uplift 4=106(LC 12), 5=46(LC 12)
Max Grav 4=166(LC 19), 5=112(LC 19), 7=338(LC 1)

FORCES.

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

TOP CHORD 2-3=-272/98

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 5-11-4 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) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4=106.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	PB1	Piggyback	11	1	
Job Reference (optional)					

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

Builders FirstSource (Valley Center),

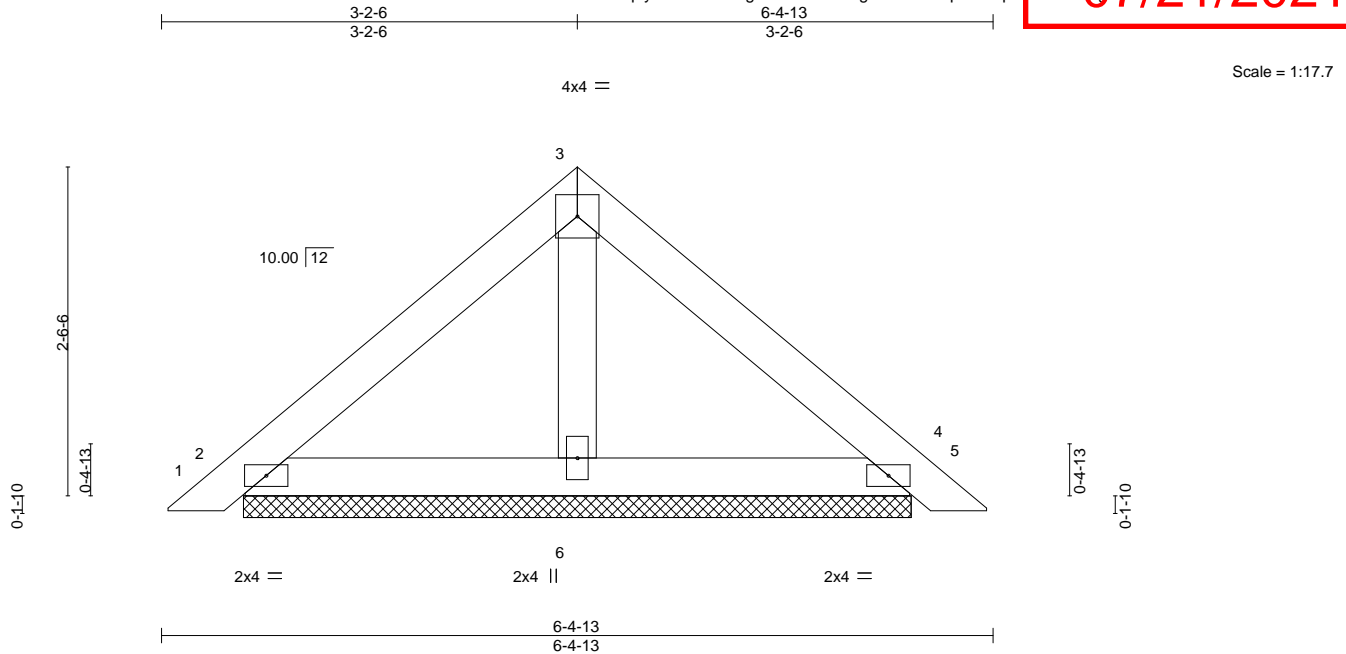
Valley Center, KS - 67147,

8.430 s Mar 22 2021 MiTek Industries, Inc.

Mon Mar 22 15:46:24 2021 Page 1

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07/21/2021



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	0.00	5	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	0.00	5	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	4	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P						Weight: 17 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=5-1-11, 4=5-1-11, 6=5-1-11
Max Horz 2=57(LC 11)
Max Uplift 2=33(LC 12), 4=41(LC 13)
Max Grav 2=161(LC 1), 4=161(LC 1), 6=191(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) 2, 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 30, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

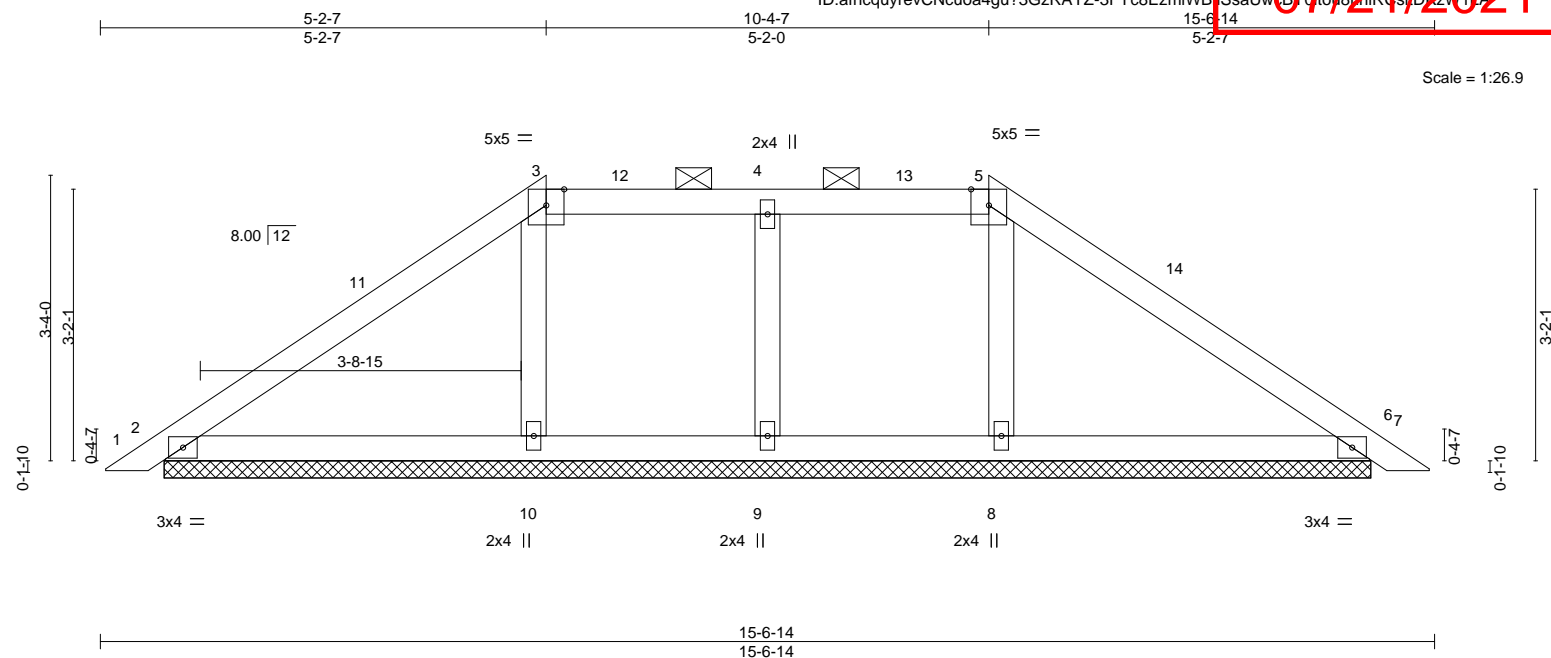
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Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	PB2	Piggyback	2	1	Job Reference (optional)

Builders FirstSource (Valley Center).	Valley Center, KS - 67147.
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8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:42:27 2021 Page

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[illegible]

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, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-1-0.
(lb) - Max Horz 2=75(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 9, 10, 8
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=360(LC 25), 8=360(LC 26)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCFL=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 5-2-7, Exterior(2R) 5-2-7 to 9-5-6, Interior(1) 9-5-6 to 10-4-7, Exterior(2R) 10-4-7 to 14-9-12, Interior(1) 14-9-12 to 15-3-3 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 9, 10, 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30, 2021

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	PB3	Piggyback	12	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

RELEASE FOR CONSTRUCTION

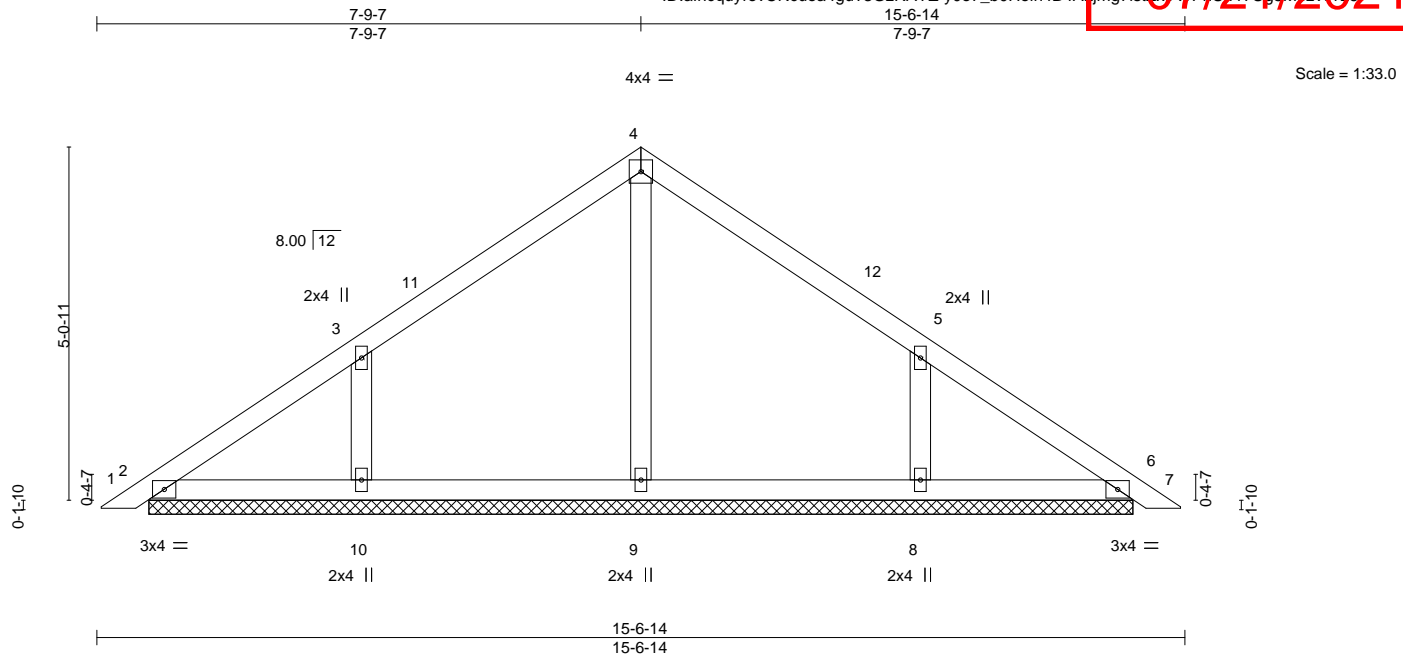
AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:46:31 2021 Page 1
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07/21/2021



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	0.00	6	n/r	120	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	0.00	7	n/r	120		
BCLL 0.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 46 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 14-1-0.
(lb) - Max Horz 2=117(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=141(LC 12), 8=140(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 9=290(LC 1), 10=377(LC 19), 8=377(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=296/169, 5-8=295/169

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) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 7-9-7, Exterior(2R) 7-9-7 to 10-9-7, Interior(1) 10-9-7 to 15-3-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 2, 6 except (jt=lb) 10=141, 8=140.
- 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.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 30, 2021

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

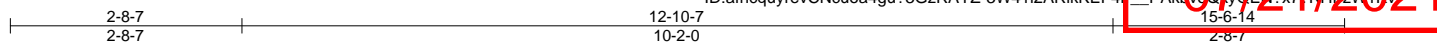


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Builders FirstSource (Valley Center).	Valley Center, KS - 67147.
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8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:42:44 2021 Page 1

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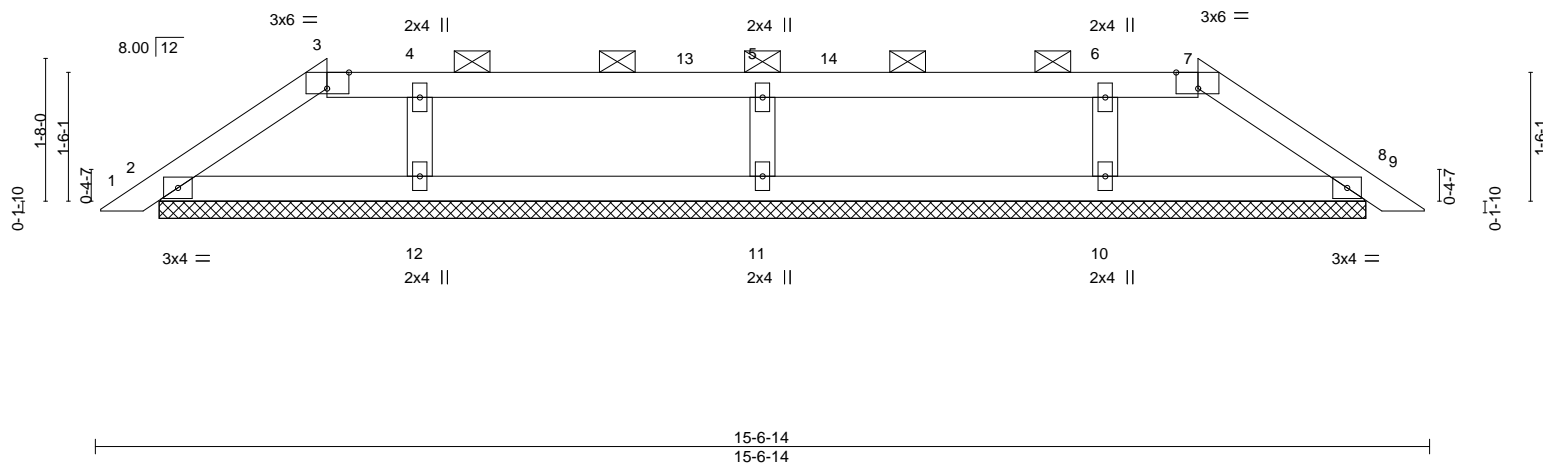


Plate Offsets (X,Y)-- [3:0-3-1,Edge], [7:0-3-1,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	0.00 9 n/r	120	MT20 197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	0.00 9 n/r	120	
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00 8 n/a	n/a	
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S					
								Weight: 38 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.): 3-7.
BOT CHORD	2x4 SPF No.2		
OTHERS	2x4 SPF No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-1-0.
(lb) - Max Horz 2=36(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 11, 12, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8 except 11=377(LC 25), 12=335(LC 25), 10=335(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-11=-296/107. 4-12=-254/93. 6-10=-254/91

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDF=6.0psf; BCDL=4.2psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-11 to 2-8-7, Exterior(2R) 2-8-7 to 6-11-6, Interior(1) 6-11-6 to 12-10-7, Exterior(2E) 12-10-7 to 15-3-3 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 11, 12, 10.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 30, 2021



WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f, 56f, 57f, 58f, 59f, 60f, 61f, 62f, 63f, 64f, 65f, 66f, 67f, 68f, 69f, 70f, 71f, 72f, 73f, 74f, 75f, 76f, 77f, 78f, 79f, 80f, 81f, 82f, 83f, 84f, 85f, 86f, 87f, 88f, 89f, 90f, 91f, 92f, 93f, 94f, 95f, 96f, 97f, 98f, 99f, 100f, 101f, 102f, 103f, 104f, 105f, 106f, 107f, 108f, 109f, 110f, 111f, 112f, 113f, 114f, 115f, 116f, 117f, 118f, 119f, 120f, 121f, 122f, 123f, 124f, 125f, 126f, 127f, 128f, 129f, 130f, 131f, 132f, 133f, 134f, 135f, 136f, 137f, 138f, 139f, 140f, 141f, 142f, 143f, 144f, 145f, 146f, 147f, 148f, 149f, 150f, 151f, 152f, 153f, 154f, 155f, 156f, 157f, 158f, 159f, 160f, 161f, 162f, 163f, 164f, 165f, 166f, 167f, 168f, 169f, 170f, 171f, 172f, 173f, 174f, 175f, 176f, 177f, 178f, 179f, 180f, 181f, 182f, 183f, 184f, 185f, 186f, 187f, 188f, 189f, 190f, 191f, 192f, 193f, 194f, 195f, 196f, 197f, 198f, 199f, 200f, 201f, 202f, 203f, 204f, 205f, 206f, 207f, 208f, 209f, 210f, 211f, 212f, 213f, 214f, 215f, 216f, 217f, 218f, 219f, 220f, 221f, 222f, 223f, 224f, 225f, 226f, 227f, 228f, 229f, 230f, 231f, 232f, 233f, 234f, 235f, 236f, 237f, 238f, 239f, 240f, 241f, 242f, 243f, 244f, 245f, 246f, 247f, 248f, 249f, 250f, 251f, 252f, 253f, 254f, 255f, 256f, 257f, 258f, 259f, 260f, 261f, 262f, 263f, 264f, 265f, 266f, 267f, 268f, 269f, 270f, 271f, 272f, 273f, 274f, 275f, 276f, 277f, 278f, 279f, 280f, 281f, 282f, 283f, 284f, 285f, 286f, 287f, 288f, 289f, 290f, 291f, 292f, 293f, 294f, 295f, 296f, 297f, 298f, 299f, 300f, 301f, 302f, 303f, 304f, 305f, 306f, 307f, 308f, 309f, 310f, 311f, 312f, 313f, 314f, 315f, 316f, 317f, 318f, 319f, 320f, 321f, 322f, 323f, 324f, 325f, 326f, 327f, 328f, 329f, 330f, 331f, 332f, 333f, 334f, 335f, 336f, 337f, 338f, 339f, 340f, 341f, 342f, 343f, 344f, 345f, 346f, 347f, 348f, 349f, 350f, 351f, 352f, 353f, 354f, 355f, 356f, 357f, 358f, 359f, 360f, 361f, 362f, 363f, 364f, 365f, 366f, 367f, 368f, 369f, 370f, 371f, 372f, 373f, 374f, 375f, 376f, 377f, 378f, 379f, 380f, 381f, 382f, 383f, 384f, 385f, 386f, 387f, 388f, 389f, 390f, 391f, 392f, 393f, 394f, 395f, 396f, 397f, 398f, 399f, 400f, 401f, 402f, 403f, 404f, 405f, 406f, 407f, 408f, 409f, 410f, 411f, 412f, 413f, 414f, 415f, 416f, 417f, 418f, 419f, 420f, 421f, 422f, 423f, 424f, 425f, 426f, 427f, 428f, 429f, 430f, 431f, 432f, 433f, 434f, 435f, 436f, 437f, 438f, 439f, 440f, 441f, 442f, 443f, 444f, 445f, 446f, 447f, 448f, 449f, 450f, 451f, 452f, 453f, 454f, 455f, 456f, 457f, 458f, 459f, 460f, 461f, 462f, 463f, 464f, 465f, 466f, 467f, 468f, 469f, 470f, 471f, 472f, 473f, 474f, 475f, 476f, 477f, 478f, 479f, 480f, 481f, 482f, 483f, 484f, 485f, 486f, 487f, 488f, 489f, 490f, 491f, 492f, 493f, 494f, 495f, 496f, 497f, 498f, 499f, 500f, 501f, 502f, 503f, 504f, 505f, 506f, 507f, 508f, 509f, 510f, 511f, 512f, 513f, 514f, 515f, 516f, 517f, 518f, 519f, 520f, 521f, 522f, 523f, 524f, 525f, 526f, 527f, 528f, 529f, 530f, 531f, 532f, 533f, 534f, 535f, 536f, 537f, 538f, 539f, 540f, 541f, 542f, 543f, 544f, 545f, 546f, 547f, 548f, 549f, 550f, 551f, 552f, 553f, 554f, 555f, 556f, 557f, 558f, 559f, 560f, 561f, 562f, 563f, 564f, 565f, 566f, 567f, 568f, 569f, 570f, 571f, 572f, 573f, 574f, 575f, 576f, 577f, 578f, 579f, 580f, 581f, 582f, 583f, 584f, 585f, 586f, 587f, 588f, 589f, 590f, 591f, 592f, 593f, 594f, 595f, 596f, 597f, 598f, 599f, 600f, 601f, 602f, 603f, 604f, 605f, 606f, 607f, 608f, 609f, 610f, 611f, 612f, 613f, 614f, 615f, 616f, 617f, 618f, 619f, 620f, 621f, 622f, 623f, 624f, 625f, 626f, 627f, 628f, 629f, 630f, 631f, 632f, 633f, 634f, 635f, 636f, 637f, 638f, 639f, 640f, 641f, 642f, 643f, 644f, 645f, 646f, 647f, 648f, 649f, 650f, 651f, 652f, 653f, 654f, 655f, 656f, 657f, 658f, 659f, 660f, 661f, 662f, 663f, 664f, 665f, 666f, 667f, 668f, 669f, 670f, 671f, 672f, 673f, 674f, 675f, 676f, 677f, 678f, 679f, 680f, 681f, 682f, 683f, 684f, 685f, 686f, 687f, 688f, 689f, 690f, 691f, 692f, 693f, 694f, 695f, 696f, 697f, 698f, 699f, 700f, 701f, 702f, 703f, 704f, 705f, 706f, 707f,



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	V1	Valley	1	1	

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

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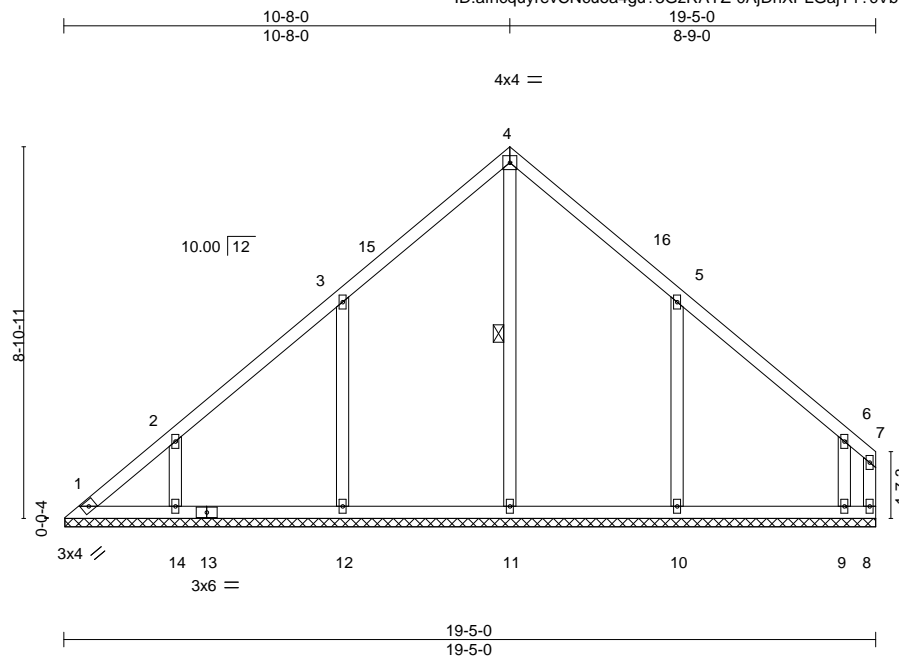
RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

07/21/2021



Scale = 1:55.1

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 0.20	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.15	Horz(CT)	0.00	8	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S					Weight: 77 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-11

REACTIONS.

All bearings 19-4-11.

(lb) - Max Horz 1=218(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) except 1=104(LC 8), 8=163(LC 11), 12=186(LC 12), 14=142(LC 12), 10=184(LC 13), 9=267(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 8 except 11=354(LC 22), 12=410(LC 19), 14=324(LC 19), 10=408(LC 20), 9=393(LC 20)

FORCES.

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

WEBS 4-11=275/60, 3-12=328/221, 2-14=252/170, 5-10=327/220, 6-9=293/244

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 10-8-0, Exterior(2R) 10-8-0 to 13-8-0, Interior(1) 13-8-0 to 19-3-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 1, 163 lb uplift at joint 8, 186 lb uplift at joint 12, 142 lb uplift at joint 14, 184 lb uplift at joint 10 and 267 lb uplift at joint 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.



March 30, 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/103 Woodside
2731383	V2	Valley	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
Job Reference (optional)					

RELEASE FOR CONSTRUCTION

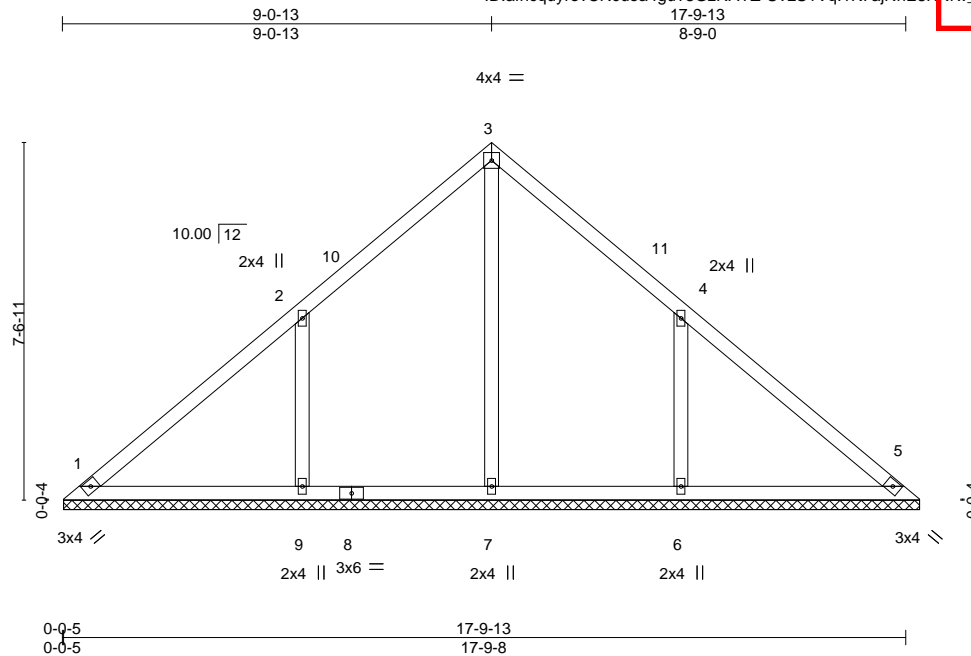
AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45408471

07/21/2021



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.00	5	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

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 18-1-0.
(lb) - Max Horz 1=-169(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-223(LC 12), 6=-222(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 9=496(LC 19), 6=496(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-381/253, 4-6=-381/253

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=4.2psf; h=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 9-0-13, Exterior(2R) 9-0-13 to 12-0-13, Interior(1) 12-0-13 to 17-8-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 except (jt=lb) 9=223, 6=222.
- 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.



March 30, 2021

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	V3	Valley	1	1	
Job Reference (optional)					

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

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

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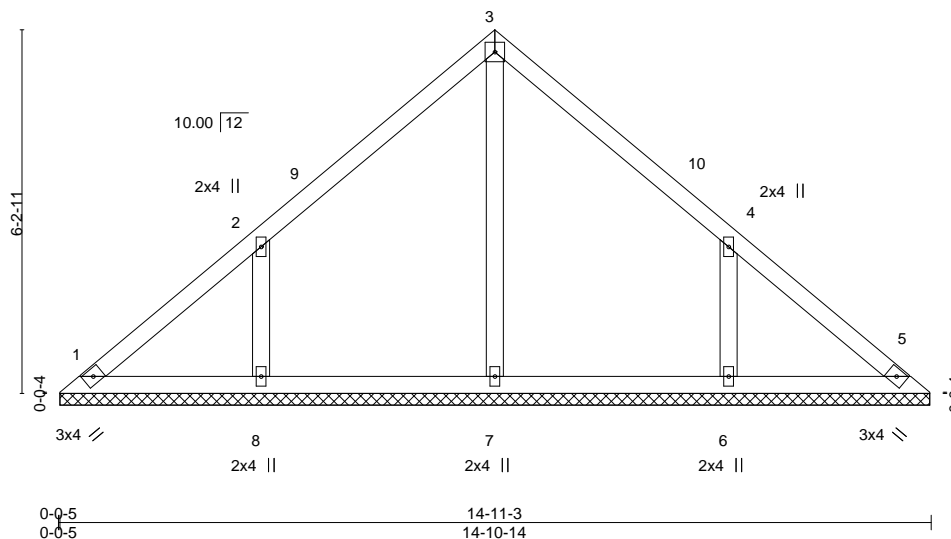
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07/21/2021

7-5-10 7-5-10 14-11-3 7-5-10

4x4 =

Scale = 1:39.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.18	Vert(LL)	n/a	-	n/a	999	MT20
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a	999	197/144
BCLL 0.0	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.00	5	n/a	n/a	
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						
									Weight: 50 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 14-10-10.
(lb) - Max Horz 1=138(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=180(LC 12), 6=179(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=266(LC 1), 8=393(LC 19), 6=392(LC 20)

FORCES.

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

WEBS

2-8=310/208, 4-6=310/208

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 3-5-10, Interior(1) 3-5-10 to 7-5-10, Exterior(2R) 7-5-10 to 10-5-10, Interior(1) 10-5-10 to 14-6-6 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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 except (jt=lb) 8=180, 6=179.
- 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.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	V4	Valley	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

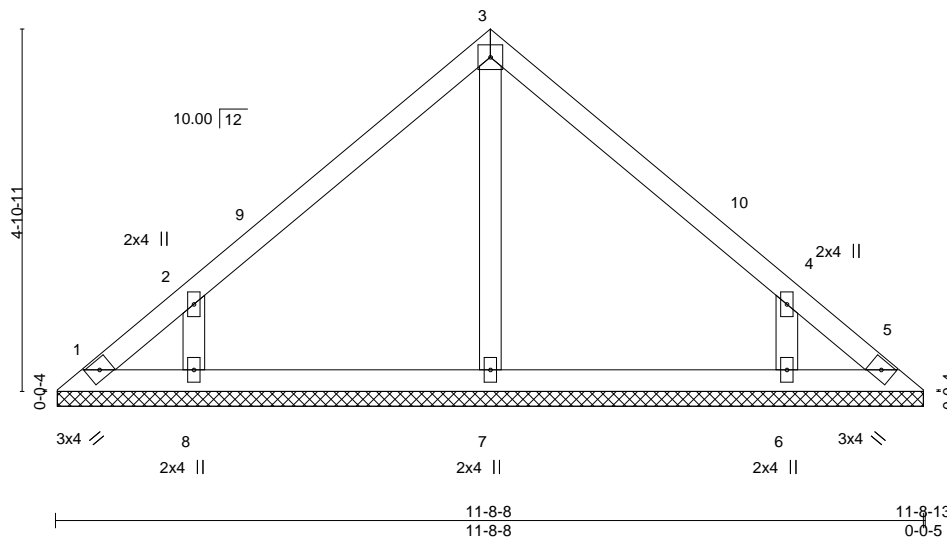
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07/21/2021

5-10-6
5-10-6
11-8-13
5-10-6

4x4 =

Scale = 1:31.1



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 0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
BCDL 10.0	Lumber DOL	1.15	BC 0.10	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-S						Weight: 37 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 11-8-3.
(lb) - Max Horz 1=107(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=163(LC 12), 6=163(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=275(LC 1), 8=347(LC 19), 6=346(LC 20)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-287/223, 4-6=-287/223

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) 0-4-13 to 3-4-13, Interior(1) 3-4-13 to 5-10-6, Exterior(2R) 5-10-6 to 8-10-6, Interior(1) 8-10-6 to 11-3-15 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=163, 6=163.
- 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.



March 30, 2021

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Summit/103 Woodside
2731383	V5	Valley	1	1	
Job Reference (optional)					

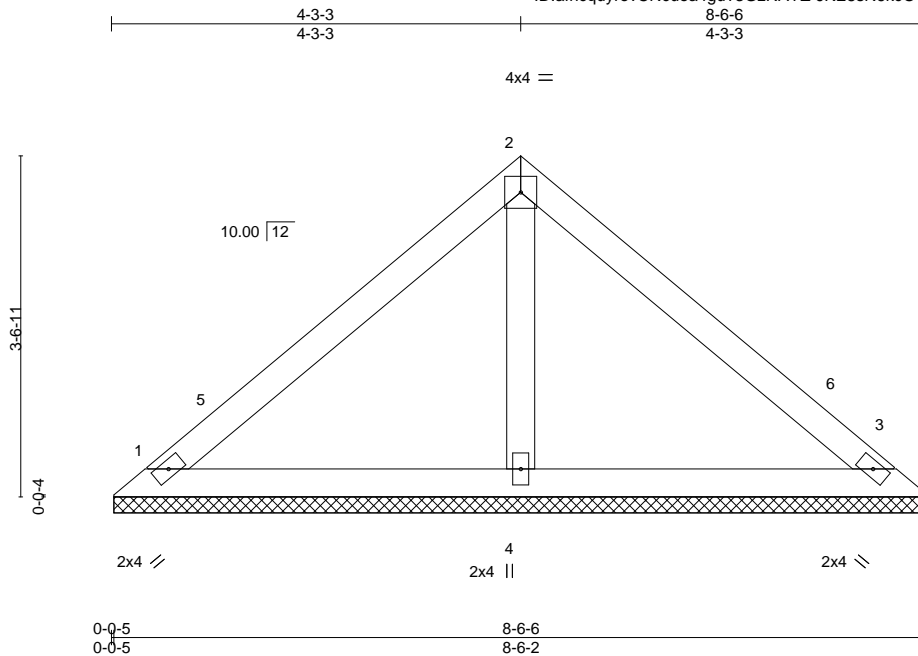
Builders FirstSource (Valley Center), Valley Center, KS - 67147,

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RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
145408474

07/21/2021



Scale: 1/2"=1'

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 25.0	Plate Grip DOL	1.15	TC 0.28	Vert(LL)	n/a	-	n/a	MT20	197/144
TCDL 10.0	Lumber DOL	1.15	BC 0.13	Vert(CT)	n/a	-	n/a		
BCLL 0.0	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2018/TPI2014		Matrix-P					Weight: 25 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=8-5-13, 3=8-5-13, 4=8-5-13
Max Horz 1=-76(LC 8)
Max Uplift 1=-38(LC 13), 3=-47(LC 13)
Max Grav 1=200(LC 1), 3=200(LC 1), 4=295(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 4-3-3, Exterior(2R) 4-3-3 to 7-3-3, Interior(1) 7-3-3 to 8-1-9 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.
- 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.



March 30, 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/103 Woodside
2731383	V6	Valley	1	1	
Builders FirstSource (Valley Center), Valley Center, KS - 67147,					
8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 22 15:44:02 2021 Page 1					
ID:afncquyrevCNcuoa4gu?3GzRAYZ-nXoX4i6Mni9Ac3drNpTu2484B7oV6-Q38Df2KZW1jh					
Job Reference (optional)					

RELEASE FOR CONSTRUCTION

AS NOTED FOR PLAN REVIEW

DEVELOPMENT SERVICES

LEE'S SUMMIT, MISSOURI

45408475

07/21/2021

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

3x6 =

Scale: 3/4"=1'

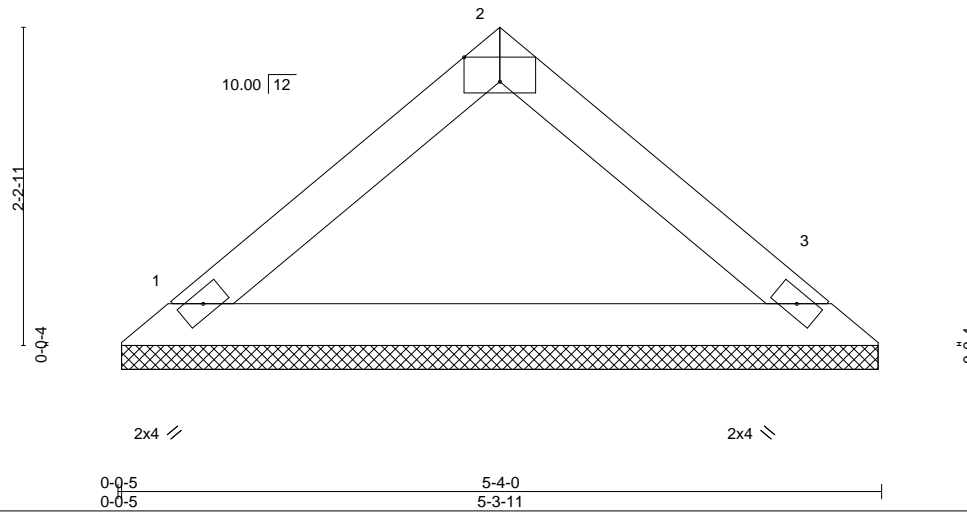


Plate Offsets (X,Y)--		[2:0-3-0,Edge]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 25.0	Plate Grip DOL	1.15	TC 0.10
TCDL 10.0	Lumber DOL	1.15	BC 0.22
BCLL 0.0	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	IRC2018/TPI2014	Matrix-P
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) n/a - n/a 999
			Vert(CT) n/a - n/a 999
			Horz(CT) 0.00 3 n/a n/a
			PLATES
			MT20
			GRIP
			197/144
			Weight: 13 lb FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=5-3-6, 3=5-3-6
Max Horz 1=44(LC 8)
Max Uplift 1=22(LC 12), 3=22(LC 13)
Max Grav 1=204(LC 1), 3=204(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.



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



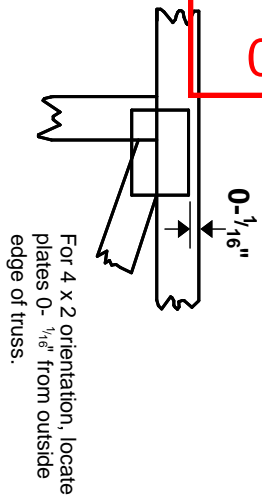
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Chesterfield, MO 63017

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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.



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

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

PLATE SIZE

4 X 4

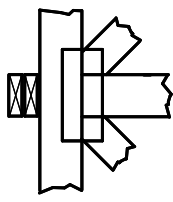
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



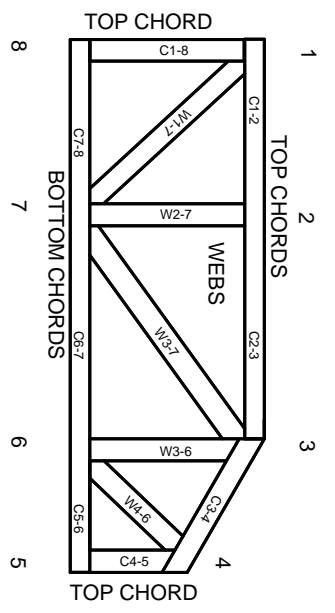
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

- ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
- DSB-89: Design Standard for Bracing.
- BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.