



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/26/2022 11:47:41

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

Re: 220056-A
320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by KC Truss & Panel Inc. (Urish, MO).

Pages or sheets covered by this seal: I50896070 thru I50896163

My license renewal date for the state of Missouri is December 31, 2023.

Missouri COA: Engineering 001193



March 23, 2022

Sevier, Scott, Engineer

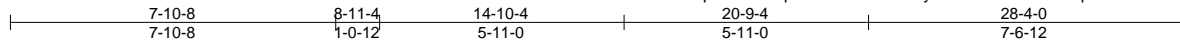
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 220056-A	Truss A2	Truss Type Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896071
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:46:52 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-QBBHyAaCW9vIwPTHs68qVSZQHQB2we4JIW9ozYhnX



Scale = 1:55.8

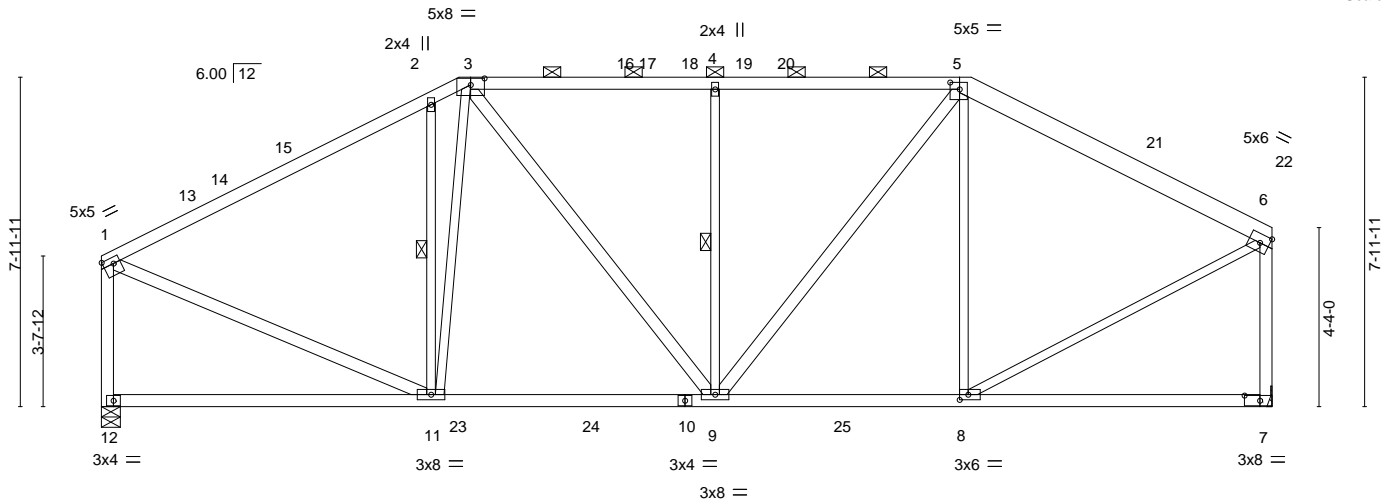


Plate Offsets (X,Y)-- [1:Edge,0-1-12], [3:0-4-0,0-1-15], [5:0-2-12,0-2-0], [7:0-4-8,0-1-8], [8:0-2-8,0-1-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.09 11-12	>999	240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.49	Vert(CT)	-0.18 11-12	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.02 7	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
								Weight: 176 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1 *Except* 5-6: 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 3-6-8 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-14 max.): 3-5.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.1 *Except* 2-11,3-11,4-9,5-8,6-8: 2x3 SPF No.3	WEBS	1 Row at midpt 2-11, 4-9

REACTIONS. (size) 12=0-5-8, 7=Mechanical
Max Horz 12=153(LC 15)
Max Grav 12=1298(LC 46), 7=1268(LC 48)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1257/58, 2-3=-1242/130, 3-4=-1272/84, 4-5=-1273/84, 5-6=-1127/63,
1-12=-1177/57, 6-7=-1153/59
BOT CHORD 9-11=-46/1096, 8-9=-29/981
WEBS 2-11=-731/172, 3-11=-140/539, 3-9=-13/414, 4-9=-589/74, 5-9=-18/545, 5-8=-312/92,
1-11=0/1090, 6-8=-3/1072

- 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=6.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 8-11-4, Exterior(2R) 8-11-4 to 13-2-3, Interior(1) 13-2-3 to 20-9-4, Exterior(2R) 20-9-4 to 25-0-3, Interior(1) 25-0-3 to 28-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 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 23,2022

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 220056-A	Truss A3	Truss Type Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896072
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:46:53 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-uNlf9WbqHS19YZ2t0qf31g6Yyqw5nMcDYyGOiEzYhnW

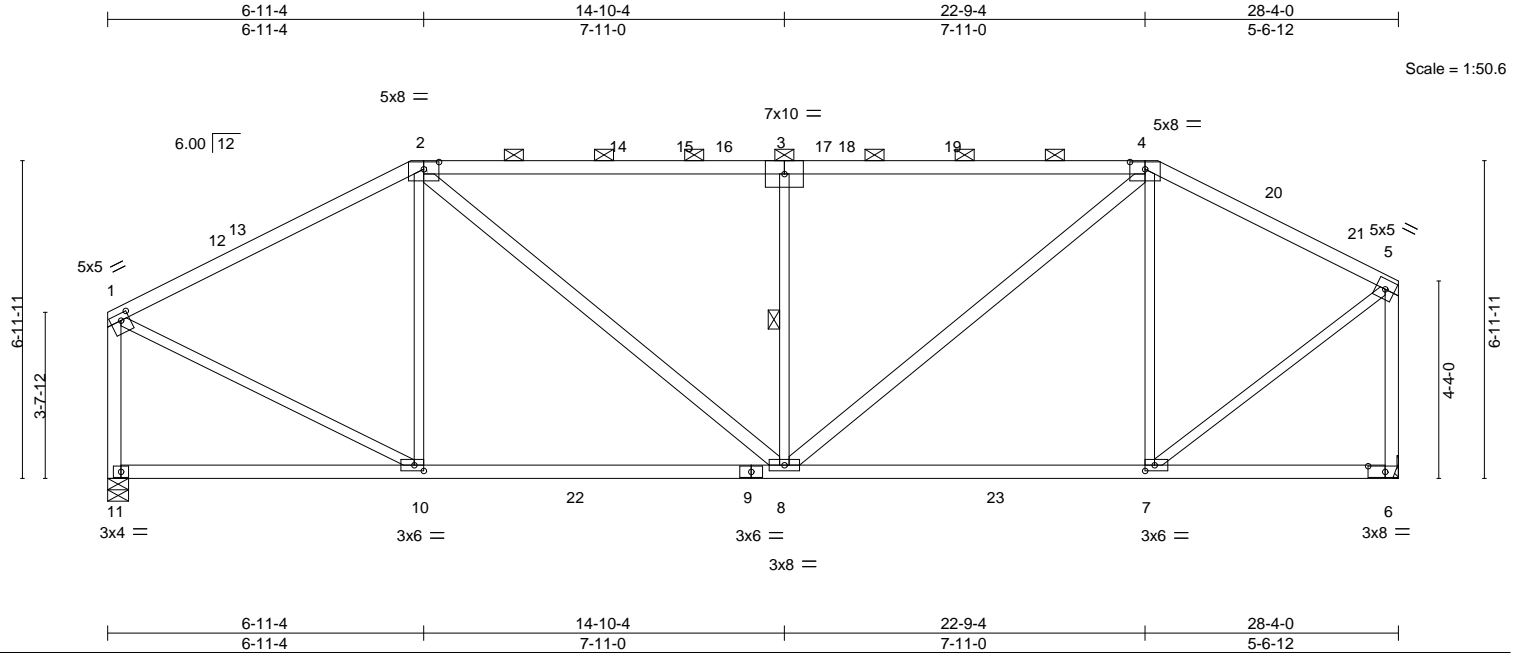


Plate Offsets (X,Y)--		[1:0-2-4,0-1-12], [2:0-4-0,0-1-15], [4:0-4-0,0-1-15], [6:0-4-8,0-1-8], [7:0-2-8,0-1-8], [10:0-2-8,0-1-8]	
LOADING (psf)		SPACING	2-0-0
TCLL (roof)	20.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	10.0	Rep Stress Incr	YES
BCLL	0.0 *	Code	IRC2018/TPI2014
BCDL	10.0		
CSL		DEFL.	
TC	0.99	in (loc)	I/defl L/d
BC	0.51	Vert(LL)	-0.12 7-8 >999 240
WB	0.73	Vert(CT)	-0.21 7-8 >999 180
Matrix-S		Horz(CT)	0.02 6 n/a n/a
PLATES		GRIP	
MT20		197/144	
Weight: 154 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 3-0-7 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 2-4.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.3 *Except* 2-8,4-8,1-11,5-6: 2x4 SP No.1	WEBS	1 Row at midpt 3-8

REACTIONS. (size) 11=0-5-8, 6=Mechanical
Max Horz 11=141(LC 15)
Max Grav 11=1263(LC 45), 6=1295(LC 47)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1266/47, 2-3=-1602/66, 3-4=-1602/66, 4-5=-1086/58, 1-11=-1168/48, 5-6=-1232/42
BOT CHORD 8-10=-58/1147, 7-8=-34/963
WEBS 2-10=-342/91, 2-8=-11/693, 3-8=-829/98, 4-8=-15/887, 4-7=-513/91, 1-10=0/1201, 5-7=-3/1179

- 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=6.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 6-11-4, Exterior(2R) 6-11-4 to 11-2-3, Interior(1) 11-2-3 to 22-9-4, Exterior(2R) 22-9-4 to 27-0-3, Interior(1) 27-0-3 to 28-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 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 23, 2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss A4	Truss Type Roof Special Girder	Qty 1	Ply 2	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896073
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:46:55 2022 Page 1
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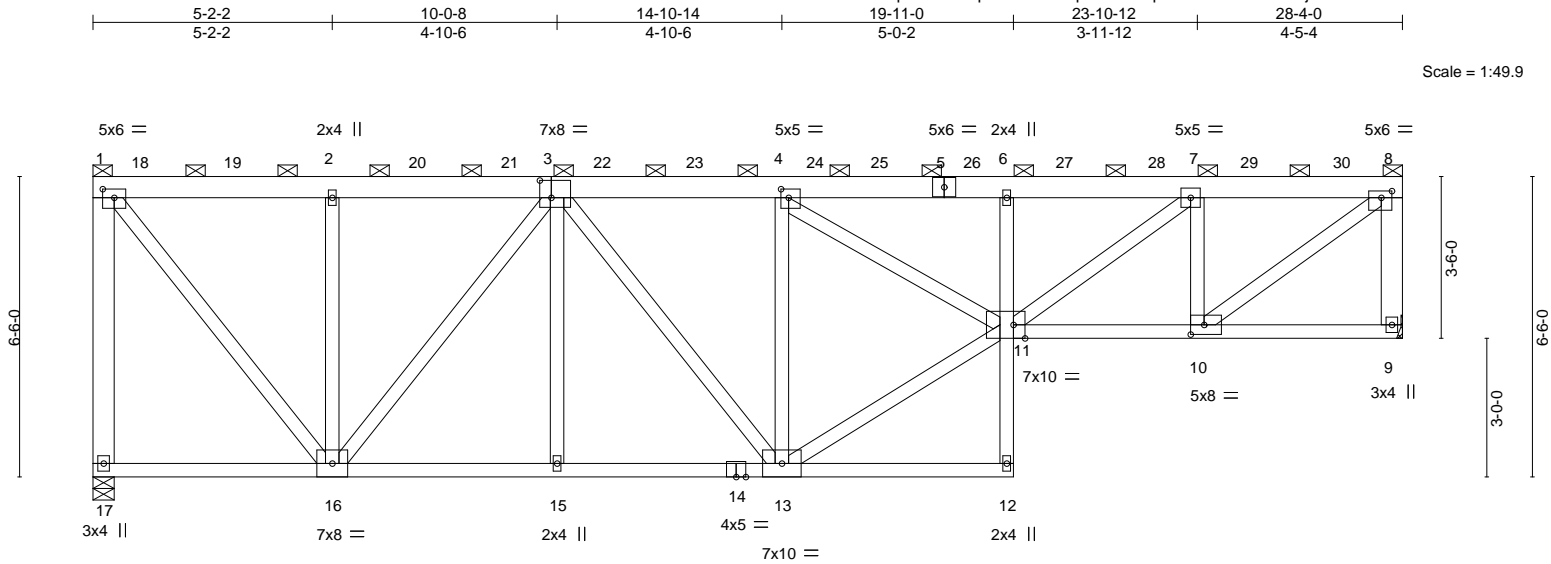


Plate Offsets (X,Y)-- [1:0-3-0,0-2-4], [3:0-3-0,0-4-8], [4:0-2-0,0-2-4], [8:0-2-12,0-1-12], [10:0-3-8,0-2-8], [11:0-3-0,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.15 12	>999	240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.29 12	>999	180
TCDL	10.0	Rep Stress Incr	NO	WB	0.61	Horz(CT)	0.10 9	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
								Weight: 459 lb FT = 20%	

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.1 *Except*
1-17,8-9: 2x6 SP No.1

BRACING-

TOP CHORD 2-0-0 oc purlins (4-11-11 max.): 1-8, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 17=0-5-8, 9=Mechanical
Max Horz 17=-139(LC 8)
Max Uplift 17=-78(LC 6), 9=-81(LC 7)
Max Grav 17=5275(LC 1), 9=5185(LC 1)

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

TOP CHORD 1-17=-5213/102, 1-2=-3584/86, 2-3=-3584/86, 3-4=-6011/110, 4-6=-9708/149,
6-7=-9749/148, 7-8=-6071/97, 8-9=-5123/102
BOT CHORD 15-16=-105/5467, 13-15=-103/5469, 6-11=-1431/81, 10-11=-120/6071
WEBS 1-16=-93/5615, 2-16=-1852/93, 3-16=-3077/58, 3-13=-9/858, 4-13=-4226/129,
11-13=-123/6960, 4-11=-96/4394, 7-11=-79/4614, 7-10=-4325/134, 8-10=-127/7394

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered 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.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 9.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 17. This connection is for uplift only and does not consider lateral forces.
- 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.

Caution: This graphic representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23, 2022

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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	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	A4	Roof Special Girder	1	2	I50896073
					Job Reference (optional)

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:46:56 2022 Page 2
ID:3YzUEFuTXpusHba?0tpUTHzCdai-lyQooYdjaNPkP0nShyDmflkCT2wO_IeEwU2lZzYhnT

NOTES-

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 569 lb down and 39 lb up at 1-0-0, 656 lb down and 28 lb up at 3-0-0, 575 lb down and 43 lb up at 5-0-0, 575 lb down and 43 lb up at 7-0-0, 575 lb down and 43 lb up at 9-0-0, 575 lb down and 43 lb up at 11-0-0, 575 lb down and 43 lb up at 13-0-0, 586 lb down and 41 lb up at 15-0-0, 586 lb down and 41 lb up at 17-0-0, 586 lb down and 41 lb up at 19-0-0, 575 lb down and 45 lb up at 21-0-0, 575 lb down and 45 lb up at 23-0-0, and 575 lb down and 45 lb up at 25-0-0, and 635 lb down and 32 lb up at 27-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-8=-61, 12-17=-20, 9-11=-20

Concentrated Loads (lb)

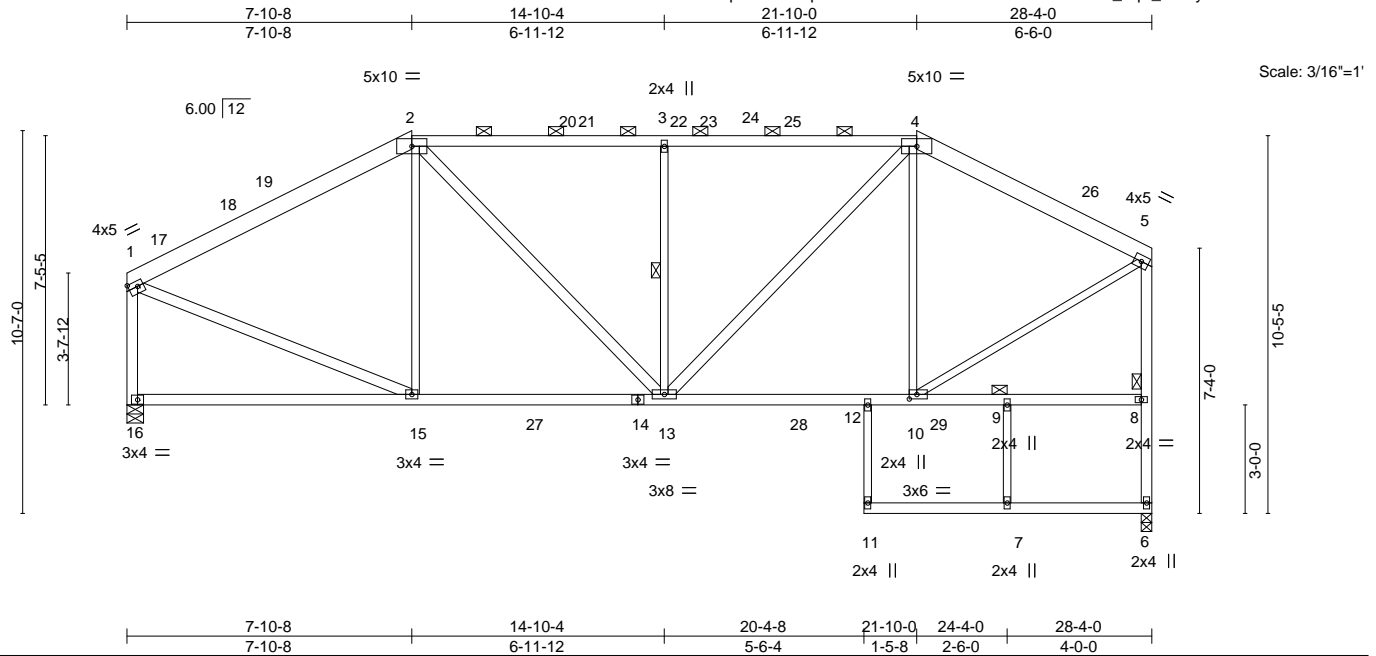
Vert: 2=-574 4=-585 18=-568 19=-655 20=-574 21=-574 22=-574 23=-574 25=-585 26=-585 27=-574 28=-574 29=-574 30=-634

Job 220056-A	Truss B4	Truss Type Piggyback Base	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896077
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

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ID:3YzUEFuTXpusHba?0tpUTHzCdai-76o32biUADAt7xEc1DKAvZ_8qS_aORyYcrxMWDzYhnN



LOADING (psf)		SPACING-		CSI		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.09 15-16 >999 240	MT20		197/144	
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.18 15-16 >999 180				
TCDL	10.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.08 6 n/a n/a				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x6 SP No.1 *Except* 2-4: 2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-11 max.): 2-4.
BOT CHORD	2x4 SP No.1 *Except* 11-12: 2x3 SPF No.3	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.1 *Except* 2-15,3-13,4-10,5-10,7-9: 2x3 SPF No.3	WEBS	1 Row at midpt 3-13, 5-6
		JOINTS	1 Brace at Jt(s): 9

REACTIONS.	
(size)	6=0-3-8, 16=0-5-8
Max Horz	16=113(LC 14)
Max Grav	6=1370(LC 29), 16=1277(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	1-2=-1306/51, 2-3=-1477/72, 3-4=-1477/72, 4-5=-1186/47, 6-8=-1300/28, 5-8=-1221/39, 1-16=-1156/50
BOT CHORD	13-15=-5/1156, 12-13=0/1031, 10-12=0/1027
WEBS	2-15=-250/92, 2-13=-6/537, 3-13=-697/85, 4-13=-13/664, 4-10=-403/80, 5-10=0/1186, 1-15=0/1182

- 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=6.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-10-8, Exterior(2R) 7-10-8 to 12-1-7, Interior(1) 12-1-7 to 21-10-0, Exterior(2R) 21-10-0 to 26-0-15, Interior(1) 26-0-15 to 28-2-4 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
 - 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 23, 2022

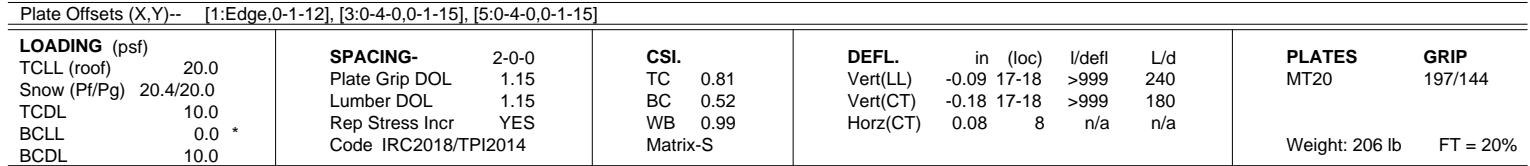
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

KC Truss & Panel Inc. (Urlich, MO), Urlich, MO - 64788, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:04 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-3UvpTHkhrQbMFO_9dMe_3T3GgXsHNr49QTb5zYhnL




REACTIONS. (size) 18=0-5-8, 8=0-3-8
 Max Horz 18=221(LC 15)
 Max Grav 18=1359(LC 46), 8=1420(LC 48)

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

TOP CHORD	1-2=-1327/59, 2-3=-1305/127, 3-4=-1182/83, 4-5=-1187/86, 5-6=-1171/120, 6-7=-1169/57, 1-18=-1237/54, 8-10=-1345/32, 7-10=-1264/44
BOT CHORD	15-17=-93/1079, 14-15=-79/983, 12-14=-78/977
WEBS	2-17=-632/141, 3-17=-70/420, 3-15=-4/379, 4-15=-522/74, 5-15=-10/516, 6-12=-536/119, 1-17=0/1099, 7-12=-6/1081

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=6.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 9-11-4, Exterior(2R) 9-11-4 to 14-2-3, Interior(1) 14-2-3 to 19-9-4, Exterior(2R) 19-9-4 to 24-0-3, Interior(1) 24-0-3 to 28-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.





March 23, 2022

Job 220056-A	Truss B6	Truss Type Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896079
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:05 2022 Page 1
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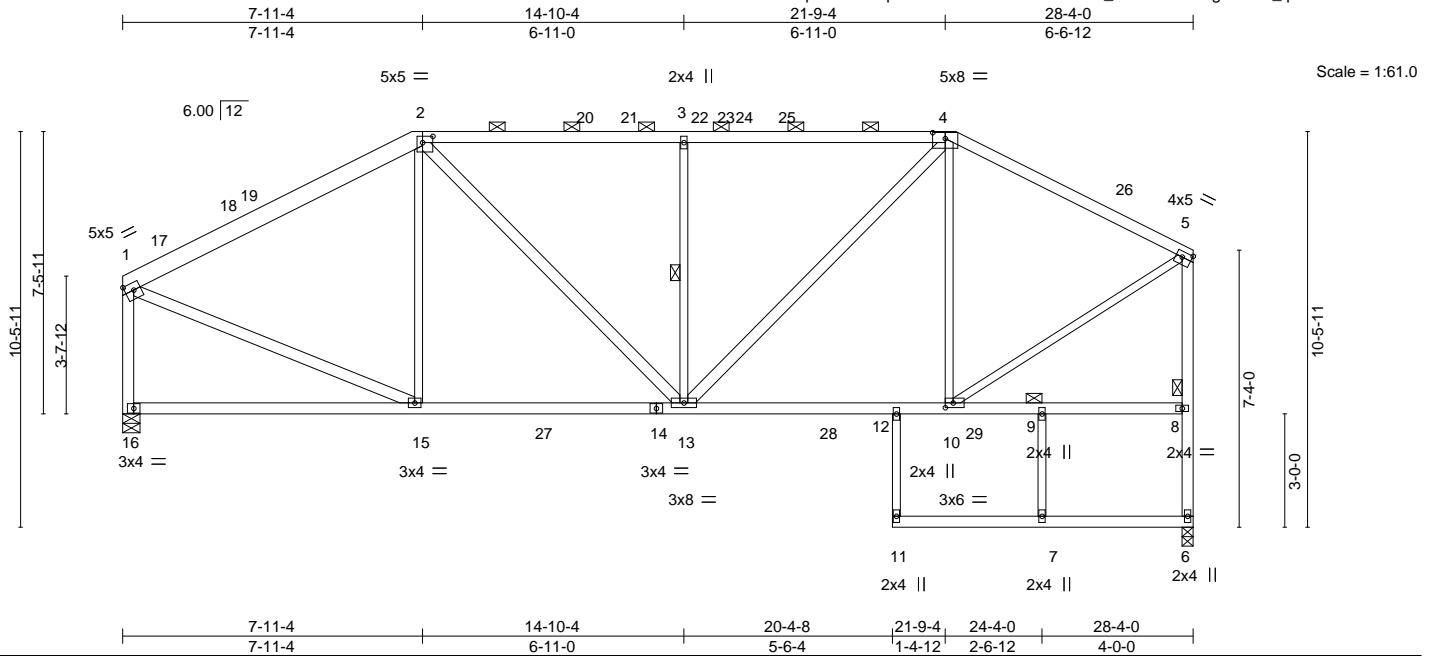


Plate Offsets (X,Y)-- [1:Edge,0-2-4], [2:0-3-4,0-2-0], [4:0-4-0,0-1-15], [5:Edge,0-1-12], [10:0-2-8,0-1-8]									
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.09 12-13	>999	240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.17 15-16	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.08 6	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
								Weight: 189 lb FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1 *Except* 1-2: 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 4-7-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-4-12 max.): 2-4.
BOT CHORD	2x4 SP No.1 *Except* 11-12: 2x3 SPF No.3	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.1 *Except* 2-15,3-13,4-10,5-10,7-9: 2x3 SPF No.3	WEBS	1 Row at midpt 3-13, 5-6
		JOINTS	1 Brace at Jt(s): 9

REACTIONS. (size) 16=0-5-8, 6=0-3-8
Max Horz 16=207(LC 15)
Max Grav 16=1279(LC 46), 6=1370(LC 28)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1295/48, 2-3=-1469/68, 3-4=-1471/69, 4-5=-1171/52, 1-16=-1160/52, 6-8=-1300/31, 5-8=-1221/43
BOT CHORD 13-15=-99/1180, 12-13=-80/1062, 10-12=-78/1058
WEBS 2-15=-254/92, 2-13=-7/541, 3-13=-707/84, 4-13=-15/681, 4-10=-411/83, 1-15=0/1176, 5-10=-2/1183

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=6.0psf; h=25ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 7-11-4, Exterior(2R) 7-11-4 to 12-2-3, Interior(1) 12-2-3 to 21-9-4, Exterior(2R) 21-9-4 to 26-0-3, Interior(1) 26-0-3 to 28-2-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23, 2022

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



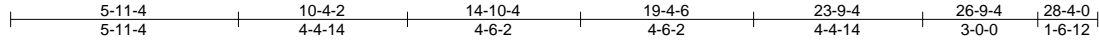
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss B7	Truss Type Roof Special	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896080
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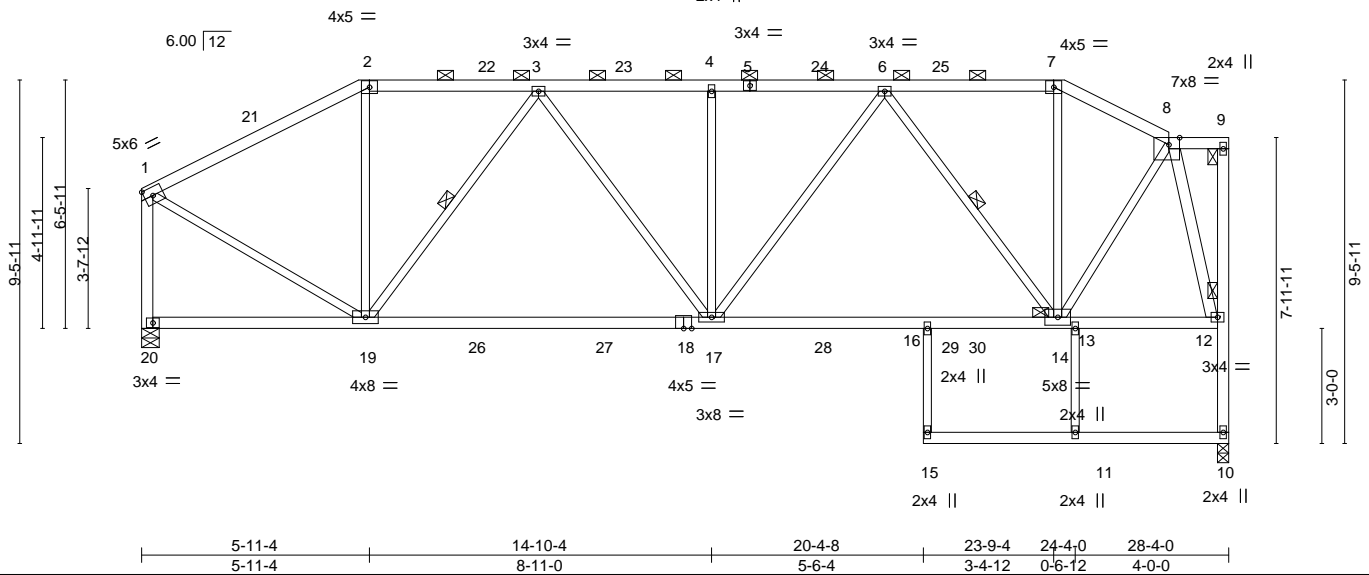
KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:07 2022 Page 1

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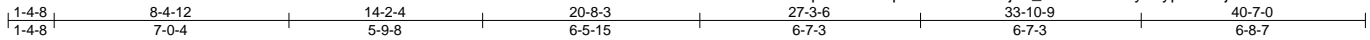


Job 220056-A	Truss C1	Truss Type Half Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896082
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:09 2022 Page 1

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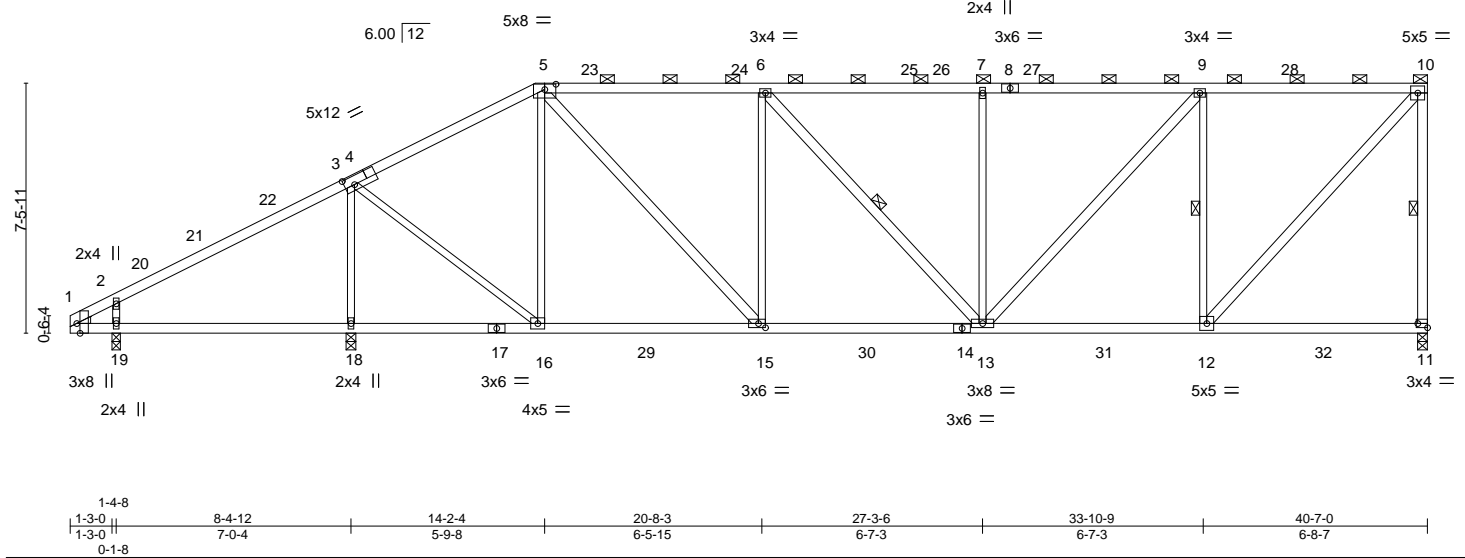


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [4:0-3-8,0-3-0], [5:0-4-0,0-1-15], [11:Edge,0-1-8], [15:0-2-8,0-1-8]									
LOADING (psf)		SPACING-	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.13 13-15	>999	240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.21 13-15	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.04 11	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
					Weight: 222 lb FT = 20%				

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 5-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (3-10-3 max.): 5-10.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.3 *Except*	WEBS	1 Row at midpt 10-11, 6-13, 9-12
	10-11,5-15,6-13,9-13,10-12: 2x4 SP No.1		
WEDGE			
Left: 2x3 SPF No.3			

REACTIONS. (size) 11=0-3-8, 19=0-3-0, 18=0-3-8
Max Horz 19=197(LC 15)
Max Uplift 19=32(LC 16)
Max Grav 11=1758(LC 38), 19=561(LC 39), 18=1722(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-386/64, 3-5=-1291/82, 5-6=-1873/84, 6-7=-1878/71, 7-9=-1878/71, 9-10=-1344/71, 10-11=-1625/51
BOT CHORD 18-19=-194/310, 16-18=-194/310, 15-16=-133/1170, 13-15=-99/1901, 12-13=-56/1341
WEBS 2-19=-462/151, 3-18=-1478/54, 3-16=0/1292, 5-16=-615/34, 5-15=0/1141, 6-15=-661/76, 7-13=-454/69, 9-13=-24/835, 9-12=-1191/107, 10-12=-19/1932

- 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=6.0psf; h=25ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 4-0-11, Interior(1) 4-0-11 to 14-2-4, Exterior(2R) 14-2-4 to 19-11-2, Interior(1) 19-11-2 to 40-5-4 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 19. This connection is for uplift only and does not consider lateral forces.
 - 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 23,2022

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



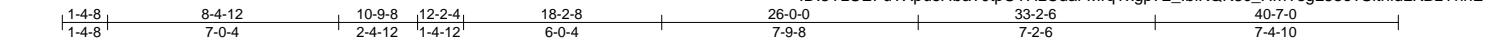
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss C2	Truss Type Half Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896083
Job Reference (optional)					

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:11 2022 Page 1

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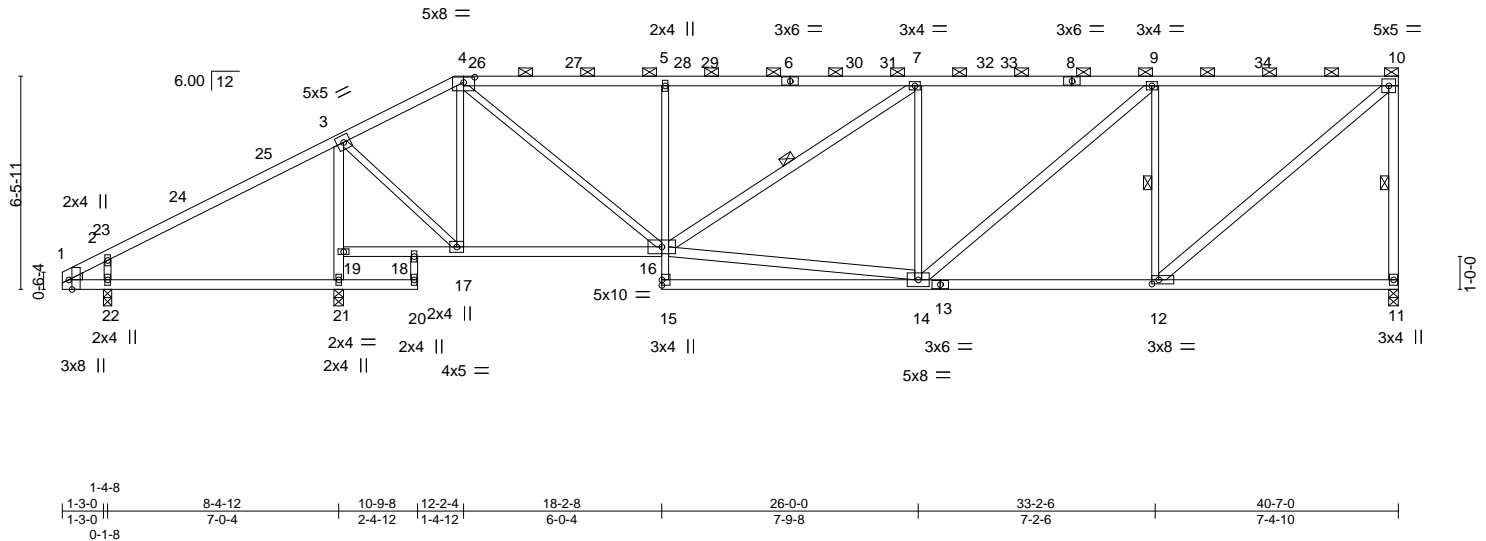


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [4:0-4-0,0-1-15], [12:0-2-8,0-1-8]					
LOADING (psf)		SPACING		CSI	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.80
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.56
TCDL	10.0	Rep Stress Incr	YES	WB	0.95
BCLL	0.0	Code	IRC2018/TPI2014	Matrix-S	
BCDL	10.0				
				DEFL.	
				in (loc)	L/d
				Vert(LL)	-0.12 5 >999 240
				Vert(CT)	-0.27 14-15 >999 180
				Horz(CT)	0.06 11 n/a n/a
					Weight: 223 lb FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 5-10-4 oc purlins, except end verticals, and 2-0-0 oc purlins (3-4-0 max.): 4-10.
BOT CHORD	2x4 SP No.1 *Except* 18-20,5-15: 2x3 SPF No.3	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.1 *Except* 2-22,3-17,4-17,4-16,7-14,9-12: 2x3 SPF No.3	WEBS	1 Row at midpt 10-11, 7-16, 9-12
WEDGE			
Left: 2x3 SPF No.3			
REACTIONS.	(size) 11=0-3-8, 22=0-3-0, 21=0-3-8 Max Horz 22=170(LC 15) Max Uplift 22=31(LC 16) Max Grav 11=1598(LC 34), 22=536(LC 35), 21=1679(LC 34)		

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-271/96, 3-4=-1039/73, 4-5=-2091/72, 5-7=-2085/72, 7-9=-2009/57, 9-10=-1498/58, 10-11=-1531/42
BOT CHORD	16-17=-99/923, 5-16=-677/94, 12-14=-36/1498
WEBS	2-22=-526/156, 19-21=-1501/95, 3-19=-1522/96, 3-17=0/1287, 4-17=-792/22, 4-16=0/1533, 14-16=-46/1934, 7-14=-535/103, 9-14=-3/675, 9-12=-1106/94, 10-12=0/1933

- 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=6.0psf; h=25ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 4-0-11, Interior(1) 4-0-11 to 12-2-4, Exterior(2R) 12-2-4 to 17-11-2, Interior(1) 17-11-2 to 40-5-4 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22. This connection is for uplift only and does not consider lateral forces.
 - 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 23,2022

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss C3	Truss Type Half Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896084
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:13 2022 Page 1
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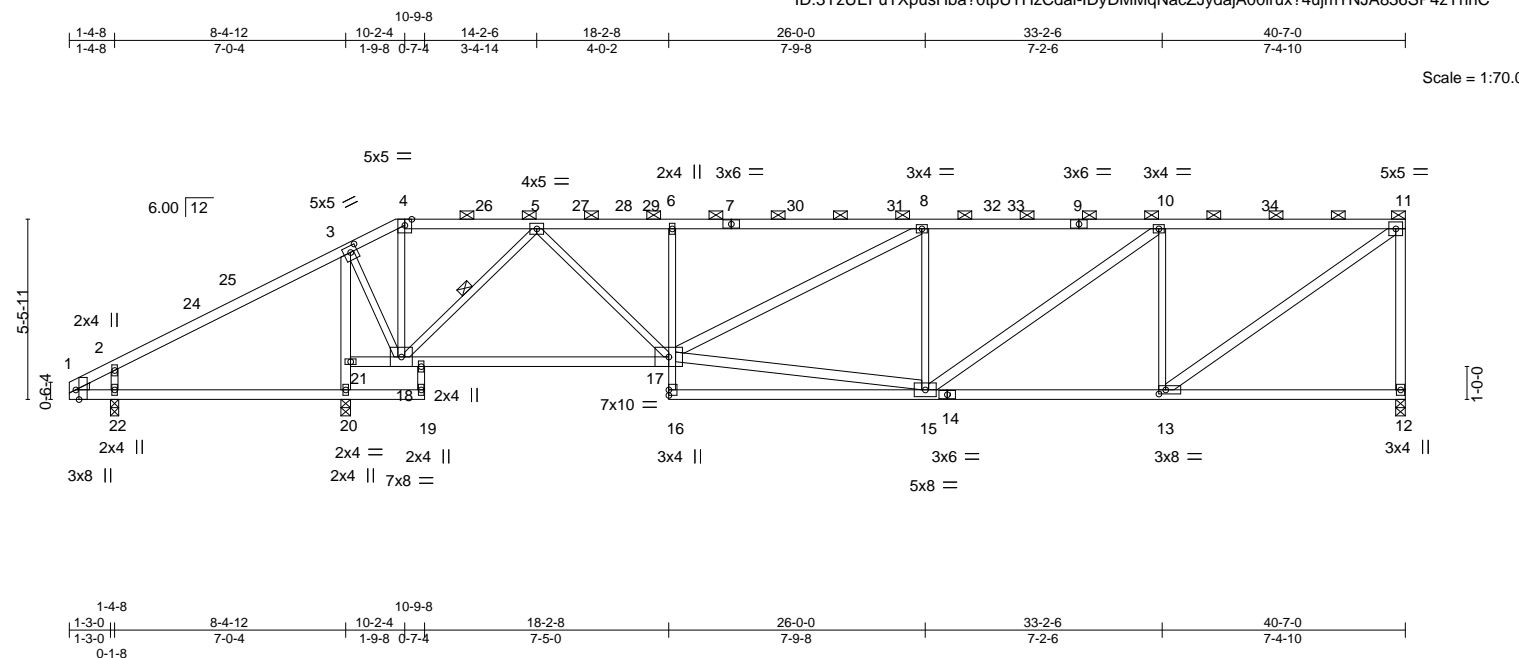


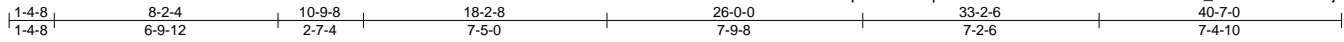
Plate Offsets (X,Y)-- [1:0-3-8,Edge], [3:0-2-8,0-2-4], [13:0-2-8,0-1-8]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		in	(loc)	l/defl	L/d	GRIP	
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.14 6 >999 240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.31 15-16 >999 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.06 12 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S				Weight: 217 lb	FT = 20%

Job 220056-A	Truss C4	Truss Type Half Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896085
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:14 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-nQWbZir?LvhAZn9vkkY_O5U9tI?6CorJNjr?xWzYhnB



Scale = 1:70.2

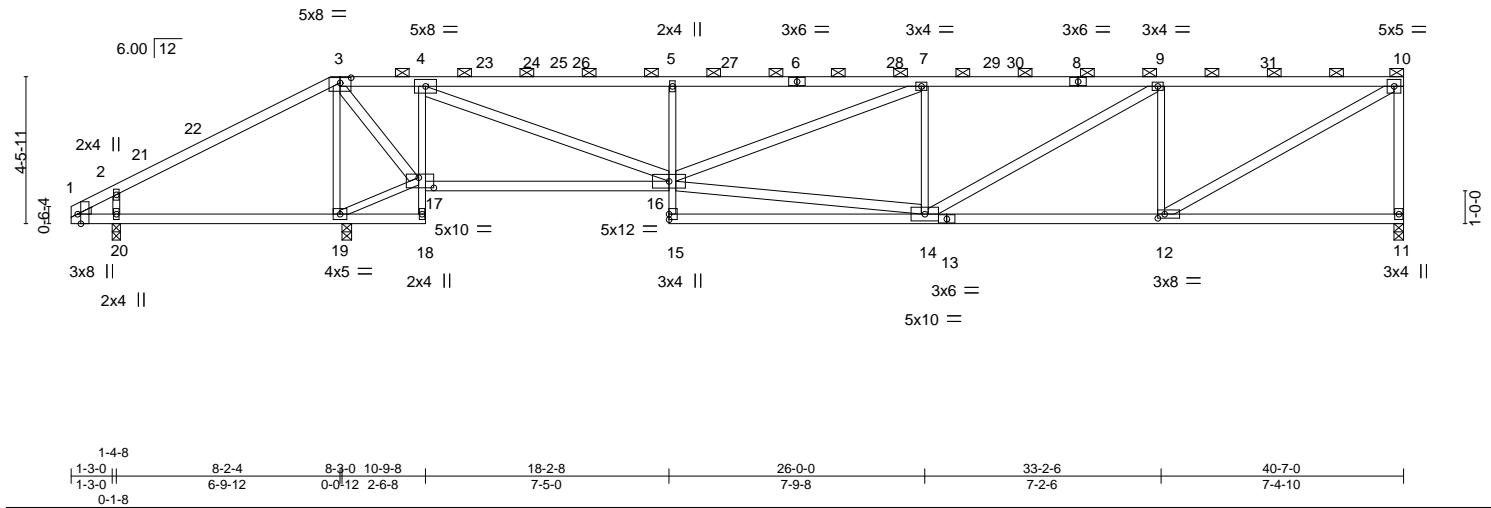


Plate Offsets (X,Y)--		[1:0-3-8,Edge], [3:0-4-0,0-1-15], [12:0-2-8,0-1-8], [17:0-5-8,0-3-12]						PLATES	GRIP
LOADING (psf)		SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	Vert(LL)	-0.21	5	>999	240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	Vert(CT)	-0.42	14-15	>921	180
TCDL	10.0	Rep Stress Incr	YES	WB	Horz(CT)	0.09	11	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
									Weight: 211 lb FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-10.
BOT CHORD	2x4 SP No.1 *Except* 4-18,5-15: 2x3 SPF No.3	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	2x4 SP No.1 *Except* 3-19,17-19,7-14,9-12,2-20: 2x3 SPF No.3		
WEDGE			
Left: 2x3 SPF No.3			

REACTIONS. (size) 11=0-3-8, 19=0-3-8, 20=0-3-0
Max Horz 20=115(LC 15)
Max Uplift 20=45(LC 16)
Max Grav 11=1522(LC 34), 19=2058(LC 34), 20=486(LC 35)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-65/414, 2-3=-153/454, 3-4=-759/92, 4-5=-3032/37, 5-7=-3001/40, 7-9=-2684/21, 9-10=-2082/26, 10-11=-1453/43
BOT CHORD 1-20=-358/29, 19-20=-386/40, 4-17=-1474/61, 16-17=-140/787, 5-16=-596/87, 12-14=-23/2082
WEBS 3-19=-1706/56, 17-19=-310/123, 3-17=-18/1755, 4-16=0/2433, 14-16=-23/2578, 7-16=-68/343, 7-14=-538/100, 9-14=-2/770, 9-12=-1029/91, 10-12=0/2350, 2-20=-562/160

- 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=6.0psf; h=25ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 4-0-11, Interior(1) 4-0-11 to 8-2-4, Exterior(2R) 8-2-4 to 13-11-2, Interior(1) 13-11-2 to 40-5-4 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.
 - 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 23,2022

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 220056-A	Truss C5	Truss Type Half Hip Girder	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896086
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:17 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-B_CkCjuueq3lQFuUPs5h0k5g?V25PAUI3h4fYrzYhn8

1-4-8	6-2-4	8-4-12	10-9-8	14-6-0	18-2-8	22-3-8	26-9-15	31-4-6	35-10-13	40-7-0
1-4-8	4-9-12	2-2-8	2-4-12	3-8-8	3-8-8	4-1-0	4-6-7	4-6-7	4-6-7	4-8-3

Scale = 1:74.6

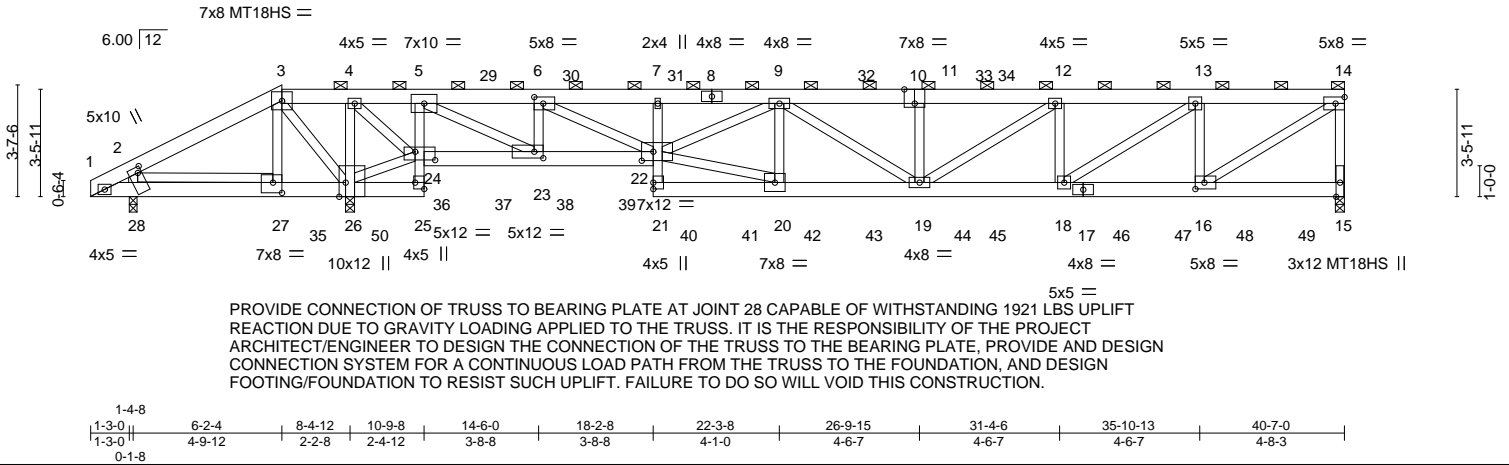


Plate Offsets (X,Y)-- [2:0-2-4,0-1-8], [6:0-3-8,0-2-8], [11:0-4-0,Edge], [16:0-3-8,0-2-8], [22:0-4-8,0-3-8], [23:0-3-8,0-2-8], [24:0-7-12,0-3-4], [25:Edge,0-3-8], [26:Edge,0-2-8], [27:0-3-8,0-4-0]

LOADING (psf)	SPACING-	CS.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.86	in (loc) l/defl L/d	MT20	244/190
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.32 19-20 >999 240	MT18HS	244/190
TCDL 10.0	Lumber DOL 1.15	WB 0.93	Vert(CT) -0.52 19-20 >739 180		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.06 15 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 300 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
5-25,7-21: 2x4 SP No.1
WEBS 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-0 max.): 3-14.
BOT CHORD Rigid ceiling directly applied or 3-9-0 oc bracing.

REACTIONS.

(size) 15=0-3-8, 28=0-3-0, 26=0-3-8
Max Horz 28=83(LC 11)
Max Uplift 15=-149(LC 12), 28=-1921(LC 30), 26=-395(LC 12)
Max Grav 15=2590(LC 30), 28=147(LC 9), 26=6543(LC 30)

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

TOP CHORD 1-2=-55/581, 2-3=-206/3637, 3-4=-273/5205, 4-5=-224/4024, 5-6=-1004/75, 6-7=-4476/292, 7-9=-4413/289, 9-11=-5507/363, 11-12=-5507/363, 12-13=-5095/331, 13-14=-3312/221, 14-15=-2362/151
BOT CHORD 1-28=-535/45, 27-28=-535/56, 26-27=-3267/205, 5-24=-2921/189, 23-24=-3966/268, 22-23=-47/1004, 21-22=-6/263, 20-21=-32/547, 19-20=-272/4756, 18-19=-308/5095, 16-18=-208/3312, 25-26=-479/29
WEBS 2-28=-73/1729, 3-27=-44/885, 4-26=-1244/72, 24-26=-5171/326, 4-24=-77/1585, 5-23=-326/5610, 6-23=-2108/152, 6-22=-244/3918, 20-22=-249/4343, 9-22=-426/38, 9-20=-588/61, 9-19=-62/902, 11-19=-257/54, 12-19=-40/633, 12-18=-664/70, 13-18=-132/2142, 13-16=-1594/124, 14-16=-230/3916, 3-26=-3321/210, 2-27=-2723/174

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=6.0psf; h=25ft; B=45ft; L=41ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 26 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1921 lb uplift at joint 28.

Continued on page 2



March 23, 2022

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	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	C5	Half Hip Girder	1	1	150896086
Job Reference (optional)					

KC Truss & Panel Inc. (Urlich, MO), Urlich, MO - 64788,

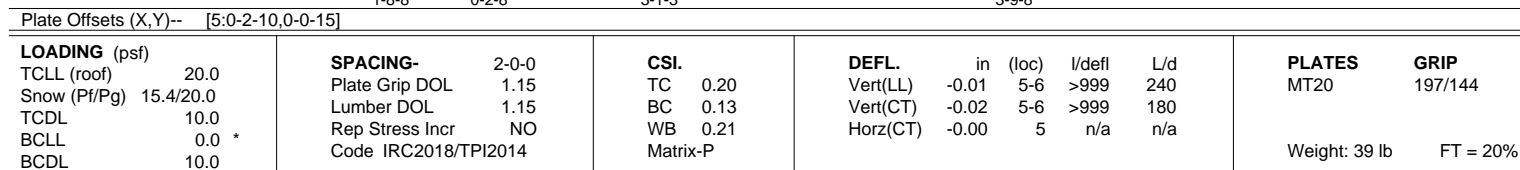
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:18 2022 Page 2
ID:3YzUEFuTXpusHba?0tpUTHzCdai-fBI6P3uWO8Bc2PSgzacwYxerkvOK8dkvLPd4HzYhn7

- NOTES-**
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 26. This connection is for uplift only and does not consider lateral forces.
 - 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 14) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
 - 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 275 lb down and 64 lb up at 6-2-4, 197 lb down and 34 lb up at 7-3-0, 197 lb down and 34 lb up at 9-3-0, 197 lb down and 32 lb up at 11-3-0, 197 lb down and 32 lb up at 13-3-0, 197 lb down and 32 lb up at 15-3-0, 197 lb down and 32 lb up at 17-3-0, 197 lb down and 34 lb up at 19-3-0, 197 lb down and 34 lb up at 21-3-0, 197 lb down and 34 lb up at 23-3-0, 197 lb down and 34 lb up at 25-3-0, 197 lb down and 34 lb up at 27-3-0, 197 lb down and 34 lb up at 29-3-0, 197 lb down and 34 lb up at 31-3-0, 197 lb down and 34 lb up at 33-3-0, 197 lb down and 34 lb up at 35-3-0, and 197 lb down and 34 lb up at 37-3-0, and 197 lb down and 34 lb up at 39-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf)
 - Vert: 1-3=-51, 3-14=-61, 1-25=-20, 22-24=-20, 15-21=-20
 - Concentrated Loads (lb)
 - Vert: 27=-275 18=-197 35=-197 36=-197 37=-197 38=-197 39=-197 40=-197 41=-197 42=-197 43=-197 44=-197 45=-197 46=-197 47=-197 48=-197 49=-197 50=-197

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:25 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzC dai-yXglT_Vll3cOTV1tYEZKQRCCkxWHYfxvw04qNzYhn0
1-10-15 5-0-2 8-9-10
1-10-15 3-1-3 3-9-8




REACTIONS. (size) 7=0-4-15, 5=0-1-8
 Max Horz 7=90(LC 11)
 Max Uplift 7=114(LC 12), 5=-35(LC 9)
 Max Grav 7=382(LC 17), 5=282(LC 17)

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

TOP CHORD	2-3=-282/64
WEBS	2-7=-374/39, 2-6=-11/346, 3-5=-275/78

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) "NAILED" indicates 3-10d skew 45 to 135 degrees (0.148" x 3") toe-nails per NDS guidelines.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).



LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 1-5=-20

Continued on page 2 March 23, 2022



March 23, 2022

Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	CJ1	Monopitch Girder	1	1	150896087
Job Reference (optional)					

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:26 2022 Page 2
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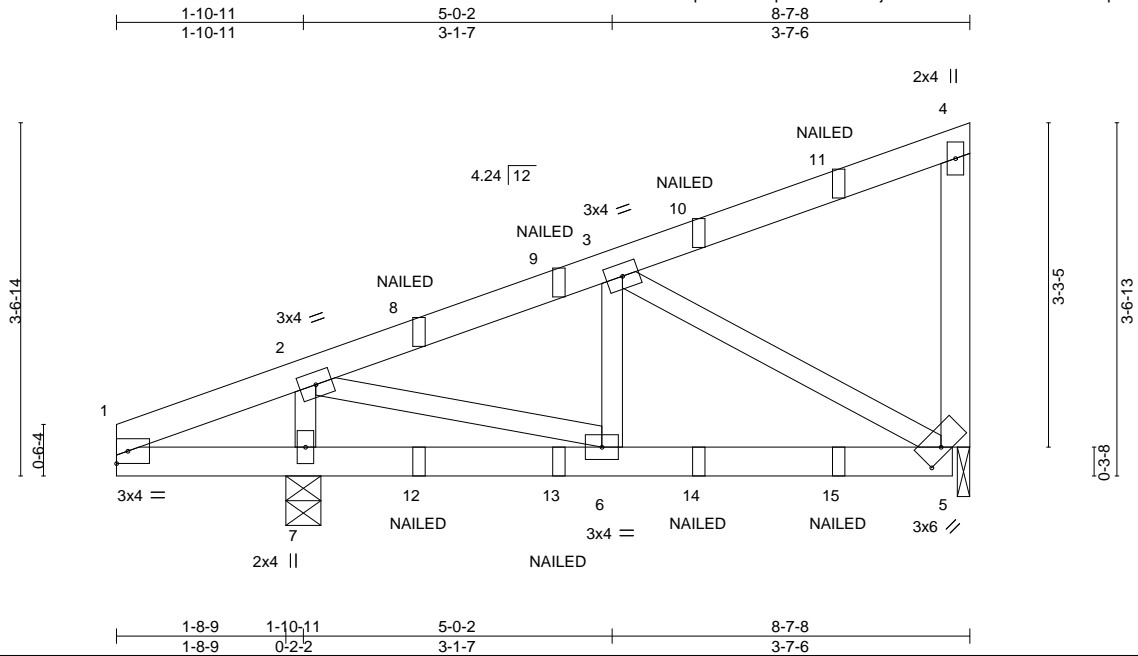
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 9=-37(F=-18, B=-18) 10=82(F=41, B=41) 11=1(F=0, B=0)

Job 220056-A	Truss CJ2	Truss Type Monopitch Girder	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896088
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KC Truss & Panel Inc. (Urich, MO),

Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:26 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-QJE75o?XWbBT?d4DRFlotdzMq8Hx0Pt47aleMqzYhn?



Scale = 1:23.3

Plate Offsets (X,Y)-- [5:0-2-9,0-1-0]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.01 5-6 >999	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.01 5-6 >999		
TCDL	10.0	Rep Stress Incr	NO	WB	0.22	Horz(CT)	-0.00 5 n/a n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P				Weight: 38 lb	FT = 20%
BCDL	10.0								

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3 *Except*
4-5: 2x4 SP No.1

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.

(size) 7=0-4-4, 5=0-1-8
Max Horz 7=88(LC 9)
Max Uplift 7=90(LC 12), 5=-36(LC 9)
Max Grav 7=364(LC 17), 5=302(LC 17)

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

TOP CHORD 2-3=-269/43
WEBS 2-7=-338/67, 2-6=-6/349, 3-5=-275/56

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.
- 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.
- "NAILED" indicates 3-10d skew 45 to 135 degrees (0.148" x 3") 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 1-5=-20



March 23, 2022

Continued on page 2

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	CJ2	Monopitch Girder	1	1	I50896088
Job Reference (optional)					

KC Truss & Panel Inc. (Urlich, MO),
Urlich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:27 2022 Page 2
ID:3YzUEFuTXpushHba?0tpUTHzCdai-uwoWI8?9HvJKdneP?zH1QrWXaXdAls7DMEVBvGzYhn_

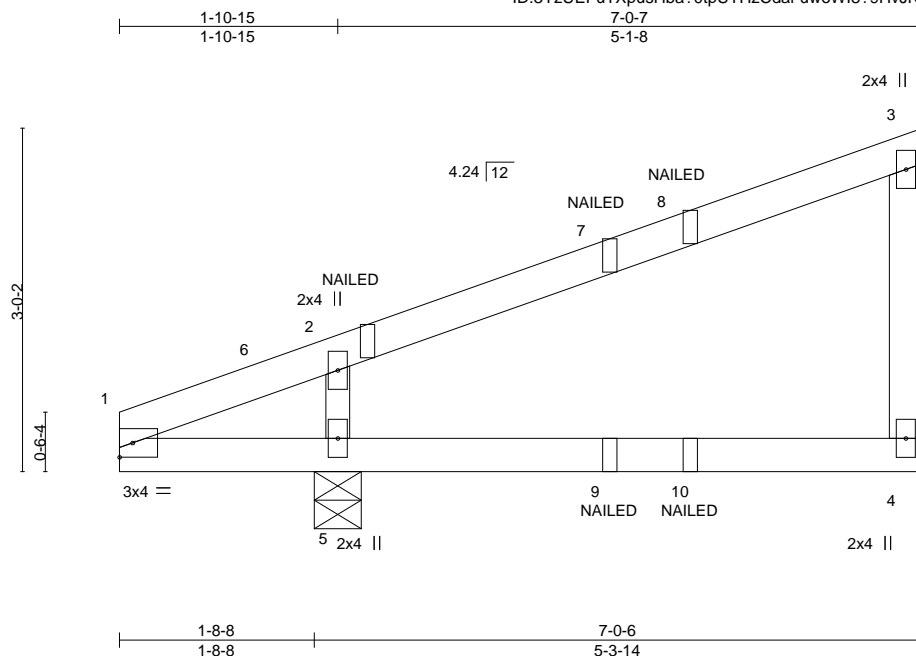
LOAD CASE(S) Standard
Concentrated Loads (lb)
Vert: 8=47(B) 10=-15(B) 11=-59(F) 12=54(B) 13=2(F) 14=0(B) 15=-10(F)

Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	CJ3	Monopitch Girder	2	1	150896089
Job Reference (optional)					

KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:27 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-owoWI8?9HvJKdneP?zH1QrWXMxcluqDMEVBvGzYhn_



Scale = 1:20.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	TC 0.29	Vert(LL)	-0.01	4-5	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	BC 0.15	Vert(CT)	-0.03	4-5	>999	180		
TCDL	10.0	WB 0.11	Horz(CT)	-0.00	4	n/a	n/a		
BCLL	0.0 *	Matrix-S							
BCDL	10.0								
								Weight: 26 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.1 *Except*
2-5: 2x3 SPF No.3

BRACING-

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

REACTIONS.

(size) 4=Mechanical, 5=0-4-15
Max Horz 5=73(LC 9)
Max Uplift 4=-5(LC 9), 5=-27(LC 12)
Max Grav 4=209(LC 16), 5=412(LC 16)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-341/69

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 5. This connection is for uplift only and does not consider lateral forces.
- 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) "NAILED" indicates 3-10d skew 45 to 135 degrees (0.148" x 3") toe-nails per NDS guidelines.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
Vert: 1-3=-51, 1-4=-20
Concentrated Loads (lb)
Vert: 10=1(B)



March 23, 2022

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



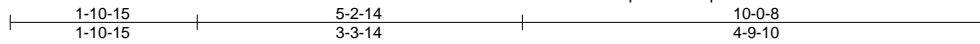
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss CJ4	Truss Type Monopitch Girder	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896090
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:28 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-M6MuWU0n2DRBFxDzgoGy23ZzxrKUKgNbuEkQizYhmz



Scale = 1:23.6

Plate Offsets (X,Y)-- [4:0-0-11,0-1-8], [5:Edge,0-3-6], [6:0-2-8,0-0-8]									
LOADING (psf)		SPACING-		CSI		DEFL.		PLATES	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.10 5-6 >940 240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.23 5-6 >406 180		
TCDL	10.0	Rep Stress Incr	NO	WB	0.13	Horz(CT)	0.06 5 n/a n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0							Weight: 42 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x6 SP No.1 *Except*
2-8: 2x3 SPF No.3

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, Except: 6-0-0 oc bracing: 6-7.

REACTIONS.

(size) 8=0-4-15, 5=0-1-8
Max Horz 8=89(LC 9)
Max Uplift 8=22(LC 12), 5=5(LC 9)
Max Grav 8=504(LC 2), 5=400(LC 17)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=422/61

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 5. This connection is for uplift only and does not consider lateral forces.
- 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.
- "NAILED" indicates 3-10d skew 45 to 135 degrees (0.148" x 3") 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 + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-51, 1-7=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 10=-93(F=-47, B=-47) 11=3(F=2, B=2) 13=-52(F=-26, B=-26)



March 23, 2022

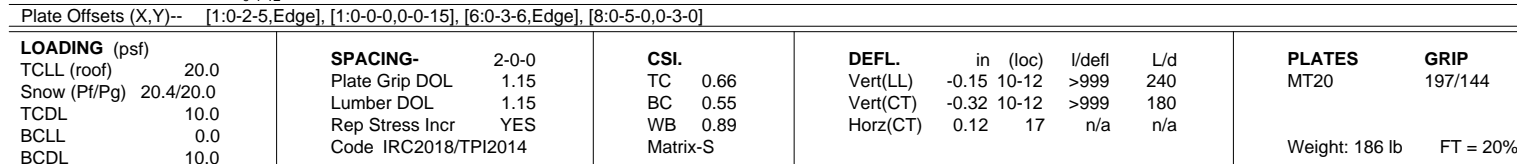
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:30 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdaI-JVUewA22aqivUFN_g5qk1T8yjlY7y3Qg2CjrUzbYhmX
1-4-12 9-1-10 16-9-0 20-5-12 26-0-8 32-2-4
1-4-12 7-8-13 7-7-7 3-8-12 5-6-12 6-1-12
Scale = 1:67.



BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 4-2-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-9-2 max.): 6-8.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 3-12, 6-10

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

TOP CHORD	1-2=-345/0, 2-3=-1840/10, 3-5=-1369/62, 5-6=-1304/60, 6-7=-959/15, 7-8=-956/14
BOT CHORD	1-15=0/364, 14-15=-146/411, 12-14=-114/1556, 10-12=-70/1319
WEBS	2-15=-1154/132, 2-14=0/1200, 3-12=-548/64, 5-12=0/806, 6-12=-520/51, 6-10=-580/53, 7-10=-594/94, 8-10=-9/1336, 8-17=-1272/11

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=6.0psf; h=25ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-2-10, Interior(1) 3-2-10 to 16-9-0, Exterior(2R) 16-9-0 to 19-11-10, Interior(1) 19-11-10 to 31-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 17.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



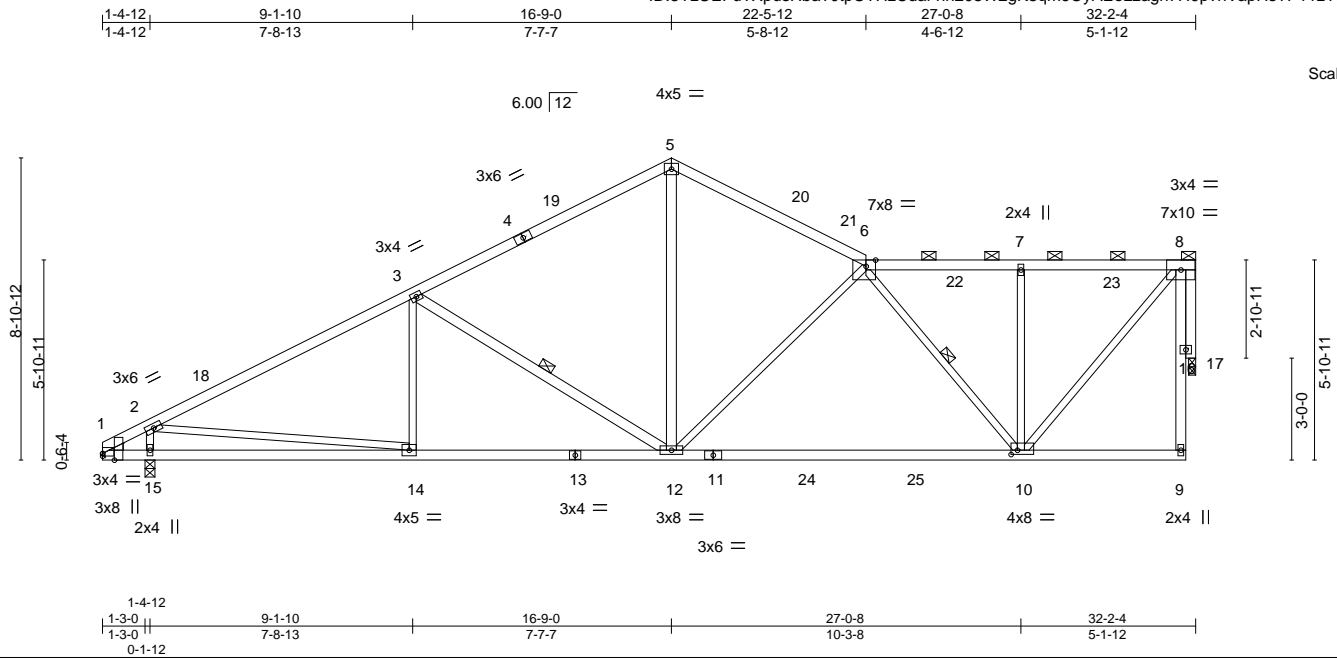
March 23.2022

Job 220056-A	Truss D2	Truss Type Roof Special	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896092
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:31 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-nh208W2gK8qm6OyAEoLzagh7H9pvhVapHsTP11zYhmw



Scale = 1:67.8

Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-15], [6:0-3-6,Edge], [10:0-2-4,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.67	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.84	Vert(LL) -0.35 10-12 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.95	Vert(CT) -0.61 10-12 >605 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.11 17 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 169 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3 *Except*
8-9,3-12,5-12,8-16: 2x4 SP No.1
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except end verticals, and 2-0-0 oc purlins (5-9-6 max.): 6-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 6-10

REACTIONS.

(size) 15=0-3-8, 17=0-2-8
Max Horz 15=141(LC 15)
Max Grav 15=1465(LC 28), 17=1320(LC 28)

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

TOP CHORD 1-2=-430/0, 2-3=-1989/19, 3-5=-1486/69, 5-6=-1475/61, 6-7=-1089/6, 7-8=-1087/5
BOT CHORD 1-15=0/430, 14-15=-123/501, 12-14=-100/1761, 10-12=-64/1558
WEBS 2-15=-1151/138, 2-14=0/1277, 3-12=-566/65, 5-12=0/940, 6-12=-490/55, 6-10=-732/64, 7-10=-489/77, 8-10=0/1560, 8-17=-1330/7

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=6.0psf; h=25ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-2-10, Interior(1) 3-2-10 to 16-9-0, Exterior(2R) 16-9-0 to 19-11-10, Interior(1) 19-11-10 to 31-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 17.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23, 2022

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 220056-A	Truss D3	Truss Type Roof Special	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896093
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:33 2022 Page 1
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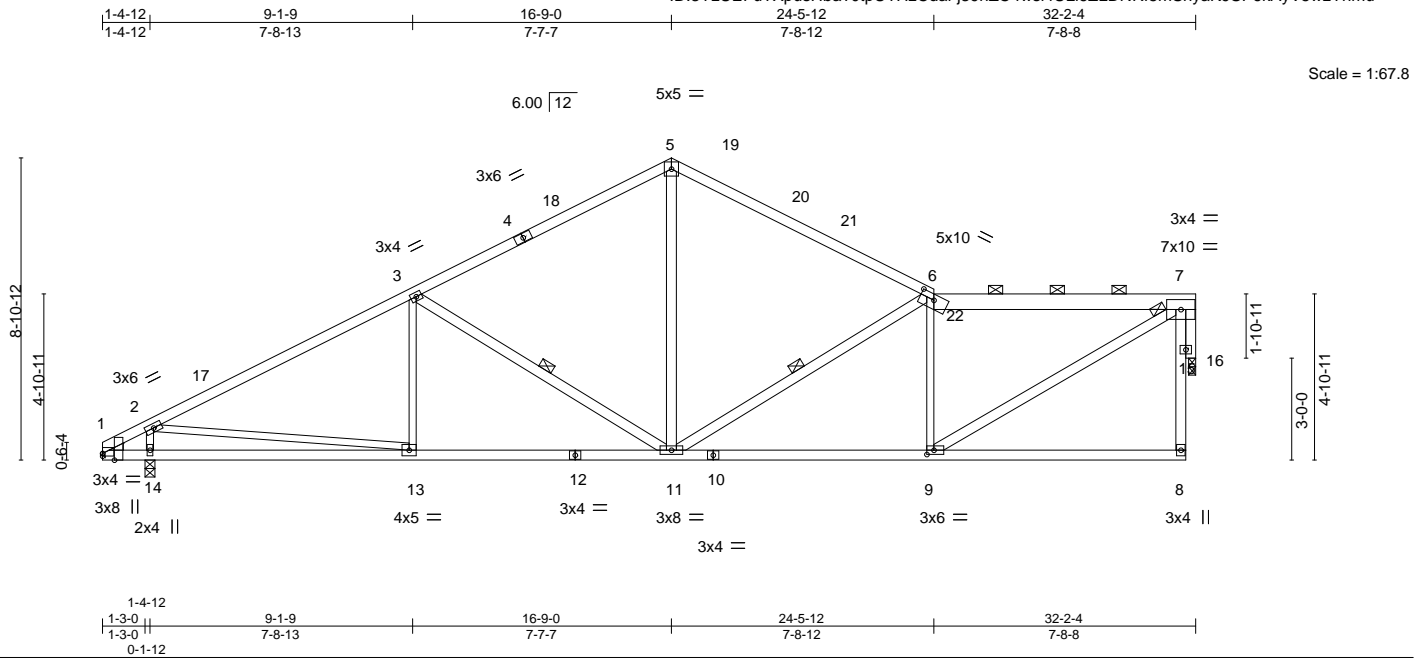


Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [6:0-5-0,0-2-0], [9:0-2-8,0-1-8]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc) l/defl L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.08 11-13 >999 240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.19 11-13 >999 180
TCDL	10.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.08 16 n/a n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S			
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						Weight: 180 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1 *Except* 5-6: 2x4 SP 2400F 2.0E, 6-7: 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 4-2-15 oc purlins, except end verticals, and 2-0-0 oc purlins (5-7-15 max.): 6-7.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.1 *Except* 2-14,2-13,3-13,6-9: 2x3 SPF No.3	WEBS	1 Row at midpt 3-11, 6-11
WEDGE			
Left: 2x3 SPF No.3			

REACTIONS. (size) 14=0-3-8, 16=0-2-8
Max Horz 14=148(LC 15)
Max Grav 14=1342(LC 2), 16=1198(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-345/0, 2-3=-1840/23, 3-5=-1367/83, 5-6=-1371/70, 6-7=-1596/21
BOT CHORD 1-14=0/366, 13-14=-105/421, 11-13=-79/1555, 9-11=-33/1577
WEBS 2-14=-1160/137, 2-13=0/1197, 3-11=-554/55, 5-11=0/710, 6-11=-564/31, 6-9=-763/108, 7-9=-17/1744, 7-16=-1226/3

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=6.0psf; h=25ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-2-10, Interior(1) 3-2-10 to 16-9-0, Exterior(2R) 16-9-0 to 19-11-10, Interior(1) 19-11-10 to 31-9-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23,2022

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



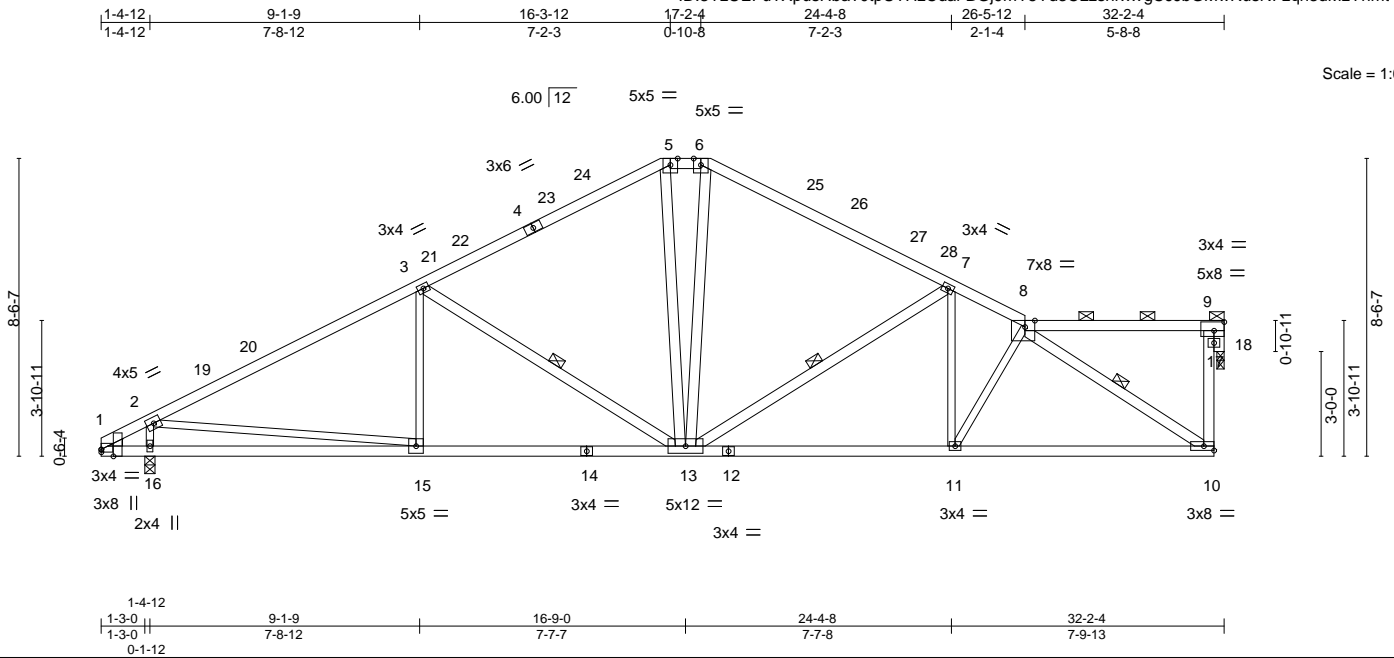
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss D4	Truss Type Roof Special	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896094
Job Reference (optional)					

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:34 2022 Page 1

ID:3YzUEFuTXpusHba70tpUTHzCdai-BGj9mY5Yd3CLzshlvxvgCJJBGMwRusNFzqh3dMzYhmt



KC Truss & Panel Inc. (Ulrich, MO), Ulrich, MO - 64788, ID:3YzUEFuTXpusHba?0tpUTHzCdai-7ervBD6o9gS2CAq81Mx8HkOyTAdHMm0YR8AAIEzYhm

Scale = 1:61.0

Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [8:0-3-6,Edge], [9:Edge,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.		PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.71	in (loc) l/defl L/d		MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.44	Vert(LL) -0.09 13-15 >999 240			
TCDL 10.0	Lumber DOL 1.15	WB 0.94	Vert(CT) -0.20 13-15 >999 180			
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.06 18 n/a n/a			
BCDL 10.0	Code IRC2018/TPI2014				Weight: 164 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3 *Except*
WEDGE Left: 2x3 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-3 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-9 max.): 5-6, 8-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-13, 7-13

REACTIONS. (size) 16=0-3-8, 18=0-1-8
Max Horz 16=98(LC 15)
Max Grav 16=1546(LC 41), 18=1287(LC 41)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-475/0, 2-3=-2157/46, 3-5=-1559/103, 5-6=-1418/97, 6-7=-1556/102, 7-8=-1979/44,
10-17=0/1235, 9-17=0/1235
BOT CHORD 1-16=0/533, 15-16=-49/542, 13-15=-39/1805, 11-13=-12/1720, 10-11=-37/1550
WEBS 2-16=-1381/152, 2-15=0/1281, 3-13=-611/34, 5-13=0/414, 6-13=0/375, 7-13=-497/20,
8-10=-1771/49, 9-18=-1311/9

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=6.0psf; h=25ft; B=45ft; L=32ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-2-6, Interior(1) 3-2-6 to 14-3-12, Exterior(2R) 14-3-12 to 17-6-2, Interior(1) 17-6-2 to 19-2-4, Exterior(2R) 19-2-4 to 22-4-10, Interior(1) 22-4-10 to 31-6-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
4) Unbalanced snow loads have been considered for this design.
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 18 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 18.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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MAR 23 2022

STATE OF MISSOURI
SCOTT M. SEVIER
PROFESSIONAL ENGINEER
PE-2001018807

MiTek
16023 Swingle Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	D6	Roof Special	1	1	I50896096
Job Reference (optional)					

KC Truss & Panel Inc. (Urlich, MO), Urlich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:37 2022 Page 2
ID:3YzUEFuTXpusHba?0tpUTHzCdai-brPIOZ7Rw_avqJPKa3SNqxw7hZwL5D5ifowjEhzYhmq

NOTES-

11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Job 220056-A	Truss D7	Truss Type Roof Special	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896097
Job Reference (optional)					

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:39 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-YDX2pF9hSbqd3dZjiUUrVM0V5NbZ7S_76PqJZzYhmo

1-4-12	4-9-0	10-3-12	15-9-12	21-3-12	22-3-0	28-9-0	32-1-4	33-6-0
1-4-12	3-4-4	5-6-12	5-6-0	5-6-0	0-11-4	6-6-0	3-4-4	1-4-12

Scale = 1:58.0

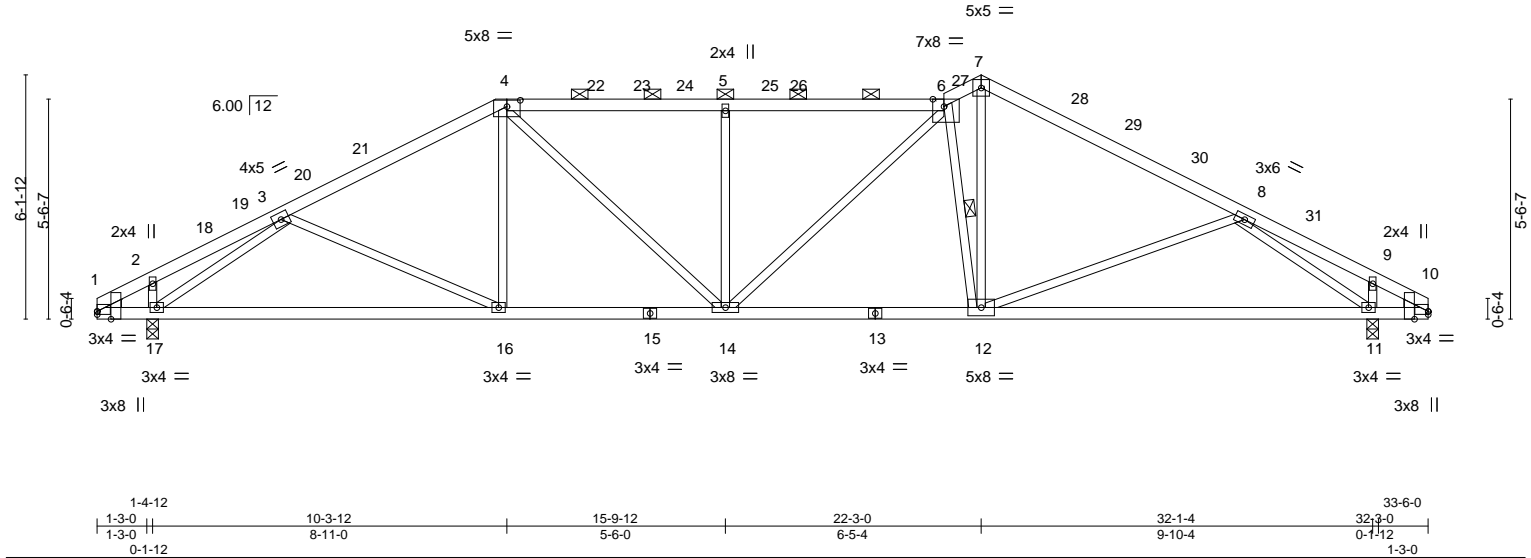


Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [4:0-4-0,0-1-15], [6:0-3-6,Edge], [10:0-0-0,0-0-15], [10:0-2-5,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.62	Vert(LL)	-0.16 11-12	>999	240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.35 11-12	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.06 11	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
					Weight: 152 lb FT = 20%				

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 4-0-6 oc purlins, except
BOT CHORD	2x4 SP No.1		2-0-0 oc purlins (4-0-1 max.): 4-6.
WEBS	2x3 SPF No.3	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE		WEBS	1 Row at midpt 6-12
Left: 2x3 SPF No.3 , Right: 2x3 SPF No.3			

REACTIONS. (size) 17=0-3-8, 11=0-3-8
Max Horz 17=84(LC 15)
Max Grav 17=1370(LC 41), 11=1340(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-313/0, 2-3=-304/0, 3-4=-1731/59, 4-5=-1921/87, 5-6=-1917/85, 6-7=-1630/71,
7-8=-1702/57, 8-9=-364/0, 9-10=-387/0
BOT CHORD 1-17=0/259, 16-17=-10/1396, 14-16=0/1495, 12-14=0/1635, 11-12=-13/1411,
10-11=0/315
WEBS 3-17=-1572/148, 3-16=-97/251, 4-14=-21/587, 5-14=-586/77, 6-14=-18/392,
6-12=-1304/53, 7-12=0/1389, 8-11=-1574/196

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-4-3, Interior(1) 3-4-3 to 10-3-12, Exterior(2R) 10-3-12 to 13-8-0, Interior(1) 13-8-0 to 22-3-0, Exterior(2R) 22-3-0 to 25-7-4, Interior(1) 25-7-4 to 33-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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 23,2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss D8	Truss Type Roof Special	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896098
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:41 2022 Page 1
ID:3YzUEFuTXpushHba?0tpUTHzCdai-UceoExAx_C4LJxj5pvXJ_n5qkBG61iHaQuXNSzYhmm

1-4-12	8-3-12	13-9-12	19-3-12	22-3-0	28-9-0	32-1-4	33-6-0
1-4-12	6-11-0	5-6-0	5-6-0	2-11-4	6-6-0	3-4-4	1-4-12

Scale = 1:58.0

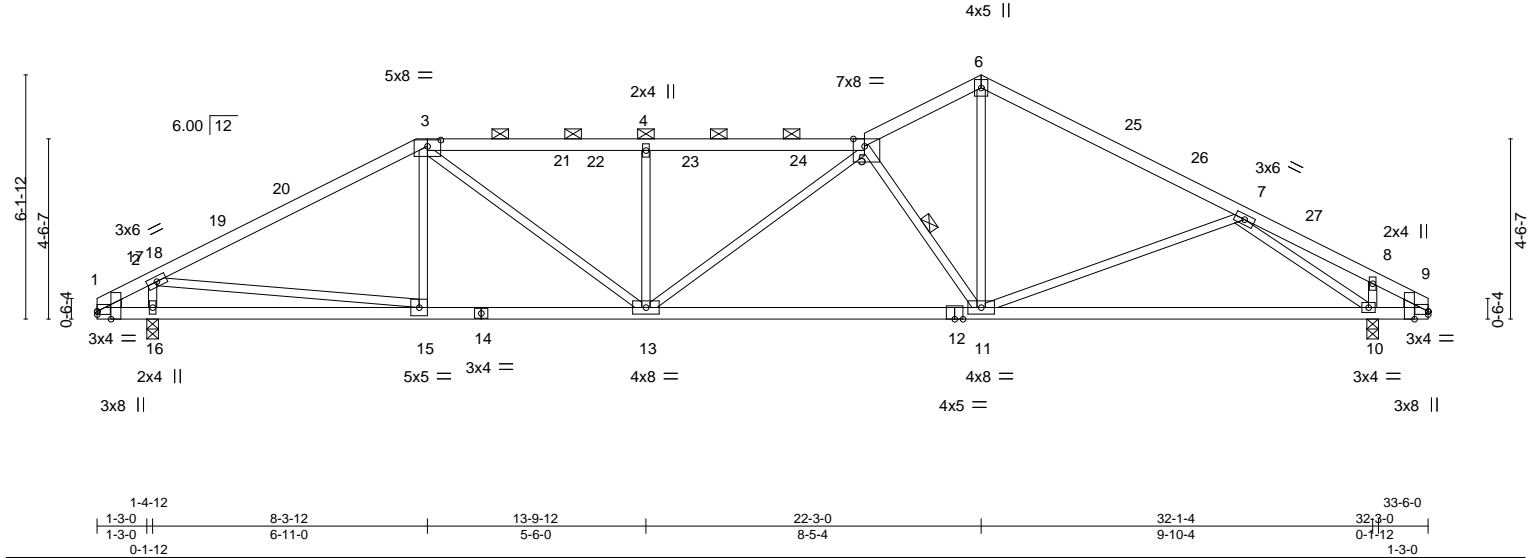


Plate Offsets (X,Y)--		[1:0-2-5,Edge], [1:0-0-0,0-15], [3:0-4-0,0-1-15], [5:0-3-6,Edge], [9:0-0-0,0-0-15], [9:0-2-5,Edge]	
LOADING (psf)		SPACING-	2-0-0
TCLL (roof)	20.0	Plate Grip DOL	1.15
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15
TCDL	10.0	Rep Stress Incr	YES
BCLL	0.0 *	Code	IRC2018/TPI2014
BCDL	10.0		
CSL		DEFL.	
TC	0.68	in (loc)	I/defl L/d
BC	0.66	Vert(LL)	-0.15 10-11 >999 240
WB	0.91	Vert(CT)	-0.33 10-11 >999 180
Matrix-S		Horz(CT)	0.06 10 n/a n/a
		PLATES	GRIP
		MT20	197/144
		Weight: 146 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-9-3 oc purlins, except
BOT CHORD 2x4 SP No.1	2-0-0 oc purlins (3-7-10 max.): 3-5.
WEBS 2x3 SPF No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEDGE	WEBS 1 Row at midpt 5-11
Left: 2x3 SPF No.3 , Right: 2x3 SPF No.3	

REACTIONS. (size) 16=0-3-8, 10=0-3-8
Max Horz 16=83(LC 14)
Max Grav 16=1340(LC 2), 10=1340(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-382/0, 2-3=-1820/48, 3-4=-2298/67, 4-5=-2298/67, 5-6=-1650/70, 6-7=-1702/52,
7-8=-340/0, 8-9=-362/0
BOT CHORD 1-16=0/437, 15-16=-15/462, 13-15=0/1567, 11-13=0/2108, 10-11=-12/1418, 9-10=0/294
WEBS 2-16=-1195/146, 2-15=0/1327, 3-13=-4/924, 4-13=-609/76, 5-13=-43/286,
5-11=-1313/75, 6-11=0/1217, 7-10=-1600/189

- 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=6.0psf; h=25ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-4-3, Interior(1) 3-4-3 to 8-3-12, Exterior(2R) 8-3-12 to 11-8-0, Interior(1) 11-8-0 to 22-3-0, Exterior(2R) 22-3-0 to 25-7-4, Interior(1) 25-7-4 to 33-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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 23, 2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss D9	Truss Type Roof Special Girder	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896099
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:43 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-Q?mZfcCCWqK3YEtUxKZn3CABI_wkV0Fa2kN1SLzYhmk

1-4-12	6-3-12	11-9-12	17-3-12	22-3-0	27-0-9	32-1-4	33-6-0
1-4-12	4-11-0	5-6-0	5-6-0	4-11-4	4-9-9	5-0-11	1-4-12

Scale = 1:57.7

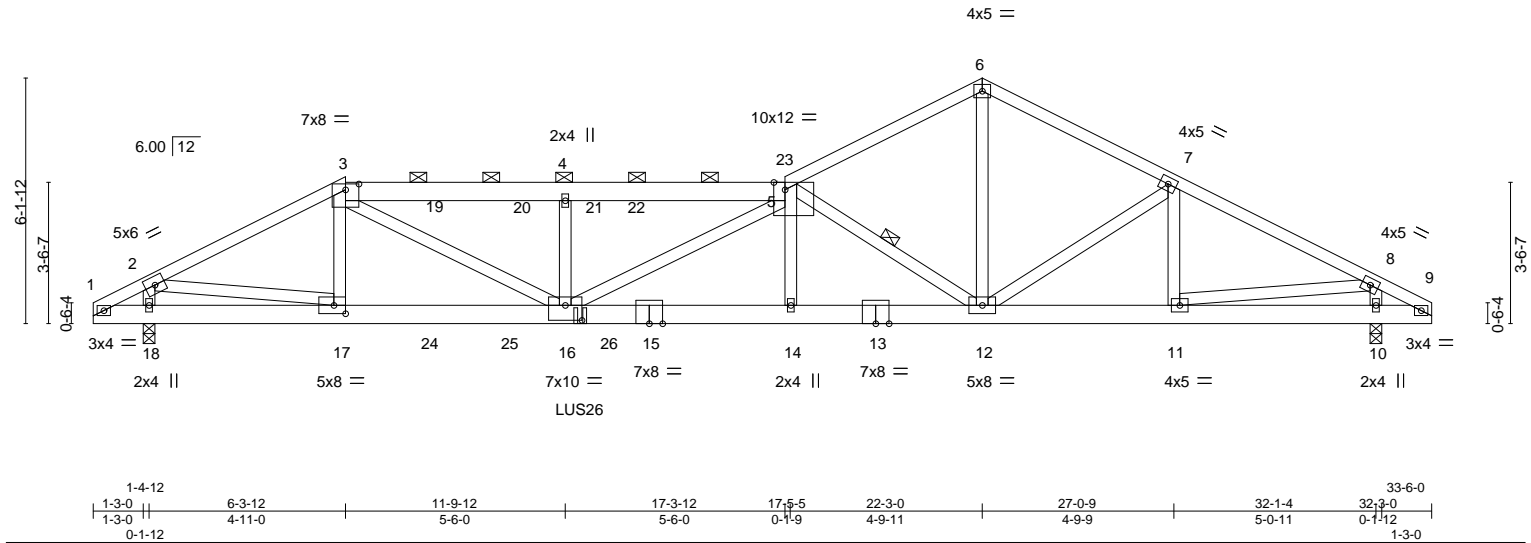


Plate Offsets (X,Y)-- [3:0-4-0,0-1-12], [5:0-3-6,Edge], [16:0-5-0,0-4-8], [17:0-3-8,0-2-8]							
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.23 14-16 >999 240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.43 14-16 >852 180
TCDL	10.0	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.08 10 n/a n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S			
BCDL	10.0						
						PLATES	GRIP
						MT20	244/190
						Weight: 216 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1 *Except* 3-5: 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 2-11-1 oc purlins, except 2-0-0 oc purlins (2-10-15 max.): 3-5.
BOT CHORD	2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.1	WEBS	1 Row at midpt 5-12

REACTIONS. (size) 18=0-3-8, 10=0-3-8
Max Horz 18=82(LC 10)
Max Grav 18=2496(LC 37), 10=1759(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-426/0, 2-3=-3904/0, 3-4=-5867/0, 4-5=-5873/0, 5-6=-2478/0, 6-7=-2480/0, 7-8=-2485/0, 8-9=-356/0
BOT CHORD 1-18=0/416, 17-18=0/416, 16-17=0/3482, 14-16=0/4829, 12-14=0/4835, 11-12=0/2160, 10-11=0/334, 9-10=0/334
WEBS 2-18=-2250/11, 2-17=0/3158, 3-16=0/2748, 4-16=-817/54, 5-16=-110/1203, 5-12=-3331/0, 6-12=0/1898, 7-11=-297/36, 8-11=0/1866, 8-10=-1486/0

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=6.0psf; h=25ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 12-2-4 from the left end to connect truss(es) to front face of bottom chord.
- Fill all nail holes where hanger is in contact with lumber.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 457 lb down and 96 lb up at 6-3-12, and 203 lb down and 33 lb up at 8-4-8, and 203 lb down and 33 lb up at 10-4-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2

LOAD CASE(S) Standard

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

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



March 23, 2022



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	D9	Roof Special Girder	1	1	I50896099
Job Reference (optional)					

KC Truss & Panel Inc. (Urlich, MO), Urlich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:43 2022 Page 2

ID:3YzUEFuTXpushHba?0tpUTHzCdai-Q?mZfcCCWqK3YEtUxKZn3CABI_wkV0Fa2kN1SLzYhmk

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-51, 3-5=-61, 5-6=-51, 6-9=-51, 1-9=-20

Concentrated Loads (lb)

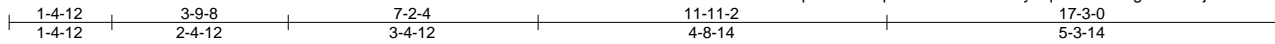
Vert: 17=-457 24=-203 25=-203 26=-802(F)

Job 220056-A	Truss F1	Truss Type Half Hip Girder	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896100
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:44 2022 Page 1

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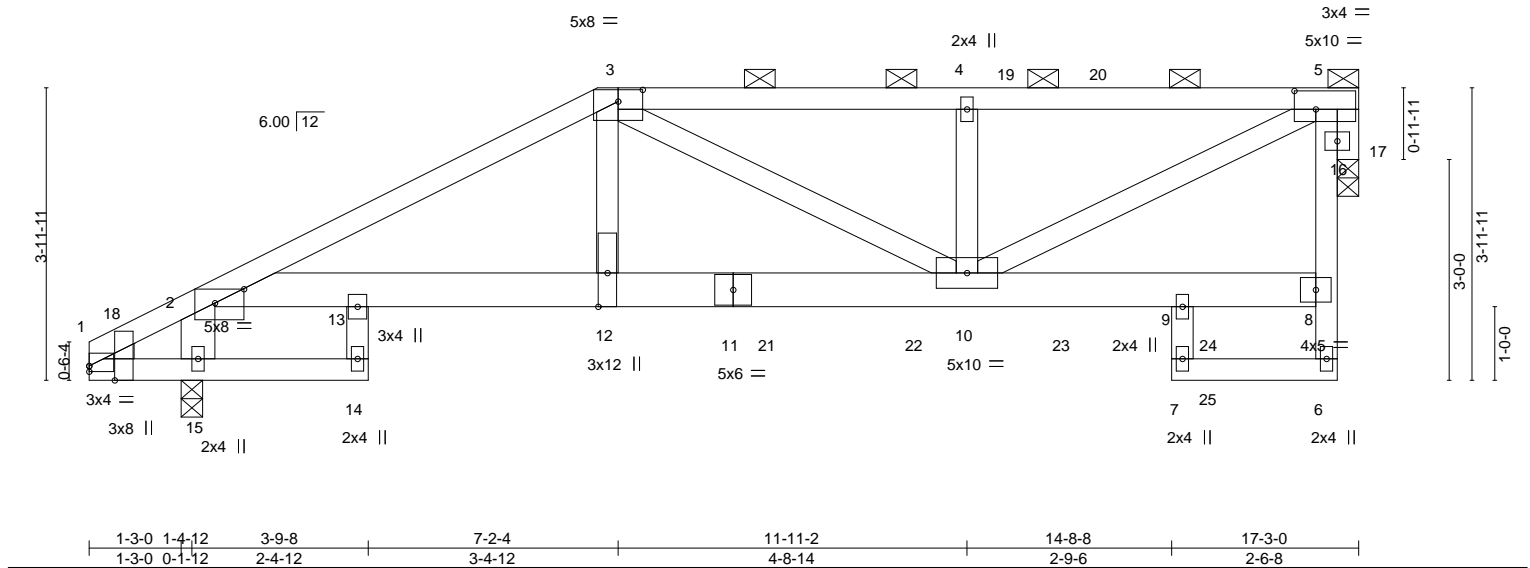


Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [2:0-4-12,0-2-4], [3:0-4-0,0-1-15], [5:0-3-8,0-3-0]													
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) L/defl L/d		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.09	10-12	>999	240		MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.14	10-12	>999	180			
TCDL	10.0	Rep Stress Incr	NO	WB	0.41	Horz(CT)	0.05	17	n/a	n/a			
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S								Weight: 103 lb	FT = 20%
BCDL	10.0												

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 3-2-8 oc purlins, except end verticals, and 2-0-0 oc purlins (3-7-10 max.): 3-5.
BOT CHORD	2x4 SP No.1 *Except* 8-11,2-11: 2x6 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 6-7.
WEBS	2x4 SP No.1 *Except* 2-15: 2x6 SP No.1		
WEDGE			
Left: 2x3 SPF No.3			

REACTIONS. (size) 15=0-3-8, 17=0-3-8
Max Horz 15=90(LC 9)
Max Uplift 15=64(LC 12), 17=-118(LC 9)
Max Grav 15=1529(LC 32), 17=1645(LC 31)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2809/178, 3-4=-2497/175, 4-5=-2494/174, 8-16=-0/300, 5-16=-0/300
BOT CHORD 2-13=-151/2440, 12-13=-199/2490, 10-12=-198/2438, 9-10=-54/316, 8-9=-59/340
WEBS 2-15=-1468/86, 3-12=-23/980, 4-10=-509/99, 5-10=-173/2466, 5-17=-1769/129

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 17. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 620 lb down and 64 lb up at 7-2-4, 247 lb down and 31 lb up at 9-3-0, 247 lb down and 31 lb up at 11-3-0, and 247 lb down and 31 lb up at 13-3-0, and 247 lb up at 15-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



March 23, 2022

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	F1	Half Hip Girder	1	1	I50896100
Job Reference (optional)					

LOAD CASE(S) Standard
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-51, 3-5=-61, 1-14=-20, 9-13=-20, 6-7=-20
Concentrated Loads (lb)
Vert: 12=-620 21=-247 22=-247 23=-247 24=-247

Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	F2	Half Hip	1	1	150896101
Job Reference (optional)					

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:47 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-Jm04V_FIZ2rV1sAFA9djE2LPcbKERwtAyMLFb6zYhmg

1-4-12	9-2-4	17-3-0
1-4-12	7-9-8	8-0-12

Scale = 1:35.6

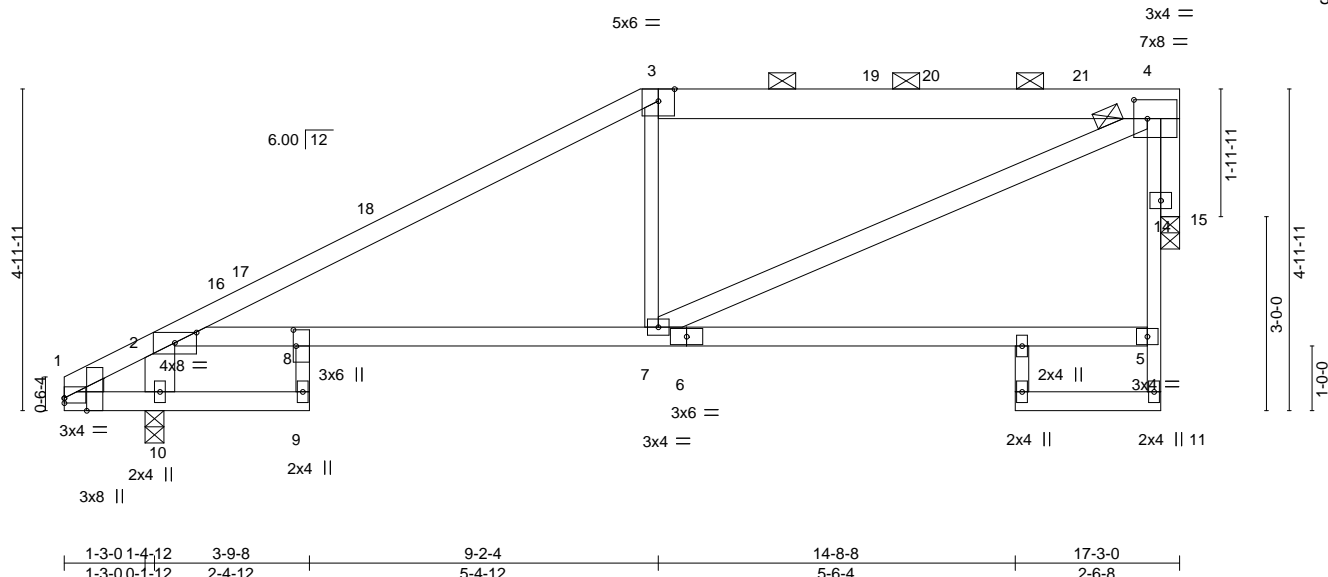


Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [2:0-4-1,0-1-15], [4:0-2-8,0-3-8], [8:0-3-0,0-0-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.87	Vert(LL)	-0.12	7-8	>999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.61	Vert(CT)	-0.22	7-8	>847		
TCDL 10.0	Lumber DOL 1.15	WB 0.16	Horz(CT)	0.12	15	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 90 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1 *Except*
3-4: 2x6 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
8-9,12-13: 2x3 SPF No.3
WEBS 2x4 SP No.1 *Except*
4-11,3-7: 2x3 SPF No.3, 2-10: 2x6 SP No.1
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4, 5-11.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 10=0-3-8, 15=0-3-8
Max Horz 10=103(LC 13)
Max Uplift 15=30(LC 13)
Max Grav 10=889(LC 36), 15=699(LC 35)

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

TOP CHORD 2-3=-980/34, 3-4=-751/72
BOT CHORD 2-8=-28/680, 7-8=-107/745
WEBS 2-10=-921/131, 4-7=-89/773, 4-15=-714/31

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 9-2-4, Exterior(2R) 9-2-4 to 13-5-3, Interior(1) 13-5-3 to 16-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 15. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss F3	Truss Type Half Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896102
Job Reference (optional)					

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:48 2022 Page 1

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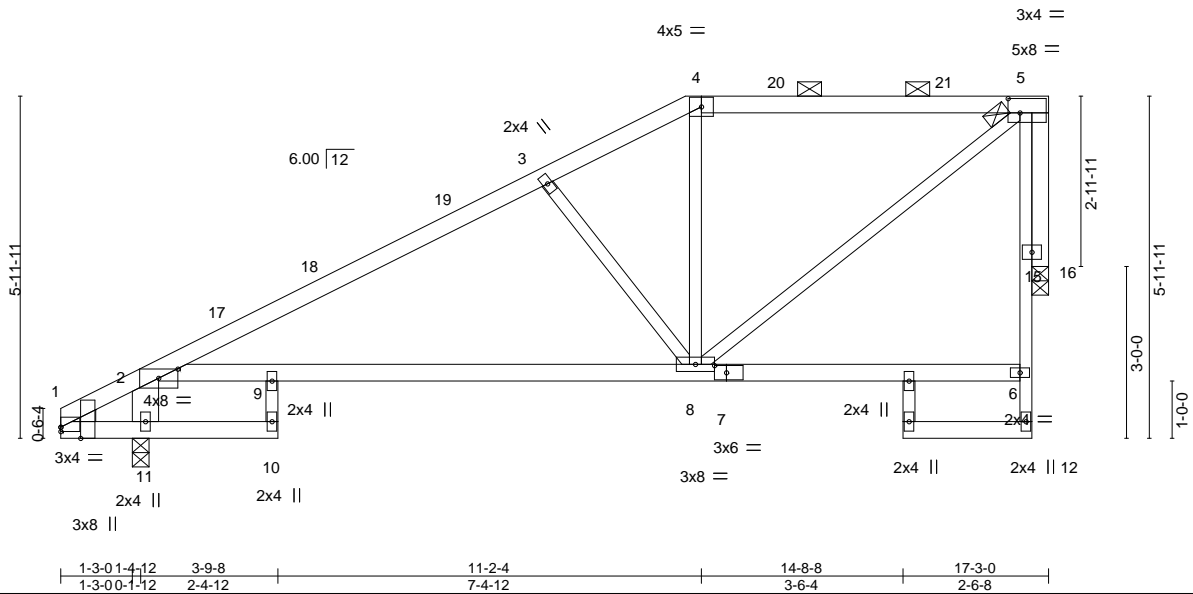
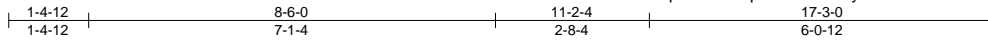


Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [2:0-4-1,0-1-15], [5:0-2-8,0-3-0], [7:0-2-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.60	Vert(LL) -0.17	8-9	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.55	Vert(CT) -0.39	8-9	>482	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.41	Horz(CT) 0.16	16	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 83 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
9-10,13-14: 2x3 SPF No.3
WEBS 2x3 SPF No.3 *Except*
2-11: 2x6 SP No.1, 5-15: 2x4 SP No.1
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-13 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5, 6-12.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS.

(size) 11=0-3-8, 16=0-3-8
Max Horz 11=120(LC 13)
Max Uplift 16=20(LC 13)
Max Grav 11=941(LC 36), 16=634(LC 35)

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

TOP CHORD 2-3=-1096/51, 3-4=-721/40, 4-5=-558/45
BOT CHORD 2-9=-82/815, 8-9=-157/869
WEBS 2-11=-891/116, 5-8=-56/664, 3-8=-500/121, 5-16=-639/40

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 11-2-4, Exterior(2R) 11-2-4 to 15-5-3, Interior(1) 15-5-3 to 16-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.
- 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 23,2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss F4	Truss Type Half Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896103
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:49 2022 Page 1

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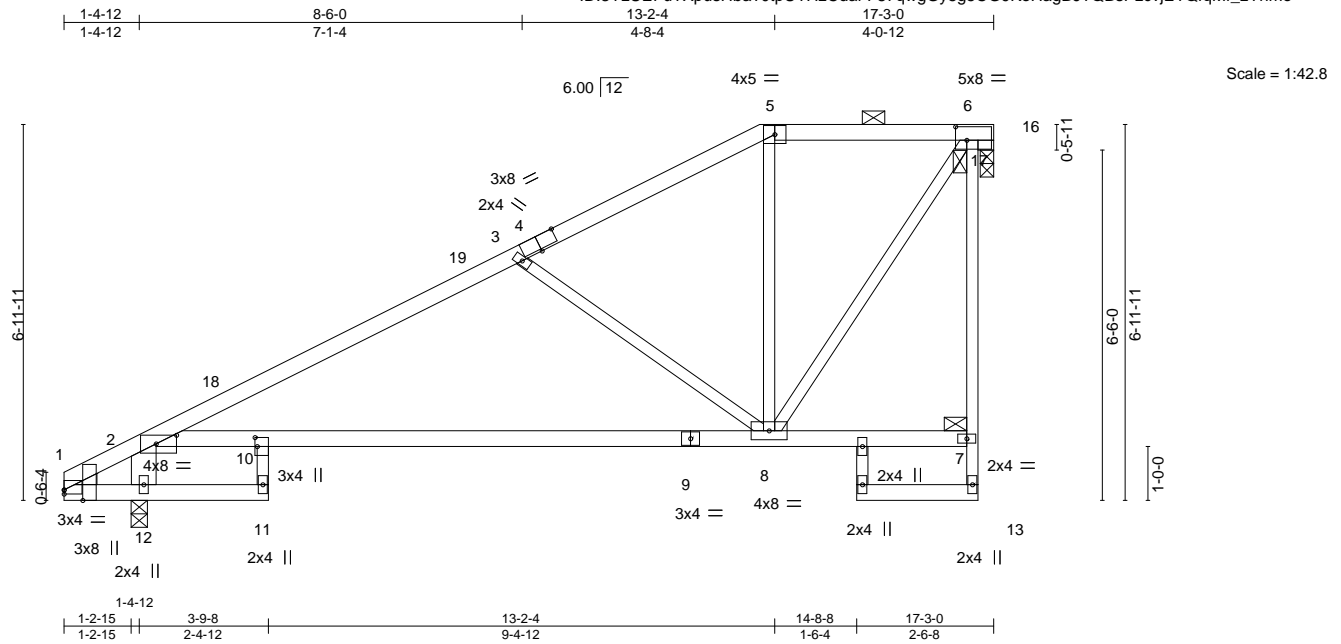


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-2-5,Edge], [2:0-4-9,0-1-15], [4:0-4-0,Edge], [6:0-2-8,0-3-0], [10:0-2-0,0-0-8]

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.67	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.81	Vert(LL) -0.35 8-10 >535 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.62	Vert(CT) -0.75 8-10 >251 180		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.18 16 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 82 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-4-7 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6, 7-13.
BOT CHORD 2x4 SP No.1 *Except* 10-11,14-15: 2x3 SPF No.3	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 8-10. 10-0-0 oc bracing: 7-8
WEBS 2x3 SPF No.3 *Except* 2-12: 2x6 SP No.1, 6-6: 2x4 SP No.1	
WEDGE Left: 2x3 SPF No.3	

REACTIONS. (size) 12=0-3-10, 16=0-3-0
Max Horz 12=180(LC 15)
Max Uplift 12=-4(LC 16), 16=-21(LC 13)
Max Grav 12=921(LC 36), 16=622(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1137/55, 3-5=-603/43, 5-6=-430/52
BOT CHORD 2-10=-102/900, 8-10=-211/939
WEBS 2-12=-849/122, 3-8=-627/137, 6-8=-80/756, 6-16=-603/138

- 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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 13-2-4, Exterior(2E) 13-2-4 to 16-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 16. This connection is for uplift only and does not consider lateral forces.
 - 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 23, 2022

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

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss F5	Truss Type Half Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896104
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:50 2022 Page 1
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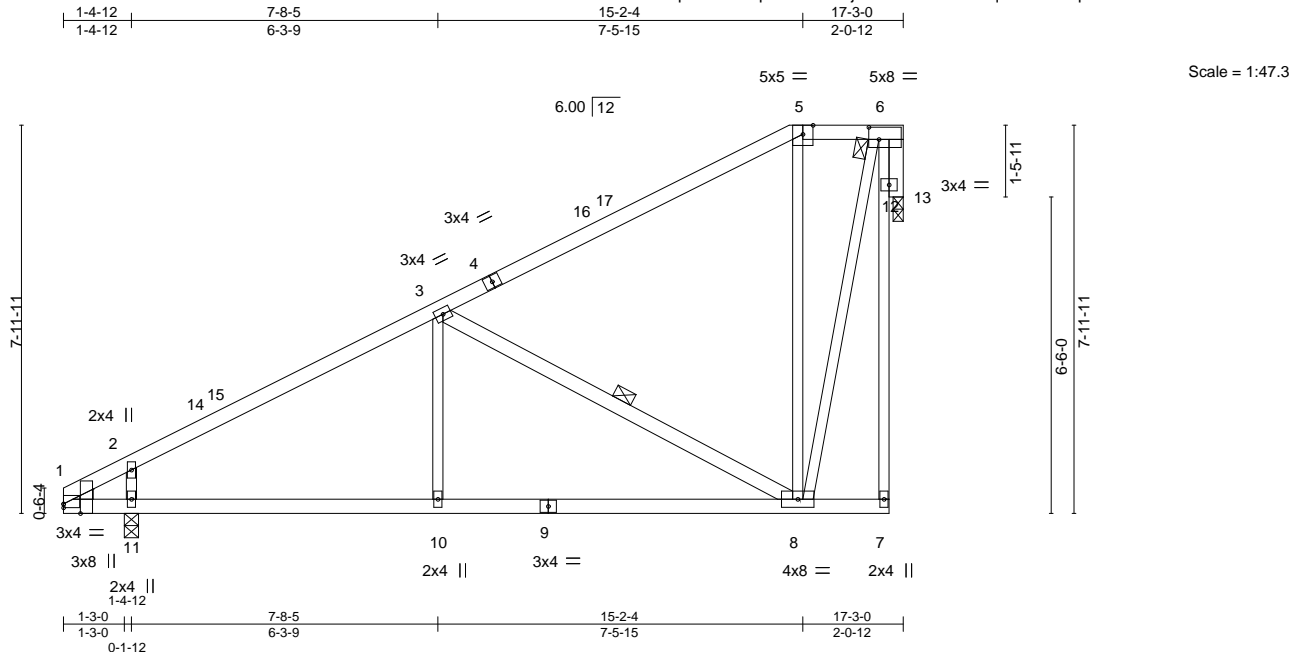


Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [6:0-2-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.76	Vert(LL)	-0.13	8-10	>999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.92	Vert(CT)	-0.25	8-10	>768		
TCDL 10.0	Lumber DOL 1.15	WB 0.76	Horz(CT)	-0.07	13	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 90 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3 *Except*
3-8,6-12: 2x4 SP No.1

WEDGE
Left: 2x3 SPF No.3

REACTIONS. (size) 11=0-3-8, 13=0-2-8
Max Horz 11=194(LC 13)
Max Uplift 13=8(LC 16)
Max Grav 11=873(LC 36), 13=716(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-823/0, 2-3=-1023/3, 3-5=-398/52
BOT CHORD 1-11=0/823, 10-11=-153/823, 8-10=-153/823
WEBS 3-8=-688/86, 5-8=-437/203, 6-8=-137/959, 2-11=-462/121, 6-13=-716/76

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 15-2-4, Exterior(2E) 15-2-4 to 16-10-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 13. This connection is for uplift only and does not consider lateral forces.
- 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 23,2022

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

KC Truss & Panel Inc. (Urish, MO),
Urish, MO - 64788,
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:51 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-BXFaKMiDdHLwVTU0P?ifOuWb7DmiNZCltzJSktzYhmc

Scale = 1:49.8

Plate Offsets (X,Y)-- [1:0-0,0-0-15], [1:0-2-5,Edge], [4:0-2-12,0-3-0], [5:0-2-12,0-3-0], [7:0-2-8,0-1-8], [9:0-2-8,0-2-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL 1.15	TC 0.43	Vert(LL) -0.09	7-8	>999	240	MT20	197/144		
Snow (Pf/Pg) 15.4/20.0	Lumber DOL 1.15	BC 0.38	Vert(CT) -0.19	7-8	>999	180				
TCDL 10.0	Rep Stress Incr YES	WB 0.85	Horz(CT) 0.14	14	n/a	n/a				
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S								
BCDL 10.0										

Weight: 98 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
11-12: 2x3 SPF No.3
WEBS 2x3 SPF No.3 *Except*
5-10,2-8,5-13: 2x4 SP No.1

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

WEDGE
Left: 2x3 SPF No.3

REACTIONS. (size) 9=0-3-8, 14=0-2-8
Max Horz 9=197(LC 13)
Max Uplift 14=22(LC 16)
Max Grav 9=753(LC 2), 14=635(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2052/380, 3-4=-846/21, 6-13=-58/460, 5-13=-58/460
BOT CHORD 8-9=-335/238, 7-8=-599/1721, 6-7=-235/738
WEBS 2-9=-665/176, 2-8=-335/1824, 3-8=-174/543, 3-7=-1015/372, 4-6=-798/169, 4-7=0/409, 5-14=-646/125

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-9-12 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 14.
8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
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.

STATE OF MISSOURI
SCOTT M. SEVIER
PROFESSIONAL ENGINEER
PE-2001018807

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss F7	Truss Type Monopitch	Qty 3	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896106
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KC Truss & Panel Inc. (Urish, MO),

Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:52 2022 Page 1
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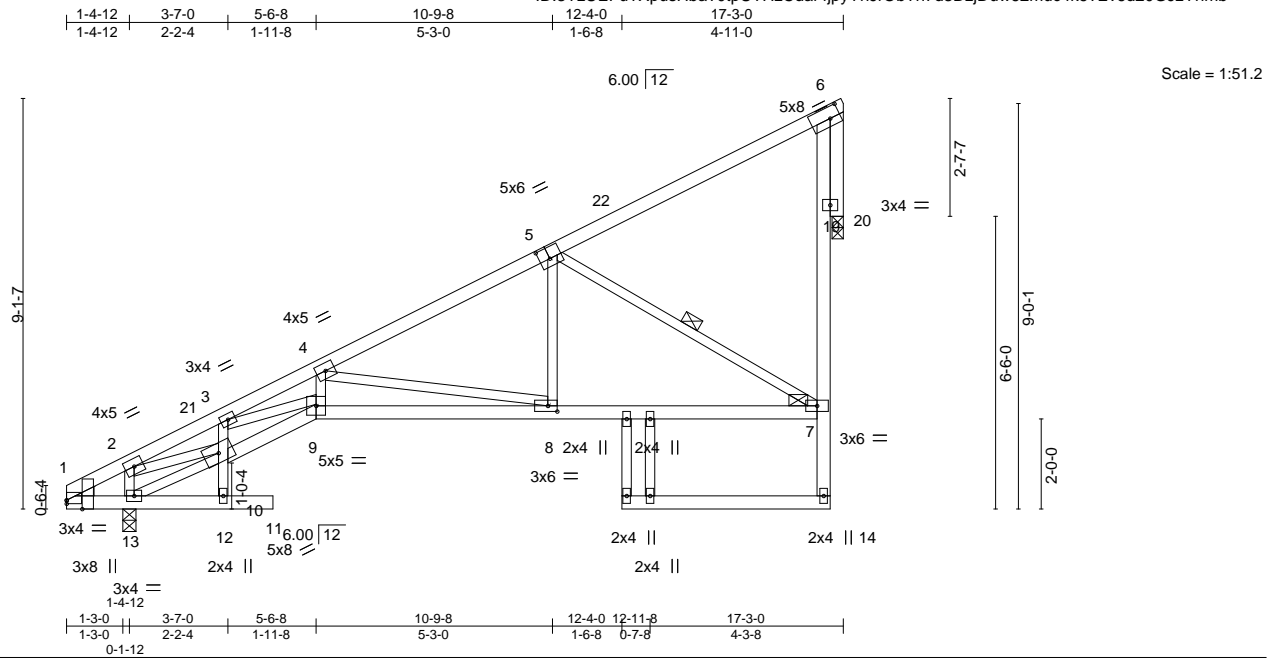


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-2-5,Edge], [5:0-2-12,0-3-0], [6:0-2-12,0-3-0], [8:0-2-8,0-1-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.42	Vert(LL) -0.08	8-9	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.40	Vert(CT) -0.17	8-9	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.92	Horz(CT) 0.14	20	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 101 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
3-12,15-16: 2x3 SPF No.3
WEBS 2x3 SPF No.3 *Except*
6-14,6-19: 2x4 SP No.1
WEDGE
Left: 2x3 SPF No.3

REACTIONS.

(size) 13=0-3-8, 20=0-3-0
Max Horz 13=197(LC 13)
Max Uplift 20=20(LC 16)
Max Grav 13=764(LC 2), 20=646(LC 21)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1333/184, 3-4=-2137/361, 4-5=-865/17, 7-19=-56/470, 6-19=-56/470
BOT CHORD 3-10=-433/106, 9-10=-525/1358, 8-9=-575/1830, 7-8=-231/756
WEBS 2-13=-680/139, 10-13=-298/192, 2-10=-179/1132, 3-9=-120/689, 4-9=-178/634,
4-8=-1109/350, 5-7=-820/166, 5-8=0/434, 6-20=-656/123

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 20. This connection is for uplift only and does not consider lateral forces.
- 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 23,2022

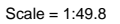
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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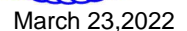
16023 Swingley Ridge Rd
Chesterfield, MO 63017

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:53 2022 Page 1
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NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-9-12 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 11.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Job 220056-A	Truss F9	Truss Type Monopitch	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896108
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:53 2022 Page 1
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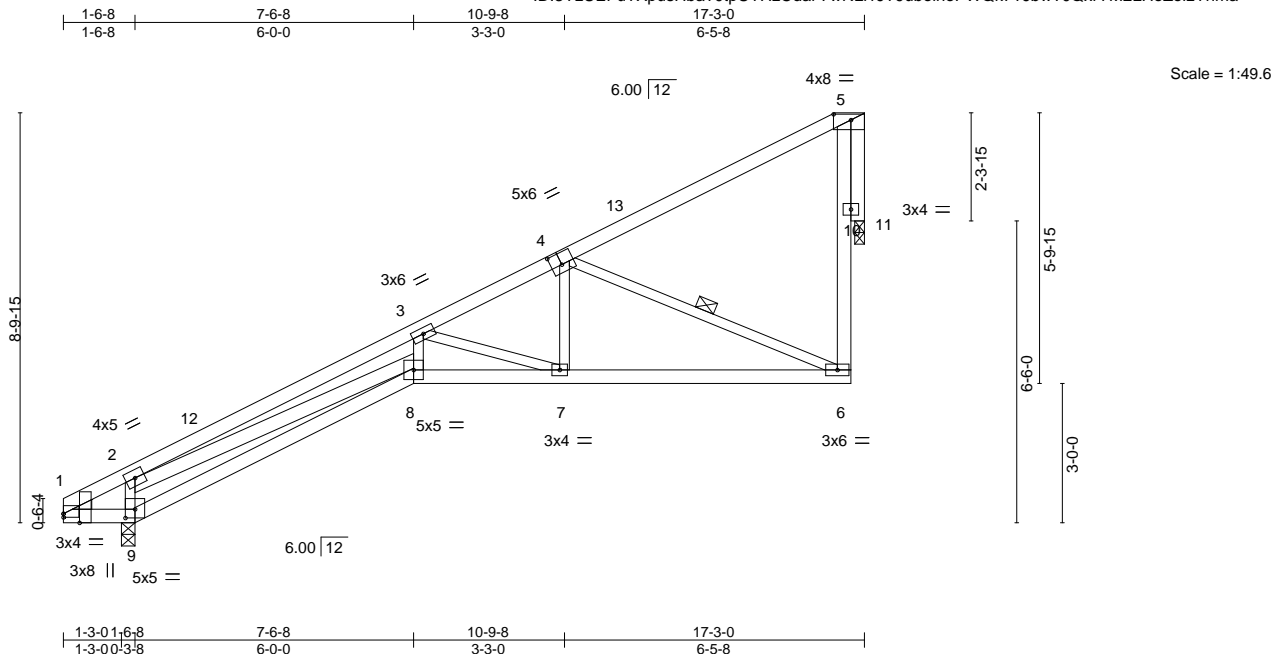


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-2-5,Edge], [4:0-2-12,0-3-0], [5:0-4-8,0-1-8], [9:0-2-8,0-2-4]									
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.15 8	>999	240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.30 8	>631	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.14 11	n/a	n/a
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S					
BCDL	10.0								
					Weight: 88 lb		FT = 20%		

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-5-11 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
WEBS 2x3 SPF No.3 *Except* 5-6,2-8,5-10: 2x4 SP No.2	8-5-0 oc bracing: 7-8.
WEDGE	WEBS 1 Row at midpt 4-6
Left: 2x3 SPF No.3	

REACTIONS. (size) 9=0-3-8, 11=0-2-8
Max Horz 9=175(LC 13)
Max Uplift 11=24(LC 16)
Max Grav 9=753(LC 2), 11=635(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2592/408, 3-4=-1098/84, 6-10=-51/455, 5-10=-51/455
BOT CHORD 1-9=-3/267, 8-9=-328/322, 7-8=-555/2143, 6-7=-236/1001
WEBS 2-9=-725/206, 2-8=-311/2156, 3-8=-187/839, 3-7=-1228/338, 4-7=-37/503, 4-6=-1021/205, 5-11=-646/121

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 11.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

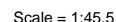
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16023 Swingley Ridge Rd
Chesterfield, MO 63017

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ID:3YzUEFuTXpusHba?0tpUTHzCdai-MNUJ4IDS1RbnnY1t2lbF8dGVLOdWztHtV2s8WDzYhmi



LUMBER-																																																																																																																																																																														
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REACTIONS. (size) 10=0-3-8, 12=0-2-8
 Max Horz 10=157(LC 13)
 Max Uplift 12=-11(LC 16)
 Max Grav 10=892(LC 36), 12=695(LC 36)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3672/288, 3-5=-592/15, 5-6=-404/35
 BOT CHORD 1-10=0/280, 9-10=-225/268, 8-9=-420/3075
 WEBS 2-10=-852/122, 2-9=-255/3180, 3-9=-95/1207, 3-8=-2701/351, 5-8=-299/137,
 6-8=-107/932, 6-12=-699/76

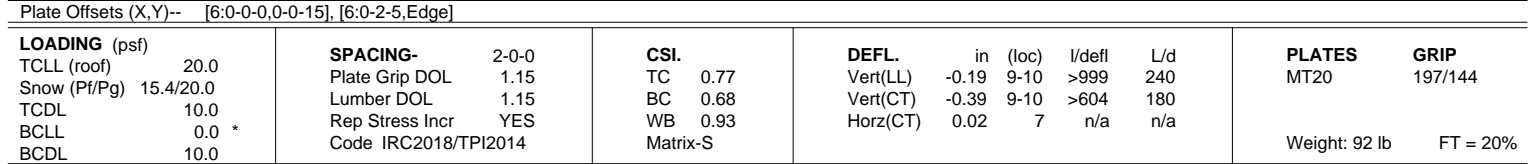
NOTES-

- 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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 14-10-12, Exterior(2E) 14-10-12 to 16-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCdL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 4) Unbalanced snow loads have been considered for this design.
- 5) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 12.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23, 2022

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:54 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzC dai-c6xjzNK5wCjVMxDb47GM0X80xQimavZCaxX7LCzYhmZ
5-2-0 10-0-0 19-10-4 21-3-0
5-2-0 4-10-0 4-10-0 5-0-4 1-4-12
Scale = 1:38.8



REACTIONS. (size) 7=0-3-8, 10=Mechanical
Max Horz 10=-88(LC 14)
Max Grav 7=906(LC 2), 10=786(LC 2)

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

TOP CHORD	2-3=-860/84, 3-4=-859/83, 4-5=-320/0, 5-6=-322/0
BOT CHORD	9-10=-32/871, 7-9=-15/861, 6-7=0/267
WEBS	3-9=0/471, 4-7=-791/133, 2-10=-857/98

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



Job 220056-A	Truss G2	Truss Type Common	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896111
Job Reference (optional)					

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:55 2022 Page 1
ID:3YzUEFuTXpushHba?0tpUTHzCdai-4IU5AjlJhWrM_4noernbYkgJNq3HJOTLobHgtezYhmY

1-4-12	6-5-0	11-3-0	16-1-0	21-1-4	22-6-0
1-4-12	5-0-4	4-10-0	4-10-0	5-0-4	1-4-12

Scale = 1:43.5

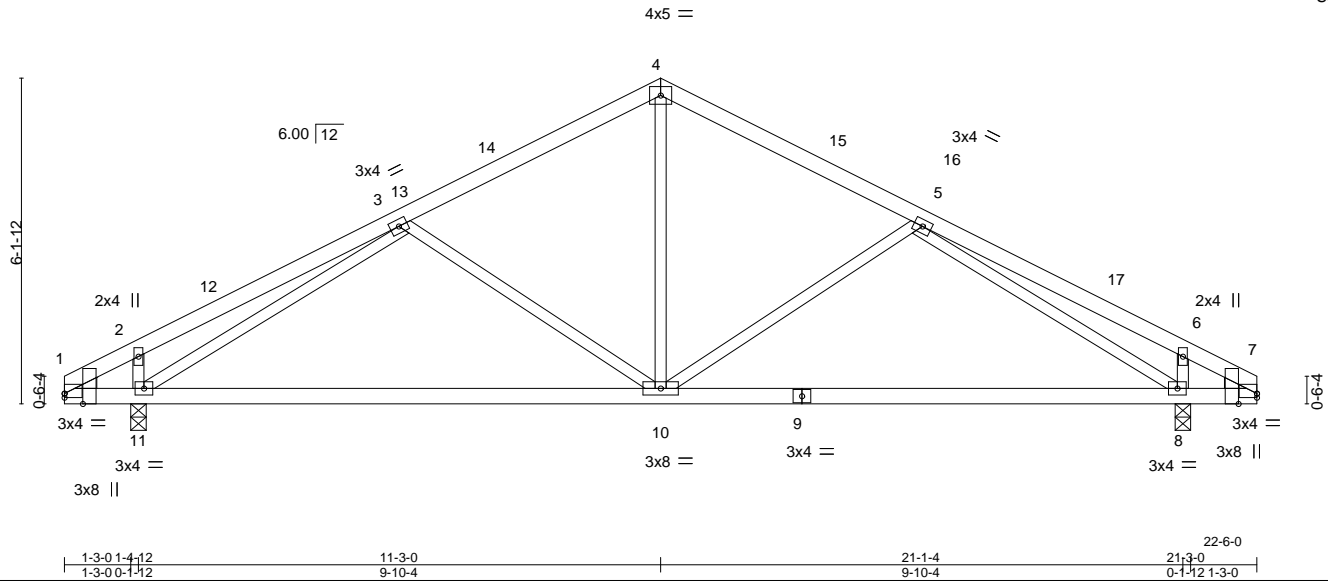


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-2-5,Edge], [7:0-0-0,0-0-15], [7:0-2-5,Edge]					
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.60
TCDL	10.0	Rep Stress Incr	YES	WB	0.83
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S	
BCDL	10.0				
			DEFL.	in (loc)	I/defl L/d
			Vert(LL)	-0.12 8-10	>999 240
			Vert(CT)	-0.25 8-10	>945 180
			Horz(CT)	0.02 8	n/a n/a
			PLATES	MT20	GRIP
					197/144
			Weight: 96 lb FT = 20%		

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3

WEDGE
Left: 2x3 SPF No.3, Right: 2x3 SPF No.3

REACTIONS.

(size) 8=0-3-8, 11=0-3-8
Max Horz 11=75(LC 14)
Max Uplift 11=6(LC 16)
Max Grav 8=900(LC 2), 11=900(LC 2)

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

TOP CHORD 1-2=-343/0, 2-3=-339/0, 3-4=-844/76, 4-5=-844/76, 5-6=-339/0, 6-7=-343/0
BOT CHORD 1-11=0/283, 10-11=-11/851, 8-10=-7/851, 7-8=0/283
WEBS 4-10=0/457, 5-8=-769/131, 3-11=-769/131

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 11-3-0, Exterior(2R) 11-3-0 to 14-3-0, Interior(1) 14-3-0 to 22-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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 220056-A	Truss G3	Truss Type Common Supported Gable	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896112 Job Reference (optional)
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:57 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-0hcrbPN_D754DOxAlGp3d9mjndulnTYeGvmnxXzYhmW

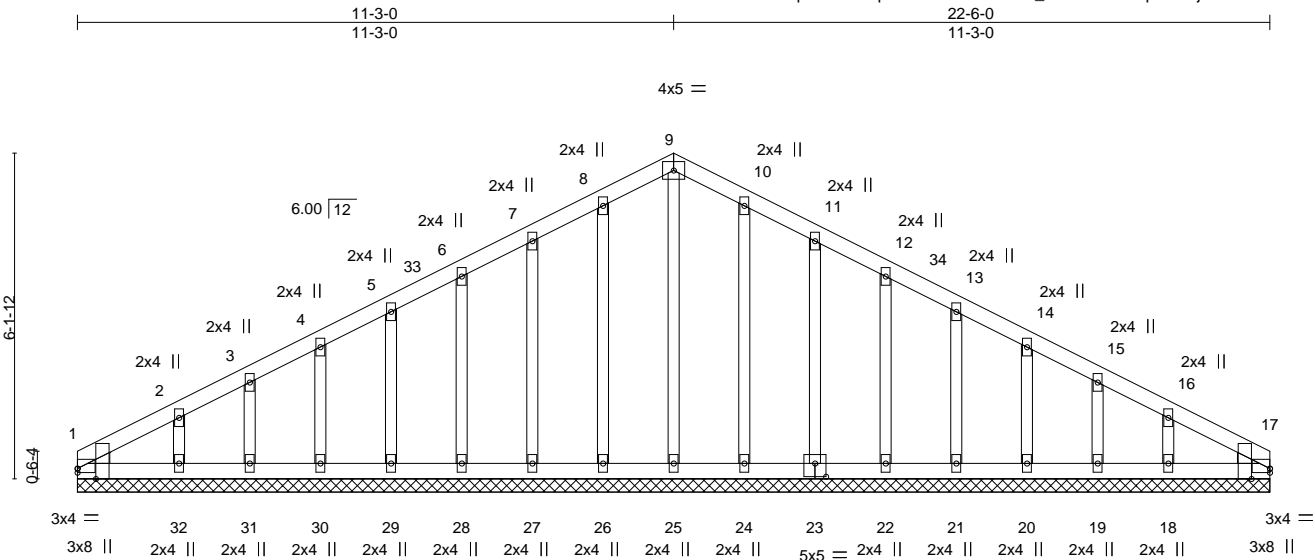


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-2-5,Edge], [17:0-0-0,0-0-15], [17:0-2-5,Edge], [23:0-2-8,0-3-0]					
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.03	in (loc) l/defl L/d	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) n/a - n/a 999		
TCDL 10.0	Lumber DOL 1.15	WB 0.09	Vert(CT) n/a - n/a 999		
BCLL 0.0 *	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.00 17 n/a n/a		
BCDL 10.0	Code IRC2018/TPI2014			Weight: 110 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x3 SPF No.3
WEDGE

Left: 2x3 SPF No.3, Right: 2x3 SPF No.3

BRACING-

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

REACTIONS.

All bearings 22-6-0.

(lb) - Max Horz 1=75(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 27, 28, 29, 30, 31, 32, 23, 22, 21, 20, 19, 18

Max Grav All reactions 250 lb or less at joint(s) 25, 26, 27, 28, 29, 30, 31, 32, 1, 17, 24, 23, 22, 21, 20, 19, 18

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) 0-0-0 to 3-3-0, Exterior(2N) 3-3-0 to 11-3-0, Corner(3R) 11-3-0 to 14-3-0, Exterior(2N) 14-3-0 to 22-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- N/A
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 23, 2022

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

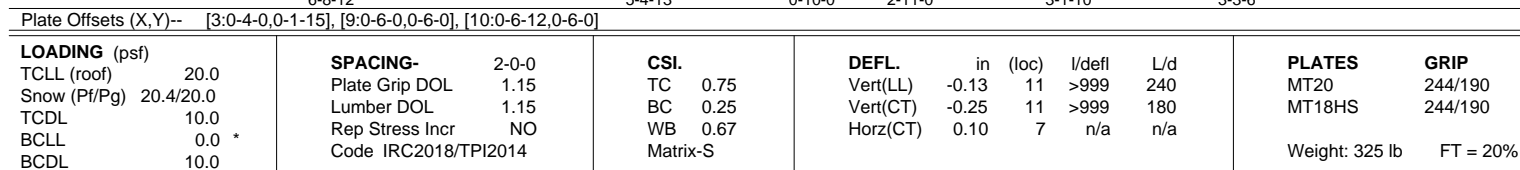
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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

KC Truss & Panel Inc. (Urlich, MO), Urlich, MO - 64788, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:59 2022 Page 1
ID:3YzUEFuTXpshBba?0tpUTHzCda-y4kc05OEkkLoTi5ZhrXjaru2RWfFE_xjDFDf0PzYhmU
6-8-12 12-1-8 15-10-8 19-0-2 22-3-8
6-8-12 5-4-13 3-9-0 3-1-10 3-3-6



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

TOP CHORD	1-2=-4595/0, 2-3=-9203/0, 3-4=-8809/0, 4-5=-8805/0, 1-14=-2782/0
BOT CHORD	13-14=-122/329, 9-10=0/8113, 8-9=0/5397, 7-8=0/5397
WEBS	2-13=-3079/0, 2-10=0/4420, 3-10=0/3259, 10-13=0/4788, 3-9=-464/1264, 4-9=-429/58, 5-9=-90/5219, 5-8=0/2977, 5-7=-8177/0, 1-13=0/3707

- 
- March 23, 2022

Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	H1	Half Hip Girder	1	2	I50896113
Job Reference (optional)					

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:59 2022 Page 2

ID:3YzUEFuTXpushHba?0tpUTHzCdai-y4kc05OEkkLoTi5ZthrXjaru2RWfFE_xjDFt0PzYhmU

- NOTES-**
- 14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss) or equivalent spaced at 2-1-12 oc max. starting at 18-0-0 from the left end to 22-1-12 to connect truss(es) to front face of bottom chord.
- 15) Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-51, 3-6=-61, 11-14=-20, 7-10=-20

Concentrated Loads (lb)

Vert: 7=-1247(F) 9=-5165(F) 18=-1154(F) 19=-1125(F)

Job 220056-A	Truss H2	Truss Type Half Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896114
Job Reference (optional)					

KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:00 2022 Page 1
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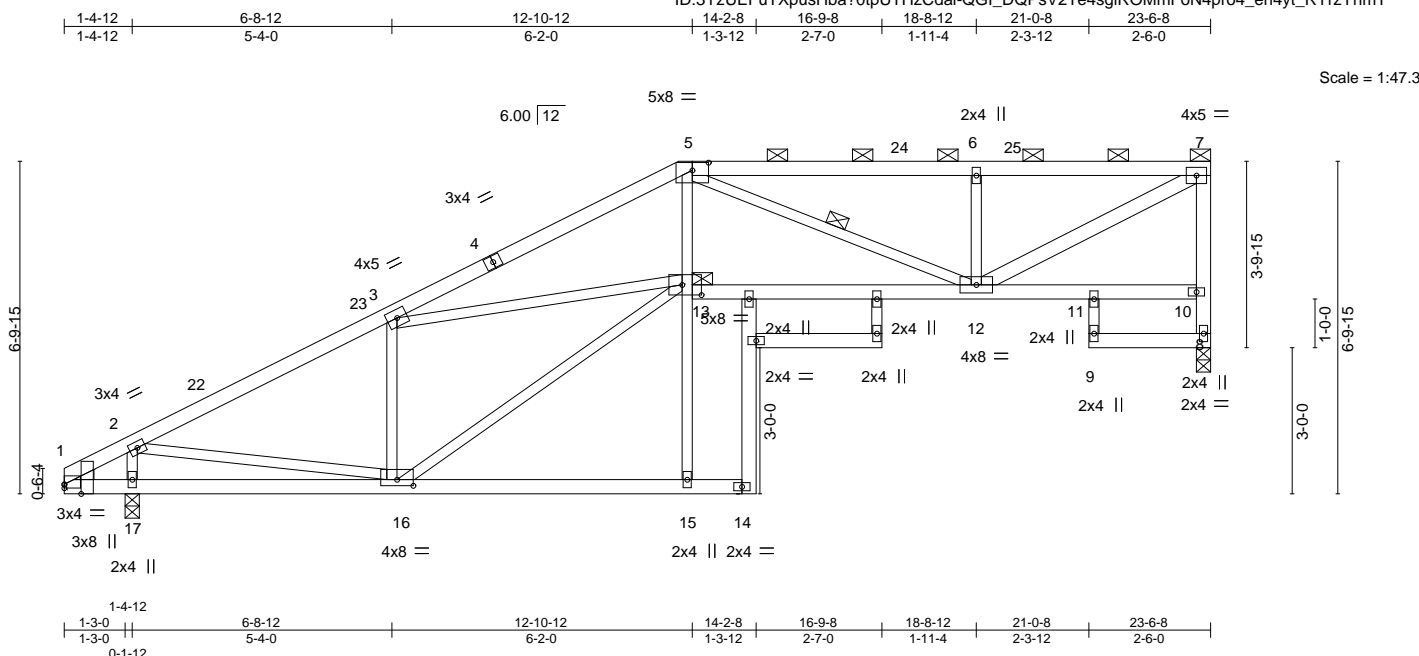


Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [5:0-4-0,0-1-15], [13:0-4-12,0-2-8], [16:0-4-0,0-1-8]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	BC 0.68	Vert(LL)	-0.13	14	>999	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Lumber DOL 1.15	TC 0.49	Vert(CT)	-0.26	15-16	>999		
TCDL 10.0	Rep Stress Incr YES	WB 0.89	Horz(CT)	0.15	8	n/a		
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S						
BCDL 10.0							Weight: 131 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
20-21,9-11: 2x3 SPF No.3
WEBS 2x3 SPF No.3 *Except*
7-8,7-12: 2x4 SP No.1
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-11 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-12 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 8-9.
10-0-0 oc bracing: 12-13
WEBS 1 Row at midpt 5-12
JOINTS 1 Brace at Jt(s): 13, 7

REACTIONS.

(size) 8=0-3-8, 17=0-3-8
Max Horz 17=143(LC 13)
Max Uplift 8=37(LC 13)
Max Grav 8=1017(LC 34), 17=1148(LC 35)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1450/0, 3-5=-2558/110, 5-6=-1537/37, 6-7=-1534/36, 8-10=-988/50, 7-10=-972/55
BOT CHORD 12-13=-172/2141
WEBS 2-17=-1023/85, 2-16=0/1024, 3-16=-897/140, 5-13=-14/1179, 13-16=-119/1435,
3-13=-73/1269, 5-12=-1046/109, 6-12=-555/109, 7-12=-51/1705

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 12-10-12, Exterior(2R) 12-10-12 to 17-1-11, Interior(1) 17-1-11 to 23-4-12 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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 220056-A	Truss H3	Truss Type Half Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896115
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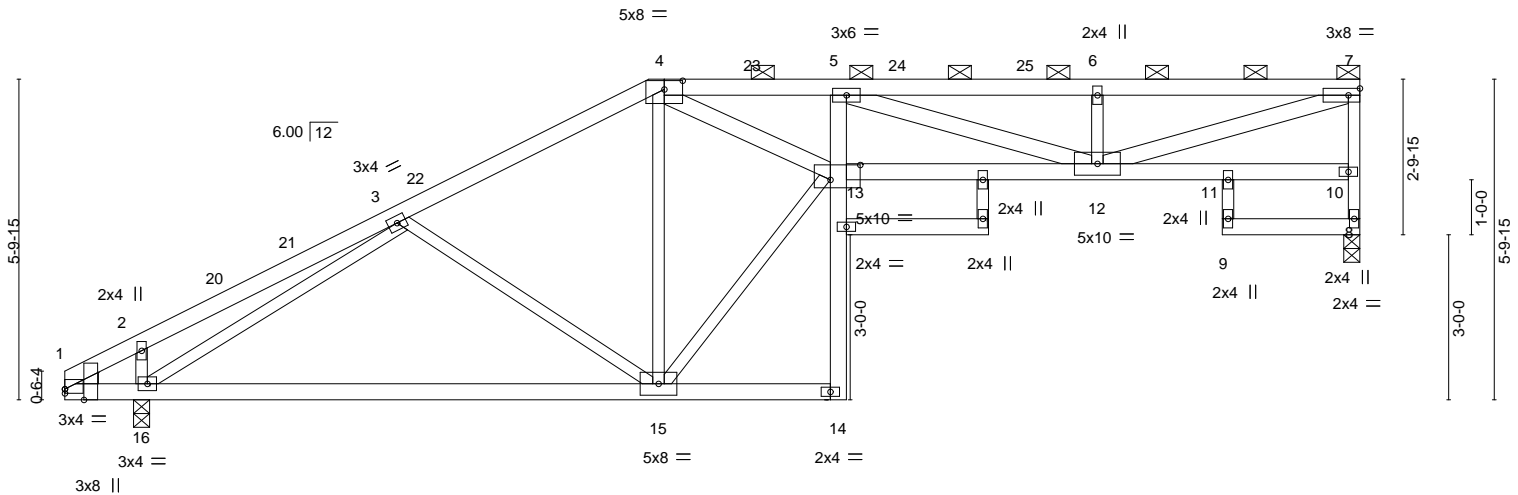
KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:01 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-uSsMRmQUGMcVi?Fx_6u?o?wHeE4uj2cEBXk_4lzYhmS

1-4-12	6-1-12	10-10-12	14-2-8	16-9-8	18-9-4	21-0-8	23-6-8
1-4-12	4-9-0	4-9-0	3-3-12	2-7-0	1-11-12	2-3-4	2-6-0

Scale = 1:41.9



1-3-0-1-4-12	10-10-12	14-2-8	16-9-8	18-9-4	21-0-8	23-6-8
1-3-0-0-1-12	9-6-0	3-3-12	2-7-0	1-11-12	2-3-4	2-6-0

Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [4:0-4-0,0-1-15], [13:0-6-8,0-3-4]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	
TCLL (roof)	20.0	2-0-0		TC	0.55	in (loc)	I/defl	L/d	GRIP
Snow (Pf/Pg)	20.4/20.0	Plate Grip DOL	1.15	BC	0.71	Vert(LL)	-0.19	13	197/144
TCDL	10.0	Lumber DOL	1.15	WB	0.98	Vert(CT)	-0.35	13	
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-S		Horz(CT)	0.21	8	
BCDL	10.0	Code IRC2018/TPI2014							
								Weight: 128 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1 *Except*
 18-19,9-11: 2x3 SPF No.3
 WEBS 2x3 SPF No.3 *Except*
 4-13,5-12,7-12: 2x4 SP No.1
 WEDGE
 Left: 2x3 SPF No.3

REACTIONS.

(size) 8=0-3-8, 16=0-3-8
 Max Horz 16=116(LC 13)
 Max Uplift 8=50(LC 13)
 Max Grav 8=1063(LC 34), 16=1131(LC 35)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-357/0, 2-3=-349/0, 3-4=-1042/34, 4-5=-3362/145, 5-6=-2562/111, 6-7=-2562/111,
 8-10=-1035/64, 7-10=-1003/72
 BOT CHORD 1-16=0/294, 15-16=-122/1048, 12-13=-177/3457
 WEBS 2-16=-323/114, 3-16=-1000/99, 3-15=-281/87, 4-15=-942/110, 13-15=-75/1396,
 4-13=-160/2738, 5-12=-965/79, 6-12=-445/92, 7-12=-119/2618

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 10-10-12, Exterior(2R) 10-10-12 to 15-1-11, Interior(1) 15-1-11 to 23-5-4 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
- 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 23,2022

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 220056-A	Truss H4	Truss Type Half Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896116
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:02 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-NfQke6Q61fkMK9q8YpPEKDTNSeQQSZwNPBTYdkzYhmR

1-4-12 1-4-12	8-10-12 7-6-0	14-2-8 5-3-12	18-9-4 4-6-12	23-6-8 4-9-4
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Scale = 1:40.9

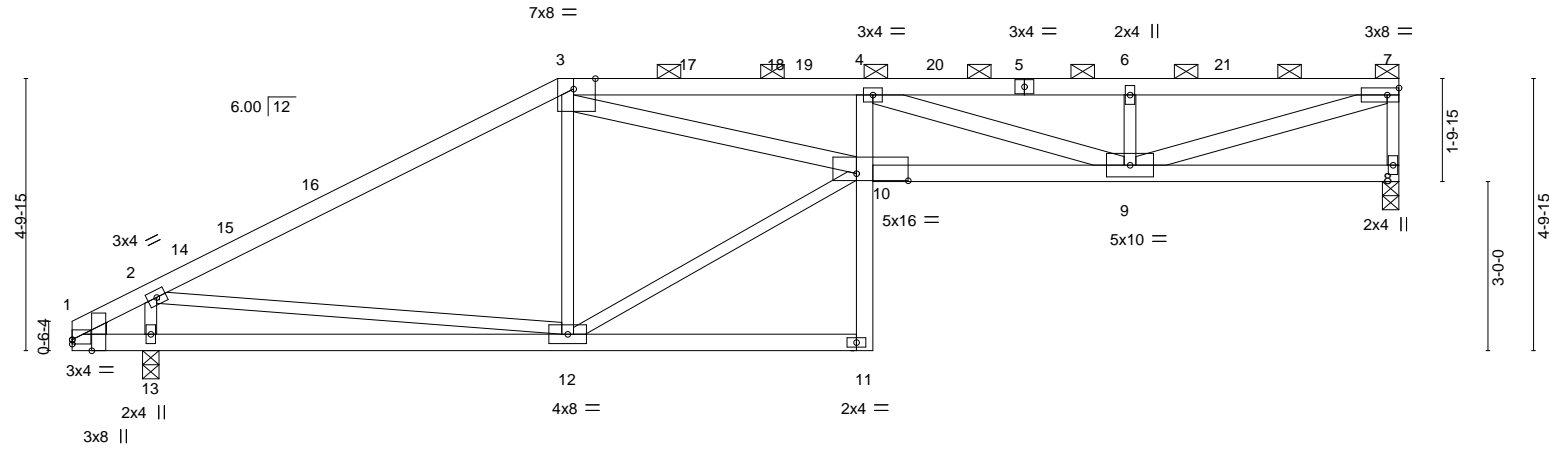


Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [3:0-4-10,Edge], [10:0-11-0,0-1-8]									
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.87	Vert(LL)	-0.27 10	>973	240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.46 11	>578	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.16 8	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
								Weight: 117 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3 *Except*
3-10,4-9,7-9: 2x4 SP No.2

WEDGE

Left: 2x3 SPF No.3

REACTIONS.

(size) 8=0-3-8, 13=0-3-8
Max Horz 13=90(LC 13)
Max Uplift 8=45(LC 13)
Max Grav 8=1110(LC 34), 13=1054(LC 35)

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

TOP CHORD 1-2=-396/0, 2-3=-1249/20, 3-4=-3963/136, 4-6=-2711/92, 6-7=-2711/92, 7-8=-1058/67
BOT CHORD 1-13=0/463, 12-13=-123/463, 9-10=-149/4049
WEBS 2-13=-936/141, 2-12=0/840, 3-12=-571/102, 10-12=-55/1162, 3-10=-142/2995,
4-9=-1405/49, 6-9=-436/90, 7-9=-103/2791

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-9-1, Exterior(2R) 8-9-1 to 13-0-0, Interior(1) 13-0-0 to 23-5-4 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8. This connection is for uplift only and does not consider lateral forces.
- 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 23,2022

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



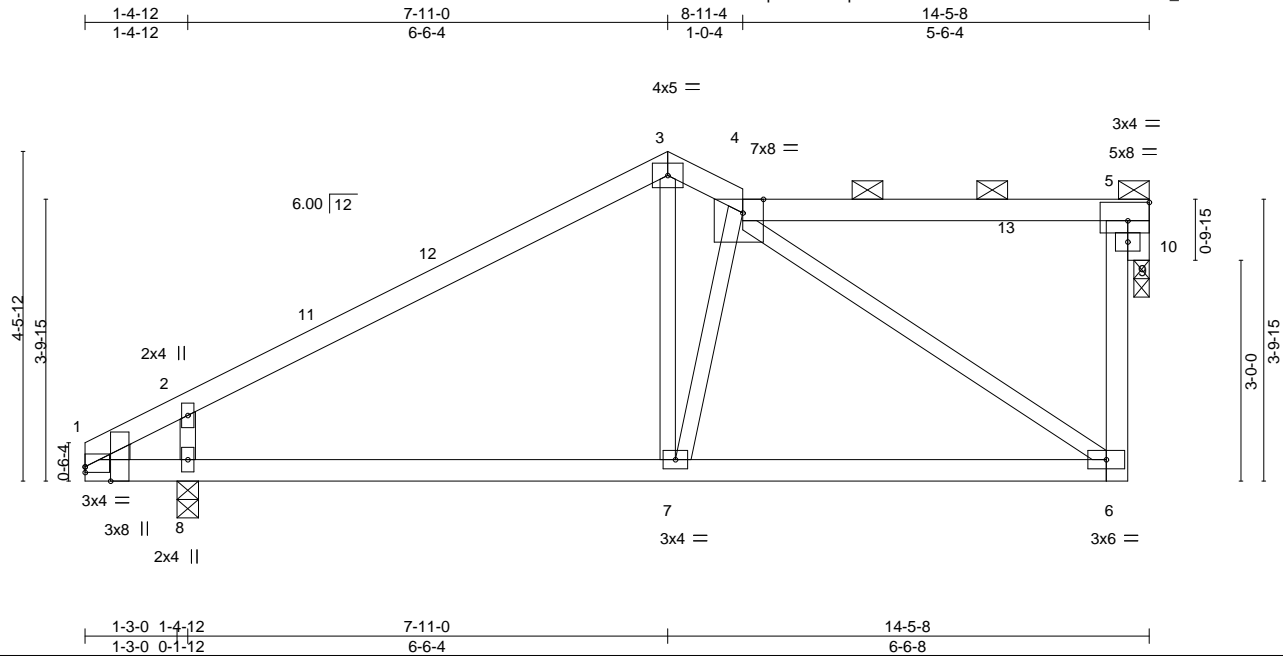
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss I1	Truss Type Roof Special	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896117
Job Reference (optional)					

KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

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ID:3YzUEFuTXpushHba?0tpUTHzCdai-rrz7sSRkozsDxJPK6WwTtQ?e_2s3B3wXerD59AZhmQ



Scale = 1:31.3

Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [4:0-3-6,Edge], [5:Edge,0-3-0]									
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.04	6-7	>999
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.08	6-7	>999
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	-0.01	10	n/a
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S					
BCDL	10.0								
					Weight: 62 lb FT = 20%				

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3 *Except*
5-6,5-9: 2x4 SP No.1

WEDGE
Left: 2x3 SPF No.3

REACTIONS. (size) 8=0-3-8, 10=0-2-8
Max Horz 8=91(LC 15)
Max Uplift 8=6(LC 16), 10=15(LC 13)
Max Grav 8=636(LC 2), 10=529(LC 39)

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

TOP CHORD 1-2=-393/0, 2-3=-568/66, 3-4=-509/81, 6-9=-28/337, 5-9=-28/337
BOT CHORD 1-8=0/416, 7-8=-117/416, 6-7=-118/466
WEBS 3-7=0/397, 4-6=-478/102, 2-8=-466/207, 4-7=-308/58, 5-10=-625/89

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-11-0, Exterior(2E) 7-11-0 to 8-11-4, Interior(1) 8-11-4 to 14-0-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 10.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 10. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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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



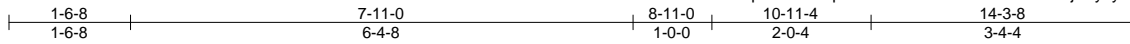
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss I2	Truss Type Roof Special	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896118
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:05 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-nD5tH8T?Ka6xBdYjDxyxYr51usSvftcp59iCE3zYhmO



Scale = 1:29.2

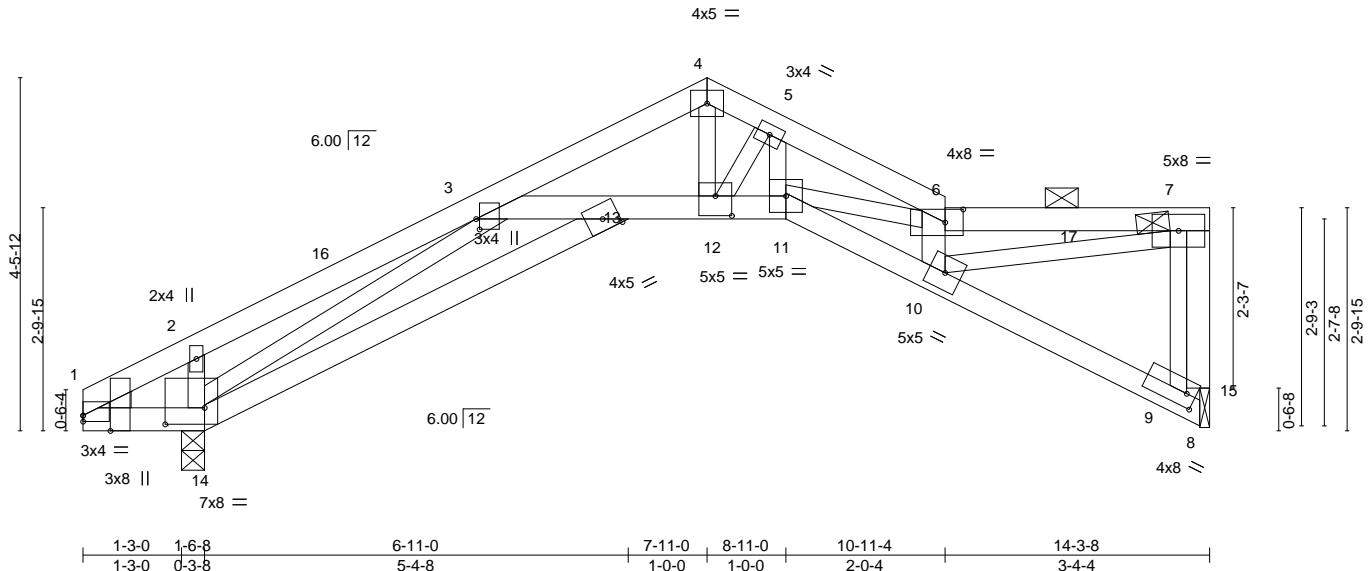


Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [3:0-1-9,0-0-9], [6:0-2-12,0-2-0], [9:0-1-7,0-2-0], [12:0-2-8,0-3-0], [14:0-6-0,0-2-8]															
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) l/defl L/d		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL		1.15		TC	0.21	Vert(LL)	-0.11	13	>999	240	MT20	197/144	
Snow (Pt/Pg)	20.4/20.0	Lumber DOL		1.15		BC	0.64	Vert(CT)	-0.22	13	>690	180			
TCDL	10.0	Rep Stress Incr		YES		WB	0.91	Horz(CT)	0.21	15	n/a	n/a			
BCLL	0.0 *	Code IRC2018/TPI2014				Matrix-S							Weight: 66 lb	FT = 20%	
BCDL	10.0														

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-7-12 oc purlins, except end verticals, and 2-0-0 oc purlins (4-10-15 max.): 6-7.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x3 SPF No.3 *Except* 6-10,7-9: 2x4 SP No.1	
WEDGE Left: 2x3 SPF No.3	

REACTIONS.	(size) 14=0-3-8, 15=0-1-8
	Max Horz 14=57(LC 16)
	Max Uplift 14=8(LC 16)
	Max Grav 14=638(LC 2), 15=484(LC 22)
FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	3-4=-1360/232, 4-5=-1405/257, 5-6=-1730/282, 6-7=-1542/229
BOT CHORD	13-14=-301/1267, 12-13=-180/1205, 11-12=-216/1432, 10-11=-224/1527
WEBS	2-14=-273/122, 3-14=-1317/274, 4-12=-146/992, 6-10=-988/190, 7-10=-219/1480, 5-11=-45/470, 5-12=-365/63, 7-15=-492/70

- 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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-11-0, Exterior(2E) 7-11-0 to 10-11-4, Interior(1) 10-11-4 to 13-10-12 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
 - 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 23,2022

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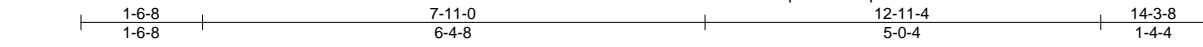


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss I3	Truss Type Roof Special	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896119
Job Reference (optional)					

KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:06 2022 Page 1
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Scale = 1:29.2

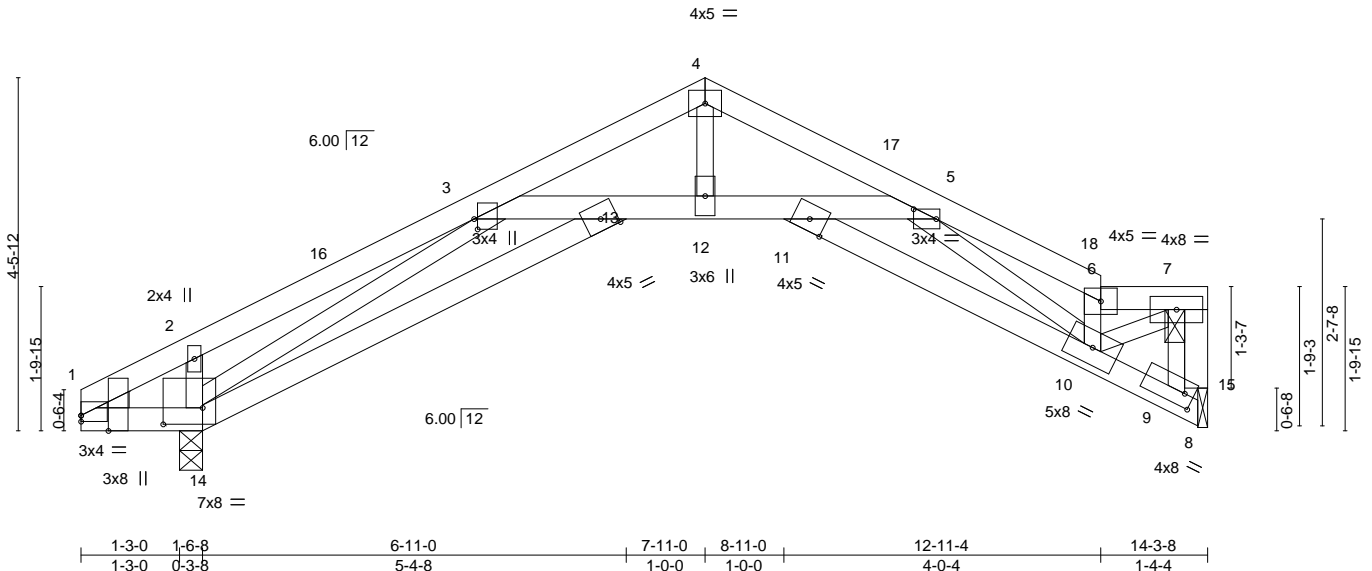


Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [3:0-1-9,0-0-9], [5:0-3-7,0-1-8], [9:0-1-7,0-2-0], [14:0-6-0,0-2-8]												
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.09	13	>999	240	MT20	197/144
Snow (Pt/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.19	3-13	>821	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.19	15	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S								
BCDL	10.0										Weight: 64 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 5-0-6 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 6-7.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 11-12
WEBS	2x3 SPF No.3 *Except* 7-9: 2x4 SP No.1		
WEDGE			
Left: 2x3 SPF No.3			

REACTIONS. (size) 14=0-3-8, 15=0-1-8
Max Horz 14=45(LC 15)
Max Uplift 14=12(LC 16)
Max Grav 14=638(LC 2), 15=501(LC 39)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1441/184, 4-5=-1444/191, 5-6=-930/108, 6-7=-918/94
BOT CHORD 13-14=-226/1277, 3-13=0/309, 12-13=-105/1274, 11-12=-105/1274, 10-11=-184/1459
WEBS 2-14=-272/120, 3-14=-1331/234, 4-12=-90/1036, 5-10=-732/124, 6-10=-459/75,
7-10=-84/871, 7-15=-527/59

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-11-0, Exterior(2R) 7-11-0 to 10-10-9, Interior(1) 10-10-9 to 13-10-12 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.
- 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 23,2022

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

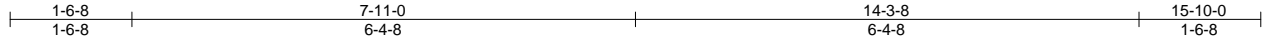


16023 Swingley Ridge Rd
Chesterfield, MO 63017

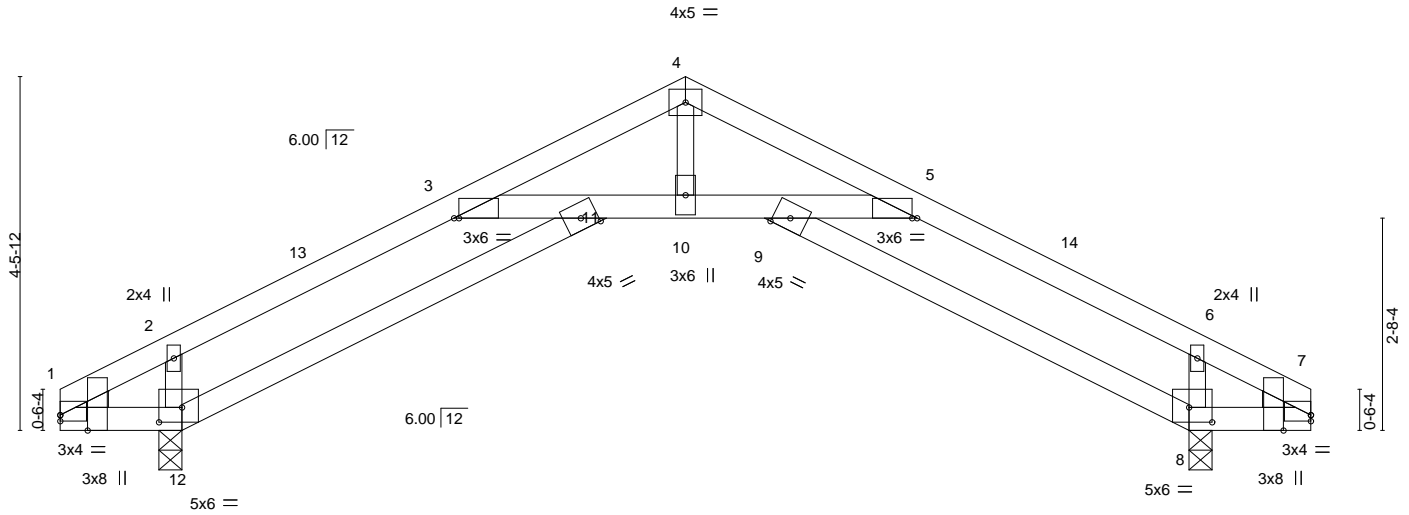
Job 220056-A	Truss I4	Truss Type Roof Special	Qty 4	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896120
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:07 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-jcDdhqUFsCMfQxi5LM_P1GACDfA17tM6ZTBJlxzYhmM



Scale = 1:29.2



1-3-0 1-6-8 6-11-0 7-11-0 8-11-0 14-3-8 14-7-0 15-10-0 1-3-0 0-3-8 5-4-8 1-0-0 1-0-0 5-4-8 0-3-8 1-3-0													
Plate Offsets (X,Y)-- [1:0-2-5,Edge], [1:0-0-0,0-0-15], [3:0-0-12,Edge], [5:0-0-12,Edge], [7:0-0-0,0-0-15], [7:0-2-5,Edge], [8:0-3-8,0-2-4], [12:0-3-8,0-2-4]													
LOADING (psf)		SPACING-		2-0-0		CSI.		DEFL.		in (loc) I/defl L/d		PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.93	Vert(LL)	-0.30	9	>510	240		MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.58	9	>264	180			
TCDL	10.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.60	8	n/a	n/a			
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S								Weight: 61 lb	FT = 20%
BCDL	10.0												

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3, Right: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
10-0-0 oc bracing: 9-10

REACTIONS.

(size) 12=0-3-8, 8=0-3-8
Max Horz 12=54(LC 14)
Max Uplift 12=14(LC 16)
Max Grav 12=633(LC 2), 8=633(LC 2)

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

TOP CHORD 1-2=-619/0, 2-3=-875/54, 3-4=-1381/8, 4-5=-1381/15, 5-6=-875/48, 6-7=-619/0
BOT CHORD 1-12=0/706, 11-12=0/693, 3-11=0/669, 10-11=0/1248, 9-10=0/1248, 5-9=0/669,
8-9=0/693, 7-8=0/706
WEBS 4-10=0/831, 6-8=-748/139, 2-12=-748/135

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-11-0, Exterior(2R) 7-11-0 to 10-10-3, Interior(1) 10-10-3 to 15-10-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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



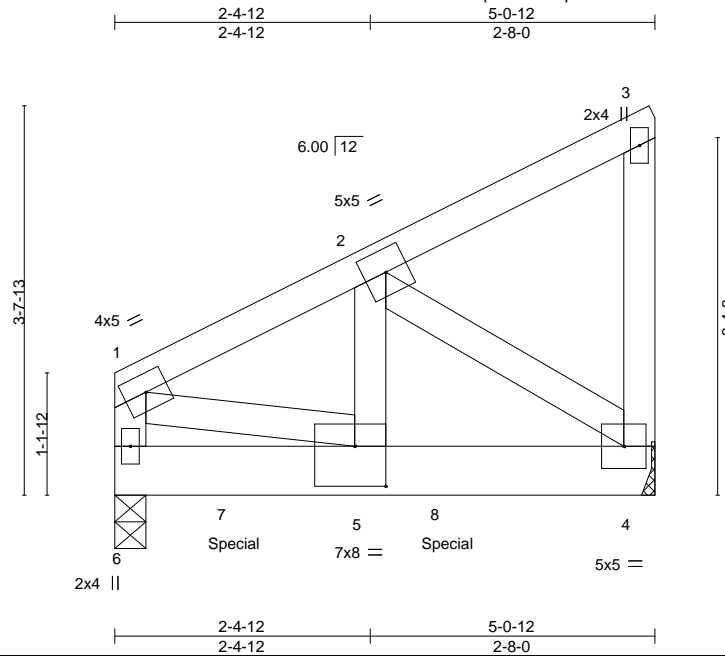
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J1	Truss Type Monopitch Girder	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896121
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:08 2022 Page 1

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Scale = 1:21.6

Plate Offsets (X,Y)-- [5:0-3-8,0-4-8]									
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.01 5	>999	240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.01 4-5	>999	180
TCDL	10.0	Rep Stress Incr	NO	WB	0.15	Horz(CT)	0.00 4	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P					
BCDL	10.0								
								Weight: 35 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-0-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 6=0-3-8
Max Horz 6=86(LC 9)
Max Grav 4=826(LC 2), 6=1088(LC 2)

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

TOP CHORD 1-2=-892/0, 1-6=-734/0
BOT CHORD 4-5=0/781
WEBS 2-5=0/830, 2-4=-988/0, 1-5=0/832

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 766 lb down at 1-1-8, and 766 lb down at 3-1-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-51, 4-6=-20
Concentrated Loads (lb)
Vert: 7=-707(F) 8=-707(F)



March 23, 2022

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



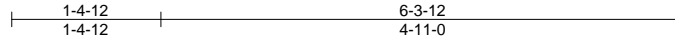
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J2	Truss Type Monopitch	Qty 3	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896122
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:14 2022 Page 1

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Scale = 1:21.6

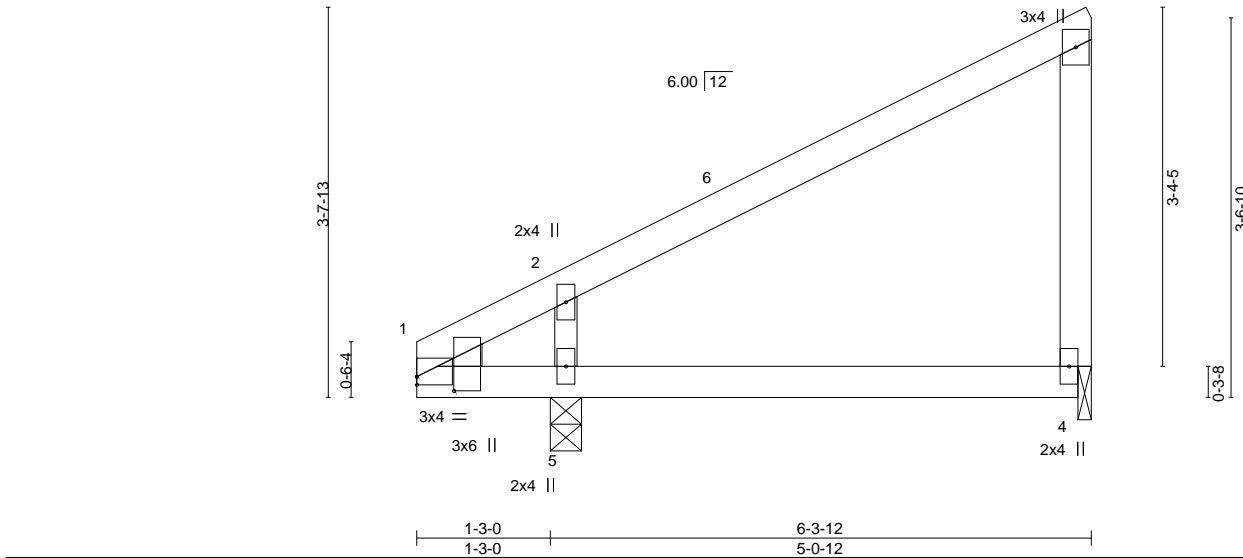


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]									
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.01 4-5	>999	240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	-0.03 4-5	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00 4	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
					Weight: 25 lb FT = 20%				

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.1 *Except*
2-5: 2x3 SPF No.3

WEDGE
Left: 2x3 SPF No.3

REACTIONS. (size) 5=0-3-8, 4=0-1-8
Max Horz 5=90(LC 15)
Max Uplift 5=-14(LC 16), 4=-13(LC 13)
Max Grav 5=351(LC 21), 4=223(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-320/204

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-2-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 4. This connection is for uplift only and does not consider lateral forces.
- 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 23,2022

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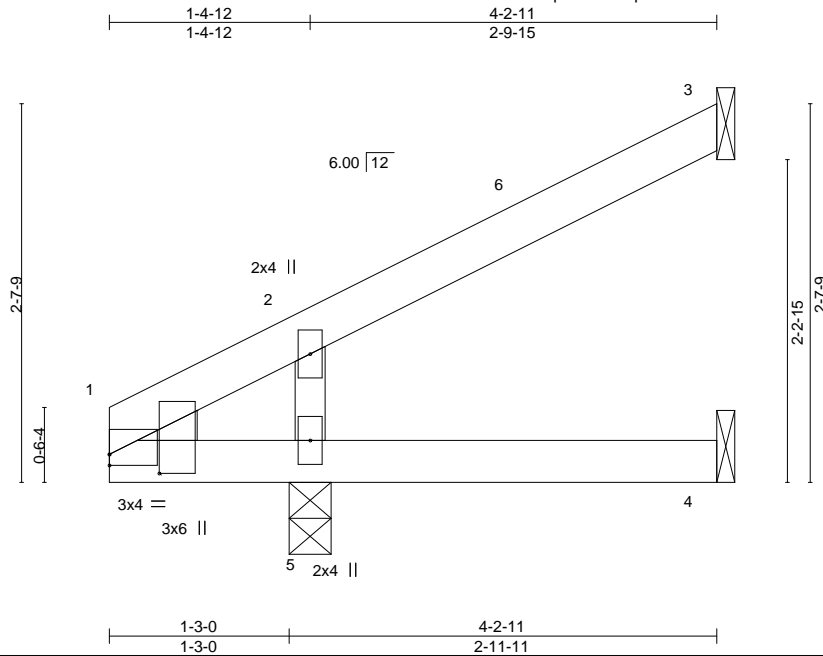


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J3	Truss Type Jack-Open	Qty 2	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896123
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:15 2022 Page 1
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Scale: 3/4"=1'

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00 4-5	>999	240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00 4-5	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00 3	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P					
BCDL	10.0								
					Weight: 14 lb		FT = 20%		

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=52(LC 16)
Max Uplift 3=-23(LC 16), 5=-1(LC 16)
Max Grav 3=83(LC 20), 4=42(LC 7), 5=304(LC 20)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-1-15 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 3.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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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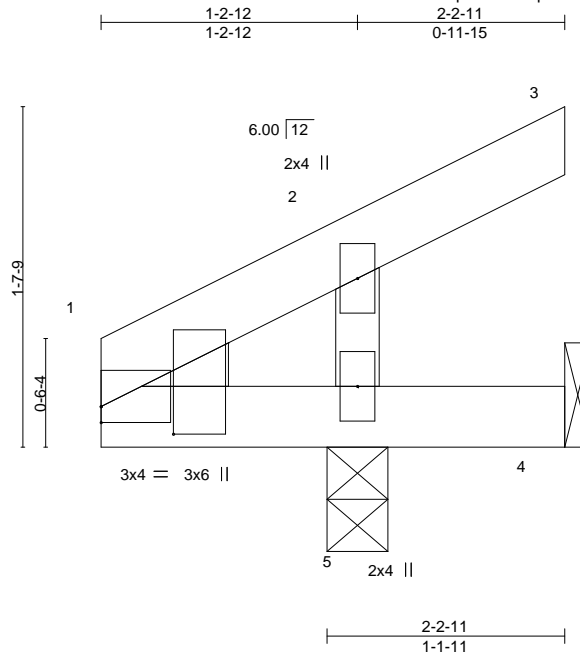


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J4	Truss Type Jack-Open	Qty 2	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896124 Job Reference (optional)
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KC Truss & Panel Inc. (Urlich, MO), Urlich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:15 2022 Page 1
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Scale = 1:11.0

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.06	Vert(LL) 0.00	5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.05	Vert(CT) 0.00	5	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.11	Horz(CT) 0.00		n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 8 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 5=0-3-8
Max Horz 5=36(LC 16)
Max Uplift 4=-31(LC 13), 5=-6(LC 16)
Max Grav 4=1(LC 12), 5=225(LC 20)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3E) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 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.



March 23, 2022

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



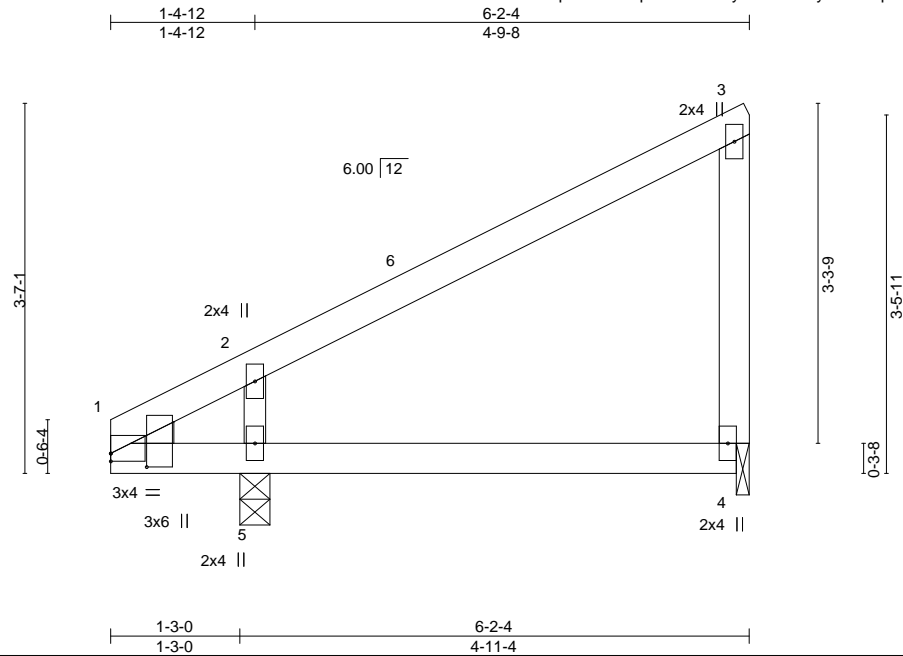
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J6	Truss Type Monopitch	Qty 13	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896125
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KC Truss & Panel Inc. (Urlich, MO), Urlich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:16 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-yLG1avbukyVN?JuqNlfWvA2wbHMhk35RdMh6wzYhmD



Scale = 1:22.3

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]									
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	-0.01 4-5	>999	240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.03 4-5	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00 4	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
					Weight: 25 lb FT = 20%				

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.1 *Except*
2-5: 2x3 SPF No.3

WEDGE
Left: 2x3 SPF No.3

REACTIONS. (size) 5=0-3-8, 4=0-1-8
Max Horz 5=88(LC 15)
Max Uplift 5=14(LC 16), 4=14(LC 13)
Max Grav 5=345(LC 21), 4=217(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-312/200

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-0-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 4. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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



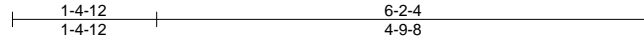
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J7	Truss Type Monopitch	Qty 4	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896126 Job Reference (optional)
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:16 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-yLG1avbukyVN?JuqNifWvA2wzHKRk36RdMh6wzYhmD



Scale = 1:22.3

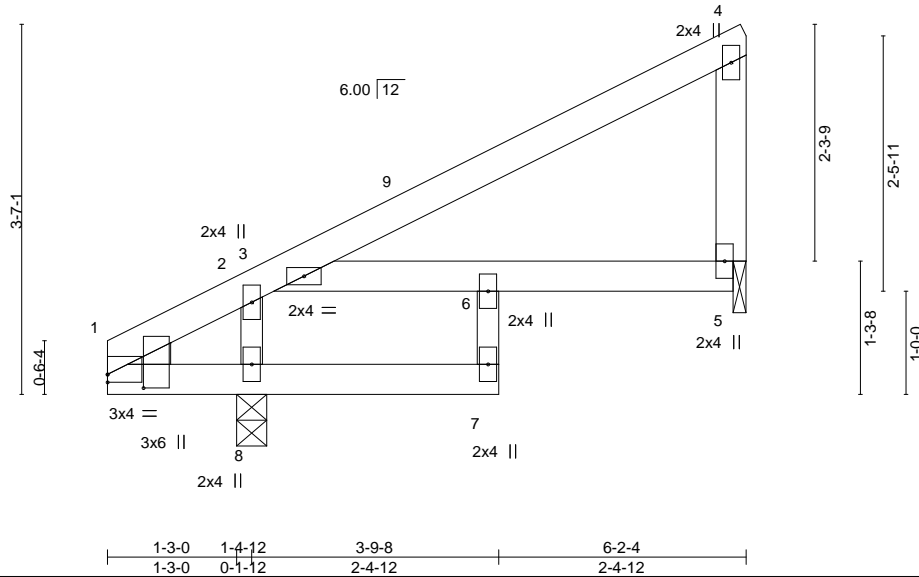


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.22	Vert(LL)	-0.01	6	>999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.20	Vert(CT)	-0.02	7	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.10	Horz(CT)	0.01	5	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 27 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
6-7: 2x3 SPF No.3
WEBS 2x4 SP No.1 *Except*
2-8: 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

BRACING-

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

REACTIONS.

(size) 8=0-3-8, 5=0-1-8
Max Horz 8=77(LC 13)
Max Uplift 8=-12(LC 16), 5=-12(LC 13)
Max Grav 8=345(LC 21), 5=217(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-310/155

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-0-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 5. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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



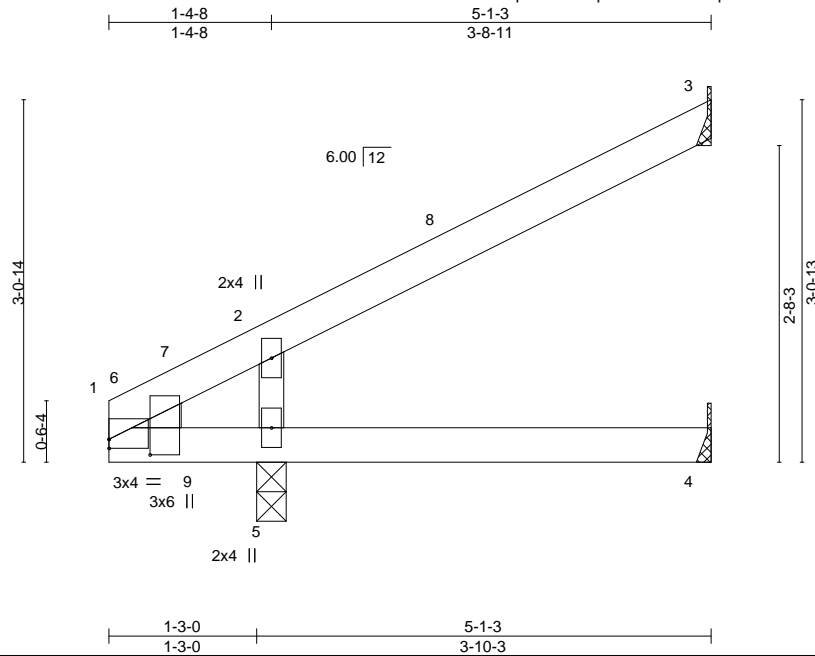
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J8	Truss Type Jack-Open	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896127
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:17 2022 Page 1

ID:3YzUEFuTXpushHba?0tpUTHzCdai-RXqPoFcWVGdEdTT0wTAIRNb6RhhTTWWas0cqfMzYhmC



Scale = 1:19.5

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]									
LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES	GRIP
TCLL (roof)	20.0	2-0-0		TC	0.18	in (loc)	l/defl	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Plate Grip DOL	1.15	BC	0.08	Vert(LL)	-0.01 4-5 >999		
TCDL	10.0	Lumber DOL	1.15	WB	0.09	Vert(CT)	-0.01 4-5 >999		
BCLL	0.0 *	Rep Stress Incr	YES	Matrix-P		Horz(CT)	-0.01 3 n/a n/a		
BCDL	10.0	Code IRC2018/TPI2014						Weight: 17 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-0
Max Horz 5=62(LC 16)
Max Uplift 3=29(LC 16)
Max Grav 3=125(LC 20), 4=62(LC 7), 5=331(LC 20)

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

WEBS 2-5=278/163

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-0-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 3.
- 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.



March 23, 2022

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



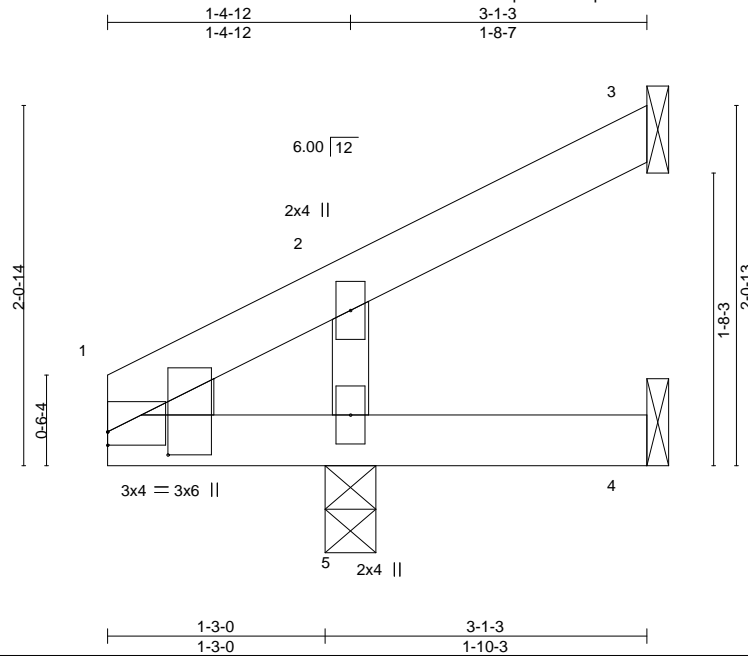
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J9	Truss Type Jack-Open	Qty 3	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896128 Job Reference (optional)
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:18 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-vkNo?ad9Gal5Fd2CUAh__b7lg51yC_Fk5gMOBpzYhmB



Scale = 1:13.2

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	0.00 5	>999	240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00 4-5	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.01 3	n/a	n/a
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-P					
BCDL	10.0								
								Weight: 11 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=39(LC 16)
Max Uplift 3=-15(LC 16), 4=-9(LC 20), 5=-6(LC 16)
Max Grav 3=30(LC 20), 4=12(LC 7), 5=262(LC 20)

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

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 3, 4.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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

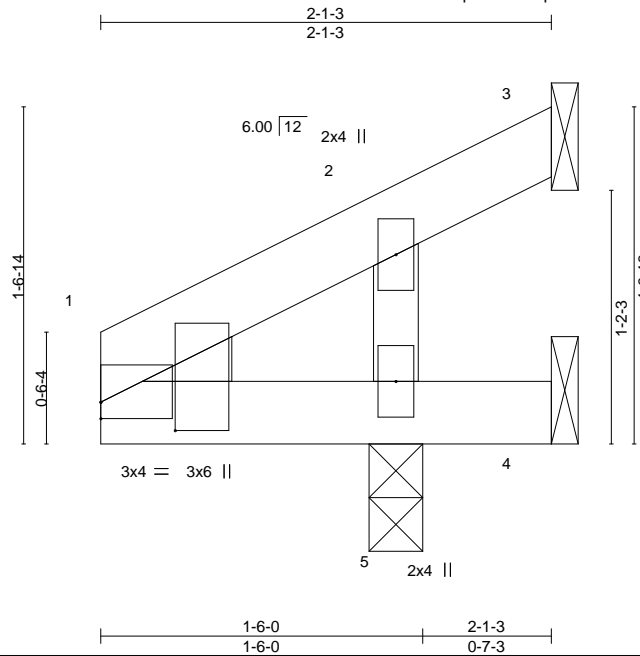


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J10	Truss Type Jack-Open	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896129 Job Reference (optional)
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:09 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-f?LO6VWVOpNfEsUSn1t7hFIATzqbv5P0ngPNqzYhmK



Scale = 1:10.7

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00 5	>999	240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	0.00 5	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00 3	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P					
BCDL	10.0								
								Weight: 8 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-1-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-0
Max Horz 5=28(LC 16)
Max Uplift 3=-39(LC 20), 4=-59(LC 20), 5=-13(LC 16)
Max Grav 5=280(LC 20)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 3, 4.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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

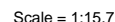
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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

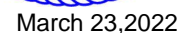


16023 Swingley Ridge Rd
Chesterfield, MO 63017

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:09 2022 Page 1
ID:3YzUEFFuTXpusHba?0toUTHzCdaif?LO6VWVOpcNfEsUSn1t7hFleT_5buoP0naPNazYhmK



- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCdL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-0-7 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 3.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

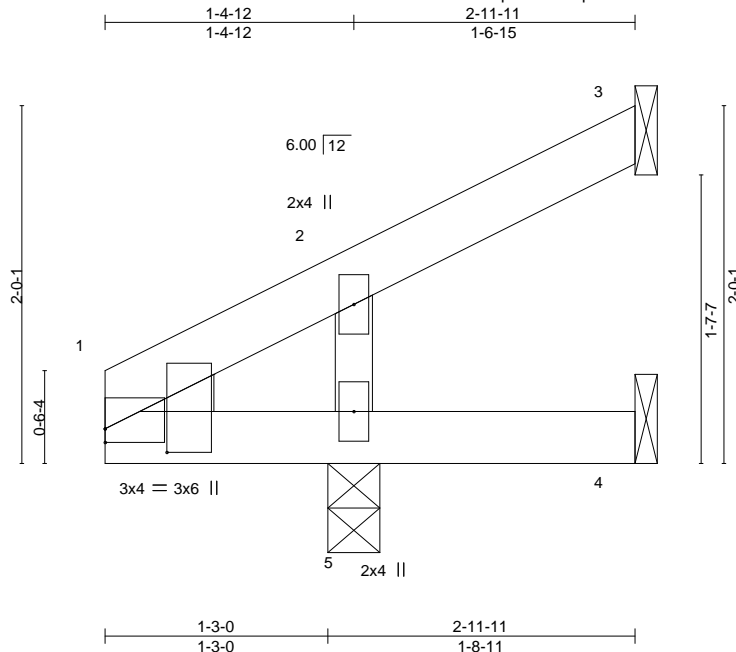


Job 220056-A	Truss J12	Truss Type Jack-Open	Qty 2	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896131 Job Reference (optional)
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:10 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-8BumKrX797kEHORg0VY6fvowktJ4KMIYFRQzvGzYhmJ



Scale = 1:12.9

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.08	Vert(LL) 0.00	5	>999	240	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.07	Vert(CT) 0.00	5	>999	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT) -0.01	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 10 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=38(LC 16)
Max Uplift 3=-14(LC 16), 4=-13(LC 20), 5=-7(LC 16)
Max Grav 3=23(LC 20), 4=8(LC 14), 5=259(LC 20)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 3, 4.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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



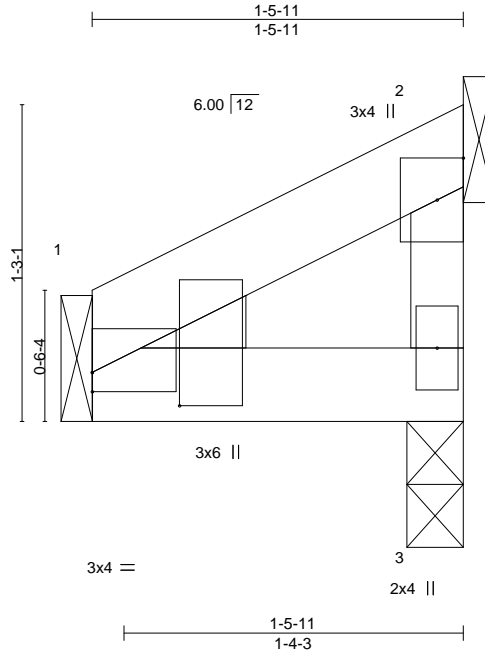
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	J13	Jack-Open	2	1	150896132
Job Reference (optional)					

KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:10 2022 Page 1

ID:3YzUEFuTXpushHba70tpUTHzCdai-8BumKrX797KEHORg0VY6fvoxPtKgKM7YFRQzvGzYhmJ



Scale = 1:9.1

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.04	Vert(LL)	-0.00	1	>999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	-0.00	1	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	-0.00	2	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 6 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 1-5-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=0-2-11, 2=Mechanical, 1=Mechanical
Max Horz 3=20(LC 16)
Max Uplift 2=14(LC 16)
Max Grav 3=27(LC 7), 2=45(LC 20), 1=58(LC 20)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 3.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
- 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 23, 2022

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

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

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

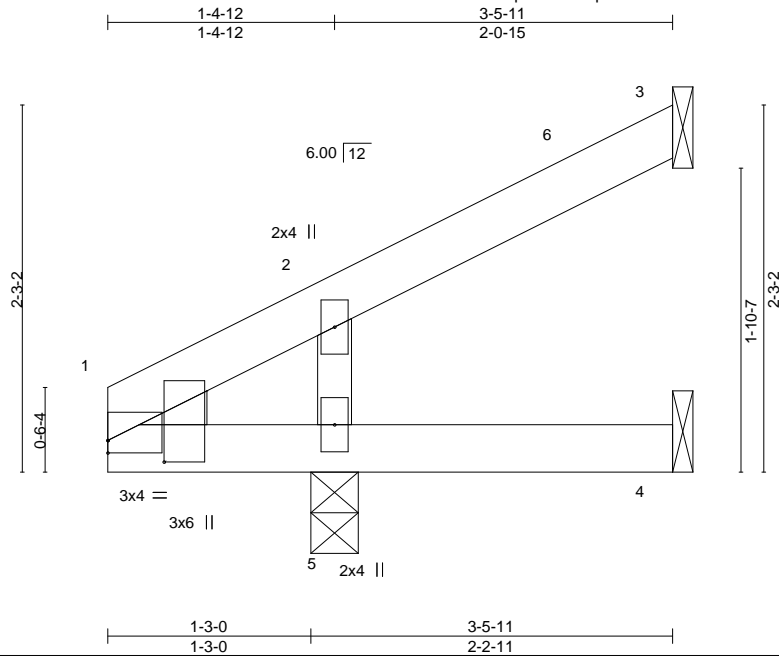


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J14	Truss Type Jack-Open	Qty 2	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896133
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:11 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-cNS8XBmwQs5vY0saC3LC6L5KGfQ3pRiU59WRjzYhml



Scale = 1:14.2

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-2]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00 5	>999	240
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	0.00 4-5	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.01 3	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-P					
BCDL	10.0								
					Weight: 12 lb		FT = 20%		

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-5-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8
Max Horz 5=43(LC 16)
Max Uplift 3=-18(LC 16), 5=-5(LC 16)
Max Grav 3=49(LC 20), 4=23(LC 7), 5=273(LC 20)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 3-4-15 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
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 3.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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

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

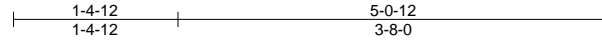


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J15	Truss Type Monopitch	Qty 8	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896134
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:12 2022 Page 1
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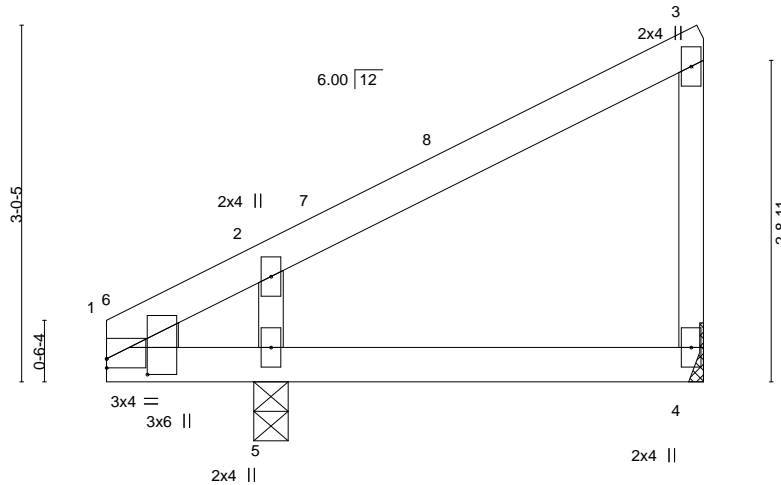


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-10,0-4-2]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.15	Vert(LL)	-0.00	4-5	>999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	-0.01	4-5	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.09	Horz(CT)	-0.00	4	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 19 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-0-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 4=Mechanical, 5=0-3-8
Max Horz 5=74(LC 13)
Max Uplift 4=-15(LC 13), 5=-16(LC 16)
Max Grav 4=153(LC 20), 5=330(LC 20)

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

WEBS 2-5=-274/170

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-11-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 4.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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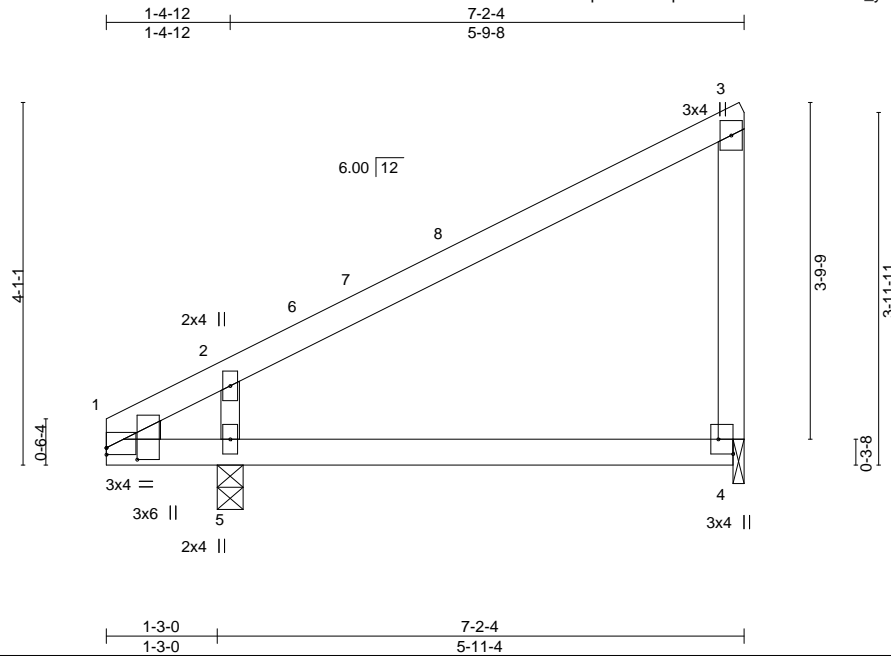
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J16	Truss Type Monopitch	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896135 Job Reference (optional)
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KC Truss & Panel Inc. (Urlich, MO), Urlich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:12 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-4a0WIXYOhk_yXib38vaakKtCYgzfoFwrikv4z9zYhmH



Scale = 1:26.0

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3], [4:Edge,0-2-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.03	4-5	>999
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.06	4-5	>999
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	4	n/a
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S					
BCDL	10.0								
								Weight: 29 lb	
								FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.1 *Except*
2-5: 2x3 SPF No.3

WEDGE
Left: 2x3 SPF No.3

REACTIONS. (size) 5=0-3-8, 4=0-1-8
Max Horz 5=102(LC 13)
Max Uplift 5=12(LC 16), 4=12(LC 13)
Max Grav 5=366(LC 21), 4=267(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-351/232

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-0-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5 and 4. This connection is for uplift only and does not consider lateral forces.
- 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 23, 2022

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

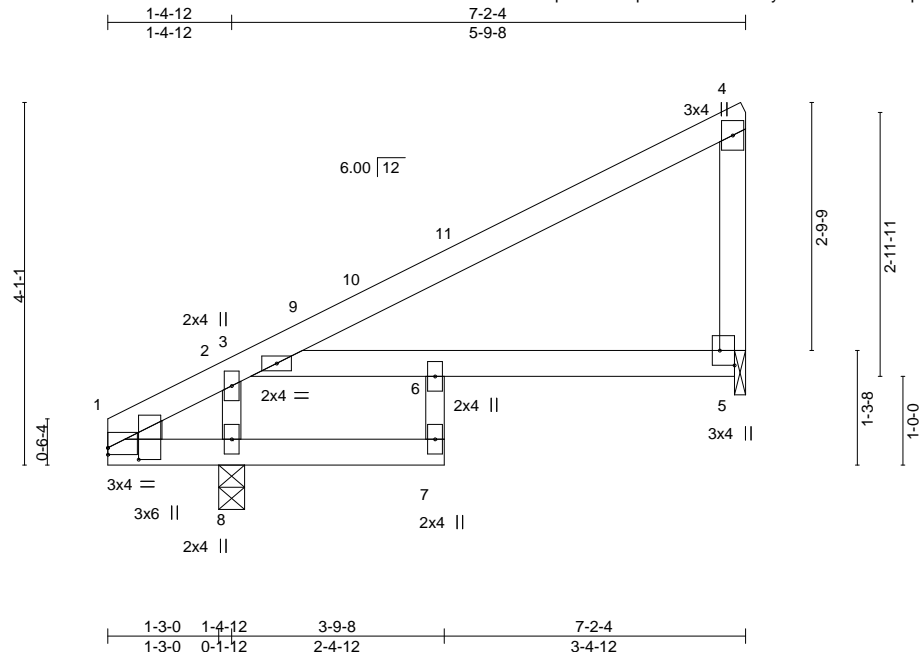


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss J17	Truss Type Monopitch	Qty 4	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896136 Job Reference (optional)
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:13 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-YmavytZ0R26o8sAFhd5pHXQNm4H4XiB?xOedWbzYhmG



Scale = 1:26.0

Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3], [5:Edge,0-2-0]									
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	-0.03	6	>999
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.31	Vert(CT)	-0.06	5-6	>999
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.03	5	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
								Weight: 31 lb	
								FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
6-7: 2x3 SPF No.3
WEBS 2x4 SP No.1 *Except*
2-8: 2x3 SPF No.3
WEDGE
Left: 2x3 SPF No.3

REACTIONS.

(size) 8=0-3-8, 5=0-1-8
Max Horz 8=91(LC 13)
Max Uplift 8=-11(LC 16), 5=-11(LC 13)
Max Grav 8=366(LC 21), 5=267(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-344/165

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 7-0-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 8 and 5. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

BRACING-

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



March 23, 2022

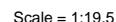
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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

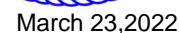


16023 Swingley Ridge Rd
Chesterfield, MO 63017

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:13 2022 Page 1
usHba?0tpUTHzCdaj-YmavvtZ0R26o8sAFhd5pHXQQk4JpXiN?xOedWbzYhmG



- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 5-0-7 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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) 4.
- 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.

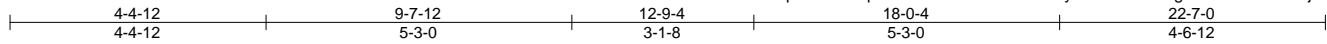


Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	K1	Hip	1	1	I50896138

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:19 2022 Page 1

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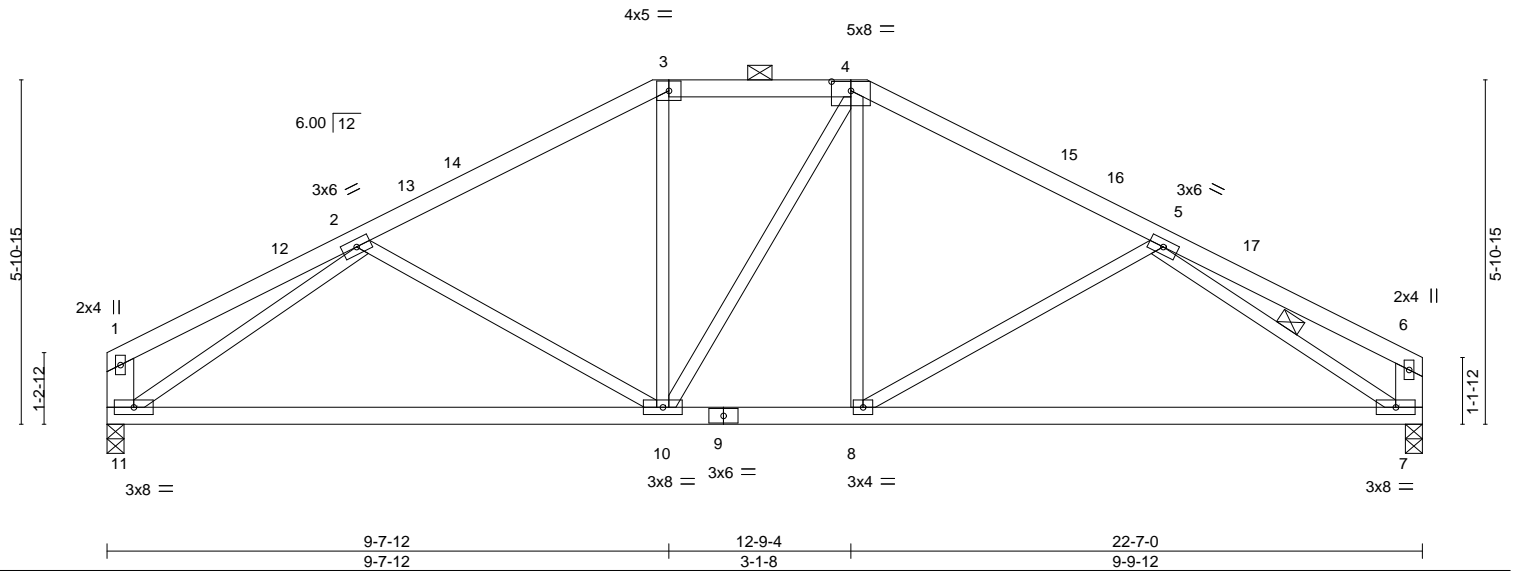


Plate Offsets (X,Y)-- [4:0-4-0,0-1-15]

LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.39	Vert(LL)	-0.19	7-8	>999	240	MT20	197/144
Snow (Pf/Pg) 20.4/20.0	Plate Grip DOL 1.15	BC 0.57	Vert(CT)	-0.39	7-8	>686	180		
TCDL 10.0	Lumber DOL 1.15	WB 0.99	Horz(CT)	0.04	7	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014								
								Weight: 106 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3 *Except*
1-11,6-7: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-1-12 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-7

REACTIONS.

(size) 11=0-3-8, 7=0-3-8
Max Horz 11=87(LC 14)
Max Grav 11=1097(LC 38), 7=1098(LC 38)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-259/0, 2-3=-1244/65, 3-4=-1012/81, 4-5=-1250/65, 5-6=-297/0, 6-7=-257/19
BOT CHORD 10-11=-57/1192, 8-10=0/1017, 7-8=-44/1229
WEBS 4-8=0/260, 2-11=-1278/93, 5-7=-1269/96

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 9-7-12, Exterior(2E) 9-7-12 to 12-9-4, Exterior(2R) 12-9-4 to 17-0-3, Interior(1) 17-0-3 to 22-4-4 zone; cantilever left and right exposed; end vertical left and right exposed; C/C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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 23, 2022

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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



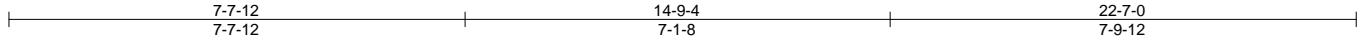
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss K2	Truss Type Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 I50896139
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:20 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-r6VYQGePoB?pUwCbcbjS30CQBvargkA1Y_rVfhZym9



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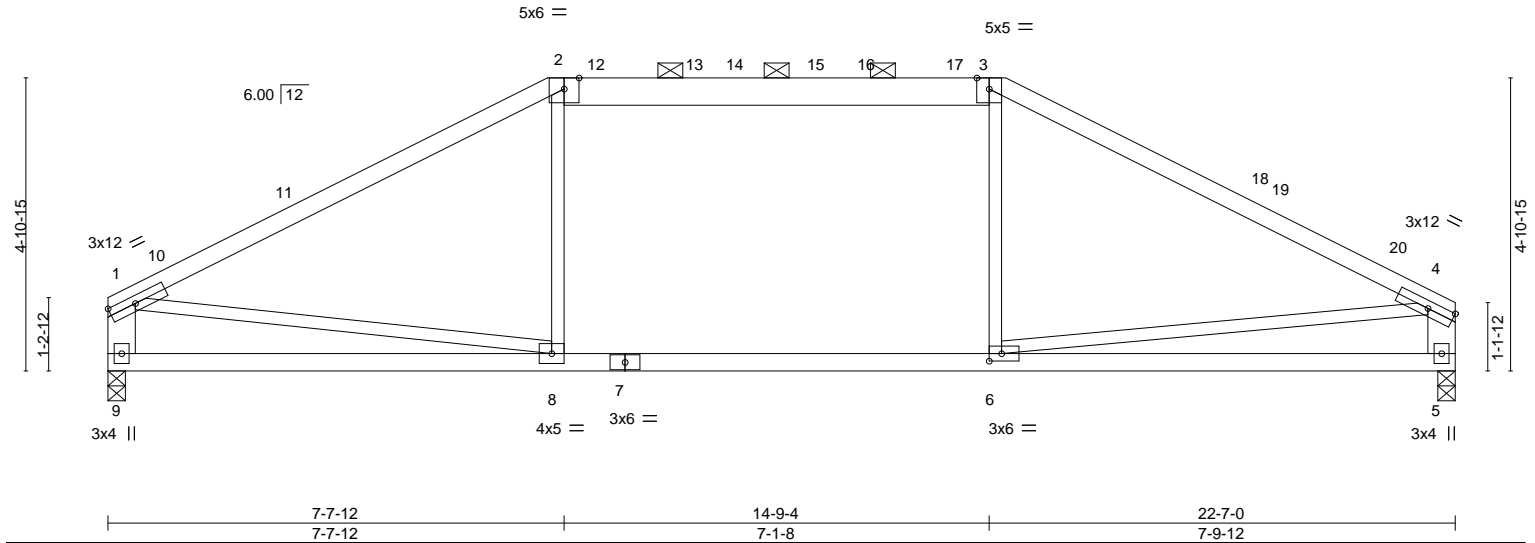


Plate Offsets (X,Y)-- [6:0-2-8,0-1-8]									
LOADING (psf)		SPACING	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.29 5-6	>906	240
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.68	Vert(CT)	-0.36 5-6	>740	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.60	Horz(CT)	0.02 5	n/a	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
					Weight: 99 lb FT = 20%				

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1 *Except* 2-3: 2x6 SP No.1	TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 2-3.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x3 SPF No.3 *Except* 1-9,4-5: 2x6 SP No.1		

REACTIONS. (size) 9=0-3-8, 5=0-3-8
Max Horz 9=73(LC 14)
Max Grav 9=1081(LC 46), 5=1083(LC 48)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1422/55, 2-3=-1170/77, 3-4=-1427/55, 1-9=-964/64, 4-5=-956/65
BOT CHORD 8-9=-60/384, 6-8=0/1184, 5-6=-31/395
WEBS 2-8=0/288, 3-6=0/295, 1-8=0/1034, 4-6=0/995

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 7-7-12, Exterior(2R) 7-7-12 to 11-10-11, Interior(1) 11-10-11 to 14-9-4, Exterior(2R) 14-9-4 to 19-0-3, Interior(1) 19-0-3 to 22-4-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 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 23, 2022

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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 220056-A	Truss K3	Truss Type Hip	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896140
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:21 2022 Page 1
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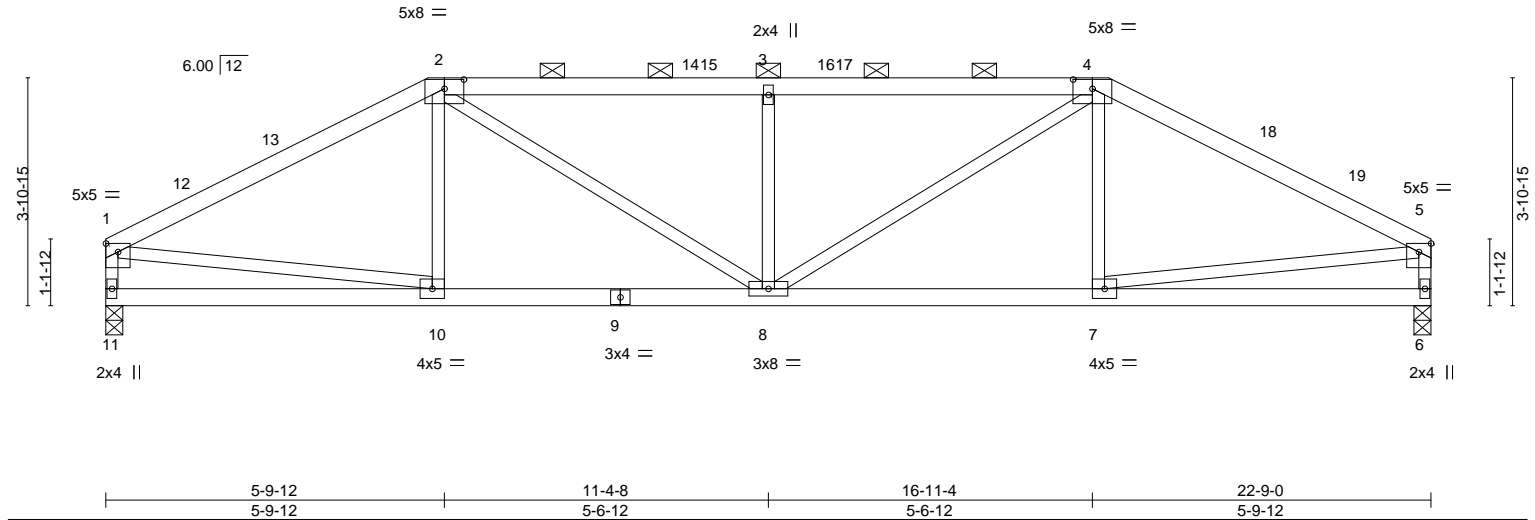


Plate Offsets (X, Y)--		[1:Edge,0-1-12], [2:0-4-0,0-1-15], [4:0-4-0,0-1-15], [5:Edge,0-1-12]									
LOADING (psf)		SPACING-	2-0-0	CSI		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.07 8	>999	240	MT20	197/144
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.13 8-10	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.02 6	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S						Weight: 99 lb	FT = 20%
BCDL	10.0										

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-2 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-12 max.): 2-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 11=0-3-8, 6=0-3-8
Max Horz 11=59(LC 15)
Max Grav 11=902(LC 2), 6=902(LC 2)

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

TOP CHORD 1-2=-1344/41, 2-3=-1712/63, 3-4=-1712/63, 4-5=-1344/41, 1-11=-847/49, 5-6=-847/49
BOT CHORD 8-10=-1/1178, 7-8=-0/1178
WEBS 2-8=-29/637, 3-8=-595/88, 4-8=-29/637, 1-10=0/1087, 5-7=0/1087

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-4 to 3-1-4, Interior(1) 3-1-4 to 5-9-12, Exterior(2R) 5-9-12 to 10-0-11, Interior(1) 10-0-11 to 16-11-4, Exterior(2R) 16-11-4 to 21-2-3, Interior(1) 21-2-3 to 22-7-12 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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 23,2022

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 220056-A	Truss K5	Truss Type Hip Girder	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896141
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:23 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-FhBh2lhH56NOLowAHjh9heqyZ6cYt9XTEy39s0zYhm6

-1-3-0 1-3-0	3-9-12 3-9-12	8-9-13 5-0-1	13-11-3 5-1-5	18-11-4 5-0-1	22-9-0 3-9-12	24-0-0 1-3-0
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Scale = 1:41.1

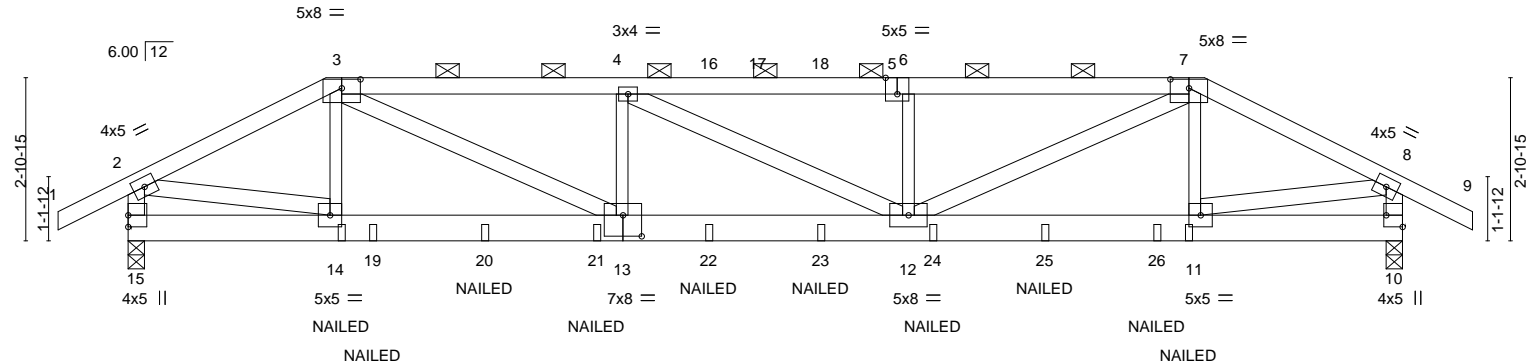


Plate Offsets (X,Y)--		[3:0-4-0,0-1-15], [5:0-2-8,Edge], [7:0-4-0,0-1-15], [10:Edge,0-3-8], [13:0-4-0,0-4-8]					
LOADING (psf)		SPACING-		CSI.		DEFL.	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.84	in (loc)	L/d
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.68	Vert(LL)	>999
TCDL	10.0	Rep Stress Incr	NO	WB	0.37	Vert(CT)	>872
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S		Horz(CT)	n/a
BCDL	10.0						
						PLATES	
						MT20	
						GRIP	
						197/144	
						Weight: 135 lb	
						FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.1 *Except*
3-14,4-13,6-12,7-11: 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-9-15 oc purlins, except end verticals, and 2-0-0 oc purlins (2-4-14 max.): 3-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 15=0-3-8, 10=0-3-8
Max Horz 15=53(LC 11)
Max Uplift 15=147(LC 12), 10=147(LC 12)
Max Grav 15=1749(LC 34), 10=1749(LC 34)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2587/206, 3-4=-4179/342, 4-6=-4150/343, 6-7=-4153/345, 7-8=-2592/208,
2-15=-1717/167, 8-10=-1720/167
BOT CHORD 13-14=-141/2310, 12-13=-294/4173, 11-12=-162/2314
WEBS 3-13=-172/2101, 4-13=-509/70, 6-12=-513/96, 7-12=-173/2068, 2-14=-170/2240,
8-11=-173/2248

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15 and 10. This connection is for uplift only and does not consider lateral forces.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- "NAILED" indicates 3-12d Nails skew 45 to 135 degrees (0.148" x 3.25") 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).



March 23,2022

LOAD CASE(S)

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	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	K5	Hip Girder	1	1	I50896141
Job Reference (optional)					

LOAD CASE(S)
Standard

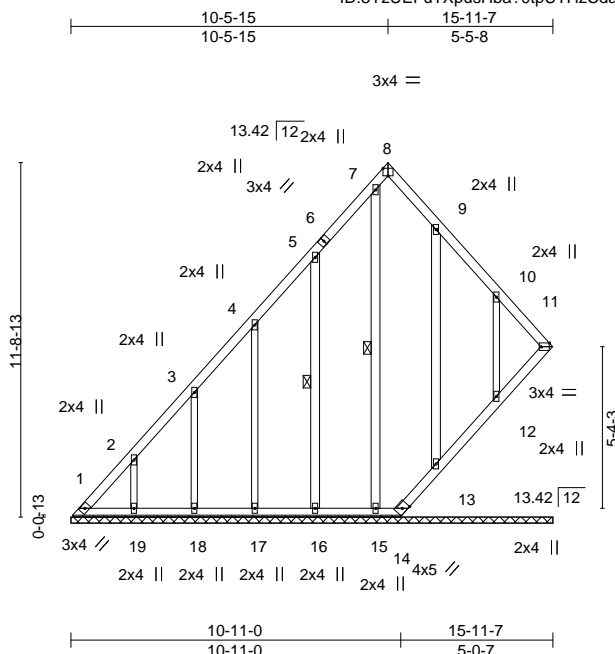
- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-51, 2-3=-51, 3-7=-61, 7-8=-51, 8-9=-51, 10-15=-20
 Concentrated Loads (lb)
 Vert: 14=-181(B) 11=-181(B) 19=-133(B) 20=-133(B) 21=-133(B) 22=-133(B) 23=-133(B) 24=-133(B) 25=-133(B) 26=-133(B)



Job 220056-A	Truss L1	Truss Type GABLE	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896142
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:24 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-jtl3GehvsQVFzYVMrRoODsNKaW5?cf3cTcpiOSzYhm5



Scale = 1:76.3

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

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.06	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.16	Horz(CT)	0.00	11	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 116 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x3 SPF No.3 *Except*
5-16,7-15,9-13: 2x4 SP No.1

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.
WEBS 1 Row at midpt 5-16, 7-15

REACTIONS.

All bearings 15-11-7.
(lb) - Max Horz 1=172(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 11, 1, 14, 19, 18, 17, 16, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 11, 1, 14, 19, 18, 17, 16, 15, 13, 12

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-304/273

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 10-5-15, Exterior(2R) 10-5-15 to 13-5-15, Interior(1) 13-5-15 to 15-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 11, 1, 14, 19, 18, 17, 16, 15, 13, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 13, 12.
- N/A
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 13, 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 23,2022

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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

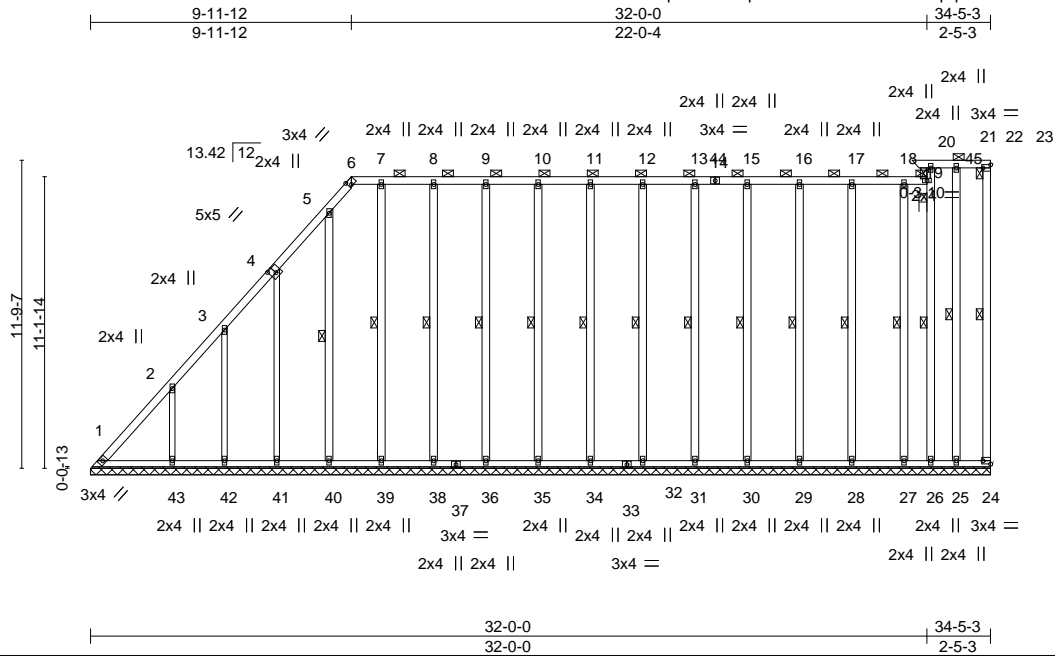


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss L2	Truss Type GABLE	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896143 Job Reference (optional)
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:27 2022 Page 1
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Scale = 1:88.2

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [6:0-1-6,Edge], [23:Edge,0-1-8], [24:Edge,0-1-8]					
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.42
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.20
TCDL	10.0	Rep Stress Incr	YES	WB	0.24
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S	
BCDL	10.0				
			DEFL.	in (loc)	I/defl L/d
			Vert(LL)	-0.00 20	n/r 120
			Vert(CT)	-0.00 20	n/r 120
			Horz(CT)	-0.01 24	n/a n/a
			PLATES		
			MT20		
			GRIP		
			197/144		
			Weight: 360 lb FT = 20%		

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.1
OTHERS 2x4 SP No.1 *Except*
2-43,3-42,4-41: 2x3 SPF No.3

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.): 6-19, 21-26, 20-23. Except:
1 Row at midpt 19-26
6-0-0 oc bracing: 19-21
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 23-24, 5-40, 7-39, 8-38, 9-36, 10-35, 11-34, 12-32, 13-31, 15-30, 16-29, 17-28, 18-27, 22-25
JOINTS 1 Brace at Jt(s): 21, 23, 19

REACTIONS.

All bearings 34-5-3.
(lb) - Max Horz 1=314(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 26, 24, 43, 42, 41, 40, 39, 38, 31, 30, 29, 28, 27, 25 except 1=118(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 26, 24, 42, 41, 40, 39, 38, 36, 35, 34, 32, 31, 30, 29, 28, 27, 25 except 1=263(LC 11), 43=262(LC 23)

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

TOP CHORD 1-2=-461/458, 2-3=-357/351, 3-4=-288/295

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=6.0psf; h=25ft; B=45ft; L=34ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-9-4, Interior(1) 3-9-4 to 9-11-12, Exterior(2R) 9-11-12 to 13-1-8, Interior(1) 13-1-8 to 32-1-12, Exterior(2E) 31-6-13 to 34-3-7 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- N/A
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23, 2022

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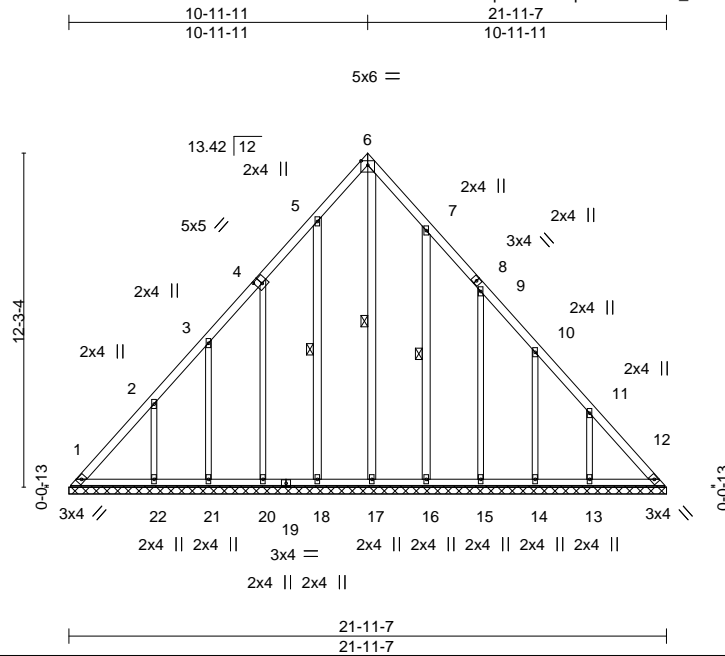


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss L3	Truss Type GABLE	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896144 Job Reference (optional)
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:28 2022 Page 1
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Scale = 1:84.6

Plate Offsets (X,Y)-- [4:0-2-8,0-3-0], [6:Edge,0-1-14]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	L/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a
TCDL	10.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.00	12	n/a
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S					
BCDL	10.0								
								Weight: 150 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x3 SPF No.3 *Except*
5-18,6-17,7-16: 2x4 SP No.1

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.
WEBS 1 Row at midpt 5-18, 6-17, 7-16

REACTIONS.

All bearings 21-11-7.
(lb) - Max Horz 1=224(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 22, 21, 20, 18, 16, 15, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 1, 21, 20, 18, 17, 16, 15, 14, 13, 12 except 22=258(LC 23)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-1-7, Interior(1) 3-1-7 to 10-11-11, Exterior(2R) 10-11-11 to 13-11-11, Interior(1) 13-11-11 to 21-7-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- N/A
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 23,2022

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

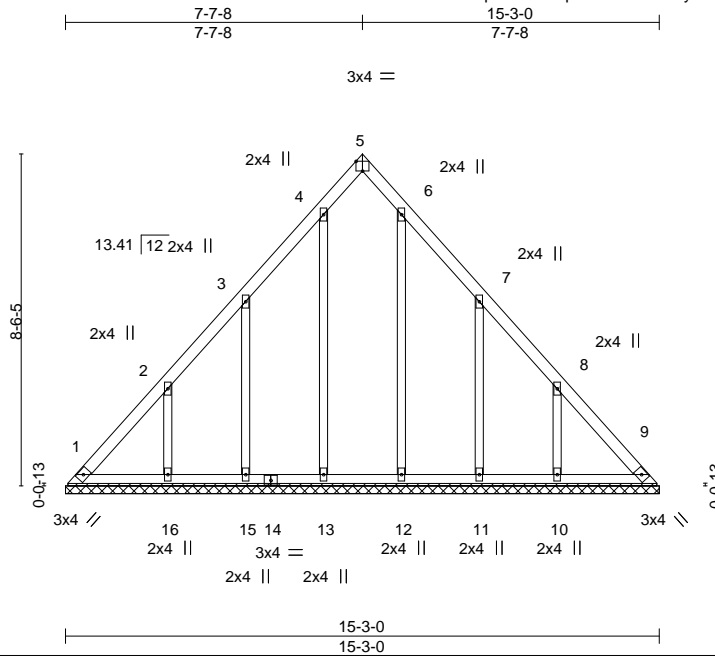


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss L4	Truss Type GABLE	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896145
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:29 2022 Page 1
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Scale = 1:59.2

Plate Offsets (X,Y)-- [5:Edge,0-3-0], [6:0-0-0,0-0-0], [7:0-0-0,0-0-0], [8:0-0-1,0-0-0]					
LOADING (psf)		SPACING-		CSI.	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.06
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03
TCDL	10.0	Rep Stress Incr	YES	WB	0.15
BCLL	0.0 *	Code	IRC2018/TPI2014	Matrix-S	
BCDL	10.0				
DEFL.		DEFL.		DEFL.	
Vert(LL)	n/a	in (loc)	-	l/defl	L/d
Vert(CT)	n/a		-	n/a	999
Horz(CT)	0.00		9	n/a	n/a
PLATES		GRIP			
MT20		197/144			
Weight: 78 lb		FT = 20%			

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x3 SPF No.3

BRACING-

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

REACTIONS.

All bearings 15-3-0.

- (lb) - Max Horz 1=154(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 15, 16, 11, 10
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 13, 15, 16, 12, 11, 10

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 7-7-8, Exterior(2R) 7-7-8 to 10-7-9, Interior(1) 10-7-9 to 14-11-1 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- N/A
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 23, 2022

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

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



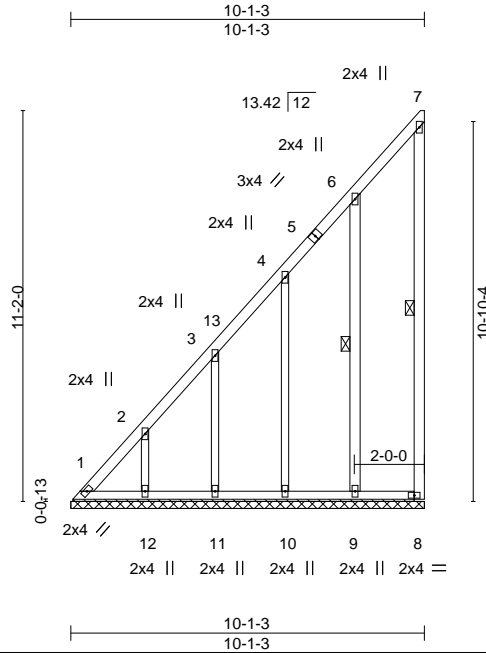
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss L5	Truss Type GABLE	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896146 Job Reference (optional)
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:30 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-Y16KWhmgRGFOhTzWBhvoT7dLsx8U0NLVrYG0c6zYhm?



Scale = 1:65.8

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.18	Horz(CT)	0.00	8	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 75 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.1
OTHERS 2x3 SPF No.3 *Except*
6-9: 2x4 SP No.1

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 7-8, 6-9

REACTIONS.

All bearings 10-1-3.
(lb) - Max Horz 1=243(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 12, 11, 10, 9
Max Grav All reactions 250 lb or less at joint(s) 8, 12, 11, 10, 9 except 1=252(LC 14)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-438/385, 2-3=-332/300

NOTES-

- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3) 0-3-15 to 4-6-13, Exterior(2R) 4-6-13 to 9-11-7 zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8.
- N/A
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 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.



March 23, 2022

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

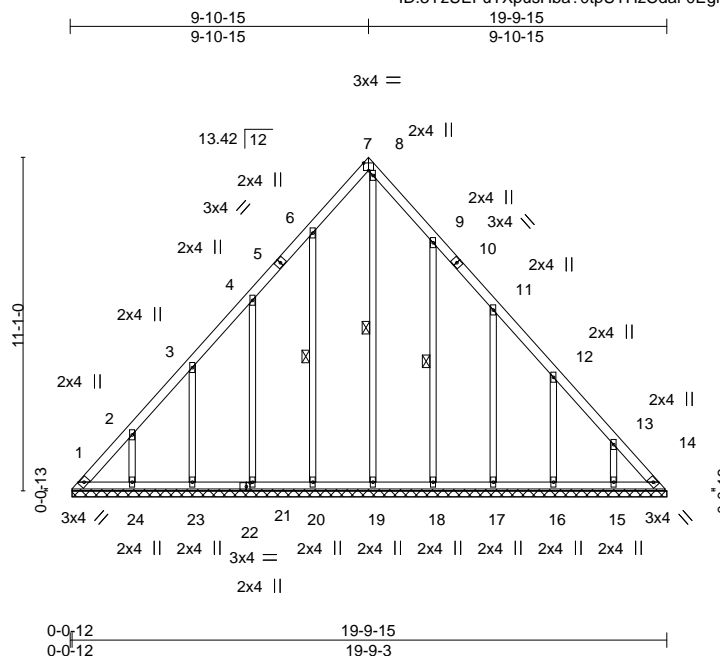


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss L6	Truss Type GABLE	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 I50896147
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:31 2022 Page 1
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Scale = 1:76.6

Plate Offsets (X,Y)-- [7:Edge,0-3-0], [22:0-1-8,0-1-8]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.17	Horz(CT)	0.00	14	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S					Weight: 113 lb	FT = 20%
BCDL 10.0	Code IRC2018/TPI2014							

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x3 SPF No.3

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.
WEBS 1 Row at midpt 6-20, 8-19, 9-18

REACTIONS.

All bearings 19-9-3.

(lb) - Max Horz 1=-202(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 1, 24, 23, 21, 20, 18, 17, 16, 15, 14

Max Grav All reactions 250 lb or less at joint(s) 1, 24, 23, 21, 20, 19, 18, 17, 16, 15, 14

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-3-15 to 3-3-15, Interior(1) 3-3-15 to 9-10-15, Exterior(2R) 9-10-15 to 12-10-15, Interior(1) 12-10-15 to 19-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- N/A
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 23, 2022

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

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

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

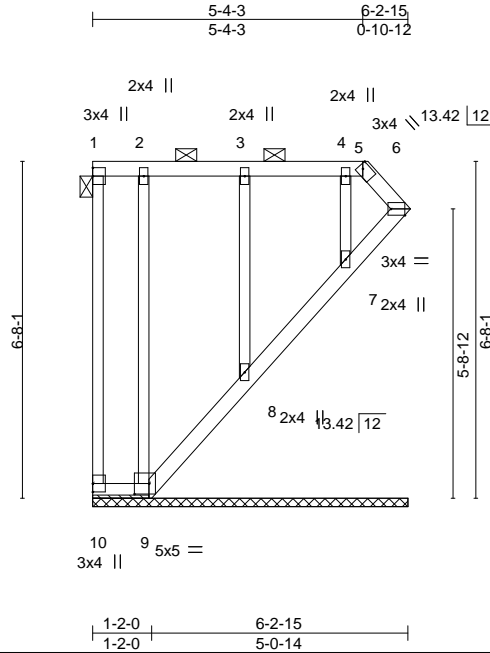


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
220056-A	L7	GABLE	1	1	150896148
Job Reference (optional)					

KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:32 2022 Page 1
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Scale = 1:45.6

Plate Offsets (X,Y)-- [6:Edge,0-1-8], [9:0-3-7,0-2-8]							
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.60	in (loc)	l/defl L/d
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.07	n/a -	n/a 999
TCDL	10.0	Rep Stress Incr	YES	WB	0.13	n/a -	n/a 999
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S		Horz(CT)	0.00 6 n/a n/a
BCDL	10.0						
						PLATES	GRIP
						MT20	197/144
						Weight: 38 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
OTHERS 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-2-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 9-10.

REACTIONS.

All bearings 6-2-15.
(lb) - Max Horz 10=132(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 10, 6, 9, 8, 7
Max Grav All reactions 250 lb or less at joint(s) 10, 6, 9, 8, 7

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-1-4 to 3-0-2, Interior(1) 3-0-2 to 5-4-3, Exterior(2E) 5-4-3 to 6-1-3 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 6, 9, 8, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8, 7.
- 8) N/A
- 9) Non Standard bearing condition. Review required.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23, 2022

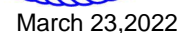
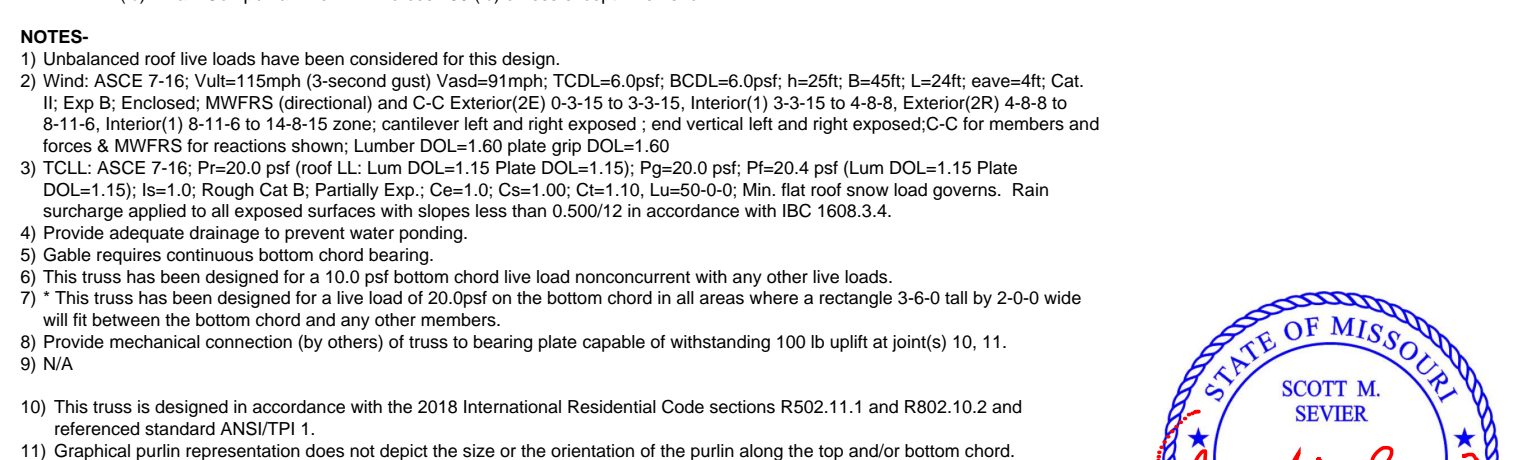
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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16023 Swingley Ridge Rd
Chesterfield, MO 63017

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:33 2022 Page 1
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4-8-8 14-8-15
4-8-8 10-0-7

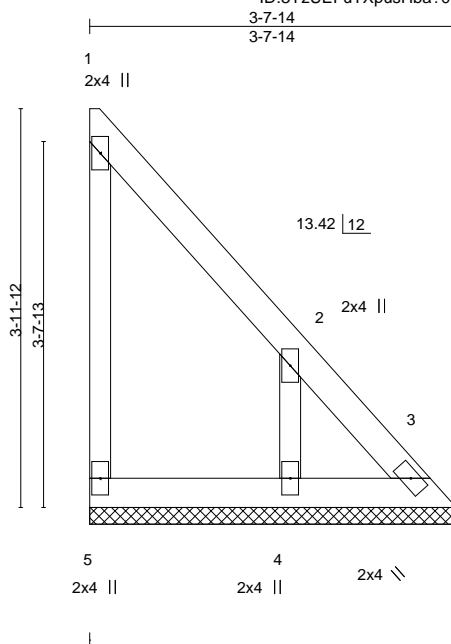


Job 220056-A	Truss L9	Truss Type GABLE	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896150 Job Reference (optional)
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:34 2022 Page 1

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Scale = 1:23.0

LOADING (psf)	SPACING-	CS.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.29	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 17 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3
OTHERS 2x3 SPF No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-7-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 5=3-7-14, 3=3-7-14, 4=3-7-14
Max Horz 5=-98(LC 12)
Max Uplift 5=-32(LC 10), 3=-30(LC 13), 4=-53(LC 14)
Max Grav 5=77(LC 24), 3=82(LC 10), 4=182(LC 24)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) N/A
- 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 23,2022

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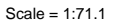
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

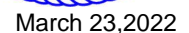
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BRACING-	
TOP CHORD	2-0-0 oc purlins (10-0-0 max.): 1-7.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 1-14, 2-12, 3-11

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

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCdL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner(3) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 12, 11, 10, 9, 8.
- 9) N/A
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 12, 11, 10, 9, 8.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



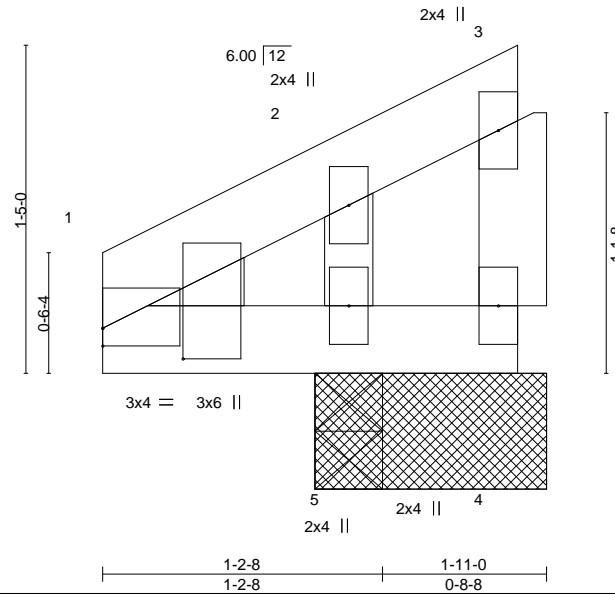
Job 220056-A	Truss M1	Truss Type Monopitch	Qty 5	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896152
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:34 2022 Page 1

ID:3YzUEFuTXpusHba?0tpUTHzCdai-RpLrM3pBVUm94GHQXzkdo2OYWEyDW5mAEEktzYhlc

1-11-0
1-11-0



Scale = 1:9.9

Plate Offsets (X,Y)--		[1:0-0-0,0-0-15], [1:0-1-9,0-4-3]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	0.00 5	>999	240	MT20	197/144
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00 5	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	-0.00 5	n/a	n/a		
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S						Weight: 8 lb	FT = 20%
BCDL	10.0										

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.1 *Except*
2-5: 2x3 SPF No.3

WEDGE

Left: 2x3 SPF No.3

REACTIONS.

(size) 4=1-0-0, 5=0-3-8
Max Horz 4=30(LC 15)
Max Uplift 4=46(LC 28), 5=22(LC 16)
Max Grav 4=8(LC 12), 5=195(LC 20)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- 7) N/A
- 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.



March 23,2022

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

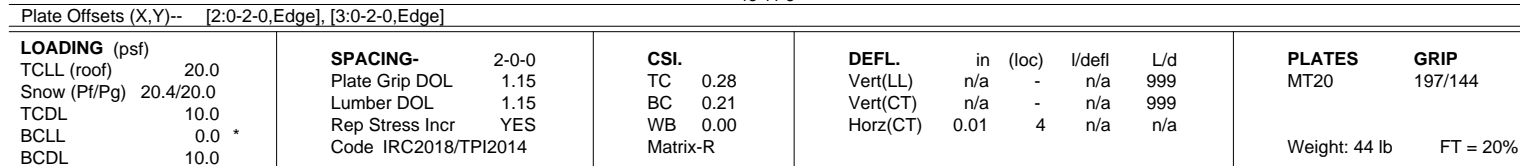
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:35 2022 Page 1
ID:3YzUEFuTxpusHba-v?0tpUTHzCdaI-v?vDaOqpGouhnErU_FVzAAK9FypfhgJE?pzpGKzYhlw
5-0-12 8-10-12 13-11-8
5-0-12 3-10-0 5-0-12
Scale = 1:22.6



REACTIONS. All bearings 13-4-8.
(lb) - Max Horz 1=28(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 1, 4
Max Grav All reactions 250 lb or less at joint(s) 6, 7, 5 except 1=418(LC 38), 4=418(LC 38)

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

TOP CHORD	1-2=-649/224, 2-3=-512/224, 3-4=-649/224
BOT CHORD	1-7=-155/512, 6-7=-155/512, 5-6=-155/512, 4-5=-155/512

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-0-12, Exterior(2E) 5-0-12 to 13-3-15 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
- 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) TCELL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- 5) Unbalanced snow loads have been considered for this design.
- 6) Provide adequate drainage to prevent water ponding.
- 7) Gable studs spaced at 4-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.
- 11) Non Standard bearing condition. Review required.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23.2022



WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 3f, 9f, 10f, 11f, 12f, 13f, 14f, 15f, 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

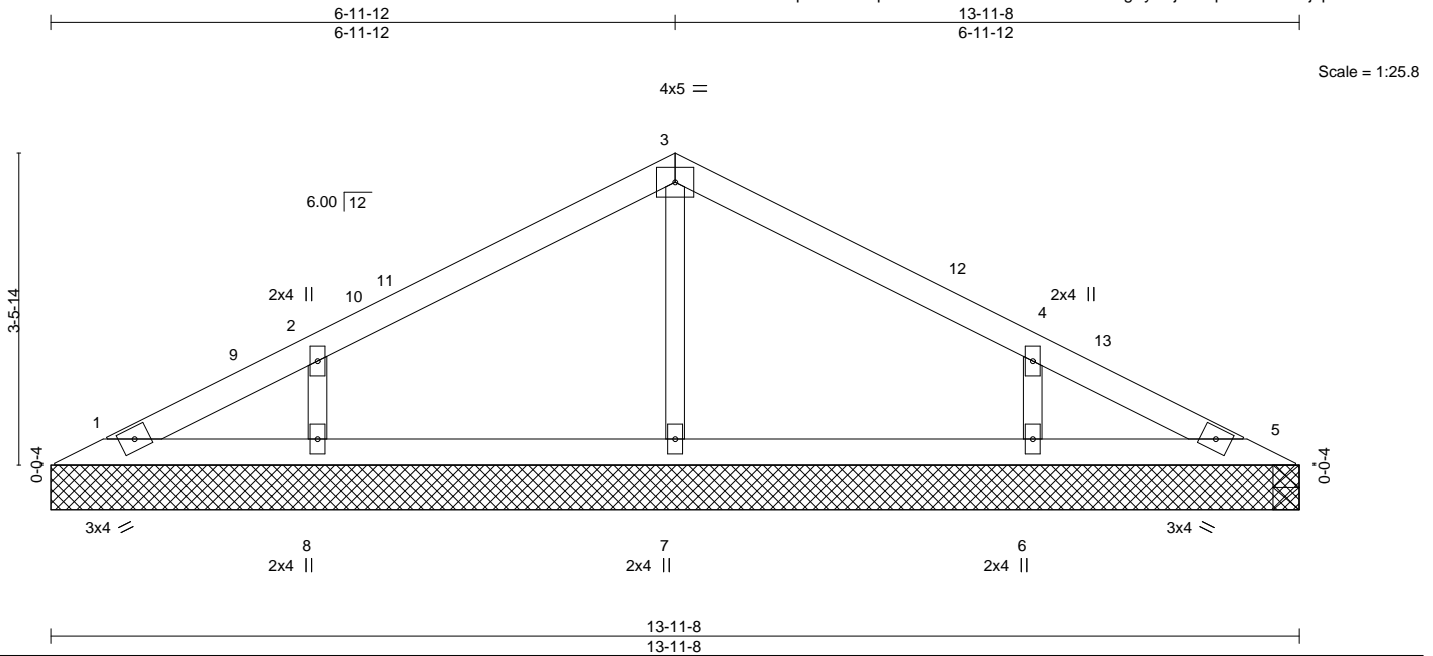


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss PB2	Truss Type Piggyback	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896154 Job Reference (optional)
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:36 2022 Page 1
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.17	Vert(LL)	-0.00	7-8	>999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.09	Vert(CT)	-0.01	7-8	>999		
TCDL 10.0	Lumber DOL 1.15	WB 0.10	Horz(CT)	0.00	5	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 46 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x3 SPF No.3

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

REACTIONS. All bearings 13-11-8.
(lb) - Max Horz 1=41(LC 14)
Max Uplift All uplift 100 lb or less at joint(s) 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 5 except 7=271(LC 2), 8=363(LC 20), 6=378(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-295/125, 4-6=-303/125

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-11-12, Exterior(2R) 6-11-12 to 9-11-12, Interior(1) 9-11-12 to 13-9-12 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- N/A
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 23, 2022

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

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

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss PB3	Truss Type GABLE	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896155
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KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:37 2022 Page 1

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Job Reference (optional)

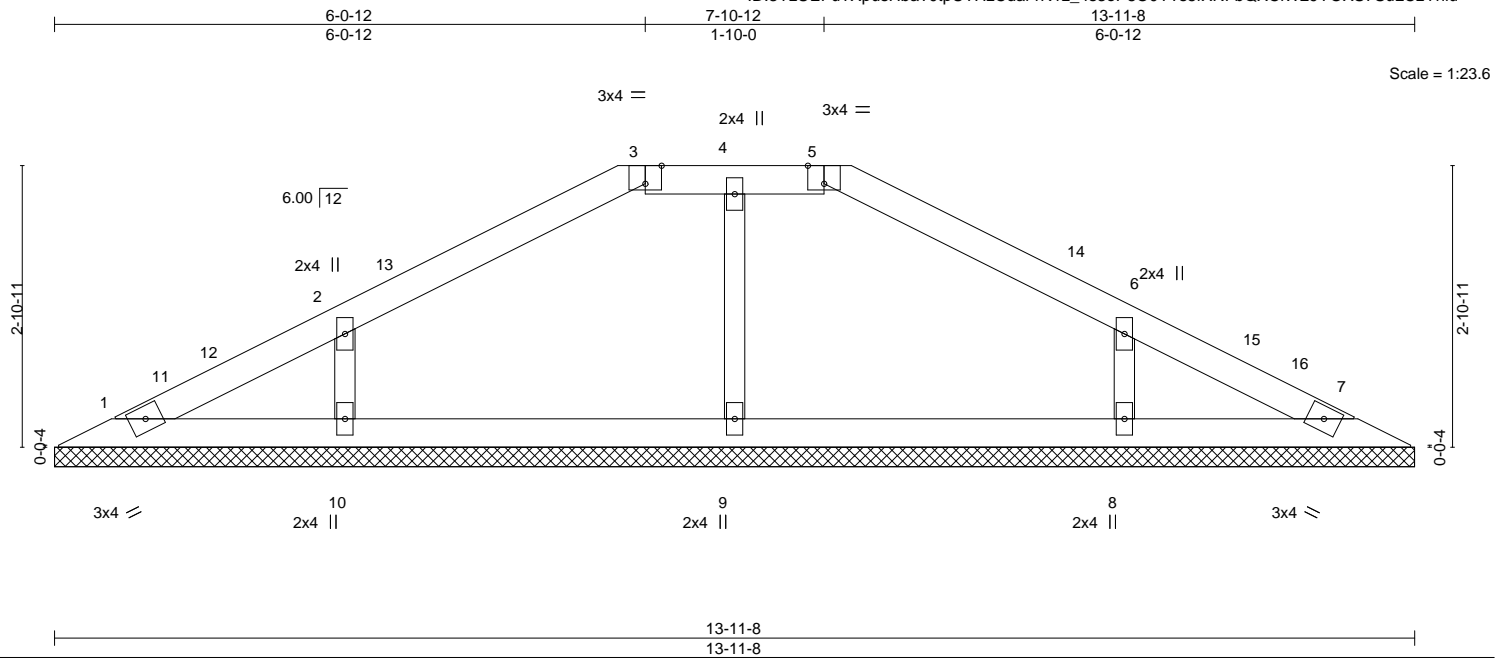


Plate Offsets (X,Y)-- [3:0-2-0,Edge], [5:0-2-0,Edge]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	999
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	999
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	7	n/a
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S					
BCDL	10.0								
								Weight: 45 lb	
								FT = 20%	

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x3 SPF No.3

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 13-11-8.
(lb) - Max Horz 1=34(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 10, 8
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=254(LC 21), 10=363(LC 38), 8=363(LC 38)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-10=-289/105, 6-8=-289/105

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-0-12, Exterior(2E) 6-0-12 to 7-10-12, Exterior(2R) 7-10-12 to 12-1-11, Interior(1) 12-1-11 to 13-3-15 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
- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- N/A
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23, 2022

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



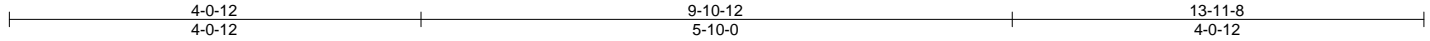
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss PB4	Truss Type GABLE	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896156
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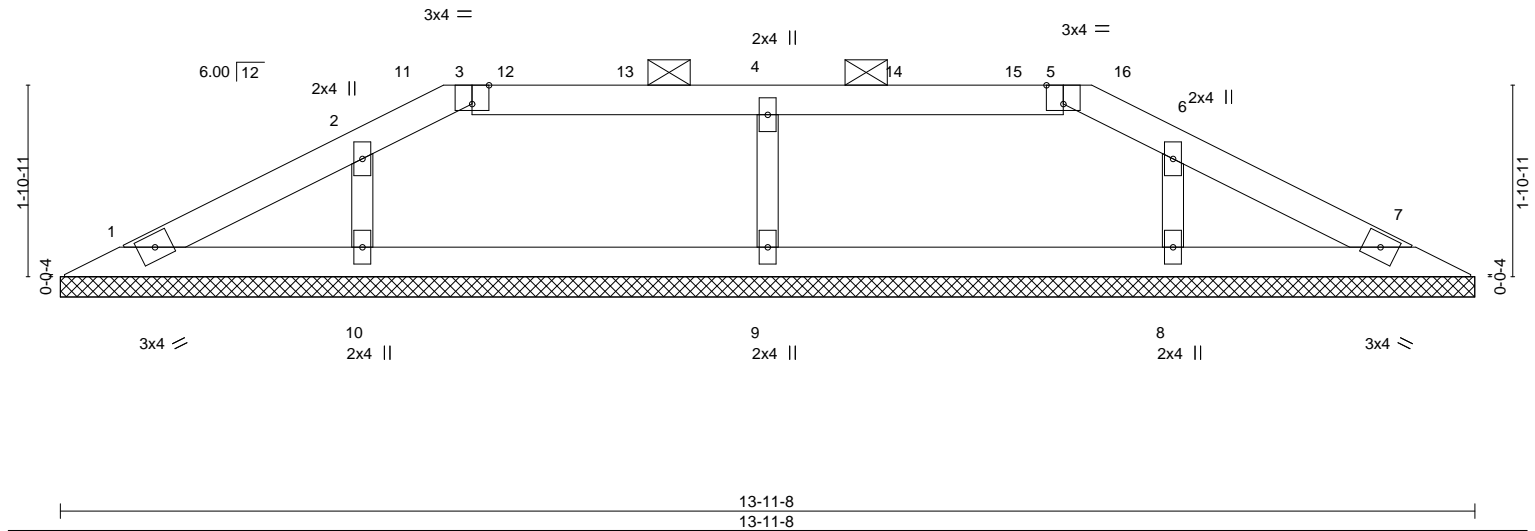
KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:39 2022 Page 1

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Scale = 1:22.7



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.17	Vert(LL)	n/a	MT20	197/144		
Snow (Pf/Pg)	20.4/20.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except
BOT CHORD	2x4 SP No.1	BOT CHORD	2-0-0 oc purlins (6-0-0 max.): 3-5.
OTHERS	2x3 SPF No.3		Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-11-8.
(lb) - Max Horz 1=21(LC 15)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 9
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=417(LC 37), 10=286(LC 38), 8=286(LC 38)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-9=-333/80

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-0-12, Exterior(2R) 4-0-12 to 8-3-11, Interior(1) 8-3-11 to 9-10-12, Exterior(2E) 9-10-12 to 13-3-15 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
- 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=20.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- Provide adequate drainage to prevent water ponding.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 4-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.
- N/A
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23, 2022

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

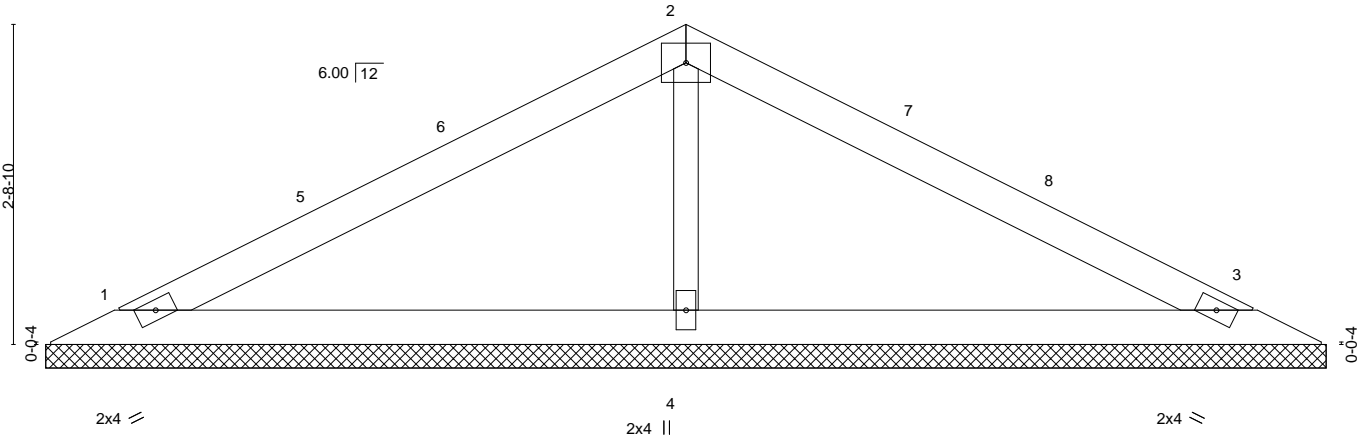
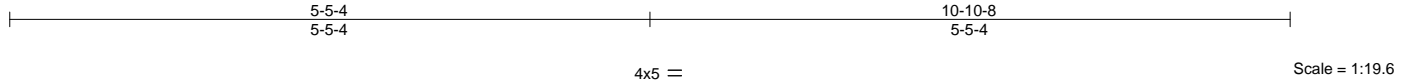


16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job 220056-A	Truss V1	Truss Type Valley	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896157
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KC Truss & Panel Inc. (Urlich, MO), Urlich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:39 2022 Page 1
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LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	n/a	MT20		197/144	
Snow (Pf/Pg)	15.4/20.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a				
TCDL	10.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00				
BCLL	0.0 *	Code IRC2018/TPI2014		Matrix-S							
BCDL	10.0										

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.1	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS	2x3 SPF No.3		

REACTIONS. (size) 1=10-10-8, 3=10-10-8, 4=10-10-8
Max Horz 1=-31(LC 14)
Max Uplift 1=-7(LC 16), 3=-7(LC 16)
Max Grav 1=230(LC 20), 3=230(LC 21), 4=399(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-258/108

- 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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-5-4, Exterior(2R) 5-5-4 to 8-5-4, Interior(1) 8-5-4 to 10-2-15 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
 - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - 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.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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.

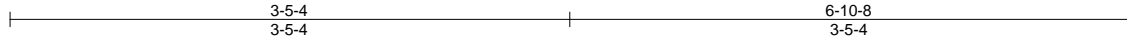


March 23, 2022

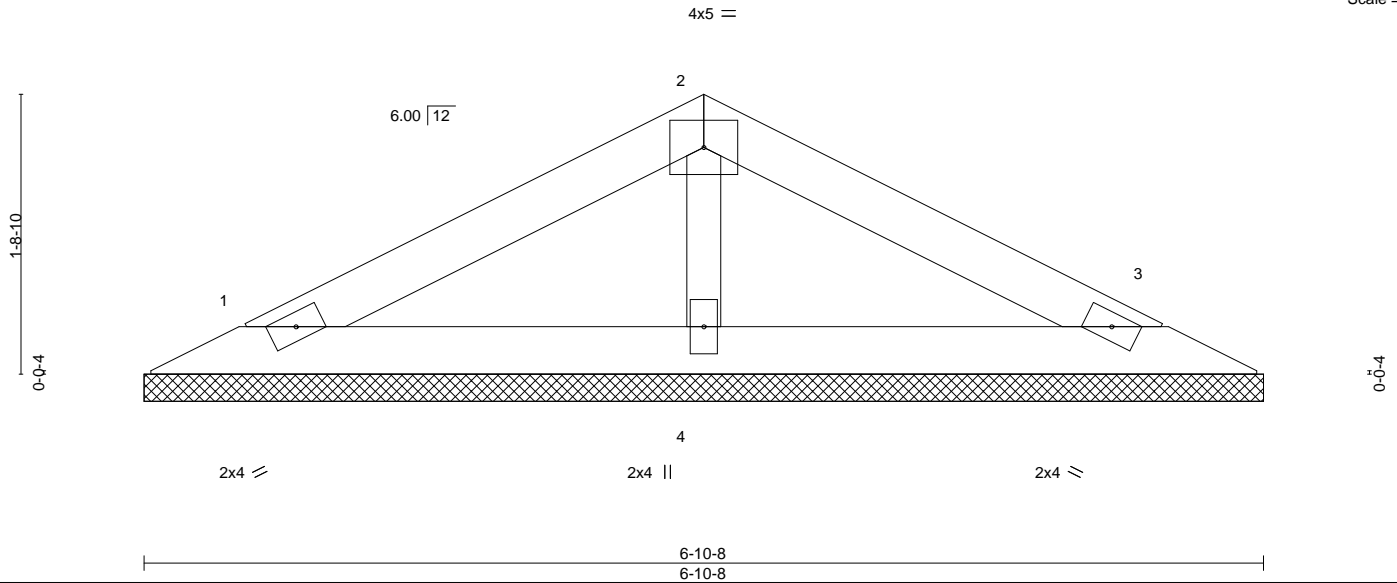
Job 220056-A	Truss V2	Truss Type Valley	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896158 Job Reference (optional)
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:40 2022 Page 1
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Scale = 1:14.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.13	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.04	Horz(CT)	0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 20 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x3 SPF No.3

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

REACTIONS. (size) 1=6-10-8, 3=6-10-8, 4=6-10-8
Max Horz 1=18(LC 14)
Max Uplift 1=7(LC 16), 3=7(LC 16)
Max Grav 1=134(LC 20), 3=134(LC 21), 4=211(LC 2)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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 23,2022

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

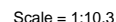
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

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



16023 Swingley Ridge Rd
Chesterfield, MO 63017

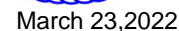
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:41 2022 Page 1
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BRACING- TOP CHORD	Structural wood sheathing directly applied or 3-0-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

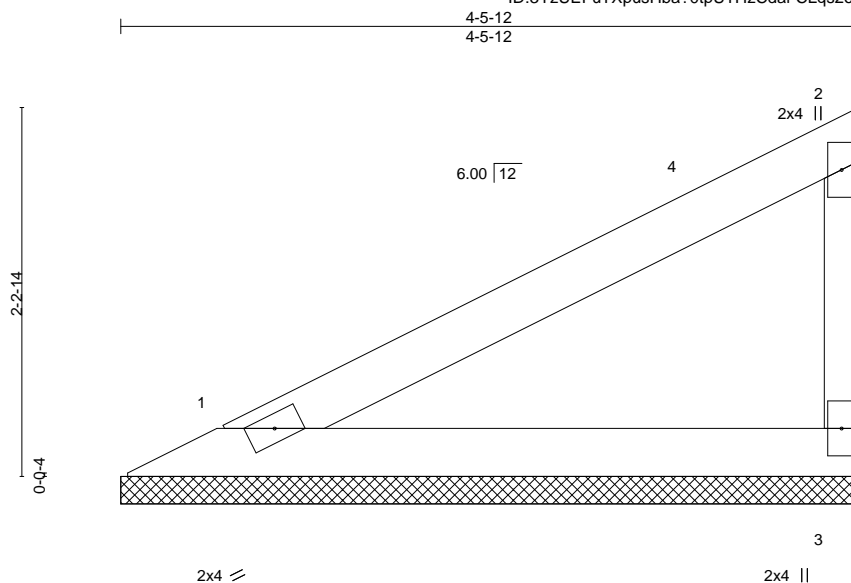
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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) TCDL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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.



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,



[illegible]

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3

BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 4-5-12 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-5-12, 3=4-5-12
Max Horz 1=51(LC 13)
Max Grav 1=179(LC 20), 3=179(LC 20)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-4-8 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
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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 23, 2022

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

WARNING – Velly design parameters are listed ONLY on this and INCLUDED WITHIN KEY REFERENCE 1: AISC MH-143 (Rev. 3/19/2020) BY ONE USER.
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/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

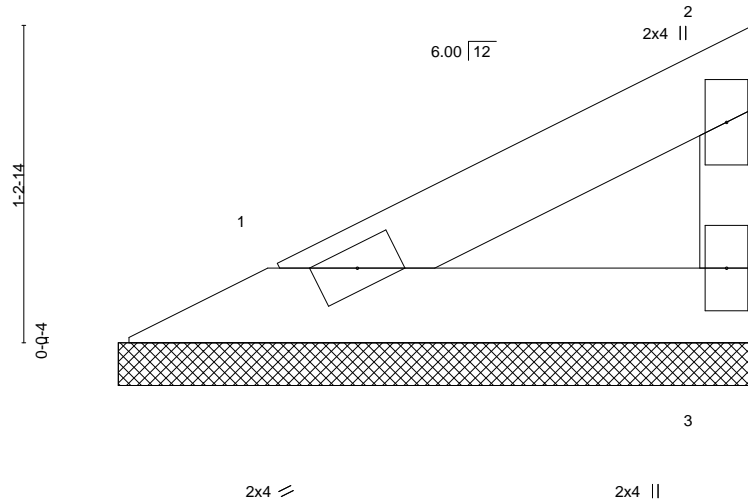
Job 220056-A	Truss V7	Truss Type Valley	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896162 Job Reference (optional)
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KC Truss & Panel Inc. (Urish, MO), Urish, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:42 2022 Page 1
ID:3YzUEFuTXpushHba?0tpUTHzCdai-CLqs2ovCcymh7JtquD7cyf7PGmFGqq2GcPAf0QzYhlp

2-5-12
2-5-12

Scale = 1:9.0



LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.02	Vert(CT)	n/a	-	n/a	999		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P							
BCDL 10.0	Code IRC2018/TPI2014							Weight: 7 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-5-12, 3=2-5-12
Max Horz 1=24(LC 15)
Max Grav 1=77(LC 20), 3=77(LC 20)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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 23, 2022

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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

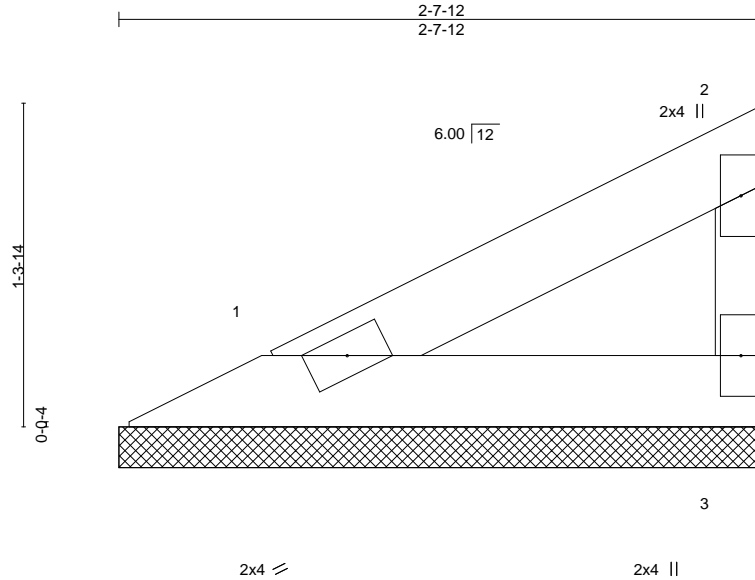


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Job 220056-A	Truss V8	Truss Type Valley	Qty 1	Ply 1	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 150896163 Job Reference (optional)
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KC Truss & Panel Inc. (Urlich, MO), Urlich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:43 2022 Page 1
ID:3YzUEFuTXpusHba?0tpUTHzCdai-gXOEF7wqNFuYITS0SwervsfasAaQZHIPr3vDYszYhlo



Scale = 1:9.4

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.05	Vert(LL)	n/a	-	n/a	MT20	197/144
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	BC 0.03	Vert(CT)	n/a	-	n/a		
TCDL 10.0	Lumber DOL 1.15	WB 0.00	Horz(CT)	0.00	3	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-P						
BCDL 10.0	Code IRC2018/TPI2014						Weight: 8 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x3 SPF No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-7-12, 3=2-7-12
Max Horz 1=26(LC 15)
Max Grav 1=85(LC 20), 3=85(LC 20)

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=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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 23, 2022

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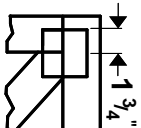
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component



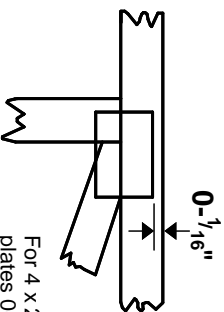
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Symbols

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.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



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

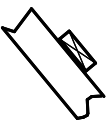
* Plate location details available in **MiTek 20/20** software or upon request.

PLATE SIZE

4 X 4

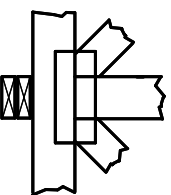
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



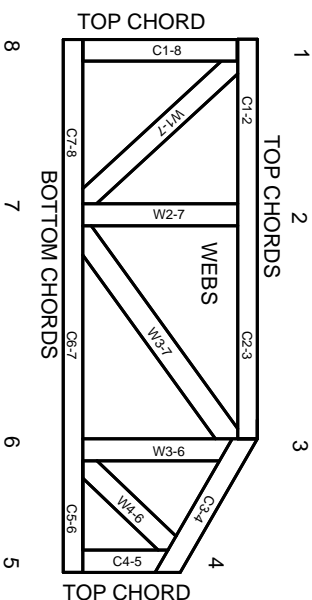
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.