



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. (Urich, 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



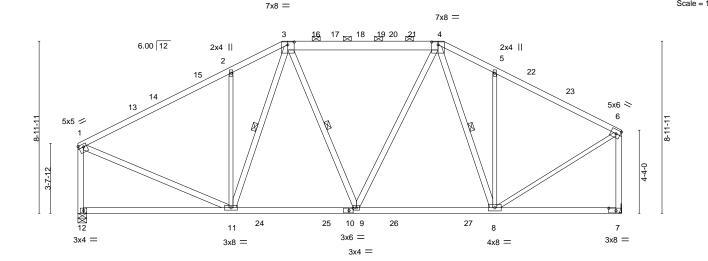
March 23,2022

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.

320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896070 220056-A Α1 Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:46:50 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-Uo3WXVZy_Xfah5JIKh6LQ1U3bdwTayqns_1k5vzYhnZ KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 7-10-8 18-9-4 21-10-0 10-11-4 28-4-0 7-10-8 3-0-12 7-10-0 3-0-12



14-6-2 1-2-14 6-1-0 6-6-0 Plate Offsets (X,Y)--[1:Edge,0-1-12], [3:0-4-0,0-1-12], [4:0-4-0,0-1-12], [7:0-4-8,0-1-8], [10:0-2-10,0-1-8] LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.87 Vert(LL) -0.098-9 >999 240 197/144 MT20 Snow (Pf/Pg) 20.4/20.0 BC 180 Lumber DOL 1.15 0.45 Vert(CT) -0.19 11-12 >999 **TCDL** 10.0 Rep Stress Incr YES WB 0.93 Horz(CT) 0.02 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 189 lb FT = 20%BCDL 10.0

15-9-0

21-10-0

28-4-0

Structural wood sheathing directly applied or 1-7-8 oc purlins,

3-11, 3-9, 4-8

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.

LUMBER-**BRACING-**TOP CHORD

TOP CHORD 2x4 SP No.1 *Except* 3-4: 2x6 SP No.1

BOT CHORD 2x4 SP No.1 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **WEBS** 2x4 SP No.1 *Except* **WEBS** 1 Row at midpt 2-11,5-8,6-8: 2x3 SPF No.3

14-6-2

REACTIONS. (size) 12=0-5-8. 7=Mechanical Max Horz 12=166(LC 15)

Max Grav 12=1381(LC 46), 7=1362(LC 48)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-1350/59, 2-3=-1320/127, 3-4=-1028/83, 4-5=-1140/123, 5-6=-1173/67,

1-12=-1257/58, 6-7=-1270/52 9-11=-45/1047, 8-9=-34/950

BOT CHORD WEBS 2-11=-594/124, 3-11=-65/378, 4-9=0/273, 5-8=-473/99, 1-11=0/1118, 6-8=-4/1090

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 10-9-9, Exterior(2R) 10-9-9 to 15-0-8, Interior(1) 15-0-8 to 18-10-15, Exterior(2R) 18-10-15 to 23-1-14, Interior(1) 23-1-14 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
- 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) Refer to girder(s) for truss to truss connections.
- 9) 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.
- 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.

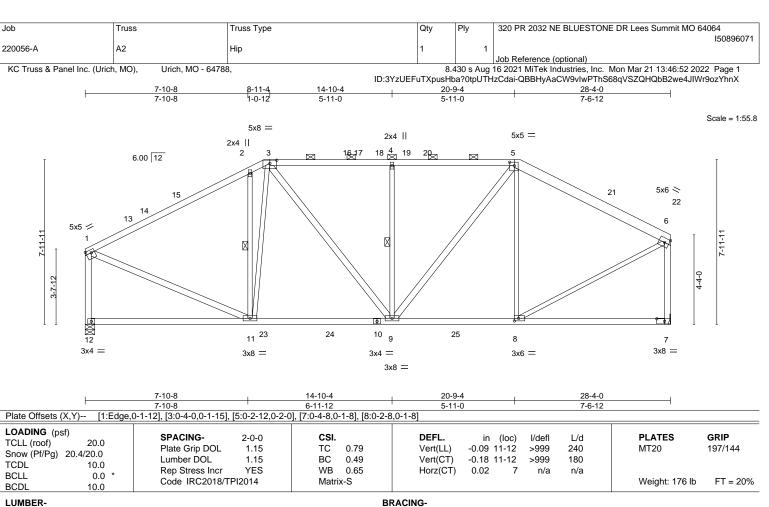


Scale = 1.60.0

March 23,2022







TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SP No.1 *Except* 5-6: 2x6 SP No.1

BOT CHORD 2x4 SP No.1 **WEBS** 2x4 SP No.1 *Except*

2-11,3-11,4-9,5-8,6-8: 2x3 SPF No.3

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

9-11=-46/1096, 8-9=-29/981

BOT CHORD 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-

- 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 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
- 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.
- * 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) Refer to girder(s) for truss to truss connections.
- 9) 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.
- 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.



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.

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

1 Row at midpt

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

Design Valid to its 90 mly with win New Commercials. This design is based only upon parameters shown, and is 10 at an individual outlining 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



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896072 220056-A АЗ Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:46:53 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-uNlf9WbqHS19YZ2t0qf31g6Yyqw5nMcDYyGOiEzYhnW Urich. MO - 64788. 14-10-4 6-11-4 22-9-4 28-4-0 6-11-4 5-6-12 7-11-0 Scale = 1.50.65x8 =7x10 = 5x8 = 6.00 12 2 17 18 🖂 \bowtie ¹⁴ 15 16

6-11-11	5x5 = 12 13						21 5x5 \\ 5 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\
	11	10	22	9 8	23	7	6
	3x4 =	3x6 =		3x6 =		3x6 =	3x8 =
				3x8 =			

6-11-4 7-11-0 7-11-0 5-6-12 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-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.99 Vert(LL) -0.127-8 >999 240 197/144 MT20 Snow (Pf/Pg) 20.4/20.0 0.51 180 Lumber DOL 1.15 BC Vert(CT) -0.217-8 >999 **TCDL** 10.0 Rep Stress Incr YES WB 0.73 Horz(CT) 0.02 6 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 154 lb FT = 20%BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

WEBS

22-9-4

1 Row at midpt

14-10-4

LUMBER-

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

WEBS 2x3 SPF No.3 *Except*

2-8,4-8,1-11,5-6: 2x4 SP No.1

REACTIONS. (size) 11=0-5-8, 6=Mechanical Max Horz 11=141(LC 15)

6-11-4

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-

- 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 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
- 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) Refer to girder(s) for truss to truss connections.
- 9) 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.
- 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.



28-4-0

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.

3-8

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

March 23,2022



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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:46:55 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-qmsPaCd5p4HtnsCG7EiX75B1jea9FI?W?GIVm7zYhnU

23-10-12

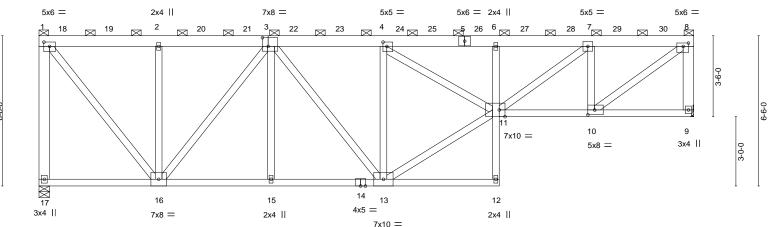
2-0-0 oc purlins (4-11-11 max.): 1-8, except end verticals.

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

28-4-0

14-10-14 10-0-8 19-11-0 23-10-12 28-4-0 4-10-6 5-0-2 4-5-4 4-10-6

Scale = 1:49 9



5-2-2	4-10-6	4-10-6	5-0-2	3-11	-12	4-5-4	
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	3:0-2-12,0-1-12], [10:0-3-8	3,0-2-8], [11:0-3-0,Edge]				
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.40 BC 0.60 WB 0.61 Matrix-S	DEFL. in Vert(LL) -0.15 Vert(CT) -0.29 Horz(CT) 0.10	(loc) I/defi 12 >999 12 >999 9 n/a	240 180	PLATES MT20 Weight: 459 lb	GRIP 244/190 FT = 20%

TOP CHORD

BOT CHORD

19-11-0

14-10-14

LUMBER-**BRACING-**

10-0-8

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

5-2-2

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-

1) 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.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) 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 DOI =1.60
- 4) 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.
- 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) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 9.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 17. 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.

Oவிர் செல்க்கு நடியில் representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



SSIONAL

OF MISS

SCOTT M.

SEVIER

NUMBER

PE-2001018807

Job Truss Truss Type Qty 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Ply 150896073 220056-A A4 Roof Special Girder 2 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_IEfEwU2IZzYhnT

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 11-0 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

320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896074 220056-A В1 Piggyback Base Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:46:57 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-m8_A?ueLLhYb1AMeFfk?CWGI5RIQjBGpTaEbr?zYhnS KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 14-10-4 21-10-0 28-4-0 7-10-8 6-11-12 7-10-8 Scale: 3/16"=1 5x10 = 5x10 = 2x4 || 6.00 12 ⊿1819 3 20 21 22 _⊠23 24 4x5 > 5 10-7-0 ¹² 11 25 26 13 10 3x4 =3x4 = 3x4 = 3x6 = 3x8 = × 6 2x4 || 2x4 | 7-10-8 14-10-4 21-10-0 25-3-10 28-4-0 7-10-8 6-11-12 6-11-12 3-5-10 3-0-6 Plate Offsets (X,Y)--[1:Edge,0-1-12], [10:0-2-8,0-1-8] LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.72 Vert(LL) -0.09 13-14 >999 240 197/144 MT20

2x6 SP No.1 *Except*

2-4: 2x4 SP No.1

Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.49 **TCDL** 10.0 Rep Stress Incr YES WB 0.69 BCLL 0.0 Code IRC2018/TPI2014 Matrix-S BCDL 10.0

180 Vert(CT) -0.18 13-14 >999 Horz(CT) 0.08 6 n/a n/a

Weight: 185 lb FT = 20%

2x4 SP No.1 *Except 7-9: 2x3 SPF No.3

TOP CHORD **BOT CHORD**

BRACING-

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. Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

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

WEBS 2x4 SP No.1 *Except* 1 Row at midpt 3-11, 5-6 2-13,3-11,4-10,5-10: 2x3 SPF No.3

REACTIONS. (size) 6=0-3-8, 14=0-5-8

Max Horz 14=-113(LC 14)

Max Grav 6=1297(LC 29), 14=1259(LC 28)

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

TOP CHORD 1-2=-1285/51, 2-3=-1439/72, 3-4=-1439/72, 4-5=-1130/45, 6-8=-1241/23, 5-8=-1165/38,

1-14=-1138/50

BOT CHORD 11-13=-5/1137, 10-11=0/981

2-11=-7/510, 3-11=-697/85, 4-11=-16/681, 4-10=-399/82, 5-10=0/1128, 1-13=0/1161 **WEBS**

NOTES-

LUMBER-

WEBS

TOP CHORD

BOT CHORD

- 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 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
- 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.
- * 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) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) 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.
- 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





320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896075 220056-A B2 Piggyback Base Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:46:59 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-jX6wQagbtlolGUV1M4mTHxMeaF_tB4W6wujivuzYhnQ KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 14-10-4 21-10-0 28-4-0 7-10-8 6-11-12 7-10-8 Scale: 3/16"=1 5x10 = 5x10 = 2x4 || 6.00 12 ⊿1819 3 20 21 22 _⊠23 24 4x5 > 5 10-7-0 3-7-12 7-4-0 ¹² 11 25 26 13 10 2x4 | 2x 3x4 =3x4 = 3x4 = 3x6 = 3x8 = × 6 2x4 || 2x4 || 23-3-10 7-10-8 14-10-4 21-10-0 28-4-0 7-10-8 1-5-10 6-11-12 6-11-12 5-0-6 Plate Offsets (X,Y)--[1:Edge,0-1-12], [10:0-2-8,0-1-8] LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.72 Vert(LL) -0.09 13-14 >999 240 197/144 MT20 180 >999

Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.49 **TCDL** 10.0 Rep Stress Incr YES WB 0.71 BCLL 0.0 Code IRC2018/TPI2014 Matrix-S BCDL 10.0

Vert(CT) -0.18 13-14 Horz(CT) 0.06 6

BRACING-

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.

n/a

n/a

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. **WEBS** 1 Row at midpt 3-11, 5-6

2-4: 2x4 SP No.1 **BOT CHORD**

2x4 SP No.1 *Except 7-9: 2x3 SPF No.3

2x6 SP No.1 *Except*

2x4 SP No.1 *Except*

2-13,3-11,4-10,5-10: 2x3 SPF No.3

REACTIONS. (size) 6=0-3-8, 14=0-5-8

Max Horz 14=-113(LC 14)

Max Grav 6=1323(LC 29), 14=1263(LC 28)

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

TOP CHORD 1-2=-1289/51, 2-3=-1447/72, 3-4=-1447/72, 4-5=-1143/47, 6-8=-1235/35, 5-8=-1183/37,

1-14=-1142/50

BOT CHORD 11-13=-5/1141, 10-11=0/993

2-11=-6/516, 3-11=-697/85, 4-11=-14/677, 4-10=-402/80, 5-10=0/1153, 1-13=0/1166 **WEBS**

NOTES-

LUMBER-

WEBS

TOP CHORD

- 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 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
- 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.
- * 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) 14 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) 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. 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.



Weight: 188 lb

FT = 20%

March 23,2022





320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896076 220056-A **B**3 Piggyback Base Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:00 2022 Page 1 KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. ID:3YzUEFuTXpusHba?0tpUTHzCdai-BjgldvgDecw9ue4Dwoliq8upKfK6wXcF9YSGRKzYhnP 14-10-4 28-4-0 21-10-0 7-10-8 6-11-12 7-10-8 Scale: 3/16"=1 5x10 = 5x10 = 2x4 || 6.00 12 <u>2</u>021 3 22 23 24 19 26 4x5 > 5 10-7-0 -4-0 12 ¹⁴ 13 27 28 15 10 Ш 3x4 =3x4 = 3x4 = 2x4 || 3x8 = 3x6 = × 11 7 2x4 || 2x4 || 2x4 II 7-10-8 14-10-4 21-3-10 21,10-0 24-4-0 28-4-0 7-10-8 0-6-6 2-6-0 6-11-12 6-5-6 4-0-0 Plate Offsets (X,Y)-- [1:Edge,0-1-12], [10:0-2-8,0-1-8] /144

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.72 BC 0.49 WB 0.72	DEFL. in (loc) l/defl L/d Vert(LL) -0.09 15-16 >999 240 Vert(CT) -0.18 15-16 >999 180 Horz(CT) 0.07 6 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	,	Weight: 194 lb FT = 20%

TOP CHORD

BOT CHORD

WEBS

JOINTS

LUMBER-BRACING-

TOP CHORD 2x6 SP No.1 *Except* 2-4: 2x4 SP No.1 **BOT CHORD**

2x4 SP No.1 *Except 11-12: 2x3 SPF No.3

2x4 SP No.1 *Except*

WEBS

2-15,3-13,4-10,5-10,7-9: 2x3 SPF No.3

REACTIONS. (size) 6=0-3-8, 16=0-5-8

Max Horz 16=-113(LC 14)

Max Grav 6=1351(LC 29), 16=1270(LC 28)

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

TOP CHORD 1-2=-1298/51, 2-3=-1463/72, 3-4=-1463/72, 4-5=-1166/47, 6-8=-1272/29, 5-8=-1203/38,

1-16=-1150/50

BOT CHORD 13-15=-5/1149, 12-13=0/1014, 10-12=0/1007

2-13=-6/526, 3-13=-697/85, 4-13=-14/668, 4-10=-402/80, 5-10=0/1170, 1-15=0/1174 **WEBS**

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 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
- 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.
- * 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) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) 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. 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.



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.

3-13, 5-6

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

1 Row at midpt

1 Brace at Jt(s): 9

March 23,2022



BRACING-

TOP CHORD

BOT CHORD

WEBS

JOINTS

BCDL

LUMBER-TOP CHORD 2x6 SP No.1 *Except*

2-4: 2x4 SP No.1 **BOT CHORD** 2x4 SP No.1 *Except 11-12: 2x3 SPF No.3

10.0

WEBS 2x4 SP No.1 *Except*

2-15,3-13,4-10,5-10,7-9: 2x3 SPF No.3

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

2-15=-250/92, 2-13=-6/537, 3-13=-697/85, 4-13=-13/664, 4-10=-403/80, 5-10=0/1186, **WEBS**

1-15=0/1182

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 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 DOI = 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.
- * 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) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) 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.
- 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.



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.

3-13, 5-6

Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Row at midpt

1 Brace at Jt(s): 9

March 23,2022



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896078 220056-A **B**5 Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:04 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-3UvpTHkkhrQbMFO_9dMe__3T3GgXsHNr49QTb5zYhnL KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788. 14-10-4 21-10-0 7-10-8 9-11-4 19-9-4 28-4-0 2-0-12 4-11-0 7-10-8 4-11-0 2-0-12 Scale = 1:66.3 5x8 = 2x4 || 5x8 = 2122 23 4 24 25 6.00 12 2x4 || 2x4 | 26 27 5x6 > 5x5 / 11-5-11 3-7-12 7-4-0 10 29 16 30 18 17 15 12 П 3-0-0 3x4 =3x8 = 3x4 = 2x4 || 3x8 = 4x8 = 13 9 2x4 2x4 || 2x4 || 7-10-8 14-10-4 20-4-8 21-10-0 24-4-0 28-4-0 7-10-8 6-11-12 5-6-4 1-5-8 2-6-0 4-0-0 Plate Offsets (X,Y)--[1:Edge,0-1-12], [3:0-4-0,0-1-15], [5:0-4-0,0-1-15] LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defI TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.81 Vert(LL) -0.09 17-18 >999 240 197/144 MT20 Snow (Pf/Pg) 20.4/20.0 180 Lumber DOL 1.15 BC 0.52 Vert(CT) -0.18 17-18 >999 **TCDL** 10.0 Rep Stress Incr YES WB 0.99 Horz(CT) 0.08 8 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 206 lb FT = 20%BCDL 10.0 LUMBER-**BRACING-**2x4 SP No.1 TOP CHORD TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-3 max.): 3-5. **BOT CHORD**

BOT CHORD

WEBS

JOINTS

Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Row at midpt

1 Brace at Jt(s): 11

3-17, 4-15, 5-12, 7-8

2x4 SP No.1 *Except*

13-14: 2x3 SPF No.3 2x4 SP No.1 *Except*

WEBS 2-17,4-15,6-12,7-12,9-11: 2x3 SPF No.3

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.
- * 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.

OF MISSO SCOTT M. SEVIER OFFISSIONAL STONAL PE-2001018807

March 23,2022





320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896079 220056-A B6 Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:05 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-XhTBhdkMS8YS_PzBiLttXCcf4g07bom_lpA17XzYhnK KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 7-11-4 14-10-4 21-9-4 28-4-0 7-11-4 6-11-0 Scale = 1.61.05x5 = 2x4 | 5x8 = 6.00 12 2 3 22 2324 18 ¹⁹ 26 4x5 < 5x5 / 7-5-11 10-5-11 3-7-12 <u>⊠</u> 16 12 27 ¹⁴ 13 28 10 29 15 Ш 3-0-0 3x4 =3x4 2x4 || 3x8 =3x6 =× 7 11 2x4 || 2x4 II 2x4 || 7-11-4 14-10-4 20-4-8 21-9-4 24-4-0 28-4-0 7-11-4 6-11-0 5-6-4 1-4-12 2-6-12 4-0-0 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-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 TC Plate Grip DOL 1.15 0.72 Vert(LL) -0.09 12-13 >999 240 197/144 MT20 Snow (Pf/Pg) 20.4/20.0 BC 180 Lumber DOL 1.15 0.56 Vert(CT) -0.17 15-16 >999 **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 Weight: 189 lb FT = 20%BCDL 10.0 LUMBER-**BRACING-**TOP CHORD 2x4 SP No.1 *Except* TOP CHORD Structural wood sheathing directly applied or 4-7-5 oc purlins, 1-2: 2x6 SP No.1 except end verticals, and 2-0-0 oc purlins (4-4-12 max.): 2-4. **BOT CHORD** 2x4 SP No.1 *Except **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. WEBS 1 Row at midpt

JOINTS

11-12: 2x3 SPF No.3

2x4 SP No.1 *Except*

WEBS 2-15,3-13,4-10,5-10,7-9: 2x3 SPF No.3

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

2-15=-254/92, 2-13=-7/541, 3-13=-707/84, 4-13=-15/681, 4-10=-411/83, 1-15=0/1176, **WEBS**

5-10=-2/1183

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 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 DOI = 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.
- * 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) 16 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.



3-13, 5-6

1 Brace at Jt(s): 9

March 23,2022



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896080 220056-A **B7** Roof Special Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:07 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-U3by5Jmc_moADi7ZqmwLcdh2HTeh3haHm7f7BQzYhnI 28-4-0 14-10-4 23-9-4 26-9-4 5-11-4 10-4-2 19-4-6 4-4-14 4-6-2 3-0-0 1-6-12 4-6-2 Scale = 1.60.12x4 || 4x5 = 3x4 = 6.00 12 3x4 = 4x5 = 2 2x4 || ≥ 23 6 ⋈ 25 22 ∇ 7x8 8 21 5x6 = 6-5-11 4-11-11 12 16 ¹⁸ 17 29 30 26 27 28 20 19 14 3x4 = 2x4 || 4x8 = 4x5 = 5x8 3x8 = 2×4 || ∭ 10 15 11 2x4 II 2x4 || 2x4 || 5-11-4 14-10-4 20-4-8 23-9-4 28-4-0 0-6-12 5-11-4 8-11-0 5-6-4 3-4-12 4-0-0 Plate Offsets (X,Y)--[8:0-3-6,Edge] LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.55 Vert(LL) -0.18 17-19 >999 240 197/144 MT20 Snow (Pf/Pg) 20.4/20.0 180 Lumber DOL 1.15 BC 0.75 Vert(CT) -0.32 17-19 >999 **TCDL** 10.0 Rep Stress Incr YES WB 0.77 Horz(CT) 0.09 10 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 172 lb FT = 20%BCDL 10.0 LUMBER-**BRACING-**2x4 SP No.1 TOP CHORD TOP CHORD Structural wood sheathing directly applied or 5-1-5 oc purlins, except end verticals, and 2-0-0 oc purlins (4-7-4 max.): 2-7, 8-9. **BOT CHORD**

2x4 SP No.1 *Except*

15-16: 2x3 SPF No.3 2x3 SPF No.3 *Except*

WEBS 9-10,8-12,1-20: 2x4 SP No.1

BOT CHORD

Rigid ceiling directly applied or 6-0-0 oc bracing. 9-10, 3-19, 6-14 1 Row at midpt

WEBS JOINTS 1 Brace at Jt(s): 9, 14

REACTIONS. (size) 10=0-3-8, 20=0-5-8

Max Horz 20=202(LC 15)

Max Grav 10=1502(LC 53), 20=1323(LC 49)

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

TOP CHORD 1-2=-1261/51, 2-3=-1106/74, 3-4=-1784/46, 4-6=-1784/46, 6-7=-974/52, 7-8=-1105/42,

10-12=-1479/41, 1-20=-1258/46 17-19=-142/1614, 16-17=-124/1543, 14-16=-117/1557, 13-14=-81/491, 12-13=-81/491

BOT CHORD WEBS 2-19=0/336, 3-19=-832/32, 3-17=0/390, 4-17=-378/49, 6-17=0/495, 6-14=-955/57,

7-14=0/322, 8-14=-4/1006, 8-12=-1474/41, 1-19=0/1248, 11-13=0/265

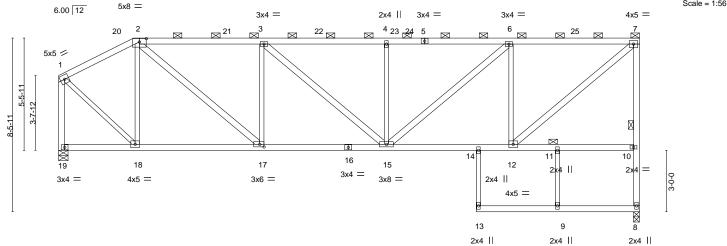
NOTES-

- 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 5-11-4, Exterior(2R) 5-11-4 to 8-11-4, Interior(1) 8-11-4 to 23-9-4, Exterior(2E) 23-9-4 to 26-9-4, Interior(1) 26-9-4 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.
- * 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) 20 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





	0 11 4	0 10 10	,	10	, 11 1 -1	20 7		22 0	10 27	7 0	20 7 0	
	3-11-4	5-11-11	'	6	5-0-15	4-4-1	0	1-8-	5 ' 2-3	3-3	4-0-0	
Plate Offsets (X,Y)	[2:0-4-0,0	0-1-15], [17:0-2-8,0-1-8]										
LOADING (psf) TCLL (roof) Snow (Pf/Pg) 20 TCDL BCLL	20.0 4/20.0 10.0 0.0 *	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.54 0.38 0.86	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.10 -0.17 0.08	15 15-17	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL	10.0	Code IRC2018/TP	I2014	Matri	x-S						Weight: 183	b FT = 20%

15-11-14

LUMBER-

9-10-15

TOP CHORD 2x4 SP No.1 2x4 SP No.1 *Except* **BOT CHORD**

13-14: 2x3 SPF No.3

3-11-4

WEBS 2x4 SP No.1 *Except*

2-18,3-17,4-15,6-12,1-18,9-11: 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 (3-11-12 max.): 2-7.

28-4-0

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. 7-8

22-0-13 24-4-0

WEBS 1 Row at midpt JOINTS 1 Brace at Jt(s): 7, 11

20-4-8

REACTIONS. (size) 8=0-3-8, 19=0-5-8

> Max Horz 19=195(LC 15) Max Uplift 8=-23(LC 13)

Max Grav 8=1476(LC 34), 19=1289(LC 34)

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

TOP CHORD 1-2=-988/33, 2-3=-1849/23, 3-4=-1988/14, 4-6=-1988/14, 6-7=-1423/27, 8-10=-1437/47,

7-10=-1413/58, 1-19=-1261/23

BOT CHORD 17-18=-151/889, 15-17=-120/1845, 14-15=-94/1423, 12-14=-94/1422

2-18=-697/65, 2-17=0/1272, 3-17=-715/73, 4-15=-481/67, 6-15=-12/742, 7-12=-29/1830, **WEBS**

6-12=-1064/93, 1-18=0/1181

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 3-11-4, Exterior(2R) 3-11-4 to 8-2-3, Interior(1) 8-2-3 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.
- * 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) 19 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) 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.
- 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



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 220056-A C₁ Half Hip Job Reference (optional)

27-3-6

6-7-3

20-8-3

6-5-15

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

5-9-8

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:09 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-QSjiW_ntWN2uT0GyxByph2mNjHNZXXRaDR8EGJzYhnG 40-7-0 33-10-9

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.

10-11, 6-13, 9-12

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

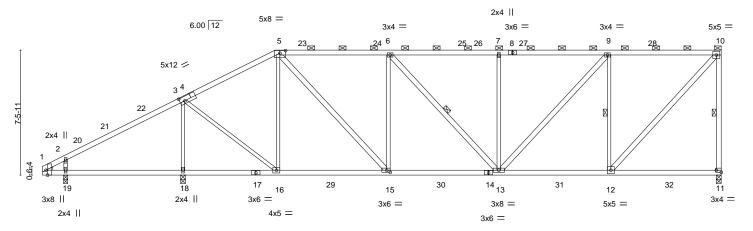
1 Row at midpt

6-8-7

6-7-3

Scale = 1:68.9

FT = 20%



1-4-8						
_I 1-3-0 _{II}	8-4-12	14-2-4	20-8-3	27-3-6	33-10-9	40-7-0
1-3-0	7-0-4	5-9-8	6-5-15	6-7-3	6-7-3	6-8-7
0-1-8						

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.62 BC 0.53 WB 1.00	DEFL. in (loc) I/defl L/d Vert(LL) -0.13 13-15 >999 240 Vert(CT) -0.21 13-15 >999 180 Horz(CT) 0.04 11 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 222 lb $FT = 2$

BOT CHORD

WEBS

LUMBER-BRACING-TOP CHORD 2x4 SP No.1 TOP CHORD

BOT CHORD 2x4 SP No.1

8-4-12

7-0-4

1-4-8

WEBS 2x3 SPF No.3 *Except*

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 WFBS 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-

- 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=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
- 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.
- * 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) 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.
- 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.



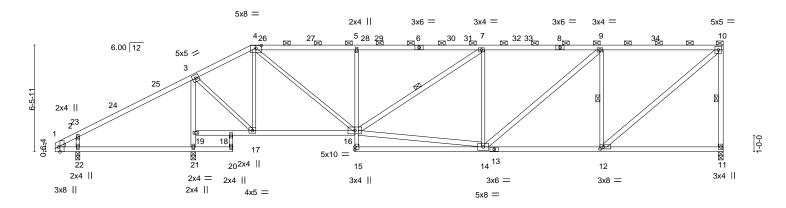
March 23,2022



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896083 220056-A C2 Half Hip Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:11 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-MrqTxgp72_lbiKQK3c_HmTsgL53e?SithldLKBzYhnE KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788.

40-7-0 8-4-12 10-9-8 18-2-8 26-0-0 33-2-6 1-4-8 1-4-8 12-2-4 1-4-12 2-4-12 6-0-4 7-4-10

Scale = 1.70.0



	1-4-8								
	լ 1-3-0 լլ	8-4-12	10-9-8	12-2-4	18-2-8	26-0-0	33-2-6	40-7-0	1
	1-3-0	7-0-4	2-4-12	1-4-12	6-0-4	7-9-8	7-2-6	7-4-10	1
	0-1-8								
F	Plate Offsets (X,Y)	[1:0-3-8,Edg	je], [4:0-4-0,0-1	I-15], [12	:0-2-8,0-1-8]				

te Offsets (X,Y) [1:0-3-8,Edge], [4:0-4-0,0-1-15], [12	2:0-2-8,0-1-8]	
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LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.80 BC 0.56 WB 0.95	DEFL. in (loc) l/defl 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	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 223 lb FT = 20%

BOT CHORD

WEBS

LUMBER-BRACING-2x4 SP No.1 TOP CHORD

TOP CHORD 2x4 SP No.1 *Except* **BOT CHORD**

18-20,5-15: 2x3 SPF No.3

WEBS 2x4 SP No.1 *Except* 2-22,3-17,4-17,4-16,7-14,9-12: 2x3 SPF No.3

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.

2-3=-271/96, 3-4=-1039/73, 4-5=-2091/72, 5-7=-2085/72, 7-9=-2009/57, 9-10=-1498/58, TOP CHORD

10-11=-1531/42

BOT CHORD 16-17=-99/923, 5-16=-677/94, 12-14=-36/1498

WFBS 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-

- 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=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
- 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 $DOL=1.15); Is=1.0; Rough \ Cat \ B; \ Partially \ Exp.; \ Ce=1.0; \ Cs=1.00; \ Ct=1.10, \ \bar{L}u=50-0-0; \ Min. \ flat \ roof \ snow \ load \ governs. \ Rain \ Partially \ P$ 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) 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.
- 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 5-10-4 oc purlins,

10-11, 7-16, 9-12

except end verticals, and 2-0-0 oc purlins (3-4-0 max.): 4-10.

Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Row at midpt

March 23,2022



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 220056-A C3 Half Hip Job Reference (optional)

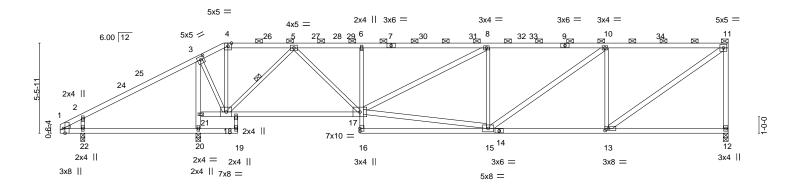
KC Truss & Panel Inc. (Urich, MO),

Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:13 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-IDyDMMqNacZJydajA00lrux?4ujmTNJA836SP4zYhnC



Scale = 1.70.0



	1-4-8		10-9-8					
1-	3-0 _{II}	8-4-12	10-2-4	18-2-8	26-0-0	33-2-6	40-7-0	
1-	3-0 ^{II}	7-0-4	1-9-8 d-7-4	7-5-0	7-9-8	7-2-6	7-4-10	
	0-1-8							

BCLL U.U a i passa missa i i i i i i i i i i i i i i i i i i	LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.85 BC 0.58 WB 0.88	DEFL. in (loc) l/defl L/d Vert(LL) -0.14 6 >999 240 Vert(CT) -0.31 15-16 >999 180 Horz(CT) 0.06 12 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Weight: 21	BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S		Weight: 217 lb FT = 20%

LUMBER-TOP CHORD 2x4 SP No.1

2x4 SP No.1 *Except* **BOT CHORD**

19-23,6-16: 2x3 SPF No.3 2x3 SPF No.3 *Except*

WEBS 11-12,3-20,15-17,8-17,10-15,11-13: 2x4 SP No.1 BRACING-TOP CHORD **BOT CHORD**

WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-11-1 max.): 4-11. Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 1-22,20-22. 1 Row at midpt 5-18

WEDGE

Left: 2x3 SPF No.3

REACTIONS. (size) 12=0-3-8, 22=0-3-0, 20=0-3-8

Max Horz 22=142(LC 15) Max Uplift 22=-30(LC 16)

Max Grav 12=1574(LC 34), 22=517(LC 35), 20=1810(LC 34)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 3-4=-618/62, 4-5=-520/51, 5-6=-2511/43, 6-8=-2508/47, 8-10=-2324/38,

10-11=-1752/41, 11-12=-1506/33

BOT CHORD 17-18=-52/1681 6-17=-511/68 13-15=-16/1752

WFBS 2-22=-493/158, 20-21=-1682/70, 3-21=-1738/37, 3-18=0/1371, 5-17=0/1184, 15-17=-6/2267, 8-15=-550/88, 10-15=0/705, 10-13=-1081/83, 11-13=0/2111,

5-18=-1660/35

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=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 10-2-4, Exterior(2R) 10-2-4 to 15-11-2, Interior(1) 15-11-2 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
- 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) 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.
- 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



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 220056-A C4 Half Hip Job Reference (optional)

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

6-9-12

1-4-8

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:14 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-nQWbZir?LvhAZn9vkkY_O5U9tl?6CorJNjr?xWzYhnB

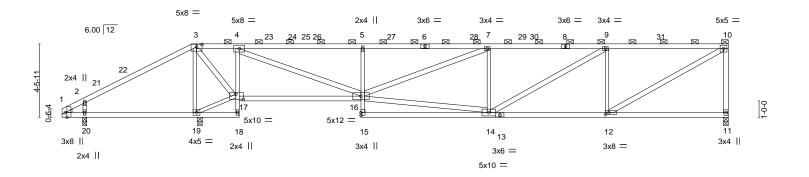
Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-10.

Rigid ceiling directly applied or 6-0-0 oc bracing

40-7-0 26-0-0 33-2-6 7-4-10

Scale = 1:70.2



1-4-8						
_L 1-3-0 _H	8-2-4	8-3-0 10-9-8	18-2-8	26-0-0	33-2-6	40-7-0
1-3-0	6-9-12	0-0 12 2-6-8	7-5-0	7-9-8	7-2-6	7-4-10
0-1-8						

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]

10-9-8

2-7-4

18-2-8

7-5-0

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.91 BC 0.89 WB 0.99	DEFL. in (loc) l/defl L/d Vert(LL) -0.21 5 >999 240 Vert(CT) -0.42 14-15 >921 180 Horz(CT) 0.09 11 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 211 lb FT = 20%

BOT CHORD

LUMBER-BRACING-2x4 SP No.1 TOP CHORD

TOP CHORD 2x4 SP No.1 *Except* **BOT CHORD**

4-18,5-15: 2x3 SPF No.3

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.

1-2=-65/414, 2-3=-153/454, 3-4=-759/92, 4-5=-3032/37, 5-7=-3001/40, 7-9=-2684/21, TOP CHORD

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

WFBS 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-

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=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
- 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) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 20. 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.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23,2022

MiTek

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

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:17 2022 Page 1 $ID: 3Yz UEFuTXpusHba? 0 tpUTHz Cdai-B_CkCjuueq3 lQFuUPs5h0k5g? V25PAUl3h4fYrzYhn8 tputhion and the property of the property$

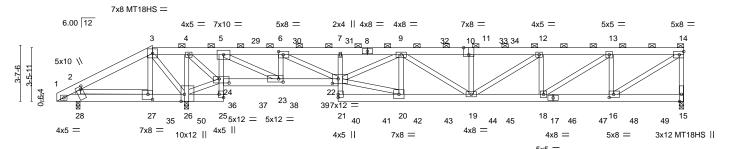
Structural wood sheathing directly applied or 10-0-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (3-2-0 max.): 3-14.

Rigid ceiling directly applied or 3-9-0 oc bracing.

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



PROVIDE CONNECTION OF TRUSS TO BEARING PLATE AT JOINT 28 CAPABLE OF WITHSTANDING 1921 LBS UPLIFT REACTION DUE TO GRAVITY LOADING APPLIED TO THE TRUSS. IT IS THE RESPONSIBILITY OF THE PROJECT ARCHITECT/ENGINEER TO DESIGN THE CONNECTION OF THE TRUSS TO THE BEARING PLATE, PROVIDE AND DESIGN CONNECTION SYSTEM FOR A CONTINUOUS LOAD PATH FROM THE TRUSS TO THE FOUNDATION, AND DESIGN FOOTING/FOUNDATION TO RESIST SUCH UPLIFT. FAILURE TO DO SO WILL VOID THIS CONSTRUCTION.

1-4-8										
₁ 1-3-0 ₁₁	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
1-3-0	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
0-1-8										

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

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1

2x6 SP No.1 *Except* **BOT CHORD**

5-25,7-21: 2x4 SP No.1

WEBS 2x4 SP No.1

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

WFBS 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-

- 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=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
- 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) All plates are MT20 plates unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * 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.
- 9) 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1921 lb uplift at joint 28.



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March 23,2022

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

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:18 2022 Page 2 ID:3YzUEFuTXpusHba?0tpUTHzCdai-fBl6P3uWO8Bc2PSgzacwYxerkvOK8dkvILpD4HzYhn7

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 15up 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

Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896087 220056-A CJ1 Monopitch Girder Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:25 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-yXgltT_vll3cOTV1tYEZKQRCCkxWHyfxvw04qNzYhn0 KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788. 1-10-15 8-9-10 5-0-2 1-10-15 Scale = 1:22 4 2x4 || 4 NAILED 4.24 12 NAILED 9 3x4 = 3 3x4 = 0-6-4 0-3-8 3x4 = 10 11 6 NAILED NAILED 3x6 // 3x4 =NAILED NAILED 2x4 || 1-8-8 1-10-15 5-0-2 8-9-10 0-2-8 1-8-8 3-1-3 3-9-8 Plate Offsets (X,Y)-- [5:0-2-10,0-0-15] DEFL. **PLATES** GRIP in (loc) I/defl I/d Vert(LL) -0.01 5-6 >999 240 197/144 MT20

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.20 BC 0.13 WB 0.21
BCDI 10.0	Code IRC2018/TPI2014	Matrix-P

Horz(CT) **BRACING-**

Vert(CT)

TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins,

180

n/a

except end verticals.

-0.02

-0.00

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

5-6

5

>999

n/a

TOP CHORD BOT CHORD WEBS

REACTIONS.

LUMBER-

2x4 SP No.1 2x3 SPF No.3 *Except*

2x4 SP No.1

4-5: 2x4 SP No.1

(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.

2-3=-282/64 TOP CHORD

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



Weight: 39 lb

FT = 20%

March 23,2022

Continued on page 2

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

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

AMSI/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
					150896087
220056-A	CJ1	Monopitch Girder	1	1	
					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 ID:3YzUEFuTXpusHba?0tpUTHzCdai-QjE75o?XWbBT?d4DRFlotdzNy8Gl0Pv47aleMqzYhn?

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)

Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896088 220056-A CJ2 Monopitch Girder 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 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-QjE75o?XWbBT?d4DRFlotdzMq8Hx0Pt47aleMqzYhn? 1-10-11 5-0-2 8-7-8 1-10-11 Scale = 1:23.3 2x4 || NAILED 11 4.24 12 NAILED 3x4 = 10 NAILED NAILED 3-6-1 3x4 = 2 0-6-4 0-3-8 12 15 13 14 6 NAILED NAILED NAILED 3x6 // 3x4 = 2x4 || NAILED 1-8-9 1-10-11 5-0-2 8-7-8 1-8-9 0-2-2 3-1-7 3-7-6 Plate Offsets (X,Y)--[5:0-2-9,0-1-0] DEFL. I /d **PLATES** GRIP in (loc) I/defl Vert(LL) -0.01 5-6 >999 240 197/144 MT20 180 Vert(CT) -0.01 5-6 >999 Horz(CT) -0.00 5 n/a n/a Weight: 38 lb FT = 20%

2x4 SP No.1

2x4 SP No.1

LOADING (psf)	SPACING- 2-0-0	CSI.
TCLL (roof) 20.0		
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL 1.15	TC 0.27
` 0,	Lumber DOL 1.15	BC 0.12
TCDL 10.0	Rep Stress Incr NO	WB 0.22
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P
BCDL 10.0	Code IRC2018/1712014	IVIatrix-P

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

WEBS 2x3 SPF No.3 *Except* **BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. 4-5: 2x4 SP No.1

REACTIONS.

LUMBER-

TOP CHORD

BOT CHORD

(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.

2-3=-269/43 TOP CHORD

WEBS 2-7=-338/67, 2-6=-6/349, 3-5=-275/56

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



March 23,2022

Continued on page 2

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

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

AMSI/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
					150896088
220056-A	CJ2	Monopitch Girder	1	1	
					Job Reference (optional)

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

Urich, MO - 64788,

8.430 s Aug 16 2021 MTek Industries, Inc. Mon Mar 21 13:47:27 2022 Page 2 ID:3YzUEFuTXpusHba?0tpUTHzCdai-uwoWl8?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)

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

KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:27 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-uwoWl8?9HvJKdneP?zH1QrWXMXclluqDMEVBvGzYhn_

2x4 ||

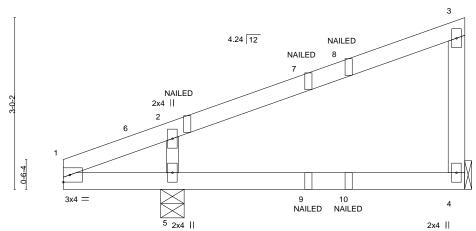
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

1-10-15 7-0-7 1-10-15 5-1-8

Scale = 1:20.2



	1-8-8		5-3-14			
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.29 BC 0.15 WB 0.11	DEFL. in (loc) Vert(LL) -0.01 4-5 Vert(CT) -0.03 4-5 Horz(CT) -0.00 4	l/defl L/d >999 240 >999 180 n/a n/a	PLATES GRIP MT20 197/144	4
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S			Weight: 26 lb FT =	= 20%

TOP CHORD

BOT CHORD

7-0-6

LUMBER-BRACING-

1-8-8

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

2x4 SP No.1 *Except* 2-5: 2x3 SPF No.3

(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

REACTIONS.

- 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





Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896090 220056-A CJ4 Monopitch Girder Job Reference (optional)

5-2-14

3-3-14

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

1-10-15

1-10-15

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:28 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-M6MuWU0n2DRBFxDbZgoGy23ZzxrKUKgNbuEkQizYhmz 10-0-8

4x5 ||

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

Scale = 1:23 6

3x6 NAILED NAILED 4.24 12 10 NAILED NAILED q 2x4 || 3 2 3x4 = 1-3-8 4x5 || 5 12 13 1-0-0

NAILED NAILED

except end verticals.

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

NAILED 2x4 || 1-8-8 1-10-15 5-2-14 10-0-8 1-8-8 0-2-8 3-3-14 4-9-10

2x4 |

11 **NAILED**

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

3x4 =

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 0.87 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 BCLL 0.0 * Rep Stress Incr NO WB 0.13 Horz(CT) 0.06 5 n/a n/a Weight: 42 lb FT = 20%	1 late 0113013 (X,1) [4.0 0 11	,0 1 0j, [0.2 agc,0 3 0j, [0.0 2 0,0 0 0j			
BCDL 10.0 Code ING2016/11/2014 Walling-0	TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 *	Plate Grip DOL 1.15 Lumber DOL 1.15	TC 0.87 BC 0.64	Vert(LL) -0.10 5-6 >940 240 MT20 197/144 Vert(CT) -0.23 5-6 >406 180 Horz(CT) 0.06 5 n/a n/a	

BOT CHORD

LUMBER-BRACING-TOP CHORD 2x4 SP No.1 TOP CHORD

BOT CHORD 2x4 SP No.1 **WEBS** 2x6 SP No.1 *Except*

2-8: 2x3 SPF No.3

0-6-4

(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

NOTES-

REACTIONS.

- 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) 8 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, 1-7=-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





Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 220056-A D1 Roof Special Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:30 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-JVUewA22aqivUFN_g5qk1T8yjlY7y3Og2CjrUbzYhmx

Structural wood sheathing directly applied or 4-2-6 oc purlins,

3-12, 6-10

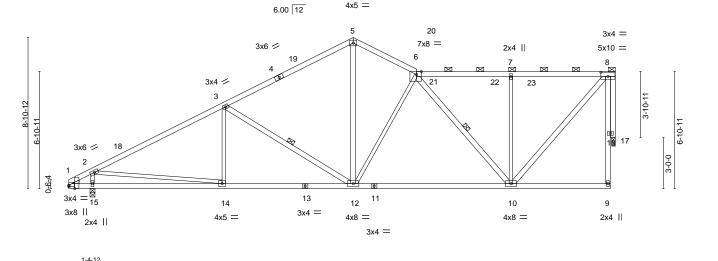
except end verticals, and 2-0-0 oc purlins (5-9-2 max.): 6-8.

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

1 Row at midpt

9-1-10 16-9-0 20-5-12 26-0-8 32-2-4 7-8-13 7-7-7 3-8-12 5-6-12 6-1-12

Scale = 1:67.8



26-0-8 9-3-8 1-3-0 0-1-12

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.66 BC 0.55 WB 0.89	,	L/d PLATES GRIP 240 MT20 197/144 180 n/a
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 186 lb FT = 20%

BOT CHORD

WEBS

LUMBER-BRACING-TOP CHORD

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

2x4 SP No.1 *Except*

2-15,2-14,3-14,6-12,7-10: 2x3 SPF No.3 WEDGE

Left: 2x3 SPF No.3

REACTIONS. (size) 15=0-3-8, 17=0-2-8

Max Horz 15=146(LC 13)

Max Grav 15=1342(LC 2), 17=1266(LC 39)

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

2-15=-1154/132, 2-14=0/1200, 3-12=-548/64, 5-12=0/806, 6-12=-520/51, 6-10=-580/53, WEBS

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



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

Urich, MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:31 2022 Page 1

16-9-0

7-7-7

ID:3YzUEFuTXpusHba?0tpUTHzCdai-nh208W2gK8qm6OyAEoLzagh7H9pvhVapHsTP11zYhmw 27-0-8 22-5-12 32-2-4 5-8-12 4-6-12 5-1-12

Structural wood sheathing directly applied or 4-1-7 oc purlins,

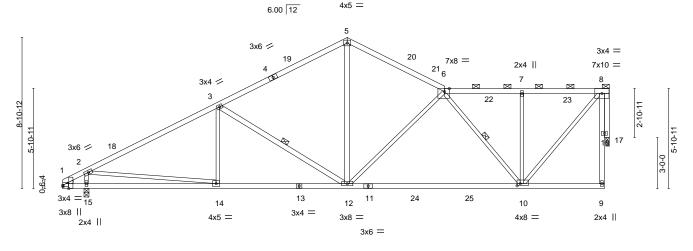
3-12, 6-10

except end verticals, and 2-0-0 oc purlins (5-9-6 max.): 6-8.

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

1 Row at midpt

Scale = 1:67.8



1-4-12 1-3-0 0-1-12

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

9-1-10

7-8-13

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

BOT CHORD

WEBS

LUMBER-BRACING-TOP CHORD

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

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

1-15=0/430, 14-15=-123/501, 12-14=-100/1761, 10-12=-64/1558 **BOT CHORD**

2-15=-1151/138, 2-14=0/1277, 3-12=-566/65, 5-12=0/940, 6-12=-490/55, 6-10=-732/64, WEBS

7-10=-489/77, 8-10=0/1560, 8-17=-1330/7

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) * 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) 17 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) 17.
- 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



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896093 220056-A D3 Roof Special Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:33 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-j39nZC4wsl4ULi6ZLDNRf5mSnyaK9SP6kAyV5wzYhmu KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788. 24-5-12 16-9-0 32-2-4

7-8-12

7-7-7

Scale = 1:67.8

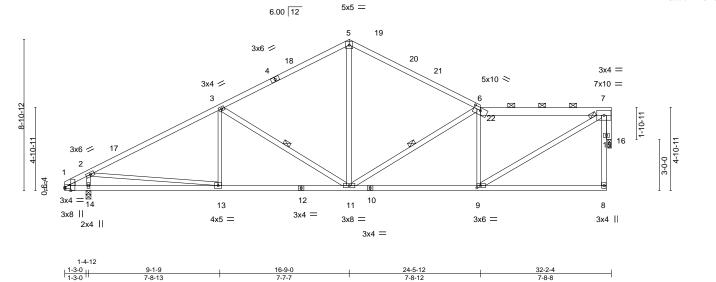


Plate Offsets (X,Y)--[1:0-2-5,Edge], [1:0-0-0,0-0-15], [6:0-5-0,0-2-0], [9:0-2-8,0-1-8]

9-1-9 7-8-13

TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.67 BC 0.46 WB 0.74	DEFL. in (loc) l/defl L/d Vert(LL) -0.08 11-13 >999 240 Vert(CT) -0.19 11-13 >999 180 Horz(CT) 0.08 16 n/a n/a	PLATES GRIP MT20 197/144
	Code IRC2018/TPI2014	Matrix-S		Weight: 180 lb FT = 20%
BCDL 10.0				3

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-TOP CHORD 2x4 SP No.1 *Except*

5-6: 2x4 SP 2400F 2.0E, 6-7: 2x6 SP No.1

BOT CHORD 2x4 SP No.1

WEBS 2x4 SP No.1 *Except*

2-14,2-13,3-13,6-9: 2x3 SPF No.3

0-1-12

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

2-14=-1160/137, 2-13=0/1197, 3-11=-554/55, 5-11=0/710, 6-11=-564/31, 6-9=-763/108, **WEBS**

7-9=-17/1744, 7-16=-1226/3

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.
- * 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) 16 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) 16.
- 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.



Structural wood sheathing directly applied or 4-2-15 oc purlins,

3-11, 6-11

except end verticals, and 2-0-0 oc purlins (5-7-15 max.): 6-7.

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

1 Row at midpt

March 23,2022



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896094 220056-A D4 Roof Special 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:3YzUEFuTXpusHba?0tpUTHzCdai-BGj9mY5Yd3CLzshlvxvgCJJbGMwRusNFzqh3dMzYhmt

Structural wood sheathing directly applied or 3-1-13 oc purlins,

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

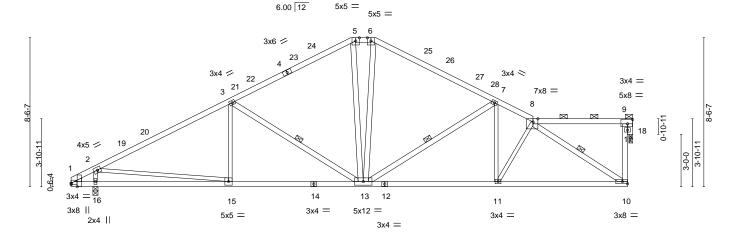
1 Row at midpt

except end verticals, and 2-0-0 oc purlins (4-8-10 max.): 5-6, 8-9.

3-13, 7-13, 8-10

24-4-8 32-2-4 16-3-12 26-5-12 9-1-9 1,7-2-4 0-10-8 7-8-12 7-2-3 2-1-4

Scale = 1.66.0



1-4-12 1-3-0 0-1-12

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) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.82 BC 0.47 WB 0.95	DEFL. in (loc) l/defl L/d Vert(LL) -0.11 13-15 >999 240 Vert(CT) -0.22 13-15 >999 180 Horz(CT) 0.06 18 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 182 lb FT = 20%

BOT CHORD

WEBS

LUMBER-BRACING-TOP CHORD

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x4 SP No.1 WEBS 2x4 SP No.1 *Except*

2-16,2-15,3-15,7-11,8-11: 2x3 SPF No.3

WEDGE

Left: 2x3 SPF No.3

REACTIONS. (size) 16=0-3-8, 18=0-2-8

Max Horz 16=150(LC 15)

Max Grav 16=1585(LC 41), 18=1302(LC 41)

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

TOP CHORD 1-2=-411/0, 2-3=-2305/30, 3-5=-1735/88, 5-6=-1440/99, 6-7=-1732/81, 7-8=-2091/25,

10-17=0/1229, 9-17=0/1229 **BOT CHORD**

1-16=0/440, 15-16=-88/482, 13-15=-69/1967, 11-13=-35/1886, 10-11=-39/1800 WEBS

2-16=-1393/140, 2-15=0/1538, 3-13=-649/50, 5-13=-14/459, 6-13=0/433, 7-13=-549/43,

7-11=-4/264, 8-10=-2025/23, 9-18=-1440/6

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 16-3-12, Exterior(2E) 16-3-12 to 17-2-4, Exterior(2R) 17-2-4 to 20-4-14, Interior(1) 20-4-14 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.
- * 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.



March 23,2022



Job Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896095 220056-A D5 Roof Special Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:36 2022 Page 1 Urich. MO - 64788.

5-2-3

ID:3YzUEFuTXpusHba?0tpUTHzCdai-7ervBD6o9gS2CAq81Mx8HkOyTAdHMm0YR8AAiEzYhmr 19-2-4 24-4-7 28-5-12 31-11-8 4-10-8 5-2-2 3-5-12

Structural wood sheathing directly applied or 3-3-3 oc purlins,

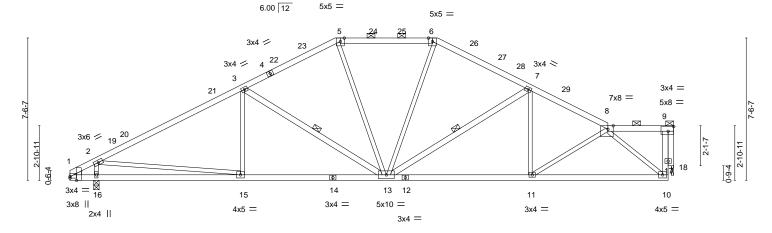
Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt

except end verticals, and 2-0-0 oc purlins (5-2-9 max.): 5-6, 8-9.

3-13, 7-13

Scale = 1.61.0



1-4-12 1-3-0 0-1-12

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 (c			

9-1-9 7-8-13

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.71	DEFL. in (loc) I/defl L/d Vert(LL) -0.09 13-15 >999 240	PLATES GRIP MT20 197/144
, 0,	Lumber DOL 1.15	BC 0.44	Vert(CT) -0.20 13-15 >999 180	
TCDL 10.0	Rep Stress Incr YES	WB 0.94	Horz(CT) 0.06 18 n/a n/a	
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S	11012(01) 0.00 10 104 104	Weight: 164 lb FT = 20%
BCDL 10.0	Code IRC2018/1912014	Matrix-5		Weight: 164 lb F1 = 20%

BOT CHORD

WEBS

LUMBER-**BRACING-**TOP CHORD

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

2x3 SPF No.3 *Except*

9-10,3-13,7-13,9-17: 2x4 SP No.1 WEDGE

Left: 2x3 SPF No.3

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 2-16=-1381/152, 2-15=0/1281, 3-13=-611/34, 5-13=0/414, 6-13=0/375, 7-13=-497/20, **WEBS**

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.
- * 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.



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

AMSI/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

320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896096 220056-A D6 Roof Special Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:37 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-brPIOZ7Rw_avqJPKa3SNqxw7hZwL5D5ifowjEhzYhmq

16-9-0 24-4-7 31-11-8 9-1-10 21-2-4 30-5-12 1-4-12 12-3-12 6-1-5 4-5-4 4-5-4 3-2-3 1-5-12

Scale = 1:57.8

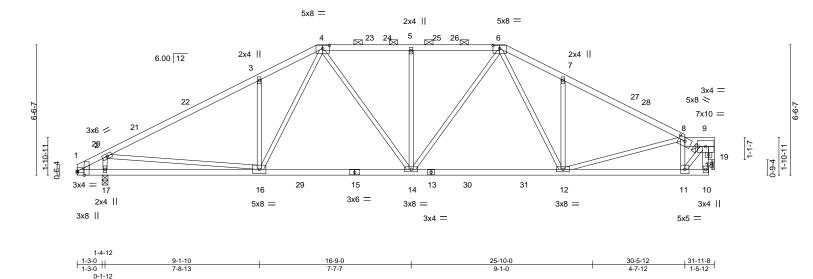


Plate Offsets (X,Y)--[1:0-2-5,Edge], [1:0-0-0,0-0-15], [4:0-4-0,0-1-15], [6:0-4-0,0-1-15], [8:0-4-0,0-2-0] LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.74 Vert(LL) -0.14 14-16 >999 240 197/144 MT20 Snow (Pf/Pg) 20.4/20.0 180 Lumber DOL 1.15 BC 0.58 Vert(CT) -0.25 14-16 >999 **TCDL** 10.0 Rep Stress Incr YES WB 0.95 Horz(CT) 0.05 19 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 152 lb FT = 20%

LUMBER-

BCDL

BRACING-

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

10.0

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

BOT CHORD 2x3 SPF No.3 *Except*

WEBS WEDGE

Left: 2x3 SPF No.3

REACTIONS. (size) 17=0-3-8, 19=0-1-8

Max Horz 17=91(LC 15)

9-10,9-18: 2x4 SP No.1

Max Grav 17=1612(LC 51), 19=1393(LC 53)

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

TOP CHORD 1-2=-514/0, 2-3=-2137/48, 3-4=-2090/119, 4-5=-1713/92, 5-6=-1713/91, 6-7=-2029/117,

7-8=-2064/52, 8-9=-1379/14

BOT CHORD 1-17=0/553, 16-17=-30/613, 14-16=-1/1548, 12-14=0/1499, 11-12=-13/1293,

10-11=-11/429

WFBS 2-17=-1358/153, 2-16=0/1284, 3-16=-523/123, 4-16=-34/653, 4-14=0/468, 5-14=-487/70,

 $6-14=0/482,\ 6-12=-30/583,\ 7-12=-433/108,\ 8-12=0/505,\ 8-11=-1199/73,\ 9-11=-11/1570,$

9-19=-1525/8

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 12-3-12, Exterior(2R) 12-3-12 to 15-6-2, Interior(1) 15-6-2 to 21-2-4, Exterior(2R) 21-2-4 to 24-4-7, Interior(1) 24-4-7 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, with BCDL = 10.0psf.
- 8) Bearing at joint(s) 19 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) 19.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Continuierengeologienzdard ANSI/TPI 1



March 23,2022



Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
					150896096
220056-A	D6	Roof Special	1	1	
					Job Reference (optional)

KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:37 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 Truss Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Qty 150896097 220056-A D7 Roof Special Job Reference (optional)

5-6-0

15-9-12

5-6-0

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

4-9-0

3-4-4

10-3-12

5-6-12

1-4-12

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:39 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-YDX2pF9hSbqd3dZjiUUrvM0V5NbzZ7S_76PqJZzYhmo 28-9-0 32-1-4 33-6-0 21-3-12 22-3-0

Structural wood sheathing directly applied or 4-0-6 oc purlins, except

6-12

2-0-0 oc purlins (4-0-1 max.): 4-6.

1 Row at midpt

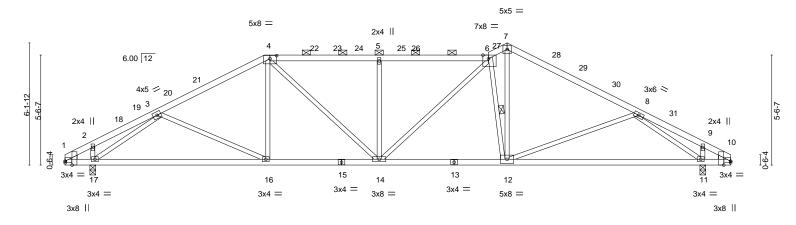
Rigid ceiling directly applied or 10-0-0 oc bracing.

6-6-0

Scale = 1.58.0

1-4-12

3-4-4



1-4-12					33-6-0
L 1-3-0 II	10-3-12	15-9-12	22-3-0	32-1-4	32 ₁ 3-0
1-3-0	8-11-0	5-6-0	6-5-4	9-10-4	0-1-12
0-1-12					1-3-0
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		

BCDL 10.0 Code IRC2018/TPI2014 Matrix-S Weight: 152 lb FT = 20%

BOT CHORD

WEBS

LUMBER-BRACING-TOP CHORD

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) 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-

- 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=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
- 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.
- * 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) This truss 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 23,2022



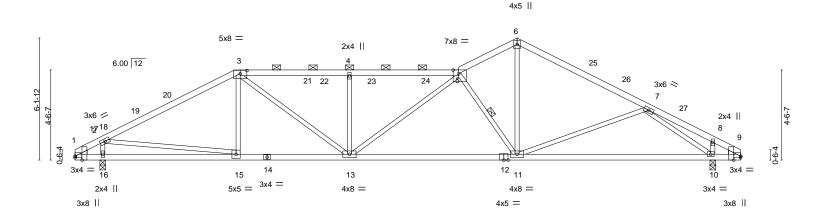
Job 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Truss Type Qty 150896098 220056-A D8 Roof Special Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:41 2022 Page 1 $ID: 3YzUEFuTXpusHba?0tpUTHzCdai-UceoExAx_C4LJxj5pvXJ_n5qkBG611iHaQuxNSzYhmm$

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

Scale = 1.58.0



1-4-12					33-6-0
1-3-0	8-3-12	13-9-12	22-3-0	32-1-4	32 ₁ 3-0
1-3-0	6-11-0	5-6-0	8-5-4	9-10-4	0-1-12
0-1-12					1-3-0
Offsets (X Y)	[1:0-2-5 Edge] [1:0-0-0 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]		

1 ato Orisots (A,1) [1.0 2 5,Eugo], [1.0 0 6,0 0 10], [0.0 4 6,0 1 10], [0.0 0 0,Eugo], [0.0 0 10], [0.0 2 0,Eugo]								
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.68 BC 0.66 WB 0.91	DEFL. in (loc) l/defl L/d Vert(LL) -0.15 10-11 >999 240 Vert(CT) -0.33 10-11 >999 180 Horz(CT) 0.06 10 n/a n/a	PLATES GRIP MT20 197/144				
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 146 lb FT = 20%				

BOT CHORD

WEBS

LUMBER-BRACING-TOP CHORD

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) 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-

- 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=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
- 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.
- * 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) This truss 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-9-3 oc purlins, except

2-0-0 oc purlins (3-7-10 max.): 3-5.

1 Row at midpt

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

5-11

March 23,2022



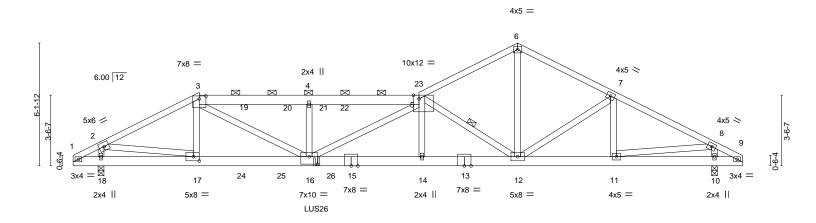


Job Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 220056-A D9 Roof Special Girder Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:43 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-Q?mZfcCCWqK3YEtUxKZn3CABI_wkV0Fa2kN1SLzYhmk 11-9-12 17-3-12 32-1-4 22-3-0 27-0-9 33-6-0 1-4-12 5-6-0 5-6-0 5-0-11 1-4-12

Scale = 1:57.7



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

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]
---------------------	--	-------------

TCDL 10.0 Rep Stress Incr NO	BC 0.77 WB 0.52	Vert(CT) Horz(CT)	-0.43 14-16 0.08 10	>852 n/a	180 n/a		
BCLL 0.0 * Code IRC2018/TPI2014	Matrix-S					Weight: 216 lb	FT = 20%

BOT CHORD

WEBS

except

1 Row at midpt

LUMBER-BRACING-TOP CHORD

TOP CHORD 2x4 SP No.1 *Except* 3-5: 2x6 SP No.1

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

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-

- 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=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
- 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) This truss 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) 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.
- 11) Fill all nail holes where hanger is in contact with lumber.
- 12) 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.
- 13) 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

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

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



Structural wood sheathing directly applied or 2-11-1 oc purlins,

5-12

2-0-0 oc purlins (2-10-15 max.): 3-5.

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

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
					150896099
220056-A	D9	Roof Special Girder	1	1	
					Job Reference (optional)

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

Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:43 2022 Page 2 ID:3YzUEFuTXpusHba?0tpUTHzCdai-Q?mZfcCCWqK3YEtUxKZn3CABI_wkV0Fa2kN1SLzYhmk

LOAD CASE(S) Standard

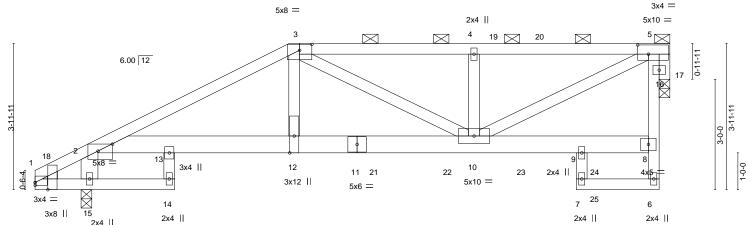
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

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)

Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896100 220056-A F1 Half Hip Girder Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:44 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-uBKxsyCqH7SwAOSgV140cQjNdOJkEVJkGO6b_nzYhmj KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 17-3-0 1-4-12 3-9-8 11-11-2 1-4-12 2-4-12 3-4-12 4-8-14 Scale = 1:31.3



1-3-0 1-4-12 3-8	9-0 1-2-4	11-11-2		14-0-0	17-3-0	
1-3-0 0-1-12 2-4	-12 3-4-12	4-8-14		2-9-6	2-6-8	
Plate Offsets (X,Y) [1:0-2-5,E	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) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2018/TPI2014	CSI. TC 0.57 BC 0.60 WB 0.41 Matrix-S	Vert(LL) -0.09	9 10-12 >999 2 4 10-12 >999	L/d PLATES 240 MT20 180 n/a Weight: 103 I	GRIP 197/144

BOT CHORD

LUMBER-**BRACING-**TOP CHORD 2x4 SP No.1 TOP CHORD

2x4 SP No.1 *Except* **BOT CHORD**

8-11,2-11: 2x6 SP No.1

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. 2-3=-2809/178, 3-4=-2497/175, 4-5=-2494/174, 8-16=-0/300, 5-16=-0/300 TOP CHORD **BOT CHORD** 2-13=-151/2440, 12-13=-199/2490, 10-12=-198/2438, 9-10=-54/316, 8-9=-59/340 2-15=-1468/86, 3-12=-23/980, 4-10=-509/99, 5-10=-173/2466, 5-17=-1769/129 WFBS

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); cantilever left and right exposed; end vertical left and right exposed; Lumber 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) 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) 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.
- 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.
- 12) 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 at**doxed anഎമൂ**dbup at 15-3-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others

OF MISSO SCOTT M. SEVIER NUMBER PE-2001018807 SSIONAL

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.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

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

March 23,2022



Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
					150896100
220056-A	F1	Half Hip Girder	1	1	
					Job Reference (optional)

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

Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:44 2022 Page 2 ID:3YzUEFuTXpusHba?0tpUTHzCdai-uBKxsyCqH7SwAOSgV140cQjNdOJkEVJkGO6b_nzYhmj

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

320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896101 220056-A F2 Half Hip Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:47 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-Jm04V_FiZ2rV1sAFA9djE2LpCbKERwtAyMLFb6zYhmg KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 17-3-0 1-4-12 9-2-4 7-9-8 Scale = 1:35.6 3x4 =5x6 = 7x8 = 3 4 \square 19 20 \bowtie 21 6.00 12 15 В 3x6 || 7 2x4 || 6 3x6 = 9 2x4 || 2x4 || 11 3x4 =10 2x4 || 2x4 II 3x8 II 1-3-0 1-4-12 1-3-0 0-1-12 9-2-4 14-8-8 17-3-0 2-4-12 5-4-12 5-6-4 2-6-8 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. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 TC Plate Grip DOL 1.15 0.87 Vert(LL) -0.127-8 >999 240 197/144 MT20 Snow (Pf/Pg) 20.4/20.0 BC 180 Lumber DOL 1.15 0.61 Vert(CT) -0.227-8 >847 **TCDL** 10.0 Rep Stress Incr YES WB 0.16 Horz(CT) 0.12 15 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 90 lb FT = 20%BCDL 10.0 **BRACING-**

TOP CHORD

BOT CHORD

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 2x4 SP No.1 *Except*

WEBS

4-11,3-7: 2x3 SPF No.3, 2-10: 2x6 SP No.1

WEDGE

Left: 2x3 SPF No.3

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

WFBS 2-10=-921/131, 4-7=-89/773, 4-15=-714/31

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 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
- 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.
- * 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) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) 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.
- 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.



Structural wood sheathing directly applied or 2-2-0 oc purlins,

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

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4, 5-11.

March 23,2022



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896102 220056-A F3 Half Hip 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 ID:3YzUEFuTXpusHba?0tpUTHzCdai-nyZSiKGKKMzLe0lRkt9ymGu2A?hRAJGJB04o7YzYhmf 11-2-4 1-4-12 17-3-0 8-6-0 1-4-12 2-8-4 6-0-12 Scale = 1:40.2 3x4 = 4x5 = 5x8 = 5 20 🖂 ⊠²¹ 2x4 📏 6.00 12 3 19 5-11-1 18 16 1 1-0-0 2x4 || 8 2x4 II 7 3x6 =3x4 = 2x4 || 10 2x4 | 1 12 3x8 2x4 || 2x4 II 3x8 || 3-6-4 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. **PLATES** GRIP 2-0-0 in (loc) I/defl I/d TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.60 Vert(LL) -0.17>999 240 197/144 8-9 MT20 Snow (Pf/Pg) 20.4/20.0 180 Lumber DOL 1.15 BC 0.55 Vert(CT) -0.398-9 >482 **TCDL** 10.0 Rep Stress Incr YES WB 0.41 Horz(CT) 0.16 16 n/a n/a BCLL 0.0

BRACING-

TOP CHORD

BOT CHORD

Matrix-S

BCDL

LUMBER-TOP CHORD 2x4 SP No.1

2x4 SP No.1 *Except* **BOT CHORD**

9-10,13-14: 2x3 SPF No.3

WEBS 2x3 SPF No.3 *Except*

10.0

2-11: 2x6 SP No.1, 5-15: 2x4 SP No.1

WEDGE

Left: 2x3 SPF No.3

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.

Code IRC2018/TPI2014

2-3=-1096/51, 3-4=-721/40, 4-5=-558/45 TOP CHORD

BOT CHORD 2-9=-82/815, 8-9=-157/869

2-11=-891/116, 5-8=-56/664, 3-8=-500/121, 5-16=-639/40 WFBS

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 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
- 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.
- * 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) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) 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.
- 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.



Weight: 83 lb

Structural wood sheathing directly applied or 4-9-13 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5, 6-12.

FT = 20%

March 23,2022



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896103 220056-A F4 Half Hip Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:49 2022 Page 1 $ID: 3Yz UEFuTX pusHba? 0 tp \overset{\circ}{U}THz Cdai-F87 qwg Gy5g5 CG9 KeHagBJTQBs PzcvjETQfqMf_zYhme$ 13-2-4 17-3-0 1-4-12 8-6-0 1-4-12 4-8-4 4-0-12 4x5 = Scale = 1:42 8 5x8 = 6.00 12 5 6 16 0-5-11 3x8 / 2x4 💸 3 18 10 9 2x4 | 3x4 II 8 -6-4 9 4x8 = 3x4 2x4 || 11 13 3x8 2x4 || 2x4 || 2x4 II 1-4-12 1-2-15 0-1-13 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]

CADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.67 BC 0.81 WB 0.62 Matrix-S	Vert(CT) -0	in (loc) .35 8-10 .75 8-10 .18 16	l/defl >535 >251 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 82 lb	GRIP 197/144 FT = 20%
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BRACING-

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

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

2-12: 2x6 SP No.1, 6-6: 2x4 SP No.1

WEDGE

WEBS

LUMBER-

TOP CHORD

BOT CHORD

REACTIONS.

Left: 2x3 SPF No.3

(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.

2-3=-1137/55, 3-5=-603/43, 5-6=-430/52 TOP CHORD

BOT CHORD 2-10=-102/900. 8-10=-211/939

2x4 SP No.1

2x4 SP No.1 *Except*

2x3 SPF No.3 *Except*

10-11,14-15: 2x3 SPF No.3

WFBS 2-12=-849/122, 3-8=-627/137, 6-8=-80/756, 6-16=-603/138

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 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
- 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.
- * 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) 16 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 9) 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. 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.



MiTek 16023 Swingley Ridge Rd Chesterfield, MO 63017

320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896104 220056-A F5 Half Hip Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:50 2022 Page 1 Urich. MO - 64788. ID:3YzUEFuTXpusHba?0tpUTHzCdai-jLhC70HbszD3uJvqrlBQrhzLCpH7e8FcfJZvCRzYhmd 17-3-0 1-4-12 15-2-4 7-8-5 6-3-9 7-5-15 2-0-12 Scale = 1.47.35x8 = 5x5 = 6.00 12 5 6 16 ¹⁷ 3x4 / 3x4 / 3 9-9-9 14 ¹⁵ 2x4 || 3x4 =9 10 8 3x8 || 3x4 = 2x4 || 4x8 =2x4 II 2x4 || 1-4-12 1-3-0 17-3-0 2-0-12 0-1-12 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. I /d **PLATES** GRIP 2-0-0 in (loc) I/defI TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.76 Vert(LL) -0.13>999 240 197/144 8-10 MT20 Snow (Pf/Pg) 20.4/20.0 BC 180 Lumber DOL 1.15 0.92 Vert(CT) -0.258-10 >768 **TCDL** 10.0 Rep Stress Incr YES WB 0.76 Horz(CT) -0.0713 n/a n/a BCLL 0.0

BCDL

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

10.0

Left: 2x3 SPF No.3

BRACING-

Matrix-S

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

2-2-0 oc bracing: 10-11.

WEBS 3-8 1 Row at midpt

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.

Code IRC2018/TPI2014

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

3-8=-688/86, 5-8=-437/203, 6-8=-137/959, 2-11=-462/121, 6-13=-716/76 **WEBS**

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 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
- 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) 13 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) 13.
- 10) 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.
- 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.



Weight: 90 lb

FT = 20%

March 23,2022



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896105 220056-A F6 Monopitch 5 Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:51 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-BXFaKMIDdHLwVTU0P?ifOuWb7DmINZCltzJSktzYhmc KC Truss & Panel Inc. (Urich, MO), Urich MO - 64788

10-9-8

5-3-0

Scale = 1:49 8 6.00 12 5 5x8 5x6 / 9-0-1 4x5 / 3 0-9-9 15 4x5 / 3x6 = 2x4 || 3x6 = 2x4 || 2x4 | | 10

13-0-0

2-2-8

17-3-0

4-3-0

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

6.00 12

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.43 BC 0.38 WB 0.85	DEFL. in (loc) l/defl L/d Vert(LL) -0.09 7-8 >999 240 Vert(CT) -0.19 7-8 >999 180 Horz(CT) 0.14 14 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 98 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-2x4 SP No.1 TOP CHORD

2x4 SP No.1 *Except* **BOT CHORD**

11-12: 2x3 SPF No.3

2x3 SPF No.3 *Except*

5-10,2-8,5-13: 2x4 SP No.1

WEDGE

WEBS

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.

1-6-8

3x8 ||

5x5 =

5-6-8 4-0-0

2-3=-2052/380, 3-4=-846/21, 6-13=-58/460, 5-13=-58/460 TOP CHORD

BOT CHORD 8-9=-335/238, 7-8=-599/1721, 6-7=-235/738

2-9=-665/176, 2-8=-335/1824, 3-8=-174/543, 3-7=-1015/372, 4-6=-798/169, 4-7=0/409, WFBS

5-14=-646/125

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) 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.



Structural wood sheathing directly applied or 4-3-6 oc purlins,

4-6

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

1 Row at midpt

March 23,2022



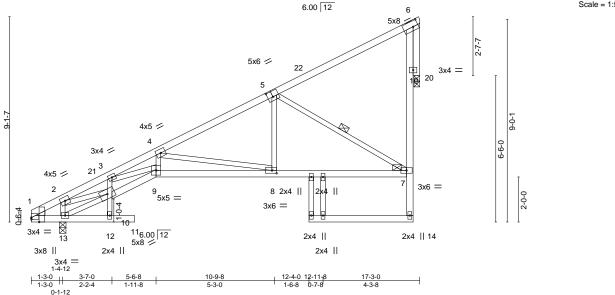
320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Truss Type Qty 150896106 220056-A F7 Monopitch 3 Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:52 2022 Page 1 $ID: 3YzUEFuTXpusHba? \~0 tpUTHzCdai-fjpyYhJrObTn7d3DzjDuw62muc4k6? Ev6d20GJzYhmb$

1-4-12 10-9-8 17-3-0 12-4-0 3-7-0 2-2-4 1-11-8 5-3-0 1-6-8

Scale = 1:51.2



DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

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) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.42 BC 0.40 WB 0.92
BCLL 0.0 *		''- ''-
PCDI 10.0	Code IRC2018/TPI2014	Matrix-S

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins,

I/defI

>999

>999

n/a

I /d

240

180

n/a

PLATES

Weight: 101 lb

MT20

GRIP

197/144

FT = 20%

except end verticals.

BOT CHORD Rigid ceiling directly applied or 8-3-6 oc bracing. Except:

10-0-0 oc bracing: 10-12

8-9

8-9

20

WEBS 1 Row at midpt 5-7

in (loc)

-0.08

-0.17

0.14

WEBS WEDGE

LUMBER-

TOP CHORD

BOT CHORD

Left: 2x3 SPF No.3

REACTIONS. (size) 13=0-3-8, 20=0-3-0

2x4 SP No.1

2x4 SP No.1 *Except*

2x3 SPF No.3 *Except*

6-14.6-19: 2x4 SP No.1

3-12,15-16: 2x3 SPF No.3

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. 2-3=-1333/184, 3-4=-2137/361, 4-5=-865/17, 7-19=-56/470, 6-19=-56/470 TOP CHORD

BOT CHORD 3-10=-433/106, 9-10=-525/1358, 8-9=-575/1830, 7-8=-231/756

2-13=-680/139, 10-13=-298/192, 2-10=-179/1132, 3-9=-120/689, 4-9=-178/634, WFBS

4-8=-1109/350, 5-7=-820/166, 5-8=0/434, 6-20=-656/123

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) 20 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) 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.
- 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



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896107 220056-A F8 Monopitch Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:53 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-7wNLl1JT9ubelnePWQk7TJbw?0QxrYM2LHoZolzYhma 10-9-8 17-3-0 1-6-8 7-6-8 6-0-0 3-3-0 6-5-8

6.00 12 5 5x8 5x6 / 5-0-1 5x5 / 0-9-9 ⁸5x5 = 7 6 12 4x5 / 4x5 = 3x6 =6.00 12

1-3-01₁6₁8 6-0-0 [1:0-0-0,0-0-15], [1:0-2-5,Edge], [4:0-2-12,0-3-0], [5:0-2-12,0-3-0], [9:0-2-8,0-2-4] Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defI TCLL (roof) 20.0 TC Plate Grip DOL 1.15 0.47 Vert(LL) -0.15>999 240 197/144 8 MT20 Snow (Pf/Pg) 15.4/20.0 BC 180 Lumber DOL 1.15 0.40 Vert(CT) -0.308 >631 **TCDL** 10.0 11 n/a n/a

Rep Stress Incr YES WB 0.55 Horz(CT) 0.14 BCLL 0.0 Code IRC2018/TPI2014 Matrix-S BCDL 10.0 LUMBER-**BRACING-**

> 2x4 SP No.1 except end verticals. 2x3 SPF No.3 *Except* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

8-5-0 oc bracing: 7-8.

TOP CHORD

WEBS WEDGE 4-6 1 Row at midpt Left: 2x3 SPF No.3

REACTIONS. (size) 9=0-3-8, 11=0-2-8 Max Horz 9=175(LC 13)

2x4 SP No.1

Max Uplift 11=-24(LC 16)

5-6,2-8,5-10: 2x4 SP No.1

Max Grav 9=753(LC 2), 11=635(LC 21)

3x8 ||

5x5 =

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

2-9=-725/206, 2-8=-311/2156, 3-8=-187/839, 3-7=-1228/338, 4-7=-37/503, **WEBS**

4-6=-1021/205, 5-11=-646/121

NOTES-

TOP CHORD

BOT CHORD

WEBS

- 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.



Weight: 88 lb

Structural wood sheathing directly applied or 3-5-11 oc purlins,

FT = 20%

Scale = 1:49 8

March 23,2022





320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Truss Type Qty 150896108 220056-A F9 Monopitch Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:53 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-7wNLl1JT9ubelnePWQk7TJbw?0QxrYM2LHoZolzYhma KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788.

10-9-8

3-3-0

Scale = 1:49 6 4x8 = 6.00 12 5 5x6 / 3x6 / 3 ⁸5x5 = 6 12 4x5 / 3x4 = 3x6 =6.00 12

17-3-0

6-5-8

1-3-01-6-8 6-5-8 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) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.47 BC 0.40 WB 0.55	DEFL. in (loc) l/defl L/d Vert(LL) -0.15 8 >999 240 Vert(CT) -0.30 8 >631 180 Horz(CT) 0.14 11 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 88 lb FT = 20%

BOT CHORD

WEBS

LUMBER-BRACING-TOP CHORD

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

WEBS 2x3 SPF No.3 *Except*

5-6,2-8,5-10: 2x4 SP No.1

WEDGE 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.

1-6-8

1-6-8

3x8 ||

7-6-8

6-0-0

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.



Structural wood sheathing directly applied or 3-5-11 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

4-6

except end verticals.

8-5-0 oc bracing: 7-8.

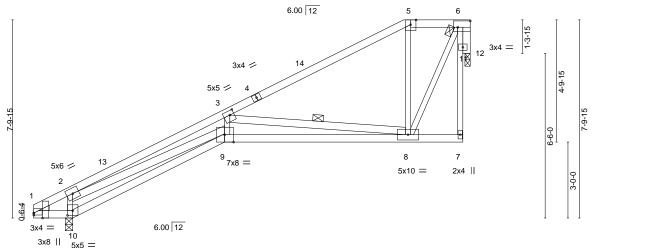
1 Row at midpt

March 23,2022





320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896109 220056-A F10 Half Hip Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:45 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-MNuJ4IDS1RbnnY1t2lbF8dGVLodWztHtV2s8WDzYhmi Urich. MO - 64788. 14-10-12 17-3-0 1-6-8 7-6-8 1-6-8 6-0-0 Scale = 1:45.5 5x5 = 5x8 = 6.00 12 5 6



14-10-12

BOT CHORD

WEBS

17-3-0

Structural wood sheathing directly applied or 2-10-6 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-6.

3-8

Rigid ceiling directly applied or 9-7-10 oc bracing.

1 Row at midpt

1-3-01₁6₁8 1-3-00-3-8 6-0-0 Plate Offsets (X,Y)--[1:0-0-0,0-0-15], [1:0-2-5,Edge], [3:0-2-0,0-2-0], [6:Edge,0-3-0], [9:0-4-4,Edge], [10:0-2-8,0-2-4]

7-6-8

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.76 BC 0.69 WB 0.75	DEFL. in (loc) l/defl L/d Vert(LL) -0.31 9 >606 240 Vert(CT) -0.49 8-9 >378 180 Horz(CT) 0.17 12 n/a n/a	PLATES MT20	GRIP 197/144
	Code IRC2018/TPI2014	Matrix-S		Weight: 89 lb	FT = 20%
BCDL 10.0	Code 11(C2016/11 12014	Wattix-5		weight. 03 lb	11 = 2076

LUMBER-BRACING-TOP CHORD

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x4 SP No.1

WEBS 2x3 SPF No.3 *Except*

2-9,3-8,6-11: 2x4 SP No.1

WEDGE Left: 2x3 SPF No.3

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.

2-3=-3672/288, 3-5=-592/15, 5-6=-404/35 TOP CHORD **BOT CHORD** 1-10=0/280, 9-10=-225/268, 8-9=-420/3075

2-10=-852/122, 2-9=-255/3180, 3-9=-95/1207, 3-8=-2701/351, 5-8=-299/137, **WEBS**

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) 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.
- * 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.
- This truss 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



Job Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896110 220056-A G1 Common 2 Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:54 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-c6xjzNK5wCjVMxDb47GM0X80xQimavZCaxX7LCzYhmZ KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 10-0-0 14-10-0 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 4x5 = 6.00 12 3x4 / 3x4 < 15 4 12 2 6-1-12 16 3x4 || 2x4 || 1-1-12 9-6-4 8 3x4 =9 10 3x4 =3x8 II 3x8 = 5x5 = 3x4 =Plate Offsets (X,Y)--[6:0-0-0,0-0-15], [6:0-2-5,Edge] SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl

LOADING (psf) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.77 Vert(LL) -0.199-10 >999 240 Snow (Pf/Pg) 15.4/20.0 180 Lumber DOL 1.15 BC 0.68 Vert(CT) -0.399-10 >604 **TCDL**

10.0 Rep Stress Incr YES WB 0.93 Horz(CT) 0.02 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S BCDL 10.0

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 except end verticals.

BRACING-

BOT CHORD

WEBS WEDGE

LUMBER-

Right: 2x3 SPF No.3

REACTIONS. (size) 7=0-3-8, 10=Mechanical

2x3 SPF No.3

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

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) 0-1-4 to 3-1-4, Interior(1) 3-1-4 to 10-0-0, Exterior(2R) 10-0-0 to 13-0-0, Interior(1) 13-0-0 to 21-3-0 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=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) 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) Refer to girder(s) for truss to truss connections
- 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.



197/144

FT = 20%

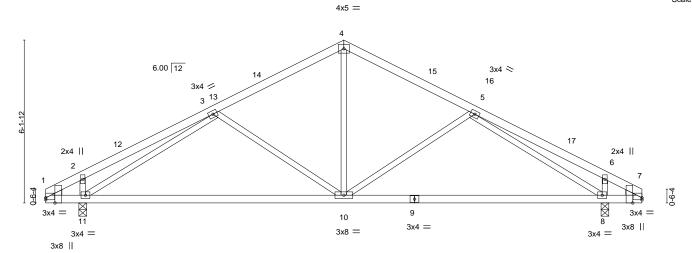
MT20

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

Weight: 92 lb



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896111 220056-A G2 Common Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:55 2022 Page 1 KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. ID:3YzUEFuTXpusHba?0tpUTHzCdai-4IU5AjLjhWrM_4noernbYkgJNq3HJOTLobHgtezYhmY 21-1-4 22-6-0 1-4-12 11-3-0 16-1-0 6-5-0 4-10-0 4-10-0 5-0-4 1-4-12 Scale = 1:43.5



22-6-0 21-3-0 0-1-12 1-3-0 9-10-4 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) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.28 BC 0.60 WB 0.83	Vert(CT) -0.	in (loc) .12 8-10 .25 8-10 .02 8	l/defl >999 >945 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 96 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

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

1-11=0/283, 10-11=-11/851, 8-10=-7/851, 7-8=0/283 **BOT CHORD**

4-10=0/457, 5-8=-769/131, 3-11=-769/131 WEBS

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 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
- 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) 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) 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.
- 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.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

March 23,2022



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896112 220056-A G3 Common Supported Gable Job Reference (optional)

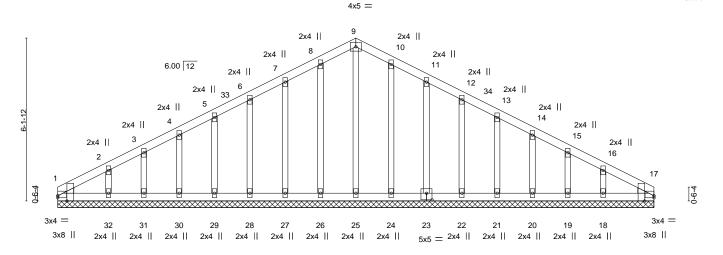
KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:57 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-0hcrbPN_D754DOxAlGp3d9mjndulnTYeGvmnxXzYhmW

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

11-3-0 22-6-0 11-3-0

Scale = 1:43.5



22-6-0 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. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.03 Vert(LL) 999 197/144 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.02 Vert(CT) n/a n/a 999 **TCDL** 10.0 Rep Stress Incr NO WB 0.09 Horz(CT) 0.00 17 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 110 lb FT = 20%BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

22-6-0

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

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,

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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
- 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) 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
- 5) Unbalanced snow loads have been considered for this design.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 1-4-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * 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) N/A
- 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.





320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896113 220056-A H1 Half Hip Girder Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:47:59 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-y4kc05OEkkLoTi5ZthrXjaru2RWfFE_xjDFt0PzYhmU KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 6-8-12 15-10-8 22-3-8 12-1-8 19-0-2 5-4-13 Scale = 1.44.05x8 = 2x4 || 7x8 = 2x4 || 3 16 \bowtie 6.00 12 4x5 / ¹⁹x10 = 9 8 18 19 7x8 MT18HS = 5x5 / 10x12 = 3x12 || HUS26 HUS26 HHUS28-2 HUS26 1-1-12

		6-8-12		5-4-13		0-10-0	2-11-0	1	3-	1-10	1	3-3-6		
Plate Offsets (X	Y) [3:0-4-0,	0-1-15], [9:0-6-0,0-6-0], [10):0-6-12,0-6-0)]										
LOADING (psf) TCLL (roof) Snow (Pf/Pg) 2 TCDL BCLL	20.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 NO	CSI. TC BC WB	0.75 0.25 0.67	\	DEFL. /ert(LL) /ert(CT) Horz(CT)	in -0.13 -0.25 0.10	(loc) 11 11 7	l/defl >999 >999 n/a	L/d 240 180 n/a		PLATES MT20 MT18HS	GRIP 244/190 244/190
BCLL	10.0	Code IRC2018/TPI	2014	Matri	x-S								Weight: 325 lb	FT = 20%

12-1-8

12

2x4 ||

12-11-8

BOT CHORD

15-10-8

19-0-2

22-3-8

Structural wood sheathing directly applied or 3-9-12 oc purlins,

except end verticals, and 2-0-0 oc purlins (4-2-7 max.): 3-6.

Rigid ceiling directly applied or 10-0-0 oc bracing

LUMBER-**BRACING-**TOP CHORD

13 5x10 =

2x4 SP No.1 TOP CHORD 2x4 SP No.1 *Except* **BOT CHORD**

7-10: 2x8 SP 2400F 2.0E

2x4 SP No.1 **WEBS**

2x4 ||

REACTIONS. (size) 7=0-3-8, 14=0-3-8 Max Horz 14=146(LC 9)

Max Grav 7=7894(LC 30), 14=2857(LC 31)

6-8-12

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=0/2097, 5-7=-8177/0, 1-13=0/3707

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.

Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x8 - 2 rows staggered at 0-2-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; 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
- 5) 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.
- 6) Unbalanced snow loads have been considered for this design.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are MT20 plates unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * 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.
- 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.
- 13) Use Simpson Strong-Tie HHUS28-2 (22-16d Girder, 8-16d Truss) or equivalent at 15-10-8 from the left end to connect truss(es) to front face of bottom chord.



March 23,2022



Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
					I50896113
220056-A	H1	Half Hip Girder	1	2	
					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:3YzUEFuTXpusHba?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)



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896114 220056-A H2 Half Hip Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:00 2022 Page 1 $ID: 3Yz UEFuTX pusHba? 0tp UTHz Cdai-QGI_DQPsV2Te4sglROMmFoN4pro4_en4yt_RYrzYhmTaller (All Control of Contro$ 12-10-12 16-9-8 18-8-12 21-0-8 23-6-8 1-4-12 6-8-12 14-2-8 5-4-0 6-2-0 1-3-12 2-7-0 1-11-4 2-3-12 Scale = 1.47.35x8 =6.00 12 2x4 || 4x5 = 5 24 25 ₹ \boxtimes 3x4 / 3-9-15 4x5 / 233 1-0-0 11 10 3x8 2x4 || 12 2x4 2x4 || 4x8 = 2x4 =2x4 9 2x4 || 3x4 / 2x4 || 2x4 2 -6-4 \aleph 3x4 16 15 14 3x8 II 4x8 = 2x4 || 2x4 = 2x4 || 1-4-12 1-3-0 12-10-12 6-2-0 0-1-12 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. **PLATES** GRIP 2-0-0 in (loc) I/defl I/d TCLL (roof) 20.0 TC Plate Grip DOL 1.15 0.68 Vert(LL) -0.13>999 240 197/144 14 MT20 Snow (Pf/Pg) 20.4/20.0 180 Lumber DOL 1.15 BC 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 n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 131 lb FT = 20%BCDL 10.0

BOT CHORD

WEBS

JOINTS

LUMBER-**BRACING-**2x4 SP No.1 TOP CHORD TOP CHORD

2x4 SP No.1 *Except* **BOT CHORD**

20-21,9-11: 2x3 SPF No.3 2x3 SPF No.3 *Except*

7-8,7-12: 2x4 SP No.1

WEDGE

Left: 2x3 SPF No.3

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.

2-3=-1450/0, 3-5=-2558/110, 5-6=-1537/37, 6-7=-1534/36, 8-10=-988/50, 7-10=-972/55 TOP CHORD

BOT CHORD 12-13=-172/2141

2-17=-1023/85, 2-16=0/1024, 3-16=-897/140, 5-13=-14/1179, 13-16=-119/1435, WFBS

3-13=-73/1269, 5-12=-1046/109, 6-12=-555/109, 7-12=-51/1705

NOTES-

WEBS

- 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 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
- 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.
- * 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) 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.
- 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.



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.

5-12

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 8-9.

1 Brace at Jt(s): 13. 7

1 Row at midpt

10-0-0 oc bracing: 12-13

March 23,2022



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896115 220056-A Н3 Half Hip Job Reference (optional)

3-3-12

2-7-0

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

6-1-12

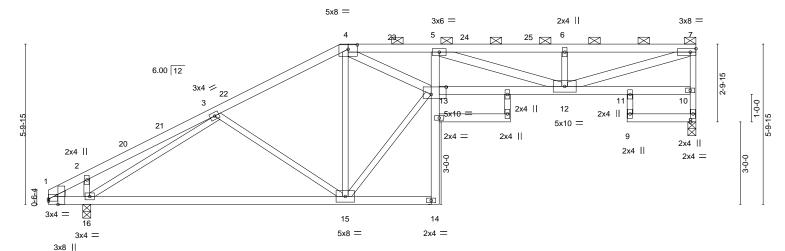
1-4-12

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 16-9-8 18-9-4 21-0-8 23-6-8 14-2-8

1-11-12

Scale = 1:41.9

2-6-0



[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] Plate Offsets (X,Y)-LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.55 Vert(LL) -0.19>999 240 197/144 13 MT20 Snow (Pf/Pg) 20.4/20.0

BRACING-

180 Lumber DOL 1.15 BC 0.71 Vert(CT) -0.3513 >762 **TCDL** 10.0 Rep Stress Incr YES WB 0.98 Horz(CT) 0.21 8 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S BCDL 10.0

10-10-12

4-9-0

TOP CHORD 2x4 SP No.1 TOP CHORD 2x4 SP No.1 *Except* **BOT CHORD BOT CHORD**

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.

1-2=-357/0, 2-3=-349/0, 3-4=-1042/34, 4-5=-3362/145, 5-6=-2562/111, 6-7=-2562/111, TOP CHORD

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-

LUMBER-

- 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 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
- 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) 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.
- 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.



Weight: 128 lb

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (3-2-12 max.): 4-7.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 13-14,8-9.

10-0-0 oc bracing: 12-13

FT = 20%

March 23,2022



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896116 220056-A H4 Half Hip Job Reference (optional)

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

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

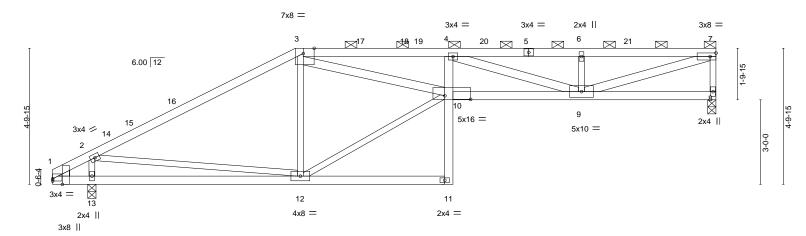
Structural wood sheathing directly applied or 4-8-2 oc purlins,

except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-7.

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

8-10-12 18-9-4 1-4-12 14-2-8 23-6-8 1-4-12 5-3-12 4-6-12

Scale = 1:40.9



1-3-0 1-4-12 1-3-0 0-1-12 Plate Offsets (X,Y) [1:0-2-5,	8-10-12 7-6-0 Edge], [1:0-0-0,0-0-15], [3:0-4-10,Edge	14-2-8 5-3-12 , [10:0-11-0,0-1-8]	18-9-4 4-6-12	23-6-8 4-9-4	
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.87 BC 0.76 WB 0.72 Matrix-S	DEFL. in (loc) I/defl Vert(LL) -0.27 10 >973 Vert(CT) -0.46 11 >578 Horz(CT) 0.16 8 n/a	L/d PLATES 240 MT20 180 n/a Weight: 117 lb	GRIP 197/144 FT = 20%

BOT CHORD

LUMBER-**BRACING-**TOP CHORD

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.1 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.

1-2=-396/0, 2-3=-1249/20, 3-4=-3963/136, 4-6=-2711/92, 6-7=-2711/92, 7-8=-1058/67 TOP CHORD

BOT CHORD 1-13=0/463, 12-13=-123/463, 9-10=-149/4049

2-13=-936/141, 2-12=0/840, 3-12=-571/102, 10-12=-55/1162, 3-10=-142/2995, **WEBS**

4-9=-1405/49, 6-9=-436/90, 7-9=-103/2791

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 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
- 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.
- * 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) 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.
- 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



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896117 220056-A 11 Roof Special Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:03 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-rrz7sSRkozsDxJPK6WwTtQ?e_2s3B3wXerD59AzYhmQ Urich. MO - 64788. 8-11-4 14-5-8 7-11-0 1-4-12 6-6-4 1-0-4 Scale = 1:31.3 4x5 = 3x4 =3 ⁴ 7x8 = 5x8 = 6.00 12 10 3-9-15 2x4 || 3x4 =6 3x8 || 3x6 = 3x4 =2x4 || 1-3-0 1-4-12 1-3-0 0-1-12 7-11-0 14-5-8 6-6-4 6-6-8 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] I /d **PLATES** GRIP 240 197/144 MT20

BOT CHORD

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	:	(100)	l/defl	L/d
TCLL (roof)	20.0				0.50		in	(loc)		
Snow (Pf/Pa) 20	1/20 0	Plate Grip DOL	1.15	TC	0.50	Vert(LL)	-0.04	6-7	>999	240
(. 3)		Lumber DOL	1.15	BC	0.35	Vert(CT)	-0.08	6-7	>999	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	-0.01	10	n/a	n/a
BCLL	0.0 *					11012(01)	-0.01	10	II/a	II/a
BCDL	10.0	Code IRC2018/TP	12014	Matri	x-S					

LUMBER-**BRACING-**TOP CHORD 2x4 SP No.1 TOP CHORD

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.

1-2=-393/0, 2-3=-568/66, 3-4=-509/81, 6-9=-28/337, 5-9=-28/337 TOP CHORD

BOT CHORD 1-8=0/416, 7-8=-117/416, 6-7=-118/466

3-7=0/397, 4-6=-478/102, 2-8=-466/207, 4-7=-308/58, 5-10=-625/89 **WEBS**

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 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
- 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) 10 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) 10.
- 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.
- 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.



Weight: 62 lb

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.

Rigid ceiling directly applied or 10-0-0 oc bracing

FT = 20%

March 23,2022



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896118 220056-A 12 Roof Special Job Reference (optional)

1-0-0

2-0-4

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

7-11-0

6-4-8

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:05 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-nD5tH8T?Ka6xBdYjDxyxyr51usSvftcp59iCE3zYhmO 8-11-0 10-11-4 14-3-8

14-3-8

Structural wood sheathing directly applied or 4-7-12 oc purlins,

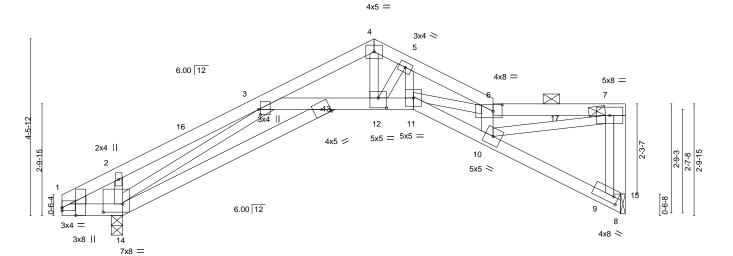
except end verticals, and 2-0-0 oc purlins (4-10-15 max.): 6-7.

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

Scale = 1:29.2

197/144

FT = 20%



1-6-8 0-3-8 7-11-0 1-3-0 1-0-0 1-0-0 5-4-8 2-0-4 3-4-4 Plate Offsets (X,Y)-- $\hbox{\tt [1:0-2-5,Edge], [1:0-0-0,0-0-15], [3:0-1-9,0-0-9], [6:0-2-12,0-2-0], [9:0-1-7,0-2-0], [12:0-2-8,0-3-0], [14:0-6-0,0-2-8], [14:0-6-0$ LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl

8-11-0

BOT CHORD

10-11-4

TCLL (roof) 20.0 TC Plate Grip DOL 1.15 0.21 Vert(LL) -0.11>999 240 13 MT20 Snow (Pf/Pg) 20.4/20.0 BC 180 Lumber DOL 1.15 0.64 Vert(CT) -0.2213 >690 **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 BCDL 10.0

LUMBER-**BRACING-**TOP CHORD

6-11-0

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

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

1-3-0

Max Horz 14=57(LC 16) Max Uplift 14=-8(LC 16)

1-6-8

1-6-8

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-

- 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 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
- 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.
- * 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) 15 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) 15.
- 10) 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.
- 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



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896119 220056-A 13 Roof Special Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:06 2022 Page 1 KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. ID:3YzUEFuTXpusHba?0tpUTHzCdai-FQfFUUUd5uEoon7vnfTAV3dCfFo0OLbzKpRlmVzYhmN 12-11-4 14-3-8 1-6-8 7-11-0 1-6-8 6-4-8 Scale = 1:29.2 4x5 = 6.00 12 17 4x5 = 4x8 =3x4 18 12 3x6 II 4x5 ≥ 2x4 || 1-9-15 1-9-15 10 5x8 > 6.00 12 8 4x8 > 3x8 14 7x8 = 1-3-0 1-6-8 0-3-8 6-11-0 7-11-0 8-11-0 12-11-4 14-3-8 1-3-0 1-0-0 1-0-0 5-4-8 4-0-4 1-4-4 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-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defI TCLL (roof) 20.0 TC Plate Grip DOL 1.15 0.21 Vert(LL) -0.09>999 240 197/144 13 MT20 Snow (Pf/Pg) 20.4/20.0 BC 180 Lumber DOL 1.15 0.65 Vert(CT) -0.193-13 >821 **TCDL** 10.0 Rep Stress Incr YES WB 0.87 Horz(CT) 0.19 15 n/a n/a BCLL 0.0

BRACING-

TOP CHORD

BOT CHORD

Matrix-S

LUMBER-TOP CHORD 2x4 SP No.1

Code IRC2018/TPI2014

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

10.0

7-9: 2x4 SP No.1

WEDGE

BCDL

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-

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 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
- 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.
- * 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) 15 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) 15.
- 10) 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.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Weight: 64 lb

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.

Rigid ceiling directly applied or 10-0-0 oc bracing. Except:

10-0-0 oc bracing: 11-12

FT = 20%

March 23,2022



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896120 220056-A 14 Roof Special Job Reference (optional)

KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:07 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-jcDdhqUFsCMfQxi5LM_P1GACDfA17tM6ZTBJIxzYhmM

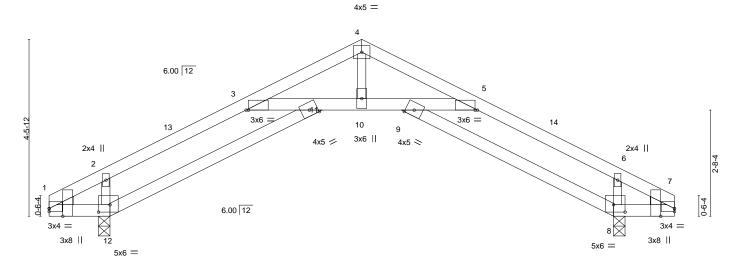
Structural wood sheathing directly applied or 2-2-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing. Except:

10-0-0 oc bracing: 9-10

7-11-0 14-3-8 15-10-0 1-6-8 1-6-8 6-4-8 1-6-8

Scale = 1:29.2



1-3-0 6-11-0 7-11-0 8-11-0 14-3-8 14-7-0 15-10-0 0-3-8 d-3-8 1-3-0 5-4-8 1-0-0 1-0-0 1-3-0

Plate Offsets (X,Y) [1:0-2-5	Plate Offsets (X,Y) [1:0-2-5,Edge], [1:0-0-0,0-0-15], [5:0-0-12,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]							
TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.93 BC 0.54 WB 0.51	Vert(CT) -0.58 9 >264 180 Horz(CT) 0.60 8 n/a n/a	7/144				
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	Weight: 61 lb	FT = 20%				

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

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-

- 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 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
- 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) 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) 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.
- 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



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896121 220056-A J1 Monopitch Girder Job Reference (optional)

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

Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:08 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-Bon0vAVtdVUW24HHv4WeaUja73a2sQIGo7xsqOzYhmL

5-0-12 2-4-12 2-4-12

Scale = 1:21 6

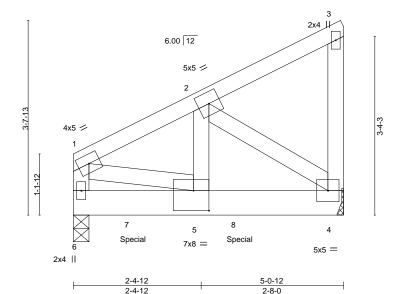


Plate Offsets (X,Y)-- [5:0-3-8,0-4-8]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.09 BC 0.30 WB 0.15	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 5 >999 240 Vert(CT) -0.01 4-5 >999 180 Horz(CT) 0.00 4 n/a n/a	PLATES GRIP MT20 244/190
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P		Weight: 35 lb FT = 20%
BCDL 10.0	0000 11102010/11 12011	l manne		110.g.m. 00 ib 1 1 2070

LUMBER-TOP CHORD

2x4 SP No.1 BOT CHORD

2x6 SP No.1 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

WEBS

- 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 Ib 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

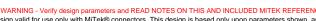
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-3=-51, 4-6=-20 Concentrated Loads (lb)

Vert: 7=-707(F) 8=-707(F)



March 23,2022





320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Truss Type Qty 150896122 220056-A J2 Monopitch 3 Job Reference (optional)

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

Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:14 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-0y8H9DaeCLEfm?kRFKc2qlzZsUg6G9Z8A2OA22zYhmF

Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

6-3-12 1-4-12 1-4-12

Scale = 1:21 6

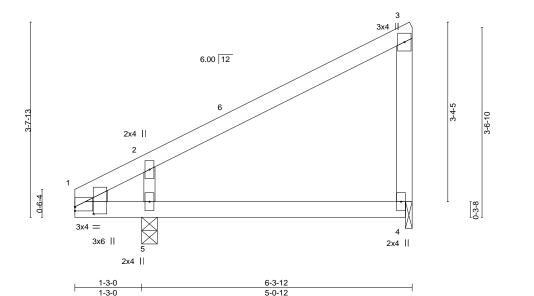


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.26 BC 0.13 WB 0.10	- ' '	in (loc) -0.01 4-5 -0.03 4-5 0.00 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 25 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

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



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896123 220056-A J3 Jack-Open 2 Job Reference (optional)

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

Urich. MO - 64788.

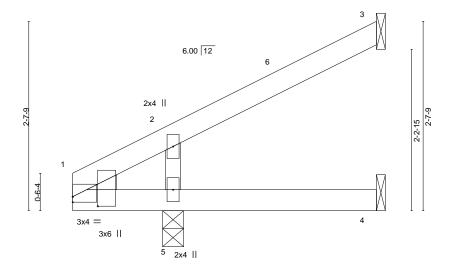
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:15 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-U9ifNZaGzfMWO9Jep28HMyVn2u1T?cEIPi7kaUzYhmE

Structural wood sheathing directly applied or 4-2-11 oc purlins.

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

4-2-11 1-4-12 1-4-12 2-9-15

Scale: 3/4"=1



1-3-0 4-2-11 1 - 3 - 02-11-11

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.11 BC 0.05 WB 0.07	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 4-5 >999 240 Vert(CT) -0.00 4-5 >999 180 Horz(CT) 0.00 3 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P		Weight: 14 lb FT = 20%
BCDL 10.0	Code 11(O2016/11 12014	IVIAUIX-I		Weight: 14 lb 11 = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS WEDGE

Left: 2x3 SPF No.3

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.

- 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 4-1-15 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
- 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 it(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

AMSI/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

Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896124 220056-A J4 Jack-Open Job Reference (optional)

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

Urich. MO - 64788.

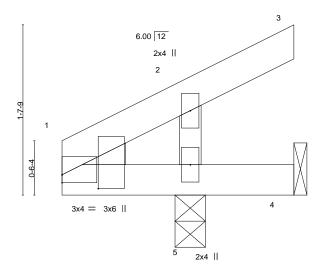
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:15 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-U9ifNZaGzfMWO9Jep28HMyVnju1U?cglPi7kaUzYhmE

Structural wood sheathing directly applied or 2-2-11 oc purlins.

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

2-2-11 1-2-12 1-2-12

Scale = 1:11 0



2-2-11 1-1-11

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.06 BC 0.05 WB 0.11	Vert(CT) 0.	in (loc) 0.00 5 0.00 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P	-				Weight: 8 lb	FT = 20%
BCDL 10.0							110191111011	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS WEDGE

Left: 2x3 SPF No.3

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.

- 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



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Truss Type Qty 150896125 220056-A J6 Monopitch 13 Job Reference (optional)

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

Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:16 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-yLG1avbukyVN?JuqNlfWvA2wbHMhk35RdMtH6wzYhmD

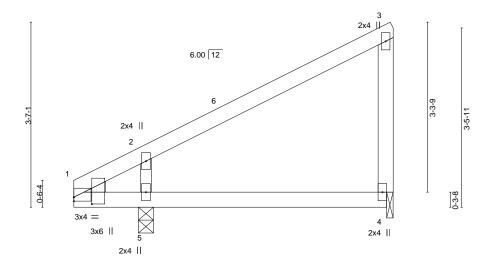
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

1-4-12 6-2-4 1-4-12

Scale = 1:22.3



1-3-0 6-2-4 1-3-0 4-11-4

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.25 BC 0.12 WB 0.10	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 4-5 >999 240 Vert(CT) -0.03 4-5 >999 180 Horz(CT) 0.00 4 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S	· ·	Weight: 25 lb FT = 20%
BCDL 10.0	Code 11(C2010/11 12014	Watrix-5		Weight: 25 lb 11 = 20 /6

BRACING-

TOP CHORD

BOT CHORD

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-

- 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 6-0-8 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
- 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



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Truss Type Qty 150896126 220056-A J7 Monopitch Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:16 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-yLG1avbukyVN?JuqNlfWvA2wzHKRk36RdMtH6wzYhmD KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 6-2-4 1-4-12 1-4-12

> 6.00 12 2-3-9 2x4 || 3 2 2x4 = 2x4 || 5 9 2x4 || 0-6-4 3x4 7 3x6 II 2x4 || 2x4 Ш

1-3-0 3-9-8 6-2-4 0-1-12 1-3-0 2-4-12 2-4-12

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.22 BC 0.20 WB 0.10	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 6 >999 240 Vert(CT) -0.02 7 >999 180 Horz(CT) 0.01 5 n/a n/a	PLATES GRIP MT20 197/144	
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 27 lb $FT = 20$	%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SP No.1 TOP CHORD 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=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-

- 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 6-0-8 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
- 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) 8 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.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

Scale = 1:22.3

March 23,2022



Job Truss Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Qty 150896127 220056-A J8 Jack-Open Job Reference (optional)

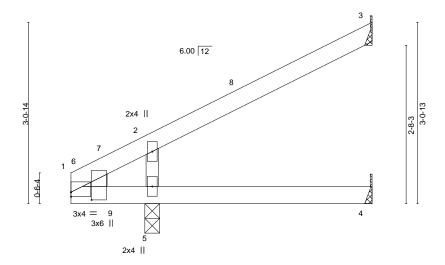
KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:17 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-RXqPoFcWVGdEdTT0wTAIRNb6RhhTTWWas0cqfMzYhmC

Structural wood sheathing directly applied or 5-1-3 oc purlins.

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

1-4-8 5-1-3 1-4-8 3-8-11

Scale = 1:19.5



1-3-0 5-1-3 1-3-0 3-10-3

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.18 BC 0.08 WB 0.09	DEFL. in (loc) l/defl L/d Vert(LL) -0.01 4-5 >999 240 Vert(CT) -0.01 4-5 >999 180 Horz(CT) -0.01 3 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P		Weight: 17 lb FT = 20%
BCDL 10.0	0000 1102010/11 12014	IVIGUIX-I		Weight. 17 ib 11 = 20/0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD 2x4 SP No.1

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

WEDGE

Left: 2x3 SPF No.3

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

- 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.





Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896128 220056-A J9 Jack-Open 3 Job Reference (optional)

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

Urich. MO - 64788.

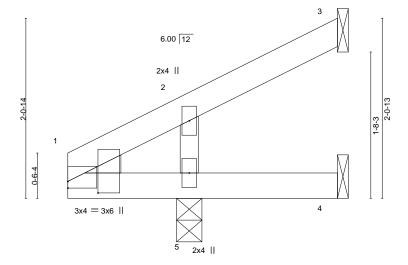
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:18 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-vkNo?ad9Gal5Fd2CUAh_b7lg51yC_Fk5gMOBpzYhmB

Structural wood sheathing directly applied or 3-1-3 oc purlins.

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



Scale = 1:13.2



1-3-0 3-1-3 1-10-3 1-3-0

|--|

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.08 BC 0.07 WB 0.06	DEFL. in (loc) l/defl L/d Vert(LL) 0.00 5 >999 240 Vert(CT) 0.00 4-5 >999 180 Horz(CT) -0.01 3 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P		Weight: 11 lb FT = 20%
BCDL 10.0	Code INC2016/1F12014	IVIALITX-F		Weight. This FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS WEDGE

Left: 2x3 SPF No.3

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-3-8

Max Horz 5=39(LC 16)

2x3 SPF No.3

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.

- 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.





Job Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896129 220056-A J10 Jack-Open Job Reference (optional)

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

Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:09 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-f?LO6VWVOpcNfEsUSn1t7hFIATzqbv5P0ngPNqzYhmK

Structural wood sheathing directly applied or 2-1-3 oc purlins.

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



Scale = 1:10.7

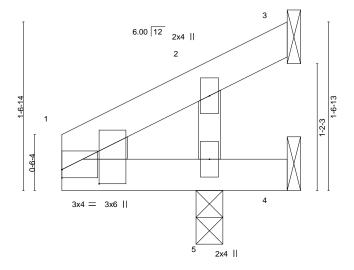


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.07 BC 0.07 WB 0.05	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 -0.00	(loc) 5 5 3	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P						Weight: 8 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

2-1-3

0-7-3

1-6-0

1-6-0

LUMBER-

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

WEBS WEDGE

Left: 2x3 SPF No.3

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.

- 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.



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896130 220056-A J11 Jack-Open Job Reference (optional)

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

Urich. MO - 64788.

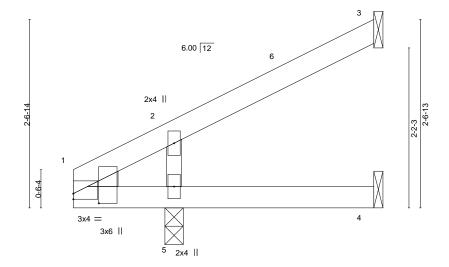
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:09 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-f?LO6VWVOpcNfEsUSn1t7hFleT_5buoP0ngPNqzYhmK

Structural wood sheathing directly applied or 4-1-3 oc purlins.

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



Scale = 1:15.7



1-3-0 4-1-3 1-3-0 2-10-3

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.10 BC 0.05 WB 0.07	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 4-5 >999 240 Vert(CT) -0.00 4-5 >999 180 Horz(CT) 0.00 3 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P		Weight: 14 lb FT = 20%
BCDL 10.0	Code 1RC2016/1F12014	IVIALITX-F		Weight. 14 lb F1 = 20 /6

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Left: 2x3 SPF No.3

REACTIONS.

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

Max Horz 5=50(LC 16)

Max Uplift 3=-22(LC 16), 5=-2(LC 16)

Max Grav 3=79(LC 20), 4=40(LC 7), 5=296(LC 20)

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 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 it(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

Job Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896131 220056-A J12 Jack-Open Job Reference (optional)

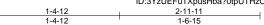
KC Truss & Panel Inc. (Urich, MO),

Urich. MO - 64788.

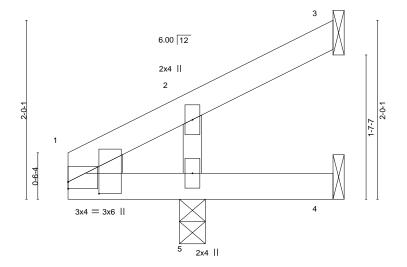
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:10 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-8BumKrX797kEHORg0VY6fvowktJ4KMIYFRQzvGzYnmJ

Structural wood sheathing directly applied or 2-11-11 oc purlins.

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



Scale = 1:12.9



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

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.08 BC 0.07 WB 0.05	DEFL. in (loc) l/defl L/d Vert(LL) 0.00 5 >999 240 Vert(CT) 0.00 5 >999 180 Horz(CT) -0.01 3 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-P	` '	Weight: 10 lb FT = 20%
BCDL 10.0	Code 1RC2016/1F12014	IVIALITX-F		Weight. To b F1 = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x3 SPF No.3

WEDGE

Left: 2x3 SPF No.3

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.





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

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

Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:10 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-8BumKrX797kEHORg0VY6fvoxPtKgKM7YFRQzvGzYhmJ

Structural wood sheathing directly applied or 1-5-11 oc purlins.

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

1-5-11 1-5-11

Scale = 1:9 1

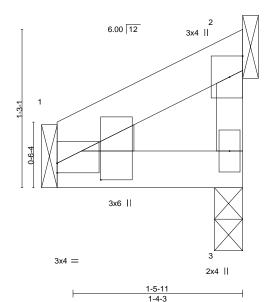


Plate Offsets (X,Y)-- [1:0-0-0,0-0-15], [1:0-1-9,0-4-3]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.04 BC 0.03 WB 0.00	DEFL. Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) -0.0	00 1	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-P					Weight: 6 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Left: 2x3 SPF No.3

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





Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896133 220056-A J14 Jack-Open Job Reference (optional)

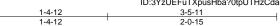
KC Truss & Panel Inc. (Urich, MO),

Urich. MO - 64788.

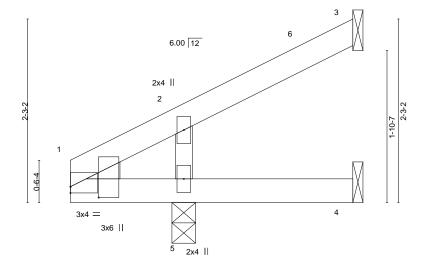
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:11 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-cNS8XBXmwQs5vY0saC3LC6L5KGfQ3pRiU59WRjzYhml

Structural wood sheathing directly applied or 3-5-11 oc purlins.

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



Scale = 1:14.2



1-3-0 3-5-11 2-2-11 1-3-0

|--|

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.09 BC 0.06 WB 0.06	DEFL. in (loc) l/defl L/d Vert(LL) 0.00 5 >999 240 Vert(CT) 0.00 4-5 >999 180 Horz(CT) -0.01 3 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-P		Weight: 12 lb $FT = 20\%$

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS WEDGE

Left: 2x3 SPF No.3

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.

- 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 it(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



Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
					I50896134
220056-A	J15	Monopitch	8	1	
					Inh Reference (antional)

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 ID:3YzUEFuTXpusHba?0tpUTHzCdai-4a0WIXYOhk_yXib38vaakKtFBg_EoFlrikv4z9zYhmH

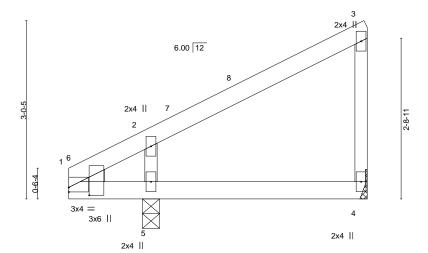
Structural wood sheathing directly applied or 5-0-12 oc purlins,

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

except end verticals.

5-0-12 1-4-12 3-8-0

Scale = 1:19.5



1-3-0 5-0-12 1-3-0 3-9-12

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.15 BC 0.09 WB 0.09	DEFL. in (loc) l/defl L/d Vert(LL) -0.00 4-5 >999 240 Vert(CT) -0.01 4-5 >999 180 Horz(CT) -0.00 4 n/a n/a	PLATES GRIP MT20 197/144
	Code IRC2018/TPI2014	Matrix-S		Weight: 19 lb FT = 20%
BCDL 10.0	0000 11(02010/11 12014	IVIALITA O		Weight. 15 lb 1 1 = 2070

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x3 SPF No.3 WEBS

WEDGE

Left: 2x3 SPF No.3

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



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Truss Type Qty 150896135 220056-A J16 Monopitch Job Reference (optional)

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

Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:12 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-4a0WIXYOhk_yXib38vaakKtCYgzfoFwrikv4z9zYhmH

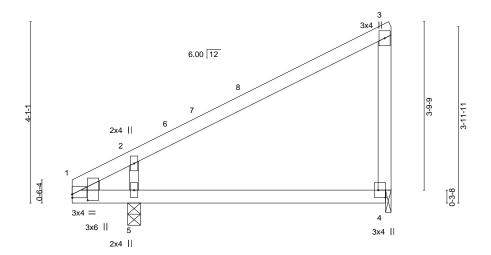
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

1-4-12 7-2-4 1-4-12

Scale = 1.26.0



1-3-0 7-2-4 1-3-0 5-11-4

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) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.38 BC 0.19 WB 0.11	DEFL. in (loc) l/defl L/d Vert(LL) -0.03 4-5 >999 240 Vert(CT) -0.06 4-5 >999 180 Horz(CT) 0.00 4 n/a n/a	PLATES GRIP MT20 197/144
BCLL 0.0 *	Code IRC2018/TPI2014	Matrix-S	, ,	Weight: 29 lb FT = 20
BCDL 10.0	Code IRC2016/1712014	IVIAUTX-3		Weight. 29 lb F1 = 2

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

2x4 SP No.1 2x4 SP No.1

BOT CHORD 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-

- 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 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
- 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



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Truss Type Qty 150896136 220056-A J17 Monopitch Job Reference (optional)

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

Urich. MO - 64788.

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

I/defl

>999

n/a

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

except end verticals.

I/d

240

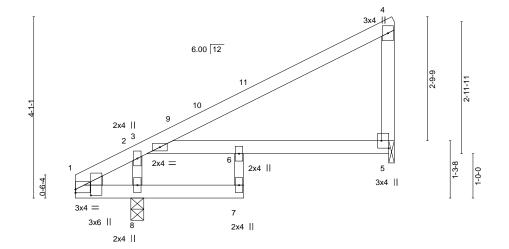
180

n/a

Structural wood sheathing directly applied or 6-0-0 oc purlins,

7-2-4 1-4-12 1-4-12 5-9-8

Scale = 1.26.0



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

BRACING-

TOP CHORD

BOT CHORD

() , ,	1/[/1/[9 - , 1				
LOADING (psf) TCLL (roof) 20.0	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)
Snow (Pf/Pg) 15.4/20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	-0.03	6
TCDL 10.0	Lumber DOL	1.15	BC 0.31	Vert(CT)	-0.06	5-6

5-6 >999 Rep Stress Incr YES WB 0.11 Horz(CT) 5 0.03 BCLL 0.0 * Code IRC2018/TPI2014 Matrix-S BCDL 10.0

> 2x4 SP No.1 2x4 SP No.1 *Except* 6-7: 2x3 SPF No.3

2x4 SP No.1 *Except* 2-8: 2x3 SPF No.3

WEDGE

LUMBER-

WEBS

TOP CHORD

BOT CHORD

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.

2-8=-344/165 WEBS

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 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
- 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) 8 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.



PLATES

Weight: 31 lb

MT20

GRIP

197/144

FT = 20%

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

AMSI/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 Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896137 220056-A J18 Jack-Open Job Reference (optional)

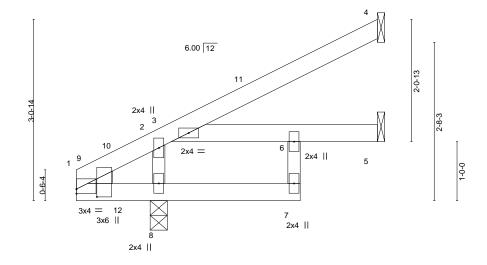
KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:13 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-YmavytZ0R26o8sAFhd5pHXQQk4JpXiN?xOedWbzYhmG

Structural wood sheathing directly applied or 5-1-3 oc purlins.

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

3-9-8 1-4-12 5-1-3 1-4-12 2-4-12 1-3-11

Scale = 1:19.5



1-3-0 3-9-8 5-1-3 0-1-12 1 - 3 - 02-4-12 1-3-11

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

Snow (Pf/Pg) 15.4/20.0 L	umber DOL 1.	0-0 .15 .15 ES	TC BC WB	0.16 0.13 0.10	Vert(LL) Vert(CT) Horz(CT)	-0.01 -0.02 0.01	(loc) 6 6 5	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 * C	Code IRC2018/TPI201	4	Matrix	(-S						Weight: 21 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1 **BOT CHORD**

2x4 SP No.1 *Except*

6-7: 2x3 SPF No.3

WEBS 2x3 SPF No.3

WEDGE

Left: 2x3 SPF No.3

REACTIONS. (size) 4=Mechanical, 5=Mechanical, 8=0-3-8

Max Horz 8=62(LC 16)

Max Uplift 4=-23(LC 16)

Max Grav 4=118(LC 20), 5=86(LC 7), 8=360(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. WEBS 2-8=-305/124

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) 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.





320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896138 220056-A K1 Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:19 2022 Page 1 Urich. MO - 64788. ID: 3YzUEFuTXpusHba? 0tpUTHzCdai-NwxADwen1ttysndP2uCDXogObVGNxBttJK5xjFzYhmA9-7-12 12-9-4 18-0-4 22-7-0 4-4-12 5-3-0 3-1-8 4-6-12 Scale = 1:39 6 4x5 = 5x8 = 3 \boxtimes 6.00 12 15 16 3x6 / 3x6 > 5 5-10-15 2x4 || 2x4 6 1-2-12 9 3x6 =3x8 = 3x4 =3x8 = 3x8 = 9-7-12 12-9-4 22-7-0 9-7-12 3-1-8 9-9-12 Plate Offsets (X,Y)--[4:0-4-0,0-1-15] LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.39 Vert(LL) -0.197-8 >999 240 197/144 MT20 Snow (Pf/Pg) 20.4/20.0 180 Lumber DOL 1.15 BC 0.57 Vert(CT) -0.397-8 >686 **TCDL** 10.0 Rep Stress Incr YES WB 0.99 Horz(CT) 0.04 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 106 lb FT = 20% BCDL 10.0 LUMBER-**BRACING-**TOP CHORD Structural wood sheathing directly applied or 5-1-12 oc purlins,

BOT CHORD

WEBS

TOP CHORD 2x4 SP No.1 BOT CHORD

2x4 SP No.1 2x3 SPF No.3 *Except*

1-11,6-7: 2x6 SP No.1 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-

WEBS

- 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) 0-2-12 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
- 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.
- * 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) This truss 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.

Rigid ceiling directly applied or 10-0-0 oc bracing

1 Row at midpt

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

AMSI/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

320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896139 220056-A K2 Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:20 2022 Page 1 Urich. MO - 64788. ID:3YzUEFuTXpusHba?0tpUTHzCdai-r6VYQGePoB?pUwCbcbjS30CQBvargkA1Y_rVFhzYhm9

14-9-4

Scale = 1:38 6

22-7-0

7-9-12

Structural wood sheathing directly applied, except end verticals, and

2-0-0 oc purlins (6-0-0 max.): 2-3

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

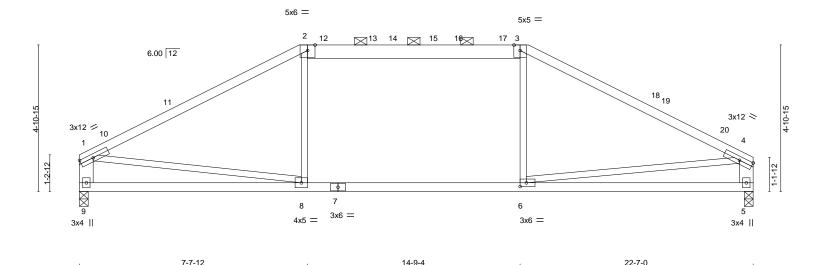


Plate Offsets (X, Y) [6:0-2-8,	0-1-8]			
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.98 BC 0.68 WB 0.60	DEFL. in (loc) l/defl L/d Vert(LL) -0.29 5-6 >906 240 Vert(CT) -0.36 5-6 >740 180 Horz(CT) 0.02 5 n/a n/a	PLATES GRIP MT20 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S		Weight: 99 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

7-1-8

LUMBER-

TOP CHORD 2x4 SP No.1 *Except*

2-3: 2x6 SP No.1 **BOT CHORD** 2x4 SP No.1

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)

7-7-12

7-7-12

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-

- 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) 0-2-12 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
- 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) This truss 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) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



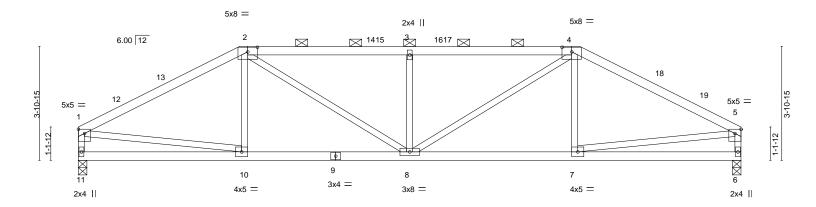


Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896140 220056-A K3 Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:21 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-Jl3wdcf1ZV7g64nn9IFhcDlcwl0KPALAnea2o8zYhm8 KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788.

11-4-8 5-6-12 16-11-4

Scale = 1:39 6

22-9-0



	5-9	-12	1	1-4-8	16-1	1-4					
	5-9	-12	5	5-6-12	5-6	-12				1	
Plate Offse	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 TCLL (roof Snow (Pf/F TCDL BCLL BCDL	f) 20.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Inc Code IRC2018	1.15 r YES	CSI. TC 0.85 BC 0.28 WB 0.67 Matrix-S	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.07 -0.13 0.02	(loc) 8 8-10 6	I/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 99 lb	GRIP 197/144 FT = 20%

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 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. Rigid ceiling directly applied or 10-0-0 oc bracing.

BOT CHORD

2x3 SPF No.3 REACTIONS. (size) 11=0-3-8, 6=0-3-8

Max Horz 11=59(LC 15)

5-9-12

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-

WEBS

- 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) 0-1-4 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
- 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) This truss 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) 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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AMSI/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	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
					I50896141
220056-A	K5	Hip Girder	1	1	
					Job Reference (optional)
KC Truss & Panel Inc. (Urich	8,	8.4	130 s Aug	16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:23 2022 Page 1	

ID:3YzUEFuTXpusHba?0tpUTHzCdai-FhBh2lhH56NOLOwAHjH9heqyZ6cYt9XTEy39s0zYhm6

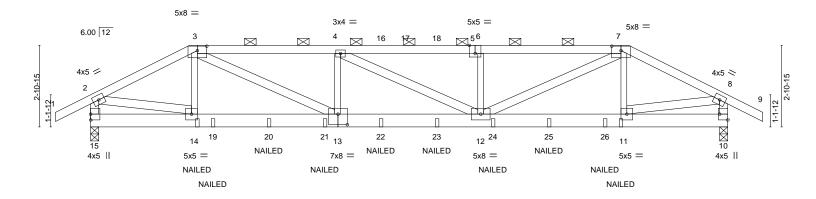
Structural wood sheathing directly applied or 3-9-15 oc purlins,

except end verticals, and 2-0-0 oc purlins (2-4-14 max.): 3-7.

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

24-0-0 13-11-3 18-11-4 -1-3-03-9-12 8-9-13 22-9-0 1-3-0 5-0-1 3-9-12 5-0-1 1-3-0

Scale = 1:41.1



3-	9-12	8-9	9-13	1	13-11-3	3		18-1	1-4		22-9-0	
3-	9-12	5-0		5-1-5			5-0	-1	1	3-9-12		
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) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	F	PACING- Plate Grip DOL umber DOL tep Stress Incr	2-0-0 1.15 1.15 NO	CSI. TC BC WB	0.84 0.68 0.37	DEFL. Vert(LL) Vert(CT) Horz(CT)		(loc) 12-13 12-13 10	l/defl >999 >872 n/a	L/d 240 180 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	* c	ode IRC2018/TP	12014	Matri	x-S	,					Weight: 135 lb	FT = 20%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

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

3-13=-172/2101, 4-13=-509/70, 6-12=-513/96, 7-12=-173/2068, 2-14=-170/2240, WEBS

8-11=-173/2248

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); cantilever left and right exposed; end vertical left and right exposed; 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 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) 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.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * 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.
- 9) 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.
- 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.

12) "NAILED" indicates 3-12d Nails skew 45 to 135 degrees (0.148" x 3.25") toe-nails per NDS guidelines. 13) 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





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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



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

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

Urich, MO - 64788,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:23 2022 Page 2 ID:3YzUEFuTXpusHba?0tpUTHzCdai-FhBh2lhH56NOLOwAHjH9heqyZ6cYt9XTEy39s0zYhm6

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)

16023 Swingley Ridge Rd Chesterfield, MO 63017

Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896142 220056-A L1 GABLE Job Reference (optional)

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

Urich. MO - 64788.

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



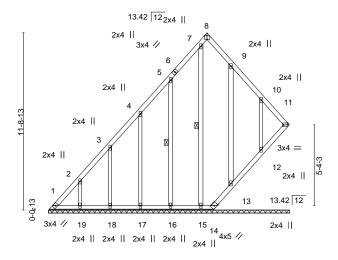
Scale = 1:76.3 3x4 =

Structural wood sheathing directly applied or 6-0-0 oc purlins.

5-16, 7-15

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

1 Row at midpt



10-11-0 15-11-7 10-11-0 5-0-7

Plate Offsets (X,Y) [8:Edge,	0-3-0], [11:Edge,0-1-8]										
TCDL	20.0 15.4/20.0 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.06 0.03 0.16	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 11	I/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCLL BCDL	0.0 * 10.0	Code IRC2018/T	PI2014	Matri	ix-S						Weight: 116 lb	FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

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

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-

- 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) 0-3-15 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
- 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) 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) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 13, 12.
- 9) N/A
- 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 11, 13, 12.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 23,2022



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Truss Type Qty 150896143 220056-A L2 GABLE Job Reference (optional)

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

Urich, MO - 64788

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:27 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-8SQBufko8Ltpq?ExWZL5rU?l8j43p?W39a1M?nzYhm2

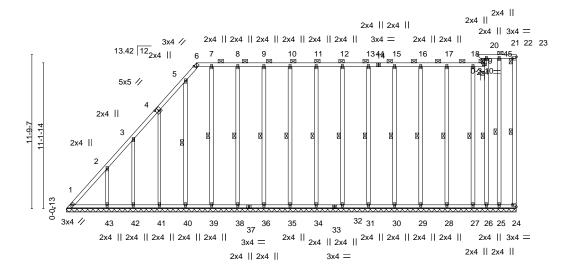
34-5-3 9-11-12 32-0-0 9-11-12

Scale = 1:88.2

GRIP

197/144

FT = 20%



34-5-3 32-0-0 32-0-0 2-5-3

BRACING-

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. DEFL. I /d **PLATES** 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.42 Vert(LL) -0.0020 120 n/r MT20 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.20 Vert(CT) -0.0020 n/r 120 **TCDL** 10.0 Rep Stress Incr YES WB 0.24 Horz(CT) -0.01 24 n/a n/a BCLL 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 360 lb

LUMBER-2x4 SP No.1

TOP CHORD BOT CHORD 2x4 SP No.1 WEBS 2x4 SP No.1 2x4 SP No.1 *Except* **OTHERS**

10.0

2-43,3-42,4-41: 2x3 SPF No.3

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 6-0-0 oc bracing: 19-21

1 Brace at Jt(s): 21, 23, 19

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing. 23-24, 5-40, 7-39, 8-38, 9-36, 10-35, 11-34 WFBS 1 Row at midpt

, 12-32, 13-31, 15-30, 16-29, 17-28, 18-27,

22-25

JOINTS REACTIONS. All bearings 34-5-3.

Max Horz 1=314(LC 11) (lb) -

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

BCDL

- 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=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
- 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) Provide adequate drainage to prevent water ponding.
- 5) Gable requires continuous bottom chord bearing.
- 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.
- 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

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



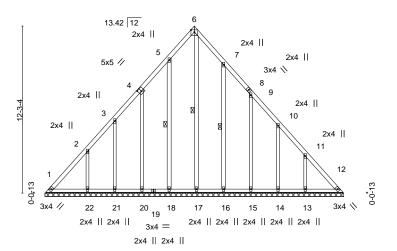
Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896144 220056-A L3 GABLE

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:28 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-cf_a5?IQve?gR9p74GtKOiY?J7TgYSwCOEnwYEzYhm1

10-11-11 21-11-7 10-11-11

> Scale = 1:84 6 5x6 =



21-11-7 21-11-7

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.07 BC 0.04 WB 0.23	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (I n/a n/a 0.00	(loc) - - 12	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S						Weight: 150 lb	FT = 20%

LUMBER-

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

2x3 SPF No.3 *Except* **OTHERS**

5-18,6-17,7-16: 2x4 SP No.1

BRACING-

TOP CHORD **BOT CHORD** WEBS

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

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.

- 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) 0-3-15 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
- 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) 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.
- 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



Truss Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Qty 150896145 220056-A L4 GABLE Job Reference (optional)

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

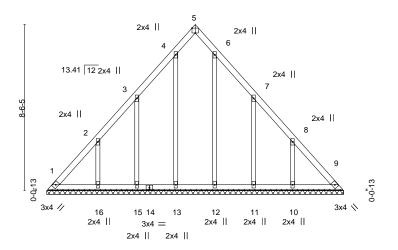
Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:29 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-4rYyJLl2gy7X3JOKd_OZwv4BJXp5HwTLduWT4gzYhm0

15-3-0 7-7-8

3x4 =

Scale = 1:59.2



15-3-0 15-3-0

Plate Offsets	(X,Y) [5:Edge,0	0-3-0], [6:0-0-0,0-0-0], [7:	0-0-0,0-0-0], [8:0-0-1,0-0-C	<u>] </u>							
LOADING (p TCLL (roof) Snow (Pf/Pg) TCDL BCLL	20.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES	CSI. TC BC WB	0.06 0.03 0.15	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 9	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCLL	10.0	Code IRC2018/TF	PI2014	Matr	x-S						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.

- 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 O-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
- 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) 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) 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









Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896146 220056-A L5 GABLE Job Reference (optional)

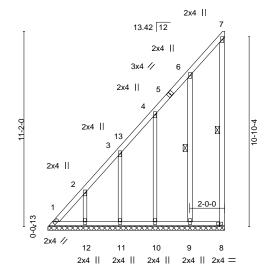
KC Truss & Panel Inc. (Urich, MO),

Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:30 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-Y16KWhmgRGFOhTzWBhvoT7dLsx8U0NLVrYG0c6zYhm?

10-1-3 10-1-3

Scale = 1:65.8



10-1-3 10-1-3

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

LUMBER-BRACING-

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x4 SP No.1

2x4 SP No.1 **WEBS** 2x3 SPF No.3 *Except* **OTHERS**

6-9: 2x4 SP No.1

BOT CHORD WEBS

TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

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-

- 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) 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 DOI = 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) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8.
- 8) N/A
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 8.
- 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.



March 23,2022



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896147 220056-A L6 GABLE Job Reference (optional)

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

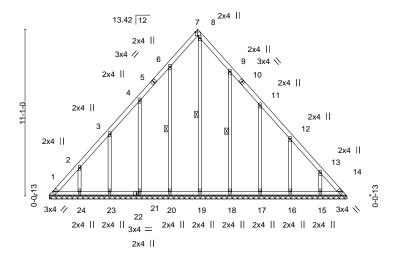
Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:31 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-0Egik1nICZNFIdYilPQ10KAXxKUglqde4C?a8YzYhm_



3x4 =

Scale = 1:76.6



19-9-15 19-9-3

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.05 BC 0.02 WB 0.17	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 14	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	, ,					Weight: 113 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD **BOT CHORD** WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

- 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) 0-3-15 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
- 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) 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) 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





Job	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
					I50896148
220056-A	L7	GABLE	1	1	
					Joh Reference (ontional)

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

Urich, MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:32 2022 Page 1 ID: 3YzUEFuTXpusHba?0tpUTHzCdai-UQE4xNoxztW6wm6vJ6xGYYiZ2kp8UHYoJsI7g?zYhlz

Structural wood sheathing directly applied or 6-2-15 oc purlins,

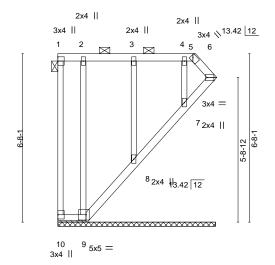
except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-5.

Rigid ceiling directly applied or 6-0-0 oc bracing, Except:

10-0-0 oc bracing: 9-10.

6-2-15 0-10-12

Scale = 1:45.6



1-2-0 6-2-15 1-2-0 5-0-14

Plate Offsets (X,Y)	[6:Edge,0-1-8], [9:0-3-7,0-2-8]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.60 BC 0.07 WB 0.13	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) n/a - n/a - 0.00 6	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
	Code IRC2018/TPI2014	Matrix-S					Weight: 38 lb	FT = 20%
BCDL 10.0	Code 11(C2010/11 12014	Watrix-5					Weight. 30 ib	1 1 - 2070

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD 2x4 SP No.1 BOT CHORD

2x4 SP No.1

2x3 SPF No.3 2x3 SPF No.3

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.

WEBS

OTHERS

REACTIONS.

- 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.





Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896149 220056-A L8 GABLE Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:33 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-zcnS9joZkBezYwh5sqSV5IFt08A7DIFxXWUhCRzYhly 4-8-8 14-8-15 4-8-8 Scale = 1:33.3 2x4 || 2x4 || 2x4 || 3x4 / 2x4 || 2x4 9 10 8 20 2x4 || >13.42 12 2x4 || 3x4 / 19 18 17 16 15 14 13 12 11 2x4 || 2x4 || 2x4 || 2x4 || 3x4 = 2x4 || 2x4 || 2x4 || 14-8-15 14-8-15 Plate Offsets (X,Y)-- [4:0-1-6,Edge]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	CSI. TC 0.05	Vert(LL) n/a - n/a 999	PLATES GRIP MT20 197/144
TCDL 10.0 BCLL 0.0 * BCDL 10.0	Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	BC 0.03 WB 0.10 Matrix-S	Vert(CT) n/a - n/a 999 Horz(CT) 0.00 10 n/a n/a	Weight: 71 lb FT = 20%

LUMBER-BRACING-

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

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except

2-0-0 oc purlins (10-0-0 max.): 4-10.

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

REACTIONS. All bearings 14-8-15.

(lb) - Max Horz 1=112(LC 14)

Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 19, 18, 17, 16, 14, 13, 11 Max Grav All reactions 250 lb or less at joint(s) 1, 10, 19, 18, 17, 16, 14, 13, 12

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=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 4-8-8. Exterior(2R) 4-8-8 to 8-11-6, Interior(1) 8-11-6 to 14-8-15 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) 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) Provide adequate drainage to prevent water ponding.
- 5) Gable requires continuous bottom chord bearing.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 11.
- 9) N/A
- 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.

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

AMSI/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	Truss	Truss Type	Qty	Ply	320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064
					150896150
220056-A	L9	GABLE	1	1	
					Job Reference (optional)

3-7-14

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 $ID: 3YzUEFuTXpusHba? 0tpUTHzCdai-RpLrM3pBVUmq94GHQXzkdzo_MYWRyDI5mAEEktzYhlx\\$

Structural wood sheathing directly applied or 3-7-14 oc purlins,

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

except end verticals.

Scale = 1.23.0

2x4 || 13.42 12 2x4 || 3-7-13 3 5 2x4 \\ 2x4 || 2x4 ||

LOADING (psf) SPACING-CSI. DEFL. L/d **PLATES** GRIP 2-0-0 I/defI in (loc) TCLL (roof) 20.0 Plate Grip DOL 1 15 TC Vert(LL) 999 197/144 0.29 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.02 Vert(CT) 999 n/a n/a 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 Weight: 17 lb FT = 20%BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x3 SPF No.3

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.

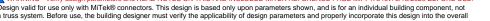
NOTES-

- 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





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

MiTek

Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Job Truss Qty 150896151 220056-A L10 GABLE Job Reference (optional)

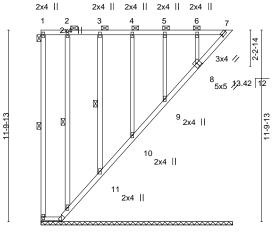
KC Truss & Panel Inc. (Urich, MO),

Urich. MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:25 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-C4IRT_iYdjd5ai4ZO8Jdm3wVcwRFL6bmiGYGxvzYhm4

11-9-14 11-9-14

Scale = 1:71.1



14 13 12 2x4 || 3x4 // 2x4 ||

1-3-0 1-3-0 11-9-14 10-6-14

Plate Offsets (X,Y) [7:0-0-10,0-1-8], [8:0-2-8,0-3-0
--

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.04 BC 0.03 WB 0.14	DEFL. ir Vert(LL) n/a Vert(CT) n/a Horz(CT) -0.00	-	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 98 lb	FT = 20%

LUMBER-

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

OTHERS 2x4 SP No.1 *Except*

4-10,5-9,6-8: 2x3 SPF No.3

BRACING-

WEBS

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.

1 Row at midpt

1-14, 2-12, 3-11

REACTIONS. All bearings 11-9-14.

(lb) - Max Uplift All uplift 100 lb or less at joint(s) 14, 7, 12, 11, 10, 9, 8 Max Grav All reactions 250 lb or less at joint(s) 14, 7, 13, 12, 11, 10, 9, 8

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 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 Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896152 220056-A М1 Monopitch 5 Job Reference (optional)

KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:34 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-RpLrM3pBVUmq94GHQXzkdzo2OYWEyDW5mAEEktzYhlx

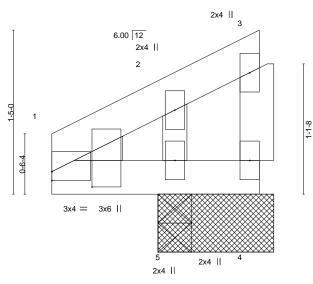
Structural wood sheathing directly applied or 1-11-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

1-11-0

Scale = 1.9.9



1-2-8 1-11-0 1-2-8 0-8-8

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

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

BRACING-

TOP CHORD

BOT CHORD

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

(size) 4=1-0-0, 5=0-3-8 REACTIONS.

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.

- 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.



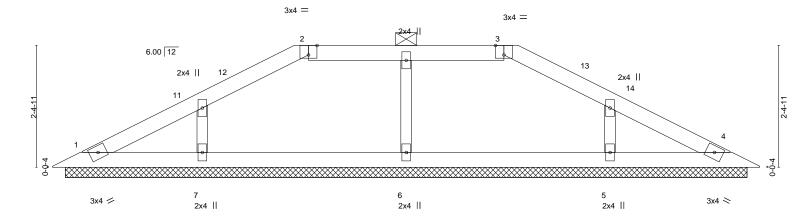
Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896153 220056-A PB1 GABLE Job Reference (optional)

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

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:35 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-v?vDaOqpGouhnErU_FVzAAK9FypfhgJE?pznGKzYhlw

8-10-12 5-0-12 13-11-8 5-0-12 3-10-0

Scale = 1:22 6



13-11-8 13-11-8 Plate Offsets (X,Y)-- [2:0-2-0.Edge], [3:0-2-0.Edge]

Tidle Gilecte (71,17) [210 2 0,								
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.28 BC 0.21 WB 0.00	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) n/a - n/a - 0.01 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R					Weight: 44 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 2x4 SP No.1 **BOT CHORD** 2-0-0 oc purlins (6-0-0 max.): 2-3. **OTHERS** 2x3 SPF No.3 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

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) 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.
- 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 - 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 chorembers 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

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



150896154 220056-A PB2 Piggyback Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:36 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-NBTbnkrR160YPOQgYy0CjOtMqLAtQ64NETjLpmzYhlv KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788. 6-11-12 13-11-8 6-11-12 Scale = 1:25.8 4x5 = 3 6.00 12 12 2x4 || 2x4 || 10 3x4 / 3x4 > 2x4 || 2x4 II 2x4 || 13-11-8 13-11-8 LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 (loc) L/d in I/defl TCLL (roof) 20.0 Plate Grip DOL TC Vert(LL) -0.00 >999 240 197/144 1 15 0.17 7-8 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL BC 0.09 Vert(CT) -0.01 >999 180 1.15 7-8 TCDL 10.0 Rep Stress Incr WB Horz(CT) YES 0.10 0.00 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 46 lb FT = 20% BCDL 10.0

Qty

LUMBER-

Job

Truss

TOP CHORD 2x4 SP No.1 2x4 SP No.1

BOT CHORD 2x3 SPF No.3 **OTHERS**

BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 6-0-0 oc purlins.

320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064

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

REACTIONS. All bearings 13-11-8.

> Max Horz 1=-41(LC 14) (lb) -

> > 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-

- 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 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
- 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

Truss Type

- 4) Unbalanced snow loads have been considered for this design.
- 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.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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 chorembers 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

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



320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Truss Type Qty 150896155 220056-A PB3 GABLE Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:37 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-rN1z_4s3oP8O0Y?s5fXRFbQXClW29YOXS7SuLCzYhlu KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788.

7-10-12

1-10-0

13-11-8

Scale = 1:23 6

3x4 = 3x4 =2x4 || 3 6.00 12 2x4 || 6^{2x4} || 2-10-11 2 15 16 3x4 / 3x4 < 2x4 || 2x4 || 2x4 |

13-11-8 13-11-8 Plate Offsets (X,Y)-- [3:0-2-0,Edge], [5:0-2-0,Edge]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.13 BC 0.09 WB 0.09	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 7	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S	, ,					Weight: 45 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 2x4 SP No.1 **BOT CHORD** 2-0-0 oc purlins (6-0-0 max.): 3-5. **OTHERS** 2x3 SPF No.3 **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.

6-0-12

6-0-12

WEBS 2-10=-289/105, 6-8=-289/105

- 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 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
- 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) 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.
- 5) Unbalanced snow loads have been considered for this design.
- 6) Provide adequate drainage to prevent water ponding.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 4-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * 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.
- 11) N/A
- 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



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

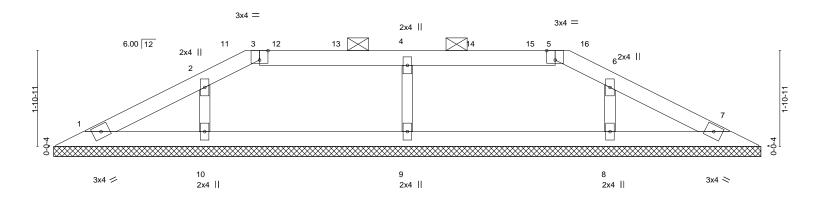


Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896156 220056-A PB4 GABLE Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:39 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-nm9kPmtKK1O6Gr9FD4ZvK0Vs4ZCVdSdqwRx?P5zYhls 4-0-12 9-10-12 13-11-8

5-10-0

Scale = 1:22 7

4-0-12



		13-11-8	}					
Plate Offsets (X,Y) [3:0-	2-0,Edge], [5:0-2-0,Edge]							
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.17 BC 0.09 WB 0.11	DEFL. Vert(LL) Vert(CT) Horz(CT)	11/a) I/defl - n/a - n/a - n/a 7 n/a	L/d 999 999 n/a	PLATES MT20	GRIP 197/144
BCLL 0.0 * BCDL 10.0	Code IRC2018/TPI2014	Matrix-S					Weight: 43 lb	FT = 20%

13-11-8

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

2-0-0 oc purlins (6-0-0 max.): 3-5.

OTHERS 2x3 SPF No.3 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 13-11-8.

(lb) - Max Horz 1=21(LC 15)

4-0-12

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

- 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 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
- 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) 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.
- 5) Unbalanced snow loads have been considered for this design.
- 6) Provide adequate drainage to prevent water ponding.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 4-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.
- 12) N/A
- 13) This truss 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.
- 15) 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

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



Truss Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Qty 150896157 220056-A V1 Valley Job Reference (optional) Urich, MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:39 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-nm9kPmtKK1O6Gr9FD4ZvK0VqmZBHdSvqwRx?P5zYhls KC Truss & Panel Inc. (Urich, MO), 10-10-8 5-5-4 Scale = 1:19 6 4x5 = 2 6.00 12 2x4 / 2x4 > 2x4 || 10-10-8 10-10-8 LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 I/defl L/d in (loc) TCLL (roof) Plate Grip DOL TC Vert(LL) 999 197/144 1 15 0.31 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.17 Vert(CT) 999 n/a n/a TCDL 10.0 Rep Stress Incr WB Horz(CT) YES 0.09 0.00 3 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-S Weight: 34 lb FT = 20% BCDL 10.0 **BRACING-**LUMBER-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.

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x4 SP No.1

2x3 SPF No.3 **OTHERS**

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-

- 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 5-5-4, 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
- 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 requires continuous bottom chord bearing.
- 6) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896158 220056-A V2 Valley Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:40 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-Fyj6d6uy5KWzu?kRno48tE12SzZFMwsz85hYyXzYhIr KC Truss & Panel Inc. (Urich, MO), Urich. MO - 64788. 6-10-8 Scale = 1:14.2 4x5 = 6.00 12 0-0-4 4 2x4 / 2x4 || 2x4 > 6-10-8 6-10-8 LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 I/defl L/d in (loc) TCLL (roof) 20.0 Plate Grip DOI TC Vert(LL) 999 197/144 1 15 0.13 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL BC 0.06 Vert(CT) 999 1.15 n/a n/a TCDL 10.0 Rep Stress Incr WB Horz(CT) YES 0.04 0.00 3 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 20 lb FT = 20% BCDL 10.0 LUMBER-**BRACING-**2x4 SP No.1 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.

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

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-

- 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) 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=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 requires continuous bottom chord bearing.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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 chorembers 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

AMSI/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 Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Truss Qty 150896159 220056-A V3 Valley Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:41 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-k9GUqSvareeqV9ldKVbNQRaE0Mv35No7NIQ6UzzYhlq KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788. 2-10-8 1-5-4 1-5-4 Scale = 1.6.33x4 =6.00 12 3 0-D-4 0-07 2x4 / 2x4 < 2-10-8 2-10-8 Plate Offsets (X,Y)--[2:0-2-0,Edge] LOADING (psf) SPACING-CSI. DEFL. I /d **PLATES** GRIP 2-0-0 in (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.01 Vert(LL) 999 244/190 n/a n/a MT20

LUMBER-

TCDL

BCLL

BCDL

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

Snow (Pf/Pg) 15.4/20.0

BRACING-

TOP CHORD **BOT CHORD**

Vert(CT)

Horz(CT)

n/a

0.00

Structural wood sheathing directly applied or 2-10-8 oc purlins.

999

n/a

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

n/a

n/a

3

REACTIONS. (size) 1=2-10-8, 3=2-10-8

10.0

10.0

0.0

Max Horz 1=-5(LC 14)

Max Grav 1=65(LC 2), 3=65(LC 2)

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

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

- 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) 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=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

1.15

YES

BC

WB

Matrix-P

0.02

0.00

- 4) Unbalanced snow loads have been considered for this design.
- 5) Gable requires continuous bottom chord bearing.
- 6) 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.
- 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.



Weight: 7 lb

FT = 20%





Job Truss Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Qty 150896160 220056-A V5 Valley Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:41 2022 Page 1 Urich. MO - 64788. ID:3YzUEFuTXpusHba?0tpUTHzCdai-k9GUqSvareeqV9IdKVbNQRaDuMvj5No7NIQ6UzzYnlq 3-0-12 3-0-12

> 2x4 || 6.00 12 0-0-4 3 2x4 / 2x4 ||

LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 I/defI L/d in (loc) TCLL (roof) 20.0 Plate Grip DOL 1 15 TC 0.08 Vert(LL) 197/144 n/a n/a 999 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.04 Vert(CT) 999 n/a n/a TCDL 10.0 Rep Stress Incr WB 0.00 Horz(CT) YES 0.00 3 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 9 lb FT = 20%BCDL 10.0

TOP CHORD

BOT CHORD

BRACING-LUMBER-

TOP CHORD 2x4 SP No.1 **BOT CHORD** 2x4 SP No.1

2x3 SPF No.3 **WEBS**

REACTIONS. (size) 1=3-0-4, 3=3-0-4

Max Horz 1=32(LC 15)

Max Grav 1=105(LC 20), 3=105(LC 20)

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 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.



Structural wood sheathing directly applied or 3-0-12 oc purlins,

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

except end verticals.

Scale = 1:10.3



Job Truss Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Qty 150896161 220056-A V6 Valley Job Reference (optional)

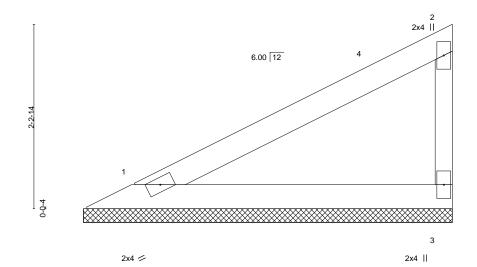
KC Truss & Panel Inc. (Urich, MO),

Urich, MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:42 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-CLqs2ovCcymh7JtquD7cyf7M5mEjqq2GcPAf0QzYhlp

4-5-12 4-5-12

Scale = 1.14.0



LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 **BCLL** 0.0 BCDL 10.0

SPACING-2-0-0 Plate Grip DOL 1 15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014

CSI. TC 0.24 BC 0.12 WB 0.00 Matrix-P

BRACING-

TOP CHORD

BOT CHORD

DEFL. L/d I/defI in (loc) Vert(LL) 999 n/a n/a Vert(CT) 999 n/a n/a Horz(CT) 0.00 3 n/a n/a

except end verticals.

Structural wood sheathing directly applied or 4-5-12 oc purlins,

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

GRIP 197/144

Weight: 14 lb FT = 20%

PLATES

MT20

LUMBER-

REACTIONS.

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

2x3 SPF No.3

(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.

- 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

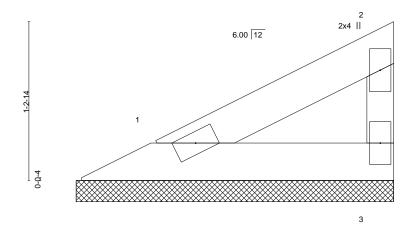


Job Truss Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Qty 150896162 220056-A V7 Valley Job Reference (optional) KC Truss & Panel Inc. (Urich, MO), Urich, MO - 64788. 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:42 2022 Page 1

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2-5-12 2-5-12

Scale = 1.90



2x4 / 2x4

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0

0.0

10.0

SPACING-2-0-0 Plate Grip DOL 1 15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014

CSI. TC 0.04 BC 0.02 WB 0.00 Matrix-P

DEFL. L/d I/defI in (loc) Vert(LL) 999 n/a n/a Vert(CT) 999 n/a n/a Horz(CT) 0.00 3 n/a n/a

PLATES GRIP 197/144

MT20

Weight: 7 lb FT = 20%

LUMBER-

BCLL

BCDL

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

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.

- 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



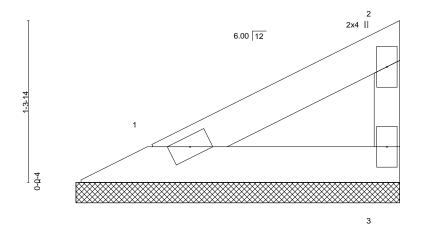
Job Truss Truss Type 320 PR 2032 NE BLUESTONE DR Lees Summit MO 64064 Qty 150896163 220056-A V8 Valley Job Reference (optional)

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

Urich, MO - 64788.

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Mar 21 13:48:43 2022 Page 1 ID:3YzUEFuTXpusHba?0tpUTHzCdai-gXOEF7wqNFuYITS0SwerVsfasAaQZHIPr3vDYszYhlo

Scale = 1.94



2x4 / 2x4 ||

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 **BCLL** 0.0 BCDL 10.0

SPACING-2-0-0 Plate Grip DOL 1 15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014

CSI. TC 0.05 BC 0.03 WB 0.00 Matrix-P

DEFL. L/d I/defI in (loc) Vert(LL) 999 n/a n/a Vert(CT) 999 n/a n/a Horz(CT) 0.00 3 n/a n/a

GRIP 197/144

Weight: 8 lb FT = 20%

PLATES

MT20

LUMBER-

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

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.

- 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.





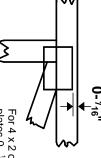


Symbols

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



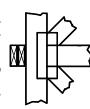
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

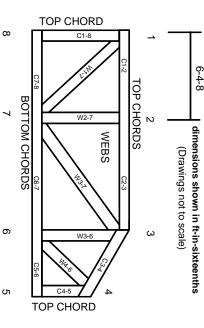
Min size shown is for crushing only

Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.
Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

ANSI/TPI1: DSB-89:

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.

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- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber

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- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- 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.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21.The design does not take into account any dynamic or other loads other than those expressly stated.