

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

Re: H3-94

SUMMIT HOMES

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Mid America MO.

Pages or sheets covered by this seal: I44987034 thru I44987086

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

Missouri COA: Engineering 001193



March 1,2021

Sevier, Scott

,Engineer

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

Job Truss Truss Type Qty SUMMIT HOMES 144987034 H3-94 C₁ **GABLE** 20 Job Reference (optional) Mid America Truss, Jefferson City, MO - 65101, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:44 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-P2E7jwRzZUzKIIAc?IWO1qClK5lvKF0?V8AdK8zhDqr 4-4-0 4-4-0 Scale = 1:16.2 4x4 = 3 6.00 12 5 6 3x4 = 2x4 || 3x4 = 8-8-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL (roof) 20.0 Plate Grip DOL Vert(LL) 999 244/190 1.15 TC 0.21 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.08 Vert(CT) 999 n/a n/a TCDI 10.0 Rep Stress Incr YES WB 0.02 Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 27 lb FT = 3% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

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

BOT CHORD **OTHERS** 2x4 SP No.2

REACTIONS. All bearings 8-8-0. Max Horz 1=23(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-114(LC 16), 5=-114(LC 17) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=363(LC 16), 4=363(LC 17)

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4 except (jt=lb) 1=114, 5=114.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

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

March 1,2021





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

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or 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



Truss Type Qty 144987035 H3-94 C1GE **GABLE** 2 Job Reference (optional) Mid America Truss, Jefferson City, MO - 65101, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:45 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-tEoVxGSbKn5BNSloZT1da1lw4V583iG9jovAsbzhDqq 4-4-0 4-4-0 Scale = 1:16.2 4x4 = 3 6.00 12 5 6 3x4 = 2x4 || 3x4 = 8-8-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL (roof) 20.0 Plate Grip DOL Vert(LL) 999 244/190 1.15 TC 0.21 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.08 Vert(CT) 999 n/a n/a TCDI 10.0 Rep Stress Incr YES WB 0.02 Horz(CT) 0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 27 lb FT = 3% **BCDL** 10.0 BRACING-

TOP CHORD

BOT CHORD

SUMMIT HOMES

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

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

LUMBER-TOP CHORD

Job

Truss

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

BOT CHORD **OTHERS** 2x4 SP No.2

REACTIONS. All bearings 8-8-0. Max Horz 1=23(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 1=-114(LC 16), 5=-114(LC 17) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 2=363(LC 16), 4=363(LC 17)

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4 except (jt=lb) 1=114, 5=114.
- 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987036 H3-94 CJ1 Diagonal Hip Girder 2 Job Reference (optional)
8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:46 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-LRMt8cSD55E2?bK?7AYs7FH2avM4o9olySfkO1zhDqp 6-10-5 1-2-14 6-10-5 Scale = 1:19.6 3x4 || 3 Special 4.24 12 Specia 4 Specia Special 2x4 || 6-10-5 LOADING (psf) SPACING-2-0-0 DEFL. I/defI L/d **PLATES GRIP** CSI. (loc)

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.01

-0.12

-0.00

2-4

2-4

except end verticals.

>999

>676

n/a

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

360

240

n/a

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

BCLL BCDL

Snow (Pf/Pg) 15.4/20.0

TCLL (roof)

TCDI

LUMBER-TOP CHORD 2x6 SP No.1

20.0

10.0

0.0

10.0

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

WEDGE

Left: 2x4 SP No.2

REACTIONS. (size) 4=Mechanical, 2=0-5-5

Max Horz 2=94(LC 8)

Max Uplift 4=-27(LC 8), 2=-60(LC 7) Max Grav 4=303(LC 16), 2=372(LC 16)

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

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

1.15

1.15

NO

TC

ВС

WB

Matrix-P

0.35

0.42

0.00

- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 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, 2.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 64 lb down and 38 lb up at 4-1-7, and 64 lb down and 38 lb up at 4-1-7 on top chord, and 12 lb down and 5 lb up at 4-1-7, and 12 lb down and 5 lb up at 4-1-7 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B)

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-3=-51, 2-4=-20

Concentrated Loads (lb)

Vert: 6=-35(F=-18, B=-18) 7=-7(F=-3, B=-3)



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244/190

FT = 3%

MT20

Weight: 35 lb



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ANSI/TP11 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 SUMMIT HOMES 144987037 H3-94 CJ2 Diagonal Hip Girder 2 Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:47 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-pdvFMyTrsPMvdlvBgu35fSq3nldWXayRB6OHxTzhDqo 7-6-12 1-2-14 1-6-11 6-0-1 Scale = 1:21.1 4x4 || 5

Special 4.24 12 Special 10 Special 5x10 = Special 5x10 = 12 0-6-0 Special 3x4 = Special 8 Special 3x4 =Special

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

	7- 1/1- 3-7- 1/17- 1			
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	CSI. TC 0.96 BC 0.73	DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) -0.17 6-7 >512 360 MT20 244/1 Vert(CT) -0.28 6-7 >309 240	
BCLL 0.0 BCDL 10.0	Rep Stress Incr NO Code IRC2018/TPI2014	WB 0.13 Matrix-SH	Horz(CT) 0.10 6 n/a n/a Weight: 36 lb FT	Γ = 3%

LUMBER-BRACING-

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

Structural wood sheathing directly applied or 4-10-14 oc purlins,

except end verticals.

4-5-6

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

REACTIONS. (size) 9=0-5-5, 6=Mechanical

Max Horz 9=97(LC 30)

Max Uplift 9=-68(LC 7), 6=-50(LC 11) Max Grav 9=408(LC 16), 6=373(LC 16)

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

TOP CHORD 3-4=-785/94

BOT CHORD 8-9=-76/383, 7-8=-39/252

WFBS 3-8=-327/80, 3-9=-452/49, 3-7=-99/549

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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 greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 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) 9, 6.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 49 lb down and 17 lb up at 1-11-15, 49 lb down and 17 lb up at 1-11-15, and 68 lb down and 32 lb up at 4-9-14, and 68 lb down and 32 lb up at 4-9-14 chord, and 4 lb down and 9 lb up at 1-11-15, 4 lb down and 9 lb up at 1-11-15, and 27 lb down and 23 lb up at 4-9-14, and 27 lb down and 23 lb up at 4-9-14 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-2=-51, 2-5=-51, 8-9=-20, 6-7=-20

Concentrated Loads (lb)

Vert: 10=-32(F=-16, B=-16) 11=1(F=1, B=1) 12=-55(F=-27, B=-27)



March 1,2021







Job Truss Truss Type Qty Ply SUMMIT HOMES 144987038 H3-94 GR1 PIGGYBACK BASE GIRDE Job Reference (optional) Mid America Truss,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:51 2021 Page 1 Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-iO9mBKWMvdsL5NDyvj81qI?qjw18TDq16kMV4EzhDqk

39-8-0 13-2-0 6-7-0 20-6-0 24-10-0 29-2-0 36-0-0 3-8-0 3-8-0 4-4-0 4-4-0 6-10-0 3-8-0

7x8 = 7x8 = 5x5 = 7 23 8 24 5x5 / 6.00 12 6 5x5 < 3x6 II 22 10 5 25 6x6 ≥ 5x5 🖊 5x8 / 5 0-6-0 16 14 13 12 7x12 = 15 26 6x10 = 6x10 = 5x5 = 3x6 || 20 18 5x8 = 5x10 8x10 || 7x12 = 5x6 = JUS24

36-0-0 39-8-0 2-11-8 3-7-8 6-10-0 Plate Offsets (X,Y)--[1:0-0-0,0-0-1], [18:Edge,0-2-8], [20:0-6-4,0-4-0] LOADING (psf) SPACING-CSI. **DEFL** (loc) I/defl L/d **PLATES** GRIP 20.0 Plate Grip DOL 1.15 TC 0.65 Vert(LL) -0.14 16-17 >999 360 244/190 MT20 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.55 Vert(CT) -0.27 16-17 >999 240 10.0 Rep Stress Incr NO WB 0.85 Horz(CT) 0.09 12 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-SH Weight: 726 lb FT = 3%

LUMBER-BRACING-

TOP CHORD 2x6 SP No.1 TOP CHORD Structural wood sheathing directly applied or 3-8-8 oc purlins, **BOT CHORD**

2x6 SP No.1 *Except* except end verticals. Except: 1-18: 2x8 SP 2400F 2.0E 10-0-0 oc bracing: 17-18

2x4 SP No.2 *Except* **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. WEBS 2-20: 2x10 SP 2400F 2.0E

REACTIONS. (size) 1=0-4-0 (req. 0-5-7), 12=0-4-0

Max Grav 1=9237(LC 33), 12=2322(LC 33)

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

1-2=-15465/0, 2-4=-8755/0, 4-5=-5798/0, 5-6=-5800/0, 6-7=-3234/0, 7-8=-2843/0, TOP CHORD

8-9=-1961/0, 9-10=-2325/0, 10-11=-1470/0, 5-17=-454/142, 11-12=-2290/0

1-20=0/13176, 19-20=0/13176, 18-19=0/1067, 16-17=0/3767, 14-16=0/2408,

WEBS

2-20=0/6626, 2-19=-5934/0, 4-19=0/2144, 17-19=0/6890, 4-17=-3059/0, 6-17=0/3036, 6-16=-2119/0, 7-16=0/1154, 8-16=0/1083, 8-14=-1210/0, 9-14=0/629, 10-14=0/958,

10-13=-1467/0, 11-13=0/2020

Special

10.0

Max Horz 1=243(LC 78)

NOTES-

BOT CHORD

TCLL (roof)

TCDL

BCLL

BCDL

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, 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-2-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

Webs connected as follows: 2x10 - 4 rows staggered at 0-2-0 oc, 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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.
- 6) Unbalanced snow loads have been considered for this design.
- 7) Provide adequate drainage to prevent water ponding.
- 8) Plates checked for a plus or minus 3 degree rotation about its center.
- 9) WARNING: Required bearing size at joint(s) 1 greater than input bearing size.
- 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) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 1-6-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.

Cantifilled on bages where hanger is in contact with lumber.



Scale = 1:77.5

March 1,2021

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



Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES
					144987038
H3-94	GR1	PIGGYBACK BASE GIRDE	1	2	Job Reference (ontional)

Mid America Truss,

NOTES-

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:52 2021 Page 2 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-Aaj8PfX_gx_CjWn8TRfGMWX?TJNNCg4AKO62chzhDqj

13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 7604 lb down at 2-11-8 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: 1-5=-51, 5-7=-51, 7-9=-61, 9-11=-51, 1-18=-20, 12-17=-20

Concentrated Loads (lb)

Vert: 20=-7604(F) 26=-544(F)



Job Truss Truss Type Qty Ply SUMMIT HOMES 144987039 H3-94 H1 Hip Girder Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101,

1-1-12

3-1-12

1-1-12

0-10-8

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:54 2021 Page 1

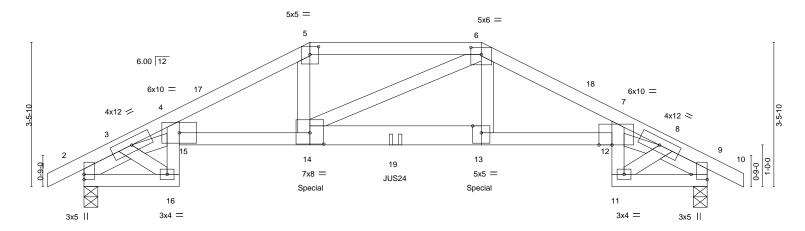
Structural wood sheathing directly applied or 3-10-5 oc purlins.

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

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-6zqvqLZECYEvyqxXbshkRxcHe7?bghQToib9gZzhDqh

12-8-8 3-1-12

Scale = 1:27.7



2-3-8	5-5-4	9-6-12		12-8-8	15-0-0	
2-3-8	3-1-12	4-1-8		3-1-12	2-3-8	
Plate Offsets (X,Y) [5:0-2-8,0	0-2-4], [6:0-3-0,0-2-0], [7:0-3-12,0-0-0],	[9:Edge,0-4-10], [14:0-4-0,0)-3-4]			
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 NO	CSI. TC 0.92 BC 0.82 WB 0.34	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) I/defl -0.14 14-15 >999 -0.23 14-15 >768 0.23 9 n/a	L/d PLATE : 360 MT20 240 n/a	244/190
BCDI 10.0	Code IRC2018/TPI2014	Matrix-SH			Weight:	159 lb FT = 3%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SP No.2 TOP CHORD

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

14-15,12-13: 2x4 SP No.1, 13-14: 2x6 SP No.1 2x4 SP No.2 WEBS

SLIDER Left 2x4 SP No.2 -t 1-2-2, Right 2x4 SP No.2 -t 1-2-2

REACTIONS. (size) 2=0-4-0, 9=0-4-0

Max Horz 2=36(LC 8)

Max Uplift 2=-128(LC 11), 9=-128(LC 12) Max Grav 2=1453(LC 34), 9=1453(LC 34)

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

TOP CHORD $2-3=-1940/181,\ 3-4=-3972/385,\ 4-5=-3289/341,\ 5-6=-2967/329,\ 6-7=-3294/322,$

7-8=-3973/345, 8-9=-1939/180

BOT CHORD 2-16=-140/1333, 15-16=-47/555, 4-15=-28/570, 14-15=-288/2971, 13-14=-242/2972,

12-13=-242/2976, 11-12=-30/554, 7-12=-10/567, 9-11=-106/1332

WFBS 3-16=-863/93, 5-14=-101/1072, 6-13=-107/1075, 8-11=-863/65, 3-15=-268/2791,

8-12=-212/2792

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 0-9-0 oc.

Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 8) Provide adequate drainage to prevent water ponding.
- 9) Plates checked for a plus or minus 3 degree rotation about its center.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=128, 9=128,
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and Continuiere naesasia nadard ANSI/TPI 1.



March 1,2021

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

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

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



Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	
H3-94	⊔4	Hip Girder	1	_		144987039
П3-94	П	nip Girder	!	2	Job Reference (optional)	

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:55 2021 Page 2

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-a9OH1hZszsMma_Wj8ZCz_89SOXLqP8gd1MKiD?zhDqg

12) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 7-6-0 from the left end to connect truss(es) to front face of bottom chord, skewed 0.0 deg.to the right, sloping 0.0 deg. down.

13) Fill all nail holes where hanger is in contact with lumber.

14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 576 lb down and 122 lb up at 5-5-4, and 576 lb down and 122 lb up at 9-6-0 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: 1-5=-51, 5-6=-61, 6-10=-51, 2-16=-20, 12-15=-20, 9-11=-20

Concentrated Loads (lb)

Vert: 14=-576(F) 13=-576(F) 19=-231(F)



Job Truss Truss Type Qty Ply SUMMIT HOMES 144987040 H3-94 H2 Hip Girder | **2** | Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:56 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101,

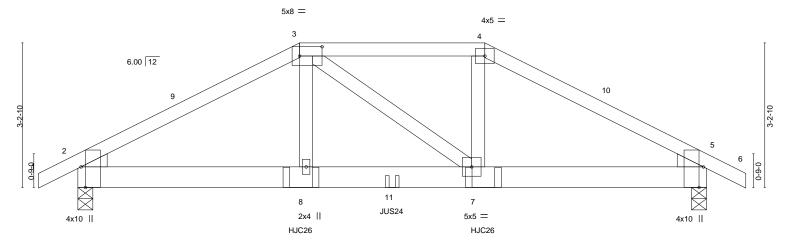
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-3MyfE1aUkAUdC85wiHjCXMilDxq28fvmF04FlSzhDqf

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

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

0-10-8 4-11-4 4-11-4 0-10-8

Scale = 1:25.7



1	4-11-4	9-0-12	14-0-0) ,
Г	4-11-4	4-1-8	4-11-4	1
fsets (>	,Y) [2:0-5-8,Edge], [3:0-6-0,0-2-8], [5:0-5-8,Edge]			

TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0	Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 NO	CSI. TC BC WB	0.40 0.25 0.09	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.02 -0.04 0.01	(loc) 7-8 7-8 5	I/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20	GRIP 244/190	
BCLL 0.0	Code IRC:2018/1	PI2014	Matri	x-P						Weight: 148 lb	FT = 3%	
BCDL 10.0	0000020.07.	20								110.9 10	0,0	

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

Plate Offs

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

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 2=0-4-0, 5=0-4-0

Max Horz 2=-33(LC 55)

Max Uplift 2=-101(LC 11), 5=-101(LC 12) Max Grav 2=1288(LC 34), 5=1288(LC 34)

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

TOP CHORD 2-3=-1942/161, 3-4=-1623/167, 4-5=-1942/161 **BOT CHORD** 2-8=-130/1590, 7-8=-132/1625, 5-7=-111/1590

WEBS 3-8=-37/680, 4-7=-49/712

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 0-9-0 oc.

Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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.
- 6) Unbalanced snow loads have been considered for this design.
- 7) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 8) Provide adequate drainage to prevent water ponding.
- 9) Plates checked for a plus or minus 3 degree rotation about its center.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=101, 5=101.
- 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) Use USP HJC26 (With 16-16d nails into Girder & 10d nails into Truss) or equivalent spaced at 4-0-12 oc max. starting at 4-11-10 from the left end to 9-0-6 to connect truss(es) to back face of bottom chord.





March 1,2021

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

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or 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	Truss Type	Qty	Ply	SUMMIT HOMES	
H3-94	шэ	Hip Girder	1	_		144987040
110-94	HZ	Trip Girder	'	2	Job Reference (optional)	

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:57 2021 Page 2 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-XYW1SNb6VTcUpIg6G_FR3ZEwzK9Ht69wUgppHuzhDqe

13) Use USP JUS24 (With 4-10d nails into Girder & 2-10d nails into Truss) or equivalent at 7-0-0 from the left end to connect truss(es) to back face of bottom chord.

14) 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, 3-4=-61, 4-6=-51, 2-5=-20

Concentrated Loads (lb)

Vert: 8=-480(B) 7=-480(B) 11=-206(B)

16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty SUMMIT HOMES 144987041 H3-94 J1 Jack-Closed 3

Mid America Truss, Jefferson City, MO - 65101, Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:57 2021 Page 1

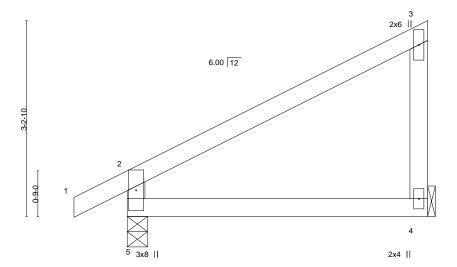
Structural wood sheathing directly applied or 4-11-4 oc purlins,

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

except end verticals.

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-XYW1SNb6VTcUplg6G_FR3ZExeKAit7WwUgppHuzhDqe 4-11-4 4-11-4

Scale = 1:18.9



4-11-4

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 0.36 BC 0.16 WB 0.00	DEFL. i Vert(LL) -0.0 Vert(CT) -0.0 Horz(CT) -0.0	3 4-5	l/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	, ,				Weight: 22 lb	FT = 3%

BRACING-TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SP No.2

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

Max Horz 5=99(LC 10)

Max Uplift 5=-11(LC 11), 4=-20(LC 8) Max Grav 5=289(LC 16), 4=226(LC 16)

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

TOP CHORD 2-5=-258/45

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

-0-10-8

0-10-8

- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 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) 5, 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.



March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987042 H3-94 J2 Jack-Open Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:58 2021 Page 1 Mid America Truss,

Jefferson City, MO - 65101,

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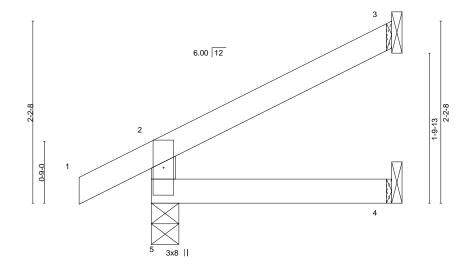
Structural wood sheathing directly applied or 2-10-15 oc purlins,

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

except end verticals.

2-10-15 2-10-15 0-10-8

Scale = 1:14.0



	J		2-10-15 2-10-15		-			
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCDL 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 0.12 BC 0.05 WB 0.00 Matrix-R	Vert(CT) -(in (loc) 0.00 4-5 0.00 4-5 0.00 3	l/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20 Weight: 11 lb	GRIP 244/190 FT = 3%

BOT CHORD

LUMBER-BRACING-TOP CHORD

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

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

Max Horz 5=46(LC 11) Max Uplift 5=-1(LC 11), 3=-30(LC 11)

Max Grav 5=221(LC 16), 3=86(LC 16), 4=29(LC 16)

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

NOTES-

REACTIONS.

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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 greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 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) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987043 H3-94 J3 Jack-Closed 3 Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:29:59 2021 Page 1

Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-Txeot3cN15sC3bqVNPHv8_KH18pEL10Cx_lwMnzhDqc

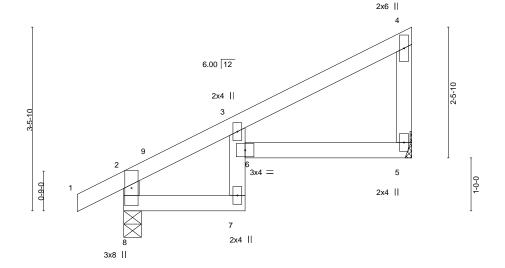
Structural wood sheathing directly applied or 5-5-4 oc purlins,

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

except end verticals.

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

Scale = 1:21.8



LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL (roof) 20.0 Plate Grip DOL TC Vert(LL) -0.05 360 244/190 1.15 0.37 6 >999 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.35 Vert(CT) -0.08 6 >787 240 TCDI 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.04 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-R Weight: 24 lb FT = 3% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

WEBS 2x4 SP No.2

> 8=0-4-0, 5=Mechanical (size) Max Horz 8=95(LC 8)

Max Uplift 8=-10(LC 11), 5=-23(LC 11) Max Grav 8=300(LC 16), 5=251(LC 16)

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

TOP CHORD 2-8=-278/28

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 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) 8, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



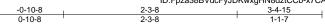
Job Truss Truss Type Qty SUMMIT HOMES 144987044 H3-94 J4 Jack-Open Job Reference (optional)
8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:00 2021 Page 1 Mid America Truss,

Jefferson City, MO - 65101,

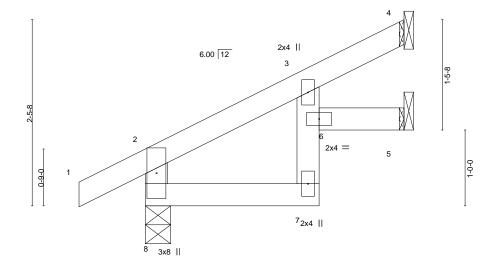
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Structural wood sheathing directly applied or 3-4-15 oc purlins,

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



Scale = 1:15.2



	<u> </u>	2-3-8 2-3-8		3-4-15 1-1-7	—			
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 0.12 BC 0.11 WB 0.00 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.01 6 -0.01 7 0.00 5	l/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20 Weight: 15 lb	GRIP 244/190 FT = 3%

BRACING-

TOP CHORD

BOT CHORD

except end verticals.

LUMBER-

REACTIONS.

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

WEBS 2x4 SP No.2

> 8=0-4-0, 4=Mechanical, 5=Mechanical (size) Max Horz 8=53(LC 11)

Max Uplift 4=-19(LC 11), 5=-5(LC 11)

Max Grav 8=247(LC 16), 4=88(LC 16), 5=56(LC 16)

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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 greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 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, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987045 H3-94 J5 Jack-Open

Mid America Truss, Jefferson City, MO - 65101, Job Reference (optional)
8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:00 2021 Page 1

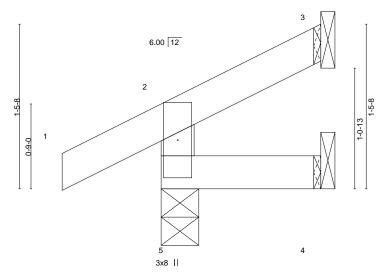
Structural wood sheathing directly applied or 1-4-15 oc purlins,

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

except end verticals.

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-x7CA4Pd?oO_3glPhx6o8hCsW0YEO4UGMAe2TuDzhDqb 0-10-8 1-4-15

Scale = 1:10.2



1-4-15

BRACING-

TOP CHORD

BOT CHORD

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 0.03 WB 0.00	Vert(CT)	in (loc) 0.00 5 0.00 5 -0.00 3	I/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-R	, ,				Weight: 7 lb	FT = 3%

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No 2 2x4 SP No.2

BOT CHORD WEBS 2x4 SP No.2

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

Max Horz 5=30(LC 8) Max Uplift 5=-5(LC 11), 3=-14(LC 11)

Max Grav 5=157(LC 16), 3=22(LC 16), 4=12(LC 9)

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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 greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 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) 5, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987046 Т1 H3-94 Common Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:01 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-PJmYlkedZi6wlvztVqJNEPPaJyQwpu6VPIn0QfzhDqa 21-2-8

5-5-2

5-5-2

Scale = 1:37.9

FT = 3%

Weight: 101 lb

20-4-0

4-8-14

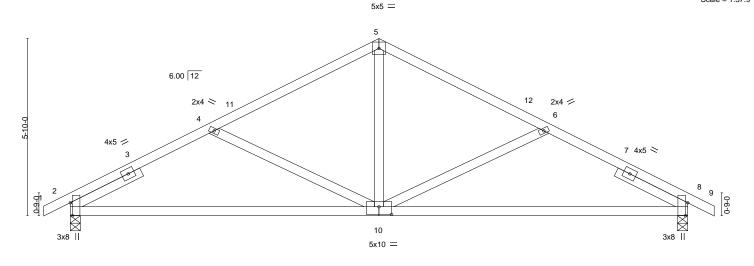


Plate Offsets (X,Y)--[2:0-5-1,Edge], [8:0-5-1,Edge], [10:0-5-0,0-3-0] LOADING (psf) SPACING-CSI. (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.57 Vert(LL) -0.04 10 >999 360 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.65 Vert(CT) -0.18 2-10 >999 240 10.0 Horz(CT) 0.04 8 n/a n/a

TCDL Rep Stress Incr YES WB 0.22 **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-SH BCDL 10.0 LUMBER-

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-0-15 oc purlins. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

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

0-10-8 0-10-8

4-8-14

WEBS 2x4 SP No.2 **SLIDER** Left 2x4 SP No.2 -t 2-7-6, Right 2x4 SP No.2 -t 2-7-6

REACTIONS. (size) 2=0-4-0, 8=0-4-0 Max Horz 2=63(LC 8)

Max Uplift 2=-20(LC 11), 8=-20(LC 12)

Max Grav 2=866(LC 2), 8=866(LC 2)

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

2-4=-1272/66, 4-5=-962/32, 5-6=-962/32, 6-8=-1272/66 TOP CHORD

BOT CHORD 2-10=-56/1055 8-10=0/1055

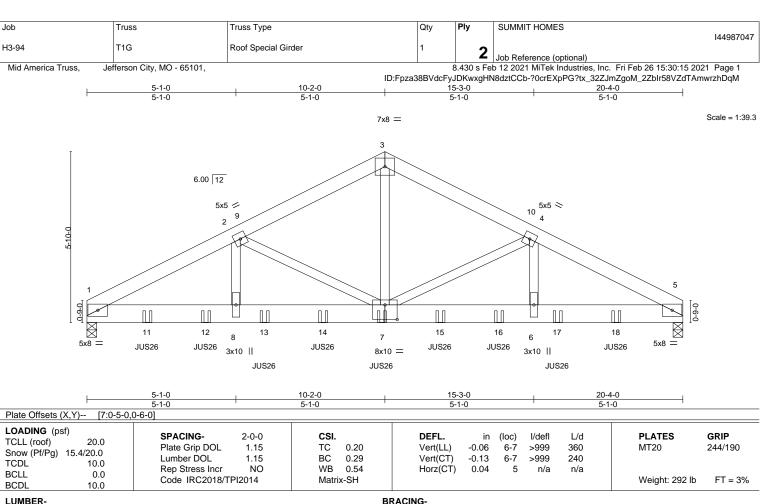
WEBS 5-10=0/458, 6-10=-328/127, 4-10=-328/127

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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 greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
- 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 1,2021





TOP CHORD

BOT CHORD

LUMBER-

2x6 SP No.1 TOP CHORD 2x8 SP 2400F 2.0E **BOT CHORD** 2x4 SP No.2 **WEBS**

REACTIONS.

(size) 1=0-4-0, 5=0-4-0 Max Horz 1=60(LC 33)

Max Uplift 1=-100(LC 11), 5=-98(LC 12) Max Grav 1=4471(LC 2), 5=4404(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-2=-7614/179, 2-3=-5408/155, 3-4=-5408/155, 4-5=-7616/180 TOP CHORD BOT CHORD 1-8=-162/6612, 7-8=-162/6612, 6-7=-108/6612, 5-6=-108/6612 WFBS 3-7=-70/4421, 4-7=-2083/123, 4-6=0/1978, 2-7=-2083/122, 2-8=0/1973

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

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 5) 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 6) Unbalanced snow loads have been considered for this design
- 7) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
- 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) Use USP JUS26 (With 4-10d nails into Girder & 4-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-0-12 from the left end to 18-0-12 to connect truss(es) to back face of bottom chord.
- 11) 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, 3-5=-51, 1-5=-20



Structural wood sheathing directly applied or 5-11-8 oc purlins.

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

March 1,2021



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

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or 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



SUMMIT HOMES Job Truss Truss Type Qty Ply 144987047 H3-94 T1G Roof Special Girder

Mid America Truss,

Jefferson City, MO - 65101,

| Z | Job Reference (optional)

8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:15 2021 Page 2
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-?0crEXpPG?tx_32ZJmZgoM_2Zblr58VZdTAmwrzhDqM

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 7=-738(B) 11=-738(B) 12=-738(B) 13=-738(B) 14=-738(B) 15=-738(B) 16=-738(B) 17=-738(B) 18=-738(B)



Job Truss Truss Type Qty SUMMIT HOMES 144987048 H3-94 T1GE Common Supported Gable Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:16 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101,

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-TCADRtq11J?obDdmtT4vKaXFU_hCqjFjs7wJSlzhDqL 21-2-8 0-10-8

10-2-0

Scale = 1:38.6 5x5 =

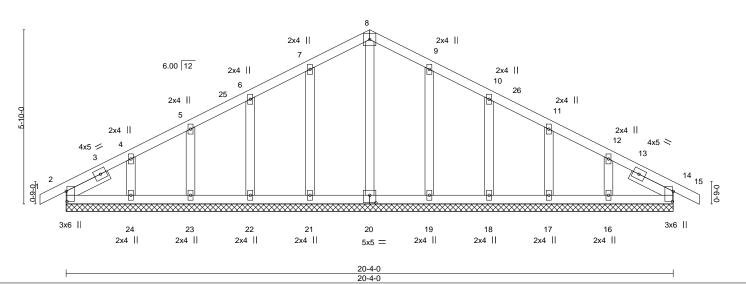


Plate Offsets (X,Y)--[2:0-4-1,0-0-5], [14:0-4-1,0-0-5], [20:0-2-8,0-3-0] LOADING (psf) SPACING-(loc) CSI. **DEFL** I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.06 Vert(LL) -0.00 120 MT20 244/190 14 n/r Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.03 Vert(CT) -0.00 14 n/r 90 TCDL 10.0 Rep Stress Incr YES WB 0.06 Horz(CT) 0.00 14 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-SH Weight: 113 lb BCDL 10.0

LUMBER-BRACING-

10-2-0 10-2-0

TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. **BOT CHORD** 2x4 SP No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.2

SLIDER Left 2x4 SP No.2 -t 1-7-3, Right 2x4 SP No.2 -t 1-7-3

REACTIONS. All bearings 20-4-0. (lb) -

0-10-8

Max Horz 2=-63(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 2, 21, 22, 23, 24, 19, 18, 17, 16

All reactions 250 lb or less at joint(s) 2, 20, 21, 22, 23, 24, 19, 18, 17, 16, 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 21, 22, 23, 24,
- 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 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987049 H3-94 T2 Roof Special 10 Job Reference (optional)
8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:18 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-PbHzsYrHYwGVrWn8?u7NQ?cV5ol8IVt?JRPQXAzhDqJ 21-0-0 5-3-0 5-3-0 5-3-0 Scale = 1:40.3 5x6 = 3 7.00 12 4x5 / 4x5 <> 7x10 = 7x10 = 5 0-10-0 7 4x5 = 5x6 = 14-0-0 21-0-0 7-0-0 7-0-0 Plate Offsets (X,Y)--[1:Edge,0-2-8], [5:Edge,0-2-8], [7:0-3-0,0-3-0] LOADING (psf) SPACING-DEFL. **PLATES** CSI. (loc) I/defl L/d GRIP 20.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.44 Vert(LL) -0.03 7-8 >999 360 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.38 Vert(CT) -0.09 7-8 >999 240 **TCDL** 10.0 Rep Stress Incr YES WB 0.57 Horz(CT) 0.03 6 n/a n/a

Matrix-SH

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

BCLL

BCDL

TOP CHORD 2x4 SP No.2 BOT CHORD

2x4 SP No.2 WEBS 2x4 SP No.2

REACTIONS. (size) 9=0-4-0, 6=0-4-0 Max Horz 9=145(LC 8)

0.0

10.0

Max Uplift 9=-8(LC 11), 6=-8(LC 12) Max Grav 9=828(LC 2), 6=828(LC 2)

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

TOP CHORD 1-2=-317/51, 2-3=-1047/79, 3-4=-1047/79, 4-5=-317/51, 1-9=-264/51, 5-6=-264/51

Code IRC2018/TPI2014

BOT CHORD 8-9=-38/933, 7-8=0/651, 6-7=0/929

WFBS 3-7=-37/411, 3-8=-37/410, 2-9=-874/0, 4-6=-874/0

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

FT = 3%

Weight: 119 lb

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

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

except end verticals.



Job Truss Truss Type Qty SUMMIT HOMES 144987050 H3-94 T2GE Roof Special Supported Gable Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:19 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-tnrL3uswJEOMSgMLYcecyC9lCCil13W9Y58z3czhDql 21-10-8 0-10-8 21-0-0 10-6-0 10-6-0 Scale = 1:46.6 5x5 = 6 2x4 || 2x4 || 5 7.00 12 2x4 || 2x4 || ⁸ 26 2x4 || ₂₅ 2x4 || 3 2x4 || 2x4 || 11 12 0-10-Q

21-0-0 21-0-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL Vert(LL) 244/190 1.15 TC 0.10 -0.00 12 n/r 120 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.07 Vert(CT) -0.00 12 90 n/r TCDI 10.0 Rep Stress Incr YES WB 0.09 Horz(CT) 0.00 13 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-R Weight: 122 lb FT = 3% **BCDL** 10.0

19

2x4 ||

18

2x4 ||

17 16

2x4 II

3x6 =

LUMBER-BRACING-

22

2x4 ||

21

2x4 ||

20

2x4 |

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

2x4 SP No.2 WEBS **OTHERS** 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

15

2x4 ||

14

2x4 ||

13

3x8 ||

REACTIONS. All bearings 21-0-0.

(lb) -Max Horz 24=-153(LC 7)

24

3x8 II

Max Uplift All uplift 100 lb or less at joint(s) 24, 13, 20, 21, 22, 23, 18, 16, 15, 14 Max Grav All reactions 250 lb or less at joint(s) 24, 13, 19, 20, 21, 22, 23, 18, 16, 15, 14

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

23

2x4 ||

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 13, 20, 21, 22, 23, 18, 16, 15, 14.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987051 H3-94 T3 Piggyback Base 3 Job Reference (optional) Mid America Truss, Jefferson City, MO - 65101, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:21 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-qAz6UauArre4i_Vjg1g41dEwy?CcVtnS?Pd48VzhDqG 29-2-0 33-6-8 39-3-4 45-0-0 6-10-0 6-10-0 6-10-0 4-4-0 4-4-0 4-4-8 5-8-12 5-8-12 Scale = 1:82.4 FLAT TOP CHORD MUST BE BRACED WITH SHEATHING 6x6 = 4x5 = 5 25 6 26 6.00 12 4x4 || 8 4x5 / 27 4x5 < 6x6 / 5x5 < 28 6x12 = 3 5x5 🗢 10 11 4x5 / 4x5 / 2 15 6x12 = 20 6x8 || 22 21 19 18 17 4x5 = 13 12 4x4 = 2x6 | 4x5 = 3x10 MT20HS = 6x10 = 4x4 = 4x5 = 6x10 = 6-10-0 20-6-0 29-2-0 33-6-8 39-3-4 45-0-0 6-10-0 6-10-0 [5:0-3-0,0-2-0], [7:0-3-0,0-2-0], [17:Edge,0-2-0] Plate Offsets (X,Y)--LOADING (psf) **PLATES** SPACING-CSI. **DEFL** (loc) I/defl L/d GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.79 Vert(LL) -0.21 19 >999 360 MT20 244/190 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.84 Vert(CT) -0.46 18-19 >999 240 MT20HS 187/143 TCDL 10.0 Rep Stress Incr YES WB 0.49 Horz(CT) 0.22 12 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-SH Weight: 327 lb FT = 3%BCDL 10.0 LUMBER-BRACING-TOP CHORD 2x4 SP No.2 *Except* TOP CHORD Structural wood sheathing directly applied, except end verticals. 3-5: 2x4 SP No.1, 1-3: 2x4 SP 2400F 2.0E **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 8-16

WEBS

1 Row at midpt

BOT CHORD 2x4 SP No.2 *Except*

1-20: 2x4 SP No.1 WEBS 2x4 SP No.2

Left 2x4 SP No.2 -t 3-9-9 SLIDER

REACTIONS. (size) 1=0-4-0, 12=Mechanical

Max Horz 1=166(LC 8)

Max Uplift 1=-13(LC 11)

Max Grav 1=1958(LC 33), 12=2005(LC 33)

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

TOP CHORD 1-3=-3583/33, 3-4=-3173/53, 4-5=-2543/67, 5-6=-2145/87, 6-7=-2030/70, 7-8=-2936/109, 8-9=-2964/30, 9-10=-3143/9, 10-11=-1655/4, 11-12=-1945/0 **BOT CHORD**

1-22=-71/3060, 21-22=-72/3057, 19-21=0/2779, 18-19=0/2105, 8-16=-473/126,

15-16=0/2755, 14-15=-29/1564, 10-14=-1183/58

WEBS 3-21=-385/94, 4-21=0/330, 4-19=-930/130, 5-19=0/727, 6-18=-429/95, 16-18=0/2002,

7-16=-105/1263, 9-16=-263/85, 10-15=0/1240, 11-14=-19/1896

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 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) 1.
- 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.



4-19, 6-19, 6-18, 7-18

March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987052 H3-94 ТЗА Piggyback Base Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:24 2021 Page 1

Mid America Truss, Jefferson City, MO - 65101,

6-10-0

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-EkfE7cw28m0fZREIL9EnfGsRDDDSiD_uhNskkqzhDqD 39-3-4 24-10-0 29-2-0 33-0-0 36-10-0 45-0-0 4-4-0 4-4-0 3-10-0 3-10-0 2-5-4 5-8-12

Structural wood sheathing directly applied, except end verticals.

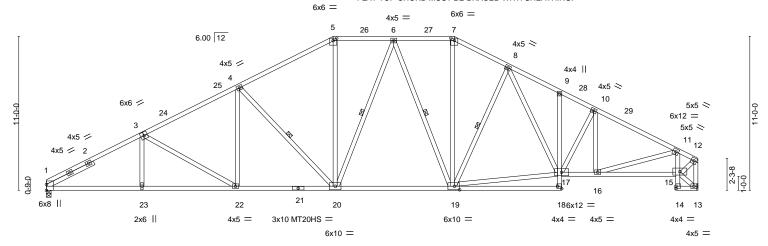
4-20, 6-20, 6-19, 8-19

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

1 Row at midpt

FLAT TOP CHORD MUST BE BRACED WITH SHEATHING.

Scale = 1:82.4



20-6-0 36-10-0 29-2-0 39-3-4 45-0-0 6-10-0 6-10-0 6-10-0 [5:0-3-0,0-2-0], [7:0-3-0,0-2-0], [18:Edge,0-2-0], [19:0-4-8,0-3-0] Plate Offsets (X,Y)--LOADING (psf) **PLATES** SPACING-2-0-0 **DEFL** (loc) I/defl L/d GRIP

TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.78 Vert(LL) -0.21 20 >999 360 MT20 244/190 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.84 Vert(CT) -0.45 19-20 >999 240 MT20HS 187/143 TCDL 10.0 Rep Stress Incr YES WB 0.53 Horz(CT) 0.21 n/a 13 n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-SH Weight: 337 lb BCDL 10.0

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*

6-10-0

6-10-0

3-5: 2x4 SP No.1, 1-3: 2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP No.2 *Except*

1-21: 2x4 SP No.1 WEBS 2x4 SP No.2

SLIDER Left 2x4 SP No.2 -t 3-9-9

REACTIONS. (size) 1=0-4-0, 13=Mechanical

Max Horz 1=166(LC 10)

Max Uplift 1=-13(LC 11)

Max Grav 1=1958(LC 33), 13=2005(LC 33)

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

TOP CHORD $1-3=-3583/33,\ 3-4=-3173/53,\ 4-5=-2542/67,\ 5-6=-2145/88,\ 6-7=-2031/69,\ 7-8=-2350/60,\ 3-4=-3173/53,\ 4-5=-2542/67,\ 5-6=-2145/88,\ 6-7=-2031/69,\ 7-8=-2350/60,\ 7-8=$

8-9=-3028/82, 9-10=-3046/40, 10-11=-3127/9, 11-12=-1657/4, 12-13=-1942/0

BOT CHORD 1-23=-71/3059, 22-23=-73/3057, 20-22=0/2779, 19-20=0/2105, 16-17=0/2733,

15-16=-32/1590, 11-15=-1196/64

WEBS 3-22=-385/94, 4-22=0/332, 4-20=-931/129, 5-20=0/725, 6-19=-425/98, 7-19=0/791, 8-19=-784/130, 17-19=0/2146, 8-17=-62/723, 11-16=0/1190, 12-15=-22/1917

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 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) 1.
- 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 1,2021

Job Truss Truss Type Qty SUMMIT HOMES 144987053 H3-94 T3B Piggyback Base 2 Job Reference (optional) Mid America Truss, Jefferson City, MO - 65101, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:25 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-ixCdKyxgv48WAbpUvsl0CTPc0dZdRhW1w1blHGzhDqC 24-10-0 29-2-0 36-0-0 42-10-0 46-7-0 6-10-0 6-10-0 6-10-0 4-4-0 4-4-0 6-10-0 6-10-0 3-9-0 Scale = 1:80.9 FLAT TOP CHORD MUST BE BRACED WITH SHEATHING. 6x6 = 6x6 =4x5 = 5 6.00 12 4x5 / 4x5 < 8 6x6 / 25 4x5 < 9 3 5x5 < 4x5 / 10 4x5 / 2 17 14 6x8 || 16 15 19 18 13 12 3x8 =2x6 II 4x5 = 3x10 MT20HS = 6x10 = 4x5 = 4x5 = 4x4 = 6x10 = 6-10-0 36-0-0 42-10-0 46-7-0 29-2-0 6-10-0 6-10-0 6-10-0 [5:0-3-0,0-2-0], [7:0-3-0,0-2-0], [11:Edge,0-2-0] Plate Offsets (X,Y)--LOADING (psf) **PLATES** SPACING-CSI. **DEFL** (loc) I/defl L/d GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.78 Vert(LL) -0.19 18 >999 360 MT20 244/190 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.84 Vert(CT) -0.42 15-16 >999 240 MT20HS 187/143 TCDL 10.0 Rep Stress Incr YES WB 0.51 Horz(CT) 0.16 n/a 11 n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-SH Weight: 307 lb BCDL 10.0 LUMBER-BRACING-TOP CHORD 2x4 SP No.1 *Except* TOP CHORD Structural wood sheathing directly applied, except end verticals. **BOT CHORD** 5-7: 2x4 SP No.2, 1-3: 2x4 SP 2400F 2.0E Rigid ceiling directly applied or 10-0-0 oc bracing. **BOT CHORD** 2x4 SP No.2 *Except* WEBS 4-16, 6-16, 6-15, 8-15 1 Row at midpt 1-17: 2x4 SP No.1 WEBS 2x4 SP No.2 SLIDER Left 2x4 SP No.2 -t 3-9-9

REACTIONS. (size) 1=0-4-0, 11=Mechanical

Max Horz 1=166(LC 10)

Max Uplift 1=-13(LC 11)

Max Grav 1=1958(LC 33), 11=2005(LC 33)

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

TOP CHORD $1-3=-3583/33,\ 3-4=-3173/53,\ 4-5=-2543/67,\ 5-6=-2145/87,\ 6-7=-2038/72,\ 7-8=-2421/50,\ 3-4=-3173/53,\ 4-5=-2543/67,\ 5-6=-2145/87,\ 6-7=-2038/72,\ 7-8=-2421/50,\ 3-4=-3173/53,\ 4-5=-2543/67,\ 5-6=-2145/87,\ 6-7=-2038/72,\ 7-8=-2421/50,\ 3-4=-3173/53,\ 4-5=-2543/67,\ 5-6=-2145/87,\ 6-7=-2038/72,\ 7-8=-2421/50,\ 3-4=-3173/53,\ 4-5=-2543/67,\ 5-6=-2145/87,\ 6-7=-2038/72,\ 7-8=-2421/50,\ 7-8=$

8-9=-2721/31, 9-10=-2048/7, 10-11=-1978/6

BOT CHORD 1-19=-71/3060, 18-19=-72/3057, 16-18=0/2779, 15-16=0/2103, 13-15=0/2351,

12-13=0/1814

WEBS 3-18=-385/94, 4-18=0/331, 4-16=-930/130, 5-16=0/721, 6-15=-423/97, 7-15=0/662,

8-15=-466/126, 9-13=0/617, 9-12=-917/64, 10-12=0/2074

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 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) 1.
- 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 1,2021







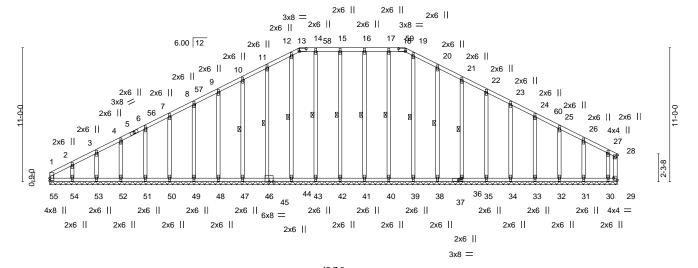
16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty SUMMIT HOMES 144987054 H3-94 T3GE **GABLE** Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:29 2021 Page 1

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-biS7AJ_BzJeyfC6G8ipyMJZTjE6SNardreZVQ1zhDq8 29-2-0 20-6-0 8-8-0 17-5-0

Scale = 1:94.6



46-7-0 46-7-0 Plate Offsets (X,Y)-- [13:0-6-8,0-2-12], [18:0-6-8,0-2-12], [29:Edge,0-2-0], [37:0-2-8,0-1-8]

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 0.10 BC 0.08 WB 0.17	DEFL. in (lo Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00 2	c) I/defl L/d - n/a 999 - n/a 999 29 n/a n/a	PLATES GRIP MT20 244/190
	Code IRC2018/TPI2014	Matrix-R			Weight: 376 lb FT = 3%
BCDL 10.0	0000 11(02010/11 12011	Width IX			Wolghi. Or o lb 11 = 070

LUMBER-BRACING-

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

OTHERS 2x4 SP No.2 **WEBS** 10-47, 11-46, 12-44, 14-43, 15-42, 16-41, 1 Row at midpt 17-40, 19-39, 20-38, 21-36

REACTIONS. All bearings 46-7-0.

Max Horz 55=164(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 55, 29, 54, 53, 52, 51, 50, 49, 48, 47, 46, 42, 41, 38, 36, 35,

34, 33, 32, 31 except 30=-109(LC 12)

All reactions 250 lb or less at joint(s) 55, 29, 54, 53, 52, 51, 50, 49, 48, 47, 46, 44, 43, 42, 41, Max Grav 40, 39, 38, 36, 35, 34, 33, 32, 31, 30

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 55, 29, 54, 53, 52, 51, 50, 49, 48, 47, 46, 42, 41, 38, 36, 35, 34, 33, 32, 31 except (jt=lb) 30=109.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987055 H3-94 T4 Common 2 Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:31 2021 Page 1

Mid America Truss, Jefferson City, MO - 65101,

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> Scale = 1:38.3 5x6 =

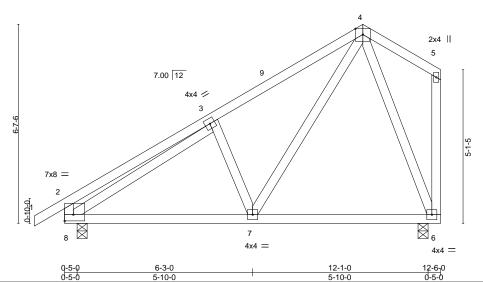


Plate Offsets (X,Y)-- [2:Edge,0-2-8]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCDL 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 0.37 BC 0.31 WB 0.33 Matrix-P	DEFL. Vert(LL) Vert(CT) Horz(CT)
--	---	---	---

(loc) I/defI L/d -0.01 >999 360 -0.05 7-8 >999 240 0.01 6 n/a n/a

MT20 244/190

GRIP

PLATES

FT = 3% Weight: 83 lb

LUMBER-

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x4 SP No.2 WEBS 2x4 SP No.2 BRACING-

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

except end verticals.

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

REACTIONS. (size) 6=0-4-0, 8=0-4-0

Max Horz 8=196(LC 8)

Max Uplift 6=-23(LC 11), 8=-18(LC 11) Max Grav 6=485(LC 2), 8=560(LC 2)

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

TOP CHORD 3-4=-517/76 **BOT CHORD** 7-8=-73/499

WFBS 3-7=-277/139, 4-7=-44/472, 4-6=-409/38, 3-8=-566/0

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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 greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 8.
- 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 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987056 H3-94 T4GE Common Structural Gable

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:32 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-?H7GoL03FE0WWgrqpqNf_yBwcR9maxD3Xco90MzhDq5

9-11-0 12-6-0

0-10-8 4-11-8 4-11-8 2-7-0

Scale = 1:43.3

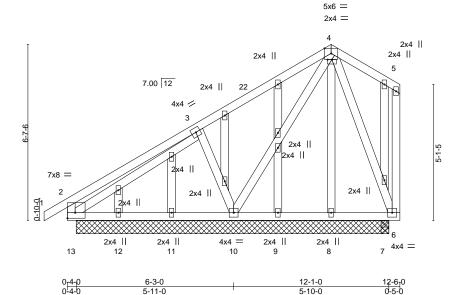


Plate Offsets (X,Y)-- [2:Edge,0-2-8], [4:0-2-0,0-0-0]

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 0.37 BC 0.04 WB 0.13	DEFL. Vert(LL) Vert(CT) Horz(CT)	in -0.00 -0.00 -0.00	(loc) 8 11 6	l/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	, ,					Weight: 113 lb	FT = 3%

5-10-0

LUMBER-BRACING-

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

REACTIONS. All bearings 11-9-0 except (jt=length) 7=0-3-8.

Max Horz 13=195(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 10, 13, 6

Max Grav All reactions 250 lb or less at joint(s) 13, 6, 8, 9, 11, 12, 7 except 10=438(LC 2)

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

WEBS 3-10=-324/142

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 7) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 13, 6.
- 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 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987057 T5 H3-94 Roof Special 2 Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:33 2021 Page 1

7-6-0 2-7-4

Mid America Truss, Jefferson City, MO - 65101,

1-1-12

1-1-12

-0-10-8 + 0-10-8 +

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-TThe?h1i0X9N8qQ1NYuuX9k5PrP3JKBDmGXjZpzhDq4 13-10-4 15-0-0 15-10-8 1-1-12 1-1-12 0-10-8 10-1-4 12-8-8 2-7-4 2-7-4

Scale = 1:29.3

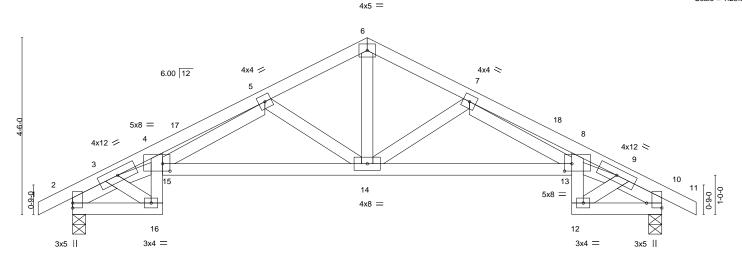


Plate Offsets (X,Y)--[4:0-2-4,0-2-4], [10:Edge,0-4-10], [13:0-2-4,0-2-4]

BRACING-

TOP CHORD

BOT CHORD

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 Code IRC2018/TPI2014	CSI. TC 0.37 BC 0.42 WB 0.34 Matrix-P
BCDL 10.0	Code IRC2016/1712014	IVIALITX-P

4-10-12

2-7-4

(loc) I/defl L/d Vert(LL) -0.07 14 >999 360 Vert(CT) -0.15 14-15 >999 240 Horz(CT) 0.14 10 n/a n/a

PLATES GRIP MT20 244/190 Weight: 86 lb

Structural wood sheathing directly applied or 3-7-13 oc purlins.

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

FT = 3%

LUMBER-

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

WEBS 2x4 SP No.2 **SLIDER** Left 2x4 SP No.2 -t 1-2-2, Right 2x4 SP No.2 -t 1-2-2

REACTIONS. (size) 2=0-4-0, 10=0-4-0

Max Horz 2=48(LC 8)

Max Uplift 2=-17(LC 11), 10=-17(LC 12) Max Grav 2=653(LC 2), 10=652(LC 2)

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

2-3=-790/20, 3-4=-1773/60, 4-5=-2064/106, 5-6=-852/9, 6-7=-852/15, 7-8=-2064/28, TOP CHORD

8-9=-1773/0 9-10=-790/20

BOT CHORD 2-16=-41/538, 15-16=-10/269, 14-15=-17/1066, 13-14=0/1066, 12-13=0/269, 10-12=0/538

WEBS 6-14=0/618, 7-14=-482/77, 7-13=-10/948, 9-12=-447/0, 5-14=-482/90, 5-15=-67/948,

3-16=-447/42, 3-15=-54/1366, 9-13=0/1366

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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 greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
- 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 1,2021



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ANSI/TP11 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 SUMMIT HOMES 144987058 H3-94 T5A Roof Special Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:35 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-QspPQM2yY9P5N7aPUzwMcapQzf4ZnEnWDa0qdhzhDq2 0-10-5 7-2-8 2-7-4 9-9-12 13-6-12 14-8-8 3-9-0 2-7-4 3-9-0 1-1-12 Scale = 1:28.7 4x5 = 5 6.00 12 4x4 / 4x4 > 17 5x8 = 16 4x10 🖊 4x10 > 2x4 -11 0-10-12 12 5x12 = 4x8 = 14 10 15 3x4 = 3x4 =3x5 || 4x4 = 2-0-0 12-5-0 14-8-8 2-0-0 Plate Offsets (X,Y)--[3:0-2-4,0-2-4], [9:Edge,0-4-10] 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 0.37 Vert(LL) -0.06 >999 360 244/190 11 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.42 Vert(CT) -0.13 11-12 >999 240 TCDL 10.0 Rep Stress Incr YES WB 0.33 Horz(CT) 0.12 9 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-P Weight: 82 lb BCDL 10.0 BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.2 **SLIDER** Right 2x4 SP No.2 -t 1-2-2

REACTIONS.

(size) 9=0-4-0, 15=Mechanical

Max Horz 15=-62(LC 7)

Max Uplift 9=-8(LC 12), 15=-6(LC 11) Max Grav 9=582(LC 2), 15=582(LC 2)

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

TOP CHORD 2-3=-1489/52, 3-4=-1701/95, 4-5=-813/8, 5-6=-814/13, 6-7=-2035/36, 7-8=-1748/4, 8-9=-781/24

14-15=-29/338, 12-13=-15/978, 11-12=0/1033, 10-11=0/277, 9-10=-3/548

BOT CHORD WEBS 2-14=-288/32, 4-13=-59/659, 4-12=-417/88, 6-12=-484/78, 6-11=-16/956, 8-10=-462/6,

5-12=0/581, 2-15=-644/13, 8-11=0/1345, 2-13=-49/1167

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; enveloped; enveloped; cantilever left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33 are proposed; Lumber DOL=1.15 Plate DOL=1.15 Plate DOL=1.15; Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL=1.15 Plate DOL=1.15 Plate DOL=1.15 Plate DOL=1.15 Plate DOL=1.15 Plat
- DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 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) 9, 15.
- 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 3-8-3 oc purlins,

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

except end verticals.

March 1,2021





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Job Truss Truss Type Qty Ply SUMMIT HOMES 144987059 H3-94 T5G Roof Special Girder | **2** | Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:36 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-u2Nnei3aJSXy?H9c2gRb8oMT_2M1WZtfSEmN97zhDq1 Scale = 1:29.6 5x5 || 3 6.00 12 5x5 / 5x5 > 2 10 0-10-12 12 13 15 16 14 6 6x8 = THD26 THD26 THD26 THD26 3x12 || 3x8 II 10x10 = 5x8 = THD26 THD26 THD26 10-11-8 14-8-8 3-7-4 Plate Offsets (X,Y)--[5:0-3-14,0-2-8], [6:0-6-4,0-1-8], [7:0-5-0,0-6-4] LOADING (psf) DEFL. SPACING-CSI. (loc) I/defl L/d **PLATES** GRIP 20.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.86 Vert(LL) -0.07 6-7 >999 360 MT20 244/190 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.66 Vert(CT) -0.136-7 >999 240 TCDL 10.0 Rep Stress Incr NO WB 0.85 Horz(CT) 0.04 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-P Weight: 212 lb BCDL 10.0 BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x6 SP No.1 TOP CHORD 2x8 SP 2400F 2.0E **BOT CHORD** 2x4 SP No.2 **WEBS**

REACTIONS.

(size) 1=Mechanical, 5=0-4-0 (req. 0-4-2)

Max Horz 1=45(LC 35)

Max Grav 1=7624(LC 15), 5=6956(LC 16)

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

1-2=-11057/0, 2-3=-8201/0, 3-4=-8206/0, 4-5=-11405/0 TOP CHORD **BOT CHORD** 1-8=0/9392, 7-8=0/9392, 6-7=0/9807, 5-6=0/9807

WEBS 2-8=0/3167, 2-7=-2405/0, 3-7=0/6940, 4-7=-2832/0, 4-6=0/3291

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: 2x8 - 2 rows staggered at 0-4-0 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 5) 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 6) Unbalanced snow loads have been considered for this design.
- 7) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) WARNING: Required bearing size at joint(s) 5 greater than input bearing size.
- 9) Refer to girder(s) for truss to truss connections.
- 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) Use USP THD26 (With 18-16d nails into Girder & 12-10d x 1-1/2 nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 0-8-8 from the left end to 12-8-8 to connect truss(es) to back face of bottom chord.
- 12) 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, 3-5=-51, 1-5=-20



Structural wood sheathing directly applied or 4-8-13 oc purlins.

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

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR

ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER

OR THE BUILDING DESIGNER.

OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.)

March 1,2021



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

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



SUMMIT HOMES Job Truss Truss Type Qty Ply 144987059 H3-94 T5G Roof Special Girder **2** Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:36 2021 Page 2

Mid America Truss,

Jefferson City, MO - 65101,

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-u2Nnei3aJSXy?H9c2gRb8oMT_2M1WZtfSEmN97zhDq1

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 6=-1985(B) 11=-1543(B) 12=-1985(B) 13=-1985(B) 14=-1985(B) 15=-1985(B) 16=-1985(B)

Job Truss Truss Type Qty SUMMIT HOMES 144987060 H3-94 T6 Common Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:37 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-MFx9r24C4mfpcRkocOzqh?ufYSm0FDaohuVwiazhDq0 -0-10-8 0-10-8 7-0-0 7-0-0 14-10-8 7-0-0 0-10-8 Scale = 1:27.7 4x5 = 6.00 12 4x4 🖊 5 4x4 ≈ 3 4x4 / 4x4 > 8 2x4 || 3x5 || 3x5 || 7-0-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL (roof) 20.0 Plate Grip DOL TC Vert(LL) 0.02 >999 360 244/190 1.15 0.81 8 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.42 Vert(CT) -0.07 6-8 >999 240 TCDI 10.0

LUMBER-

BCLL

BCDL

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

0.0

10.0

2x4 SP No.2 WEBS

SLIDER Left 2x4 SP No.2 -t 3-10-11, Right 2x4 SP No.2 -t 3-10-11

REACTIONS. (size) 2=0-4-0, 6=0-4-0

Max Horz 2=45(LC 8)

Max Uplift 2=-16(LC 11), 6=-16(LC 12) Max Grav 2=612(LC 2), 6=612(LC 2)

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

Rep Stress Incr

Code IRC2018/TPI2014

TOP CHORD 2-4=-693/4, 4-6=-692/0 **BOT CHORD** 2-8=0/524, 6-8=0/524

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

YES

WB

Matrix-P

0.05

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.01

6

n/a

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

n/a

Structural wood sheathing directly applied or 3-6-8 oc purlins.

- 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 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
- 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: 64 lb

FT = 3%

March 1,2021

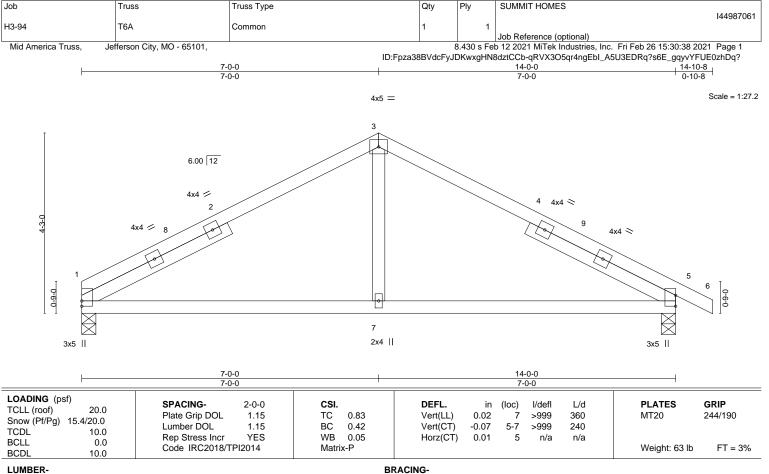


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TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

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

BOT CHORD 2x4 SP No.2 WEBS

SLIDER Left 2x4 SP No.2 -t 3-10-11, Right 2x4 SP No.2 -t 3-10-11

REACTIONS. (size) 1=0-4-0, 5=0-4-0 Max Horz 1=45(LC 8)

Max Uplift 1=-7(LC 11), 5=-16(LC 12)

Max Grav 1=558(LC 2), 5=614(LC 2)

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

TOP CHORD 1-3=-694/4, 3-5=-696/0 **BOT CHORD** 1-7=0/527, 5-7=0/527

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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 greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

March 1,2021



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Job Truss Truss Type Qty SUMMIT HOMES 144987062 H3-94 T7 Piggyback Base Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:40 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-mpcIT465Nh1OTvSNHWWXJeW8zgjsSQLFNskbHvzhDpz 36-7-0 19-2-0 26-6-0 32-10-0 3-8-0 6-10-0 4-4-0 7-4-0 6-4-0 3-9-0 Scale = 1:69.3 5x5 = FLAT TOP CHORD MUST BE BRACED WITH SHEATHING. 4x5 = 3 6.00 12 4x5 / 21 4x5 ≈ 2 6 18 4x4 / 10-0-0 11-0-0 22 4x5 < 4x4 < 8 **⊠** 17 12 6x12 15 16 14 13 3x6 =4x5 = 5x10 = 5x10 = 11 10 9 3x4 =3x4 =5x10 = 10-6-0 19-2-0 32-10-0 36-7-0 3-8-0 6-10-0 7-4-0 Plate Offsets (X,Y)--[3:0-2-8,0-2-4], [5:0-3-0,0-2-0], [9:Edge,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.93 Vert(LL) -0.09 12-13 >999 360 244/190 MT20 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.73 Vert(CT) -0.23 12-13 >999 240 TCDL 10.0 Rep Stress Incr YES WB 0.69 Horz(CT) 0.08 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-SH Weight: 265 lb FT = 3%BCDL 10.0 LUMBER-BRACING-2x4 SP No.2 *Except* TOP CHORD TOP CHORD Structural wood sheathing directly applied, except end verticals. 5-8: 2x4 SP No.1 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except: **BOT CHORD** 2x4 SP No.2 6-0-0 oc bracing: 16-17. 1 Row at midpt WEBS 2x4 SP No.2 **WEBS** 4-14, 4-13, 6-13 REACTIONS. (size) 17=0-4-0, 9=Mechanical Max Horz 17=-223(LC 7) Max Uplift 9=-14(LC 12) Max Grav 17=1634(LC 33), 9=1559(LC 33) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. $1-2=-987/21,\ 2-3=-1465/49,\ 3-4=-1182/57,\ 4-5=-1452/89,\ 5-6=-1783/66,\ 6-7=-2315/56,$ TOP CHORD 7-8=-1572/24. 1-17=-1610/0. 8-9=-1531/25 **BOT CHORD** 14-16=-36/871, 13-14=0/1327, 12-13=0/2026

WEBS 2-16=-1005/59, 2-14=-17/509, 3-14=0/297, 4-14=-518/78, 4-13=-34/318, 5-13=0/348,

6-13=-735/131, 10-12=0/1304, 7-12=0/684, 7-10=-886/71, 1-16=0/1413, 8-10=0/1573

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
- 9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021





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Job Truss Truss Type Qty SUMMIT HOMES 144987063 H3-94 T8 Piggyback Base 2 Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:42 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-iCk2um8LvIH5jCclPxY?O3cTiTNbwGDXqADhMnzhDpx 36-4-0 39-8-0 40-6-8 3-4-0 0-10-8 14-10-0 19-2-0 26-0-0 32-10-0 3-8-0 6-10-0 4-4-0 4-4-0 6-10-0 6-10-0 3-6-0 Scale = 1:72.3 FLAT TOP CHORD MUST BE BRACED WITH SHEATHING. 6x6 = 6x6 = 4x5 =3 6.00 12 23 4x5 / 4x5 > 6 2 5x5 / 3x8 > 4x5 < 8 4x5 < 1-9-0 9 11 17 18 16 15 19 14 13 4x4 = 3x8 = 6x10 = 4x5 = 6x10 = 4x5 = $4x5 = _{5x10 \text{ MT20HS}} =$ 7x12 MT20HS ≈ 4.00 12 39-8-0 32-10-0 10-6-0 36-4-0 3-8-0 6-10-0 6-10-0 Plate Offsets (X,Y)-[3:0-3-0,0-2-0], [5:0-3-0,0-2-0], [12:0-3-0,0-5-4] LOADING (psf) SPACING-**PLATES** CSI. **DEFL** (loc) I/defl L/d GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.97 Vert(LL) -0.22 14-15 >999 360 MT20 244/190 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.78 Vert(CT) -0.46 14-15 >999 240 MT20HS 187/143 TCDL 10.0 Rep Stress Incr YES WB 0.92 Horz(CT) 0.21 12 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-SH Weight: 269 lb BCDL 10.0 LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied, except end verticals. **BOT CHORD** BOT CHORD 2x4 SP No.2 *Except* Rigid ceiling directly applied or 10-0-0 oc bracing. 13-17: 2x4 SP No.1 WEBS 1 Row at midpt 4-18, 6-16 WEBS 2x4 SP No.2 REACTIONS. (size) 20=0-4-0, 12=0-4-0 Max Horz 20=-235(LC 7) Max Uplift 12=-37(LC 12) Max Grav 20=1762(LC 34), 12=1693(LC 34) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD

 $1-2=-1067/22,\ 2-3=-1619/51,\ 3-4=-1322/58,\ 4-5=-1697/92,\ 5-6=-2041/73,\ 6-8=-2898/60,$

8-9=-3751/55, 9-10=-4750/52, 1-20=-1737/0, 10-12=-1754/61

BOT CHORD 18-19=0/942, 16-18=0/1521, 15-16=0/2511, 14-15=0/3360, 13-14=-9/4090,

12-13=-22/468 WEBS

2-19=-1099/53, 2-18=-12/587, 3-18=0/361, 4-18=-644/74, 4-16=-35/444, 5-16=0/490,

6-16=-1105/126, 6-15=0/491, 8-15=-920/85, 8-14=0/403, 9-14=-803/43, 9-13=0/695,

1-19=0/1528, 10-13=0/3766

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; Cat. II; Exp C; Enclosed: MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 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) All plates are MT20 plates unless otherwise indicated.
- 8) Plates checked for a plus or minus 3 degree rotation about its center.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 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 1,2021



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16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty SUMMIT HOMES 144987064 H3-94 Т9 Piggyback Base Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:44 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-fbsoJR9bRwXpyWm8WMbTTUhrgH2TOCYqlUioRgzhDpv 32-0-0 32-10₇8 3-4-0 0-10-8 2-10-0 2-10-0 28-8-0 25-2-0 4-0-8 6-10-0 6-10-0 3-6-0 6.00 12 Scale = 1:69.1 6x8 = 3x4 II 6x8 = 2 322 21 4x5 / 4x5 > 3x6 < 11-0-0 6 4x5 > 4x5 > 8 10] [6] [5] 15 14 13 12 5x12 = 16 ∑ 20 4x5 = 4x5 = 7x10 = 18 19 3x6 3x4 =7x10 > 5x10 = 3x4 =4x5 = 4.00 12 11-6-0 24-0-0 28-8-0 32-0-0 2-10-0 4-7-8 4-0-8 Plate Offsets (X,Y)--[2:0-6-0,0-2-8], [4:0-6-0,0-2-8], [11:0-2-12,0-2-4], [18:Edge,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 0.88 BC 0.88 WB 0.81	DEFL. in (loc) l/defl L/d Vert(LL) -0.17 13-14 >999 360 Vert(CT) -0.35 13-14 >999 240 Horz(CT) 0.18 11 n/a n/a	PLATES GRIP MT20 244/190
BCLL 0.0 BCDI 10.0	Code IRC2018/TPI2014	Matrix-SH	11012(01) 0.10 11 11/4 11/4	Weight: 259 lb FT = 3%

LUMBER-

WEBS

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

2x4 SP No.2

BRACING-

TOP CHORD

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

3-17

2-19, 4-17, 5-15, 1-20

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

BOT CHORD 1 Row at midpt **WEBS** 1 Row at midpt

REACTIONS. (size) 20=0-4-0, 11=0-4-0

Max Horz 20=-330(LC 7)

Max Uplift 20=-19(LC 7), 11=-37(LC 12) Max Grav 20=1267(LC 2), 11=1367(LC 34)

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

 $1\hbox{-}2\hbox{--}386/97, 2\hbox{-}3\hbox{--}733/77, 3\hbox{-}4\hbox{--}734/76, 4\hbox{-}5\hbox{--}1270/77, 5\hbox{-}7\hbox{--}2115/60, 7\hbox{-}8\hbox{--}2900/57,}$ TOP CHORD

8-9=-3741/53, 1-20=-1242/31, 9-11=-1413/62

BOT CHORD 19-20=-78/272, 3-17=-430/86, 15-17=0/1012, 14-15=0/1811, 13-14=0/2595,

12-13=-11/3211, 11-12=-22/386

WEBS 2-19=-999/72, 17-19=0/348, 2-17=-1/1044, 4-17=-755/51, 4-15=-7/851, 5-15=-1091/121,

5-14=0/476, 7-14=-850/87, 7-13=0/356, 8-13=-689/43, 8-12=0/562, 1-19=-55/1059,

9-12=0/2943

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 11.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987065 H3-94 T10 Piggyback Base 2 Job Reference (optional) Mid America Truss, Jefferson City, MO - 65101, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:03 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-LitliQgt4JNeXD7GcFLrJqUq0l27HfcoscG7VYzhDqY 28-8-0 33-10-8 1-10-8 2-10-0 2-10-0 11-6-0 32-0-0 4-0-8 6-10-0 6-10-0 3-6-0 3-4-0 6.00 12 Scale = 1:71.4 6x8 = 3x4 II 6x8 = 2 322 21 4x5 / 4x5 🗢 5 3x6 > 6 4x5 < 4x5 < 8 15 13 12 5x12 = 16 **⊠** 20 7x10 = 4x5 = 4x5 = 19 18 11 3x6 = 3x4 = 7x10 > 5x10 = 3x4 =4x5 = 4.00 12

> 11-6-0 32-0-0 2-10-0 2-10-0 4-7-8 4-0-8 6-10-0

Plate Offsets (X,Y)-- [2:0-6-0,0-2-8], [4:0-6-0,0-2-8], [11:0-2-12,0-2-4], [18:Edge,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	CSI. TC 0.88 BC 0.86	DEFL. in (loc) l/defl L/d Vert(LL) -0.17 13-14 >999 360 Vert(CT) -0.35 13-14 >999 240	PLATES GRIP MT20 244/190
BCLL 0.0 BCDL 10.0	Rep Stress Incr YES Code IRC2018/TPI2014	WB 0.79 Matrix-SH	Horz(CT) 0.18 11 n/a n/a	Weight: 261 lb FT = 3%

LUMBER-BRACING-

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

except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

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

6-0-0 oc bracing: 11-12.

1 Row at midpt

WEBS 1 Row at midpt 2-19, 4-17, 5-15, 1-20 (size) 20=0-4-0, 11=0-4-0

REACTIONS. Max Horz 20=-337(LC 7)

2x4 SP No.2

Max Uplift 20=-18(LC 7), 11=-48(LC 12) Max Grav 20=1264(LC 2), 11=1420(LC 34)

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

TOP CHORD 1-2=-385/97, 2-3=-731/75, 3-4=-732/75, 4-5=-1267/75, 5-7=-2107/56, 7-8=-2876/46, 8-9=-3672/26, 1-20=-1239/31, 9-11=-1435/62

19-20=-77/279, 3-17=-430/86, 15-17=0/1009, 14-15=0/1804, 13-14=0/2574,

12-13=0/3149, 11-12=-36/283 WFBS 2-19=-996/70, 17-19=0/353, 2-17=0/1040, 4-17=-752/50, 4-15=-6/847, 5-15=-1086/119,

5-14=0/470, 7-14=-835/81, 7-13=0/339, 8-13=-638/27, 8-12=0/535, 1-19=-55/1057,

9-12=0/2976

NOTES-

BOT CHORD

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 11.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



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Job Truss Truss Type Qty SUMMIT HOMES 144987066 H3-94 T10A Piggyback Base Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:05 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-I5?376h8cxdLnWHekfOJOFa9IZkBlZn5KvIEZQzhDqW 2-10-0 2-10-0 28-8-0 32-0-0 4-4-0 4-4-0 6-10-0 6-10-0 3-6-0 3-4-0 6.00 12 Scale = 1:65.1 5x5 = 5x5 =4x5 = 24 3 25 4x4 / 4x5 🗢 5 8-0-0 3x6 ≥ 11-0-0 6 4x5 < 4x5 > 18 3x4 = 5x12 =]6 15 13 12 3x4 3x6 =5x10 = 4x5 = 4x5 = 7x10 = 2x4 || 2x4 || 2x4 || 7x10 < 2x4 || 4.00 12 11-6-0 18-4-0 28-8-0 32-0-0 4-7-8 4-0-8 6-10-0 Plate Offsets (X,Y)--[2:0-2-8,0-2-4], [4:0-2-8,0-2-4], [10:Edge,0-2-4], [15:0-4-8,0-2-8] LOADING (psf) SPACING-2-0-0 **DEFL** (loc) I/defl L/d **PLATES** GRIP 20.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.96 Vert(LL) -0.16 12-13 >999 360 MT20 244/190 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.89 Vert(CT) -0.34 12-13 >999 240 **TCDL** 10.0 Rep Stress Incr YES WB 0.81 Horz(CT) 0.13 10 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-SH Weight: 245 lb BCDL 10.0 LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, **BOT CHORD** 2x4 SP No.2 except end verticals. WEBS 2x4 SP No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 2-17 **WEBS** 1 Row at midpt 3-17, 5-15

REACTIONS. (size) 18=0-4-0, 10=0-4-0

Max Horz 18=-285(LC 7) Max Uplift 10=-39(LC 12)

Max Grav 18=1268(LC 2), 10=1314(LC 33)

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

 $1-2=-509/64,\ 2-3=-425/61,\ 3-4=-989/120,\ 4-5=-1251/105,\ 5-7=-2116/95,\ 7-8=-2910/96,$ TOP CHORD

8-9=-3764/108, 1-18=-1226/11, 9-10=-1339/64

BOT CHORD 13-15=0/1812, 12-13=-17/2603, 11-12=-71/3242, 10-11=-24/320

WEBS 15-17=0/774, 3-17=-778/98, 3-15=-55/599, 5-15=-1096/128, 5-13=0/470, 7-13=-857/91,

7-12=0/369, 8-12=-717/57, 8-11=0/553, 1-17=-27/1030, 9-11=-52/3037

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33 and 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) and DOL=1.15 Plate DOL
- DOL=1.15); Is=1.0; Rough Cat C; 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
- 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/TPL1



March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987067 H3-94 T10B PIGGYBACK BASE 5 Job Reference (optional) Mid America Truss, Jefferson City, MO - 65101, 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:07 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-ET7pYojO8Yt30qR1r4QoTgfW_MQfDTJOnDELeJzhDqU 2-10-0 2-10-0 32-0-0 11-6-0 28-8-0 4-0-8 6-10-0 6-10-0 3-6-0 3-4-0 6.00 12 Scale = 1:68.4 6x8 = 3x4 || 6x8 = 2 321 20 4x5 / 4x5 < 3x6 > 1-0-0 6 4x5 < 4x5 < 8 10-9-0 10-0-0-1 15 14 13 12 11 5x12 = ₩ 19 4x5 = 4x5 = 7x10 = 10 18 17 3x6 = 3x4 =7x10 < 5x10 = 3x4 =4x5 = 4.00 12 11-6-0 28-8-0 32-0-0 2-10-0 4-7-8 4-0-8 6-10-0 Plate Offsets (X,Y)--[2:0-6-0,0-2-8], [4:0-6-0,0-2-8], [10:Edge,0-2-4], [17:Edge,0-1-8] LOADING (psf) SPACING-2-0-0 DEFL. (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.88 Vert(LL) -0.17 12-13 >999 360 MT20 244/190 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.89 Vert(CT) -0.36 12-13 >999 240 **TCDL** 10.0 Rep Stress Incr YES WB 0.81 Horz(CT) 0.18 10 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-SH Weight: 258 lb BCDL 10.0 LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, **BOT CHORD** 2x4 SP No.2 except end verticals. WEBS 2x4 SP No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 3-16

WEBS

1 Row at midpt 2-18, 4-16, 5-14, 1-19

REACTIONS. (size) 19=0-4-0, 10=0-4-0

Max Horz 19=-322(LC 7)

Max Uplift 19=-19(LC 7), 10=-26(LC 12) Max Grav 19=1268(LC 2), 10=1314(LC 33)

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

1-2=-386/97, 2-3=-734/78, 3-4=-735/78, 4-5=-1271/78, 5-7=-2117/63, 7-8=-2909/62, TOP CHORD

8-9=-3765/66, 1-19=-1243/31, 9-10=-1339/50

BOT CHORD 18-19=-80/264, 3-16=-430/86, 14-16=0/1013, 13-14=0/1813, 12-13=0/2602,

11-12=-35/3242, 10-11=-21/320

WEBS 2-18=-1000/73, 16-18=-2/343, 2-16=-3/1045, 4-16=-756/51, 4-14=-8/852,

5-14=-1094/122, 5-13=0/477, 7-13=-855/90, 7-12=0/367, 8-12=-718/51, 8-11=0/555,

1-18=-55/1060, 9-11=-18/3037

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 10.
- 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 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987068 H3-94 T11 Piggyback Base Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:10 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-e2oyAplGRTFetHAcXD_V5JH2uaQ5Qr9qTBT?FezhDqR 32-0-0 2-10-0 2-10-0 18-1-0 25-2-0 28-8-0 2-3-8 3-3-8 3-3-8 7-1-0 3-6-0 3-4-0 6.00 12 Scale = 1:69.9 6x8 = 4x4 = 5x5 = 3 25 4x5 / 5x10 < 3x4 II 6 3x6 <> X 4x5 > 0 - 2 - 68 4x5 < 19 6x12 = 13 12 5x12 = Ď Š 7x10 = 4x5 = 23 22 21 16 15 18 3x4 7x10 > 5x10 = 5x10 = 3x4 = 3x4 = 3x4 =4.00 | 12 28-8-0 32-0-0 2-10-0 11-2-8 18-1-0 2-10-0 6-4-8 2-0-0 3-7-0 3-3-8 Plate Offsets (X,Y)--[2:0-6-0,0-2-8], [4:0-2-8,0-2-4], [11:Edge,0-2-4], [15:Edge,0-1-8], [17:0-0-0,0-1-8], [21:Edge,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.78 Vert(LL) -0.19 13-14 >999 360 244/190 MT20 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.90 Vert(CT) -0.42 13-14 >900 240 **TCDL** 10.0 Rep Stress Incr YES WB 0.74 Horz(CT) 0.24 11 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Weight: 294 lb FT = 3%Matrix-SH BCDL 10.0 LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 2-5-1 oc purlins, **BOT CHORD** 2x4 SP No.2 except end verticals. WEBS 2x4 SP No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 1 Row at midpt 3-20 10-0-0 oc bracing: 17-19 **WEBS** 1 Row at midpt 2-22, 5-16, 8-14, 1-23 REACTIONS. (size) 23=0-4-0, 11=0-4-0 Max Horz 23=-322(LC 7) Max Uplift 23=-13(LC 7), 11=-23(LC 12) Max Grav 23=1278(LC 2), 11=1319(LC 33) FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-391/93, 2-3=-1097/28, 3-4=-1253/41, 4-5=-1460/31, 5-6=-2021/134, 6-8=-2072/57, 8-9=-2950/53, 9-10=-3761/55, 1-23=-1263/18, 10-11=-1346/49 **BOT CHORD** 22-23=-80/264, 3-20=-711/101, 19-20=0/1096, 4-19=0/495, 6-14=-492/140, 13-14=0/2650, 12-13=-24/3238, 11-12=-22/329 2-22=-1087/16, 20-22=0/402, 2-20=0/1255, 3-19=-50/585, 16-19=0/1596, 5-19=-27/300, WFBS 5-16=-1335/0, 14-16=0/1210, 5-14=-73/1398, 8-14=-961/96, 8-13=0/377, 9-13=-677/45, 9-12=0/545, 1-22=-48/1093, 10-12=-6/3022 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33 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 OF MISS DOL=1.15); Is=1.0; Rough Cat C; 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 11.
- 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 1,2021





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

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

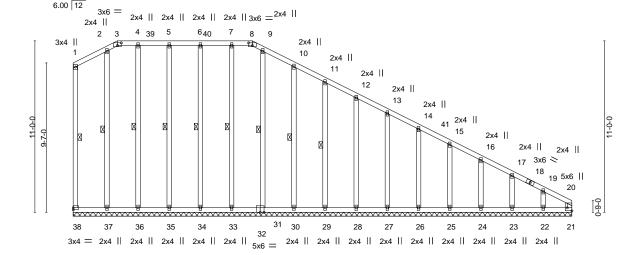


Job Truss Truss Type Qty SUMMIT HOMES 144987069 H3-94 T11GE **GABLE**

Mid America Truss, Jefferson City, MO - 65101, Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:12 2021 Page 1

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-bRwibVnXz4VM6bJ_ee0zAkMTfNHoute7xVy6JWzhDqF 32-0-0 2-10-0 8-8-0 20-6-0

Scale = 1:73.9



32-0-0

Snow (Pt/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.25 Vert(CT) n/a - n/a 999	late Offsets (X,Y) [3:0-3-	[3:0-3-0,0-2-0], [8:0-3-0,0-2-0], [20:Edge,0-3-8]							
Rep Stress Incr YES	CLL (roof) 20.0 now (Pf/Pg) 20.4/20.0 CDL 10.0 CLL 0.0	20.0 Plate Grip DOL 1.15 20.0 Lumber DOL 1.15 10.0 Rep Stress Incr YES Code IRC2018/TPl2014	TC 0.50 BC 0.25 WB 0.17	Vert(LL) r Vert(CT) r	n/a - n/a -	n/a n/a	999 999	MT20	GRIP 244/190

LUMBER-BRACING-

TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, **BOT CHORD** 2x4 SP No.2 except end verticals.

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

OTHERS 2x4 SP No.2 WEBS 1-38, 2-37, 4-36, 5-35, 6-34, 7-33, 9-31, 1 Row at midpt 10-30, 11-29

REACTIONS. All bearings 32-0-0.

Max Horz 38=-321(LC 9) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 38, 21, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23

except 22=-121(LC 7)

Max Grav All reactions 250 lb or less at joint(s) 38, 21, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22

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

TOP CHORD 17-19=-254/79, 19-20=-300/89 **BOT CHORD**

37-38=-80/263, 36-37=-80/263, 35-36=-80/263, 34-35=-80/263, 33-34=-80/263,

31-33=-80/263, 30-31=-80/263, 29-30=-80/263, 28-29=-80/263, 27-28=-80/263,

26-27=-80/263, 25-26=-80/263, 24-25=-80/263, 23-24=-80/263, 22-23=-80/263,

21-22=-80/263

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; 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) Plates checked for a plus or minus 3 degree rotation about its center.
- 8) Gable requires continuous bottom chord bearing.
- 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 10) Gable studs spaced at 2-0-0 oc.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 38, 21, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23 except (jt=lb) 22=121.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



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

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

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 SUMMIT HOMES 144987070 H3-94 V1 **GABLE** Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:45 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-7nQBXnADBDfgagLK436i0hE2ZhYJ7ri_W8SLz6zhDpu 11-10-11 5-11-6 5-11-6 Scale = 1:20.4 4x5 = 2 6.00 12 3x5 > 3x5 / 2x4 || 11-10-11 11-10-11 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.74 Vert(LL) 999 244/190 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.20 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: 39 lb FT = 3% **BCDL** 10.0 **BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.2

REACTIONS. 1=11-10-11, 3=11-10-11, 4=11-10-11 (size) Max Horz 1=30(LC 8)

Max Uplift 1=-22(LC 11), 3=-27(LC 12)

Max Grav 1=247(LC 15), 3=247(LC 16), 4=422(LC 2)

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

2-4=-289/47 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Gable requires continuous bottom chord bearing.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.



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

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



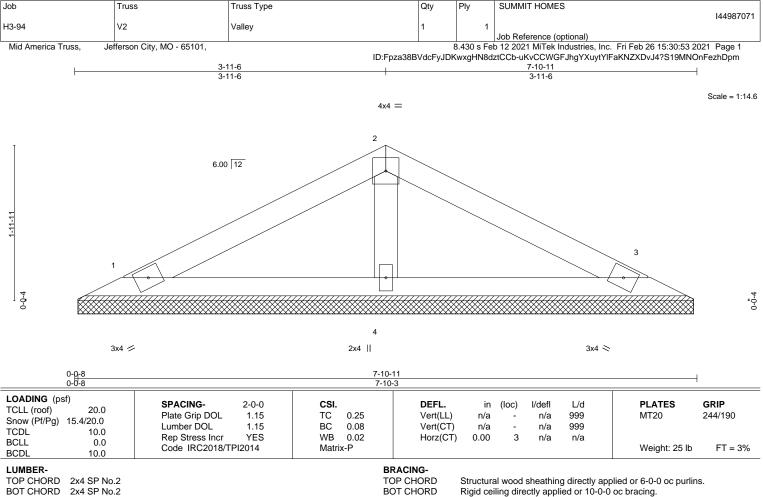


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AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





BOT CHORD 2x4 SP No.2

OTHERS 2x4 SP No.2

REACTIONS. 1=7-9-11, 3=7-9-11, 4=7-9-11 (size)

Max Horz 1=19(LC 8)

Max Uplift 1=-14(LC 11), 3=-17(LC 12)

Max Grav 1=156(LC 15), 3=156(LC 16), 4=263(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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Gable requires continuous bottom chord bearing.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021





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

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or 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 Truss Type Qty SUMMIT HOMES 144987072 H3-94 V3 Valley Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:53 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-uKvCCWGFJhgYXuytYlFaKNZagvKK?SN9MNOnFezhDpm 1-11-6 Scale = 1:7.5 3x4 = 6.00 12 3 0-0-4 3x4 / 3x4 > 3-10-11 Plate Offsets (X,Y)--[2:0-2-0,Edge] LOADING (psf) SPACING-2-0-0 CSI. in (loc) I/defI L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.03 Vert(LL) 999 MT20 244/190 n/a n/a Snow (Pf/Pg) 15.4/20.0

LUMBER-

TCDL

BCLL

BCDL

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

10.0

10.0

0.0

BRACING-

TOP CHORD **BOT CHORD**

Vert(CT)

Horz(CT)

n/a

0.00

Structural wood sheathing directly applied or 3-10-11 oc purlins.

999

n/a

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

n/a

n/a

3

REACTIONS.

(size) 1=3-9-11, 3=3-9-11 Max Horz 1=-8(LC 7) Max Uplift 1=-1(LC 11), 3=-1(LC 12) Max Grav 1=105(LC 2), 3=105(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

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

1.15

YES

BC

WB

Matrix-P

0.06

0.00

- 4) Unbalanced snow loads have been considered for this design.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Gable requires continuous bottom chord bearing.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

FT = 3%

Weight: 10 lb





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

ANSI/TP11 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 SUMMIT HOMES 144987073 H3-94 V4 **GABLE** Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:54 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-MWTaQsHt4_oP92X36Smpta6hnJe0kvfJb17Kn5zhDpl 8-6-6 2-7-0 Scale = 1:31.0 4x5 = 3 2x4 || 7.00 12 2x4 II 2 3x5 / 7 5 2x4 || 2x4 || 2x4 || 11-1-6 11-1-6 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc)

LUMBER-

TCLL (roof)

TCDI

BCLL

BCDL

TOP CHORD 2x4 SP No.2

20.0

10.0

0.0

10.0

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

Snow (Pf/Pg) 15.4/20.0

TOP CHORD **BOT CHORD**

1.15

1.15

YES

TC

ВС

WB

Matrix-P

0.26

0.10

0.06

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

n/a

n/a

-0.00

999

999

n/a

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

n/a

n/a

n/a

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

5

except end verticals.

OTHERS 2x4 SP No.2

REACTIONS. All bearings 11-1-6. Max Horz 1=134(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 5, 7

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 7=406(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-7=-313/130

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Gable requires continuous bottom chord bearing.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

244/190

FT = 3%

MT20

Weight: 49 lb







Job Truss Truss Type Qty SUMMIT HOMES 144987074 H3-94 V5 **GABLE** Job Reference (optional)
8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:55 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-qi0ydCIVrlwFnC6FfAH2Qoetti_ITMESqhttJXzhDpk 6-9-13 2-7-0 Scale = 1:25.8 4x4 = 3 7.00 12 2x4 || 2x4 || 2 2-5-10 4-0-0 3x4 / 2x4 || 2x4 || LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC Vert(LL) 999 244/190 0.24 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.06 Vert(CT) 999 n/a n/a TCDI 10.0 Rep Stress Incr YES WB 0.04 Horz(CT) -0.00 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 39 lb FT = 3% **BCDL** 10.0

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2

BOT CHORD 2x4 SP No.2 WEBS **OTHERS** 2x4 SP No.2

TOP CHORD

BOT CHORD

BRACING-

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

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

REACTIONS. All bearings 9-4-13.

Max Horz 1=102(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 7

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6 except 7=335(LC 22)

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

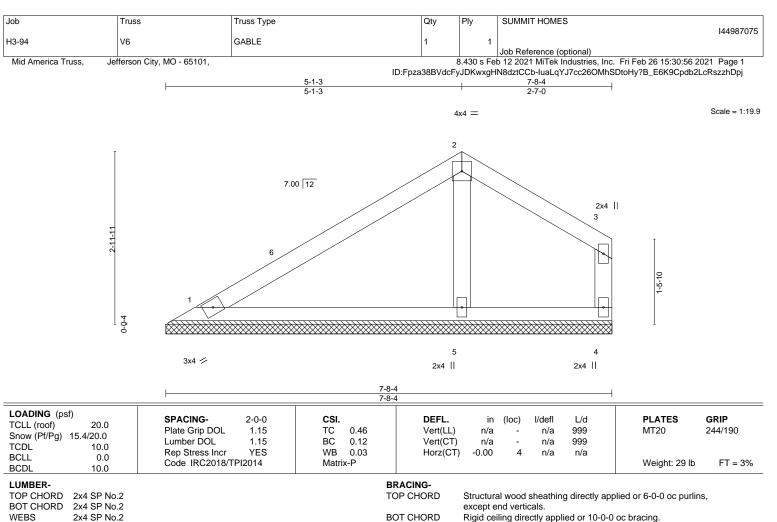
2-7=-262/109 WEBS

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Gable requires continuous bottom chord bearing.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 7.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021





2x4 SP No.2 WEBS **OTHERS** 2x4 SP No.2

> (size) 1=7-8-4, 4=7-8-4, 5=7-8-4 Max Horz 1=70(LC 8)

Max Uplift 1=-14(LC 11), 4=-24(LC 12)

Max Grav 1=174(LC 15), 4=107(LC 16), 5=305(LC 2)

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

NOTES-

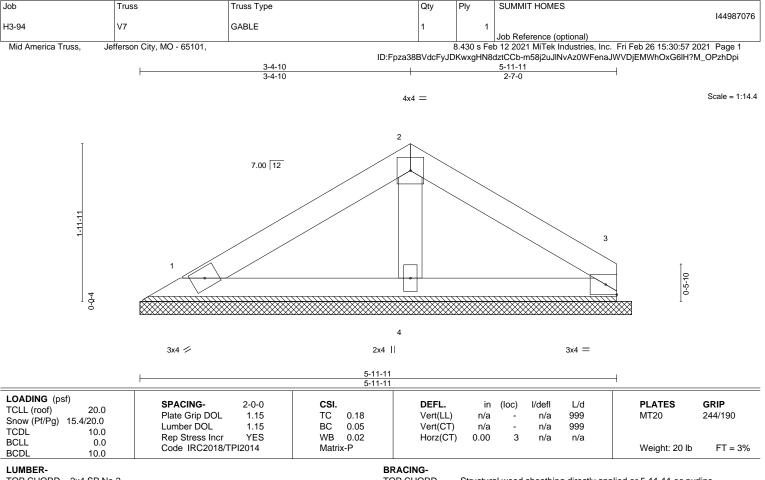
REACTIONS.

- 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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Gable requires continuous bottom chord bearing.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 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.



March 1,2021





TOP CHORD

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

BOT CHORD OTHERS 2x4 SP No.2

TOP CHORD BOT CHORD

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

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

REACTIONS.

1=6-1-15, 3=6-1-15, 4=6-1-15 (size) Max Horz 1=-35(LC 7) Max Uplift 1=-12(LC 11), 3=-15(LC 12)

Max Grav 1=136(LC 15), 3=125(LC 16), 4=207(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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Gable requires continuous bottom chord bearing.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty SUMMIT HOMES 144987077 H3-94 V8 **GABLE** Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:58 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-EHi5FEKN7DIqegqqLIrl1QGL7w0EghOuWf5XwszhDph 1-2-0 8-8-0 Scale = 1:45.1 2x4 || 2x4 || 2x4 || 4x5 = 4x5 =3 6.00 12 2x4 || 3-9-11 13 3x5 / 12 11 10 9 2x4 || 4x4 = 2x4 || 2x4 || 2x4 || LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL (roof) 20.0 Plate Grip DOL TC Vert(LL) 999 244/190 1.15 0.43 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.08 Vert(CT) 999 n/a n/a TCDI 10.0 Rep Stress Incr YES WB 0.14 Horz(CT) -0.00 8 n/a n/a

LUMBER-

BCLL

BCDL

TOP CHORD 2x4 SP No.2

0.0

10.0

BOT CHORD 2x4 SP No.2 2x4 SP No.2 WEBS **OTHERS** 2x4 SP No.2 BRACING-

Matrix-P

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

except end verticals.

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

REACTIONS. All bearings 17-10-0

Max Horz 1=236(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 8, 12, 11, 10, 9

Code IRC2018/TPI2014

Max Grav All reactions 250 lb or less at joint(s) 1, 8 except 12=398(LC 33), 11=319(LC 2), 10=378(LC 35),

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

WEBS 2-12=-320/105, 5-10=-296/93

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Provide adequate drainage to prevent water ponding.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Gable requires continuous bottom chord bearing.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 12, 11, 10, 9.
- 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: 91 lb

FT = 3%

March 1,2021





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

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or 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 Truss Type Qty SUMMIT HOMES 144987078 H3-94 V9 **GABLE** Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:59 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-jTGTTaL?uXQhFpP1u?M_aepUlKMnP9O2kJr5SlzhDpg 5-3-7 5-3-7 1-2-0 8-8-0 Scale = 1:37.9 2x4 || 2x4 || 5 2x4 || 4x5 =6-4-11 6.00 12 4x5 = 2 2-7-11 2-0-11 3x5 < 9 8 ₇2x4 || 10 4x4 = 2x4 || 2x4 || 15-0-15 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc)

LUMBER-

TCLL (roof)

TCDI

BCLL

BCDL

TOP CHORD 2x4 SP No.2

20.0

10.0

0.0

10.0

BOT CHORD 2x4 SP No.2 2x4 SP No.2 WEBS **OTHERS** 2x4 SP No.2

Snow (Pf/Pg) 15.4/20.0

BRACING-

Vert(LL)

Vert(CT)

Horz(CT)

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

except end verticals.

n/a

n/a

-0.00

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

n/a

n/a

n/a

999

999

n/a

6-0-0 oc bracing: 1-10

REACTIONS. All bearings 15-0-15.

Max Horz 1=198(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 7, 10, 9, 8

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=391(LC 2), 9=372(LC 35), 8=272(LC 2)

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

WEBS 4-9=-296/93

NOTES-

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10

1.15

1.15

YES

TC

ВС

WB

Matrix-P

0.57

0.12

0.09

- 3) Unbalanced snow loads have been considered for this design.
- 4) Provide adequate drainage to prevent water ponding.
- 5) Plates checked for a plus or minus 3 degree rotation about its center.
- 6) Gable requires continuous bottom chord bearing.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 10, 9, 8.
- 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 1,2021

244/190

FT = 3%

MT20

Weight: 73 lb



Job Truss Truss Type Qty Ply SUMMIT HOMES 144987079 H3-94 V10 **GABLE** Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:46 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-bz_Zk7BryXnXCqwXendxYvmMx4xgsll7loBvVYzhDpt 12-9-7 2-11-7 1-2-0 8-8-0 Scale = 1:31.1 2x4 || 6 2x4 || 5 2x4 || 4x5 = 6.00 12 4x5 || 2 0-10-11 3x5 / 3x5 ≥ 9 8 7 2x4 || 11 2x4 || 2x4 || 2x4 ||

12-9-7 12-8-15 LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d (loc) TCLL (roof) 20.0 Plate Grip DOL TC 1.15 0.19 Snow (Pf/Pg) 15.4/20.0

ВС

WB

Matrix-P

0.06

0.06

Vert(LL) 999 n/a n/a Vert(CT) 999 n/a n/a Horz(CT) -0.00 n/a n/a **PLATES GRIP** 244/190 MT20

Weight: 58 lb FT = 3%

LUMBER-

TCDI

BCLL

BCDL

TOP CHORD 2x4 SP No.2

10.0

0.0

10.0

BOT CHORD 2x4 SP No.2 2x4 SP No.2 WEBS **OTHERS** 2x4 SP No.2 BRACING-TOP CHORD

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

except end verticals.

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

REACTIONS. All bearings 12-8-15.

Max Horz 1=159(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 7, 11, 9, 8

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

Max Grav All reactions 250 lb or less at joint(s) 1, 10, 7, 11 except 9=337(LC 35), 8=271(LC 2)

1.15

YES

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

WEBS 4-9=-268/91

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 11, 9, 8.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



March 1,2021





Job Truss Truss Type Qty SUMMIT HOMES 144987080 H3-94 V11 **GABLE**

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional)
8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:47 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-3AXxxTCUjrvOpzVjBU8A56JVXUGOblGH_SxS1?zhDps

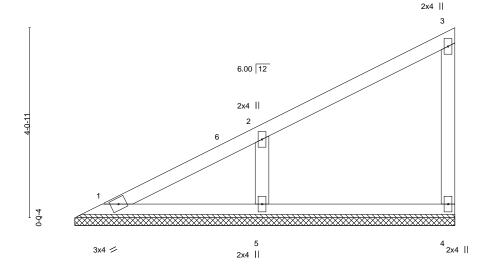
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

8-1-7

Scale = 1:24.6



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 0.10 WB 0.04	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	,					Weight: 32 lb	FT = 3%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 WEBS **OTHERS** 2x4 SP No.2

REACTIONS.

(size) 1=8-1-7, 4=8-1-7, 5=8-1-7

Max Horz 1=121(LC 8) Max Uplift 4=-14(LC 8), 5=-53(LC 11)

Max Grav 1=102(LC 23), 4=159(LC 15), 5=420(LC 15)

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

2-5=-327/108 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 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 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987081 H3-94 V12 Valley Job Reference (optional) Mid America Truss, Jefferson City, MO - 65101,

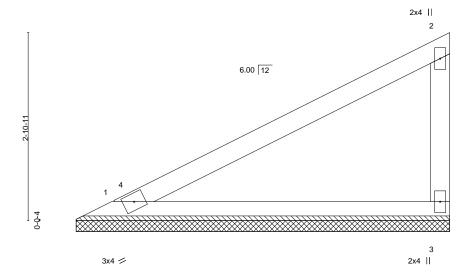
8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:47 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-3AXxxTCUjrvOpzVjBU8A56JPPUEUbluH_SxS1?zhDps

Structural wood sheathing directly applied or 5-9-7 oc purlins,

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

except end verticals.

Scale = 1:17.7



LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.66 Vert(LL) 999 244/190 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.22 Vert(CT) 999 n/a n/a **TCDL** 10.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 3 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 21 lb FT = 3% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.2 2x4 SP No.2

(size)

BOT CHORD WEBS 2x4 SP No.2

1=5-8-15, 3=5-8-15 Max Horz 1=83(LC 8) Max Uplift 1=-3(LC 11), 3=-19(LC 11)

Max Grav 1=239(LC 15), 3=249(LC 15)

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; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 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 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987082 H3-94 V13 **GABLE**

Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:48 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-XM5J9pC6U81FR73vlBfPdKshJub3KBaQD6g0aRzhDpr

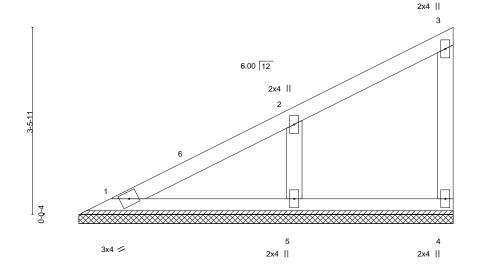
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

6-11-7

Scale = 1:21.4



LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.20 Vert(LL) 999 244/190 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.07 Vert(CT) 999 n/a n/a **TCDL** 10.0 Rep Stress Incr YES WB 0.04 Horz(CT) -0.00 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 27 lb FT = 3% **BCDL** 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2

BOT CHORD 2x4 SP No.2 WEBS **OTHERS** 2x4 SP No.2

REACTIONS.

Mid America Truss,

(size) 1=6-11-7, 4=6-11-7, 5=6-11-7

Max Horz 1=102(LC 8)

Max Uplift 4=-11(LC 8), 5=-45(LC 11)

Max Grav 1=106(LC 23), 4=100(LC 15), 5=372(LC 15)

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

WEBS 2-5=-294/91

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
- 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 1,2021



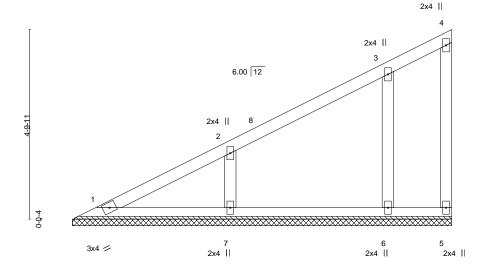
Job Truss Truss Type Qty SUMMIT HOMES 144987083 H3-94 V14 **GABLE**

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:49 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-?YfhM9DkFSA63He6JvAeAXOs_lx43dMZRmQZ6tzhDpq

9-7-7

Scale = 1:29.2



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 0.20 BC 0.08 WB 0.07	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - - 5	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	,					Weight: 43 lb	FT = 3%

LUMBER-BRACING-

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

OTHERS 2x4 SP No.2 TOP CHORD

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

except end verticals.

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

REACTIONS. All bearings 9-7-7.

Max Horz 1=146(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 5, 7, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=340(LC 2), 6=335(LC 15)

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

2-7=-255/100, 3-6=-269/76 WEBS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



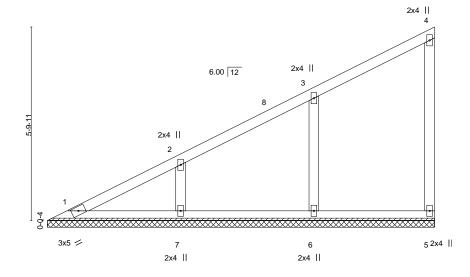
Job Truss Truss Type Qty SUMMIT HOMES 144987084 H3-94 V15 **GABLE**

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:50 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-TlD3aVEM0mlzgRDltchtjlx0FiHMo4SjgQ96eJzhDpp

11-7-7

Scale = 1:34.6



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 0.23 BC 0.08 WB 0.08	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (lo n/a n/a -0.00	oc) I/de - n/ - n/ 5 n/	a 999 a 999	PLATES MT20	GRIP 244/190
BCLL 0.0	Code IRC2018/TPI2014	Matrix-P	` ′				Weight: 51 lb	FT = 3%
BCDL 10.0	Code 11(C2010/11 12014	IVIAUIX-I					Weight. 31 lb	11 - 370

LUMBER-BRACING-

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

2x4 SP No.2

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

BOT CHORD

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

REACTIONS. All bearings 11-7-7.

Max Horz 1=178(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 5, 7, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=326(LC 2), 6=389(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 3-6=-306/97

WEBS

NOTES-

OTHERS

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 7, 6.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



Job Truss Truss Type Qty SUMMIT HOMES 144987085 H3-94 V16 **GABLE**

Mid America Truss, Jefferson City, MO - 65101, Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:51 2021 Page 1

Scale = 1:41.5

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-yxnSnrF_n3QqlboUQKD6FyU935dcXWWsv3vgAmzhDpo 13-11-7

2x4 ||

5 2x4 || 6.00 12 2x4 || 10 3 2x4 || 2 3x5 / 9 8 7 2x4 || 2x4 || 2x4 2x4 ||

LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defI L/d **PLATES GRIP** (loc) TCLL (roof) 20.0 Plate Grip DOL 1.15 TC Vert(LL) 999 244/190 0.36 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.08 Vert(CT) 999 n/a n/a TCDI 10.0 Rep Stress Incr YES WB 0.15 Horz(CT) -0.00 6 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 68 lb FT = 3% **BCDL** 10.0

LUMBER-BRACING-

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

OTHERS 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

REACTIONS. All bearings 13-11-7.

Max Horz 1=217(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 6, 9, 8, 7

Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 9=326(LC 2), 8=330(LC 2), 7=337(LC 15)

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

WEBS 4-7=-269/78

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9, 8, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021



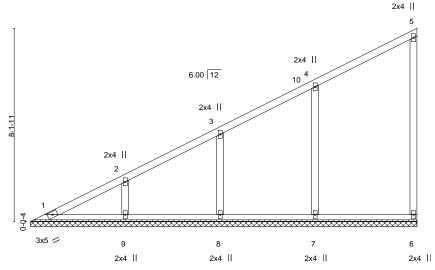
Job Truss Truss Type Qty SUMMIT HOMES 144987086 H3-94 V17 **GABLE**

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Feb 12 2021 MiTek Industries, Inc. Fri Feb 26 15:30:52 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-Q7Lq?BGcYNYhwlNg_1kLoA0HIVzWGzE07jeDjCzhDpn

16-3-7

Scale = 1:48.5



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 0.52 BC 0.10 WB 0.19	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - - 6	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	, ,					Weight: 77 lb	FT = 3%

BOT CHORD

LUMBER-BRACING-

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

OTHERS 2x4 SP No.2 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.

REACTIONS. All bearings 16-3-7. Max Horz 1=255(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 6, 9, 8, 7

Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 9=332(LC 2), 8=305(LC 2), 7=421(LC 15)

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

4-7=-328/109

- 1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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 C; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) Plates checked for a plus or minus 3 degree rotation about its center.
- 5) Gable requires continuous bottom chord bearing.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 9, 8, 7.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



March 1,2021

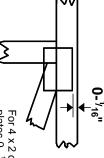


Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.



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

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

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

PLATE SIZE

4 × 4

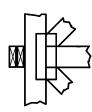
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



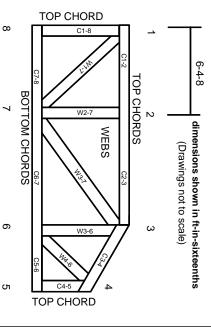
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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.
- 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.
- 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.