

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

Re: H3-90

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: I44715924 thru I44715976

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

Missouri COA: Engineering 001193



February 9,2021

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 144715924 H3-90 C₁ **GABLE** 20 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:17 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-rvUxif5?lbjnNkc4tO?B?OX7cWPDF3COWsxSdYznB6W 4-4-0 4-4-0 Scale = 1:16.8 4x4 = 3 6.00 12 0-1-10 2x4 || 3x4 =8-8-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. L/d **PLATES GRIP** (loc) I/defl TCLL (roof) 20.0

Vert(LL)

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

n/a

0.00

n/a

n/a

n/a

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

999

999

n/a

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

LUMBER-

TCDI

BCLL

BCDL

TOP CHORD 2x4 SP No.2

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

Snow (Pf/Pg) 15.4/20.0

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

10.0

0.0

10.0

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)

1.15

1.15

YES

TC

ВС

WB

Matrix-P

0.21

0.08

0.02

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

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.



244/190

FT = 3%

MT20

Weight: 27 lb

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Job Truss Truss Type Qty SUMMIT HOMES 144715925 H3-90 C1GE **GABLE** 2 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:19 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-olbi7K7FHC_Vd1mT_p1f4pcT5J4hjzih_AQYhRznB6U 8-8-0 4-4-0 4-4-0 Scale = 1:16.8 4x4 = 3 6.00 12 0-1-10 2x4 || 3x4 =8-8-0 LOADING (psf) SPACING-2-0-0 DEFL. L/d **PLATES GRIP** CSI. (loc) I/defl TCLL (roof) 20.0 Plate Grip DOL Vert(LL) 244/190 1.15 TC 0.21 n/a n/a 999 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

LUMBER-

REACTIONS.

BCLL

BCDL

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

0.0

10.0

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

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)

YES

WB

Matrix-P

0.02

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

n/a

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

n/a

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

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

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) 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.



Weight: 27 lb

FT = 3%

February 9,2021



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 144715926 H3-90 CJ1 Diagonal Hip Girder 2 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:19 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-olbi7K7FHC_Vd1mT_p1f4pcRsJ?Ojz_h_AQYhRznB6U 6-10-5 1-2-14 6-10-5 Scale = 1:18.6

3-2-2	4.24 12 Special Special 6	3x4
1 1	7 Special Special	4 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 0.35 0.01 2-4 360 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.42 Vert(CT) -0.12 2-4 >676 240 TCDI 10.0 Rep Stress Incr NO WB 0.00 Horz(CT) -0.00 4 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 35 lb FT = 3% **BCDL** 10.0

6-10-5

BOT CHORD

LUMBER-BRACING-TOP CHORD

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

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.

- 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, 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)



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

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

except end verticals.

February 9,2021



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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 Ply SUMMIT HOMES 144715927 H3-90 CJ2 Diagonal Hip Girder 2 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:21 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-kgjSY08WpqEDsLwr6E489Ehdp7c3BrO_RUvfmJznB6S 1-2-14 1-6-11 6-0-1 Scale = 1:19.9 5 4x4_H Special Special 4.24 12 10 Special 5x10 = Special 5x10 = Special 6 12 1-0-0 Special 0-6-0 3x4 = Special 3x4 =Special

7-6-12 3-1-6

Plate Offsets (X,Y) [4:0-4-0,	0-2-4], [6:Edge,0-1-8], [9:0-2-0,0-4-12]			
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO	CSI. TC 0.96 BC 0.73 WB 0.13	DEFL. in (loc) l/defl L/d PLATES Vert(LL) -0.17 6-7 >512 360 MT20 Vert(CT) -0.28 6-7 >309 240 Horz(CT) 0.10 6 n/a n/a	GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH	Weight: 36 lb	FT = 3%

LUMBER-BRACING-

TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 4-10-14 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.

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

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



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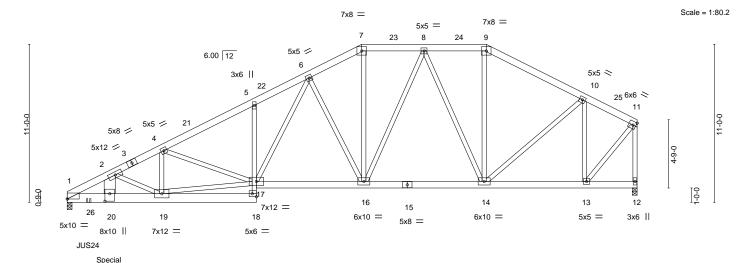
ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:24 2021 Page 1

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-8FPbA2BO6kcnjpeQnMdrnsJC?KgTO00Q7R8JMeznB6P 39-8-0 16-10-0 24-10-0 29-2-0 36-0-0 3-7-8 6-7-0 3-8-0 3-8-0 4-4-0 4-4-0 6-10-0 3-8-0



₁ 2-11-8	6-7-0	13-2-0	20-6-0	29-2-0	36-0-0	₁ 39-8-0 ₁	
2-11-8	3-7-8	6-7-0	7-4-0	8-8-0	6-10-0	3-8-0	
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) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0	SPACING Plate Grip Lumber D Rep Stres Code IRC	DOL 1.15	CSI. TC 0.65 BC 0.55 WB 0.85 Matrix-SH	DEFL. in (loc Vert(LL) -0.14 16-17 Vert(CT) -0.27 16-17 Horz(CT) 0.09 12	7 >999 360 7 >999 240	PLATES MT20 Weight: 726 lb	GRIP 244/190 FT = 3%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

1-18: 2x8 SP 2400F 2.0E

2x4 SP No.2 *Except*

2-20: 2x10 SP 2400F 2.0E

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

Max Horz 1=243(LC 8)

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.

TOP CHORD 1-2=-15466/0, 2-4=-8756/0, 4-5=-5798/0, 5-6=-5801/0, 6-7=-3234/0, 7-8=-2843/0,

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,

BOT CHORD

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

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

Structural wood sheathing directly applied or 3-8-8 oc purlins,

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

except end verticals. Except:

10-0-0 oc bracing: 17-18

NOTES-

WEBS

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.



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M 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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Job	Truss	Truss Type	Qty	Ply	SUMMIT HOMES	П
H3-90	GR1	PIGGYBACK BASE GIRDE	1	2	I44715928	3
					Joh Reference (ontional)	

Mid America Truss,

NOTES-

Jefferson City, MO - 65101,

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:24 2021 Page 2

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-8FPbA2BO6kcnjpeQnMdrnsJC?KgTO00Q7R8JMeznB6P

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

 H3-90
 H1
 Hip Girder
 1
 2
 Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101,

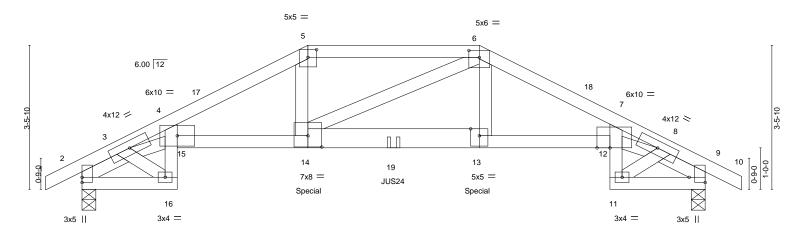
8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:27 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-Zq4jp3DGPf_MaGN?SVAYOVxfwYewbVdtqPMzzzznB6M

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

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

-0-10-8 1-1-12 2-3-8 5-5-4 9-6-12 12-8-8 13-10-4 15-0-0 15-10-8 1-1-12 1-1-12 3-1-12 4-1-8 3-1-12 1-1-12 1-1-12

Scale = 1:27.7



2-3-8	5-5-4	9-6-12		12-8-8		15-0-0	
2-3-8 Plate Offsets (X,Y) [5:0-2-8,0	3-1-12 0-2-4], [6:0-3-0,0-2-0], [7:0-3-12,0-0-0],	4-1-8 [9:Edge,0-4-10], [14:0-4-0,0-3-	4]	3-1-12		2-3-8	
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 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 360 240 n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 BCDI 10.0	Code IRC2018/TPI2014	Matrix-SH				Weight: 159 lb	FT = 3%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2 *Except*

14-15,12-13: 2x4 SP No.1, 13-14: 2x6 SP No.1 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, 9=0-4-0

Max Horz 2=36(LC 54)

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

WEBS 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.

- 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 Continuing Property and Con



February 9,2021

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

Design palaritetes and READ NOTES ON FIRS AND INCLODED MITER REFERENCE PAGE MIT 47 Set. 3 19/2202 BEFORE USE.

Design valid for use only with MITER® 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	
	ши					144715929
H3-90	H1	Hip Girder	1	2	Job Reference (optional)	

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:27 2021 Page 2 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-Zq4jp3DGPf_MaGN?SVAYOVxfwYewbVdtqPMzzzznB6M

- 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)

16023 Swingley Ridge Rd Chesterfield, MO 63017

Job Truss Truss Type Qty Ply SUMMIT HOMES 144715930 H3-90 H2 Hip Girder | **Z** | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:29 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-VDCUDIEXwHE4paXOawD0Uw07VLTN3T69Hjr42sznB6K 9-0-12

4-1-8

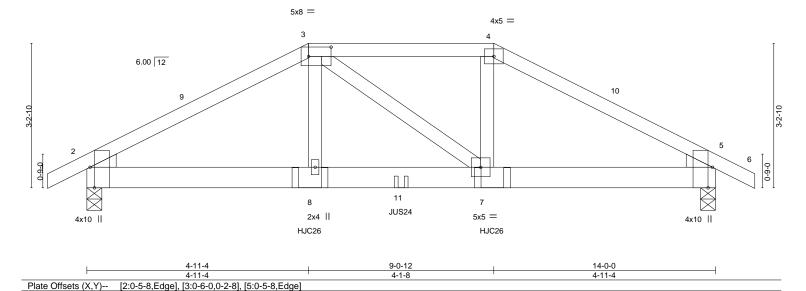
Scale = 1:25.7

0-10-8

4-11-4

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

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



LOADING (psf) (loc) SPACING-CSI. **DEFL** I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.40 Vert(LL) -0.02 7-8 >999 360 MT20 244/190 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.25 Vert(CT) -0.04 7-8 >999 240 TCDL 10.0 Rep Stress Incr NO WB 0.09 Horz(CT) 0.01 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-P Weight: 148 lb BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

0-10-8

TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.1 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 9)

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.

4-11-4

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.





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

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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
110.00	luo.	LIF OF L			I44715930
H3-90	H2	Hip Girder	1	2	Job Reference (optional)

Mid America Truss,

Jefferson City, MO - 65101,

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:29 2021 Page 2

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-VDCUDIEXwHE4paXOawD0Uw07VLTN3T69Hjr42sznB6K

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)



Job Truss Truss Type Qty SUMMIT HOMES 144715931 H3-90 J1 Jack-Closed 3

Mid America Truss,

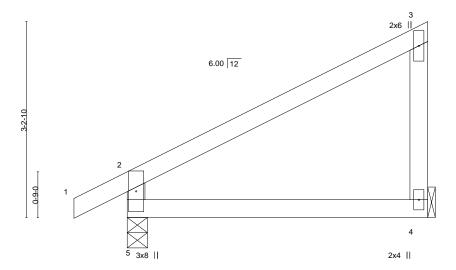
Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:29 2021 Page 1

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-VDCUDIEXwHE4paXOawD0Uw08ALUo3UT9Hjr42sznB6K

-0-10-8 4-11-4 0-10-8 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 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC 2018/TPI2014	CSI. TC 0.36 BC 0.16 WB 0.00
BCDI 10.0	Code IRC2018/TPI2014	Matrix-R

DEFL. I/defI L/d (loc) Vert(LL) -0.01 >999 4-5 360 Vert(CT) -0.03 4-5 >999 240 Horz(CT) -0.00 4 n/a n/a **PLATES** MT20

244/190 Weight: 22 lb FT = 3%

GRIP

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 4-11-4 oc purlins,

except end verticals.

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

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
- 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.



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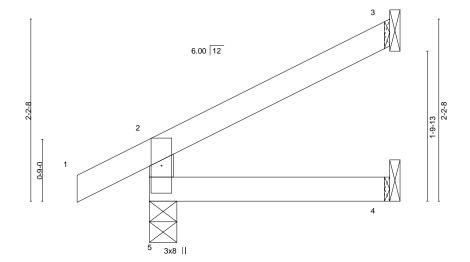
Job Truss Truss Type Qty SUMMIT HOMES 144715932 H3-90 J2 Jack-Open Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:30 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101,

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-zPmsR5F9haMxRk6a8dkF07ZNmlsioxiJWNbealznB6J

except end verticals.

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

Scale = 1:14.0



			2-10-15						
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 0.05 WB 0.00 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 -0.00 -0.00	(loc) 4-5 4-5 3	l/defl >999 >999 n/a	L/d 360 240 n/a	PLATES MT20 Weight: 11 lb	GRIP 244/190 FT = 3%

2-10-15

BOT CHORD

LUMBER-BRACING-TOP CHORD

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

REACTIONS. 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-

- 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.



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

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



Job Truss Truss Type Qty SUMMIT HOMES 144715933 H3-90 J3 Jack-Closed 3 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:31 2021 Page 1

Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-RbKEeRGnSuUo3tgmhLFUZL6Ua96KXOySk1KB6kznB6l

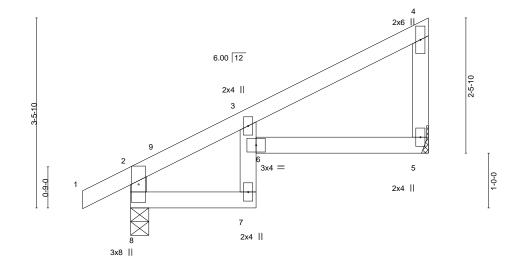
Structural wood sheathing directly applied or 5-5-4 oc purlins,

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

except end verticals.

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

Scale = 1:21.0



	 	2-3-8 2-3-8	5-5-4 3-1-12		
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 0.37 BC 0.35 WB 0.00 Matrix-R	DEFL. in (loc) Vert(LL) -0.05 6 Vert(CT) -0.08 6 Horz(CT) 0.04 5	l/defl L/d >999 360 >787 240 n/a n/a	PLATES GRIP MT20 244/190 Weight: 24 lb FT = 3%

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

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) 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.



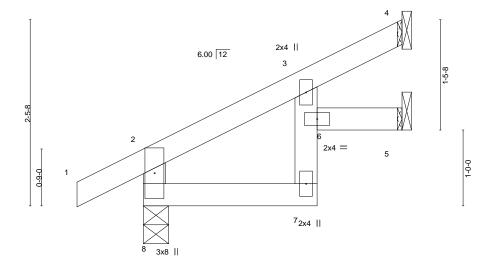
February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715934 H3-90 J4 Jack-Open Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:31 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-RbKEeRGnSuUo3tgmhLFUZL6YR9AzXOySk1KB6kznB6l

-0-10-8 3-4-15 0-10-8 1-1-7

Scale = 1:15.2



DEFL. in (loc) I/defl L/d PLATES GRIP Vert(LL) -0.01 6 >999 360 Vert(CT) -0.01 7 >999 240 Horz(CT) 0.00 5 n/a n/a Weight: 15 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

> 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.

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) 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.



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

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

except end verticals.

Job Truss Truss Type Qty SUMMIT HOMES 144715935 H3-90 J5 Jack-Open

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:32 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-voucsnHPDCcfg1FzF2mj5YejYZXUGrCczh4kfBznB6H

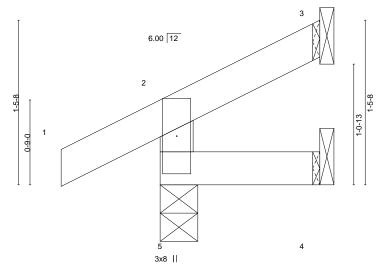
Structural wood sheathing directly applied or 1-4-15 oc purlins,

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

except end verticals.



Scale = 1:10.2



1-4-15

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	DEFL. Vert(LL) Vert(CT) Horz(CT)	in 0.00 0.00 -0.00	(loc) 5 5 3	l/defl >999 >999 n/a	L/d 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-BRACING-TOP CHORD

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

REACTIONS. 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.

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) 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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715936 H3-90 T1 Common Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:33 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-N_S_37I1_VkWIBq9plHyemBnrzj0?F3lCLplBdznB6G 20-4-0 21-2-8 0-10-8 0-10-8

5-5-2

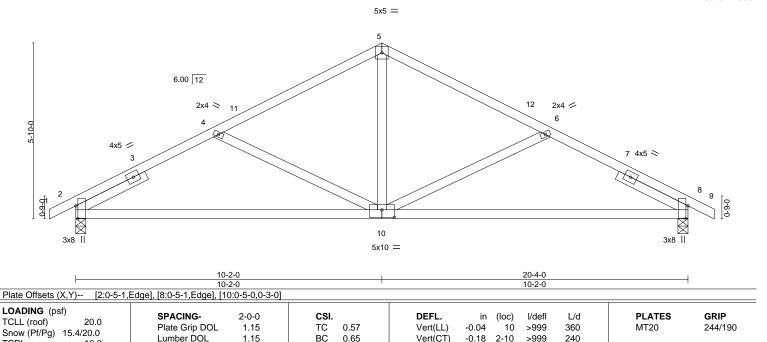
5-5-2

Scale = 1:38.3

FT = 3%

Weight: 101 lb

4-8-14



LUMBER-

TCDL

BCLL

BCDL

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

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)

10.0

10.0

0.0

Max Uplift 2=-20(LC 11), 8=-20(LC 12) Max Grav 2=866(LC 2), 8=866(LC 2)

4-8-14

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

Rep Stress Incr

Code IRC2018/TPI2014

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

YES

WB

Matrix-SH

0.22

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.04

8

n/a

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

n/a

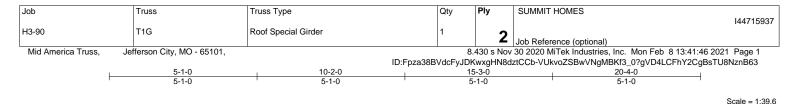
Structural wood sheathing directly applied or 5-0-15 oc purlins.

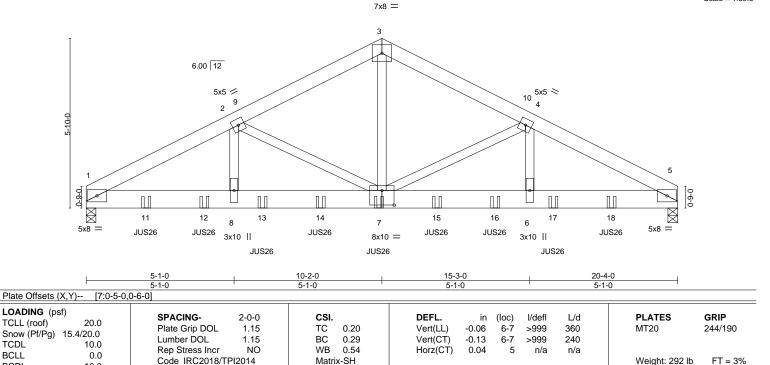
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Plates checked for a plus or minus 3 degree rotation about its center.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 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.



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BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TCDL

BCLL

BCDL

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

10.0

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.

February 9,2021





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



Truss Type SUMMIT HOMES Job Truss Qty Ply 144715937 H3-90 T1G Roof Special Girder

Mid America Truss,

Jefferson City, MO - 65101,

Job Reference (optional)

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:46 2021 Page 2
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-VUkvoZSBwVNgMBKf3_0?gVD4LCFhY2CgBsTU8NznB63

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 144715938 H3-90 T1GE Common Supported Gable Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:47 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-zgIH?vSphpVX_LvrdiXECjmHGcf2HdypQWC1gpznB62

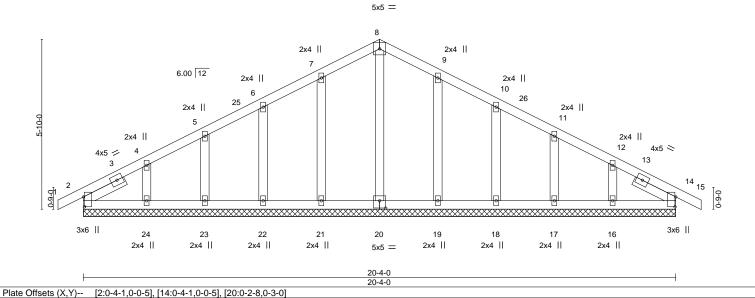
10-2-0

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

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

Scale = 1:39.6

21-2-8 0-10-8



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 14 120 MT20 244/190 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

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

0-10-8

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.

Max Horz 2=-63(LC 7) (lb) -

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

10-2-0

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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715939 H3-90 T2 Roof Special 10 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:49 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-v3P2QbU4DQIEDe2El6ail8rYtPG_IPa6tqh8liznB60 5-3-0 5-3-0 5-3-0 Scale = 1:42.2 5x6 = 3 7.00 12 11 4x5 / 4x5 ≥ 2 7x10 = 7x10 = 0-10-0 8 7 4x5 = 5x6 = 14-0-0 7-0-0 21-0-0 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. L/d CSI. (loc) I/defl **PLATES** GRIP TCLL (roof) 20.0 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 **BCLL** 0.0

Matrix-SH

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

BCDL

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

WEBS 2x4 SP No.2 REACTIONS. (size) 9=0-4-0, 6=0-4-0

10.0

Max Horz 9=145(LC 8) 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.



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.



February 9,2021

Job Truss Truss Type Qty SUMMIT HOMES 144715940 H3-90 T2GE Roof Special Supported Gable Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:51 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-sSXorHVKI10ySyCcsXcANZxzID?NDQSPL8AFqaznB6_ 21-10-8 0-10-8 10-6-0 10-6-0 Scale = 1:46.9 5x5 = 6 2x4 | 2x4 || 5 7.00 12 2x4 || 2x4 || 8 26 2x4 || 2x4 25 9 2x4 || 2x4 || 10

21-0-0 21-0-0 SPACING-2-0-0 CSI. DEFL. L/d **PLATES** GRIP (loc) I/defl 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 10.0 Rep Stress Incr YES WB 0.09 Horz(CT) 0.00 13 n/a n/a 0.0 Code IRC2018/TPI2014 Matrix-R Weight: 122 lb FT = 3%

18

2x4 ||

19

2x4 ||

LUMBER-BRACING-

22

2x4 ||

21

2x4 ||

20

2x4 ||

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

LOADING (psf)

TCLL (roof)

TCDI

BCLL

BCDL

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

15

2x4 ||

14

2x4 ||

except end verticals.

17 16

2x4 ||

3x6 =

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

REACTIONS. All bearings 21-0-0.

10.0

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

24

3x8 ||

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 ||

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) 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.



12

13

3x8 ||

February 9,2021



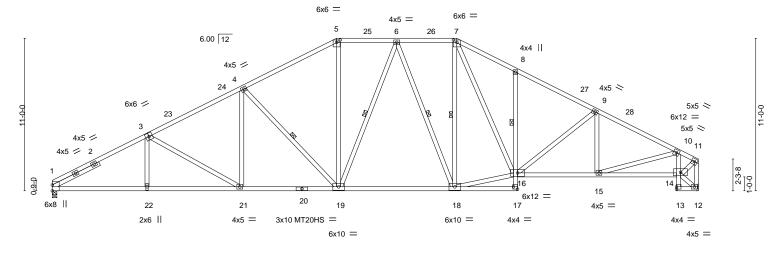
Job Truss Truss Type Qty SUMMIT HOMES 144715941 Т3 H3-90 Piggyback Base 3 Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:53 2021 Page 1

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-oqfYGyXaHfGgiGM?_yeeS_08U1VhhEkhoSfLtTznB5y 45-0-0 24-10-0 29-2-0 33-6-8 6-10-0 6-10-0 6-10-0 4-4-0 4-4-8 5-8-12 5-8-12

FLAT TOP CHORD MUST BE BRACED WITH SHEATHING.

Scale = 1:83.1



0-10-0	6-10-0	-0 0-0	o-u	4-4-0	3-0-12	3-0-12 1-7-0	
Plate Offsets (X,Y) [5:0-3-0	0,0-2-0], [7:0-3-0,0-2-0], [17:Edge,0-2-0]						
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.79 BC 0.84 WB 0.49	- ' '	in (loc) -0.21 19 -0.46 18-19 0.22 12	l/defl L/d >999 360 >999 240 n/a n/a	PLATES MT20 MT20HS	GRIP 244/190 187/143
BCDI 10.0	Code IRC2018/TPI2014	Matrix-SH				Weight: 327 lb	FT = 3%

BRACING-

TOP CHORD

BOT CHORD

WEBS

1 Row at midpt

1 Row at midpt

29-2-0

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*

6-10-0

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

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.



45-0-0

Structural wood sheathing directly applied, except end verticals.

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

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

8-16

46-7-0

February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715942 H3-90 ТЗА Piggyback Base Job Reference (optional) Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:55 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-kDnJheZqpGWOxZWN5Nh6XP5T?qBI97h_Gm8SyLznB5w 24-10-0 29-2-0 33-0-0 36-10-0 39-3-4 45-0-0 6-10-0 6-10-0 6-10-0 4-4-0 4-4-0 3-10-0 3-10-0 2-5-4 5-8-12 Scale = 1:82.4 FLAT TOP CHORD MUST BE BRACED WITH SHEATHING 6x6 = 6x6 = 4x5 =26 6 27 6.00 12 4x5 < 4x5 / 4x4 || 4 9 25 4x5 > 28 10 6x6 / 5x5 < 6x12 = 3 5x5 > 4x5 / 11 12 4x5 / 16 21 6x8 || 20 186x12 = 23 22 19 14 13 2x6 II 4x5 = 3x10 MT20HS = 6x10 = 4x4 = 4x5 = 4x4 = 6x10 = 4x5 = 20-6-0 29-2-0 36-10-0 39-3-4 45-0-0 6-10-0 6-10-0 6-10-0 Plate Offsets (X,Y)--[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] 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*

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



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

February 9,2021

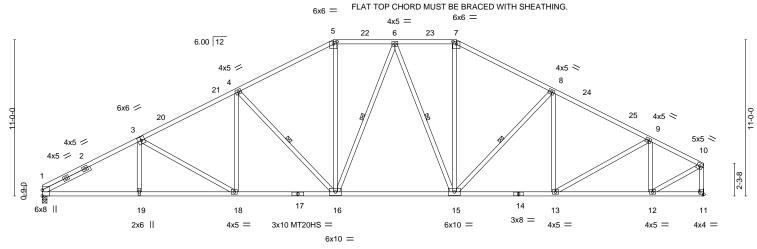


Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 SUMMIT HOMES 144715943 H3-90 T3B Piggyback Base 2 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:56 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-CPKhu_ZTZaeFZj5af5CL4ceeoEWTubC8UQu0UoznB5v 24-10-0 29-2-0 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 = 1:81.1



6-10-0	6-10-0 6-1	0-0	8-8-0	6-10-0	6-	10-0 3-9-0	
Plate Offsets (X,Y) [5:0-3-0,0	0-2-0], [7:0-3-0,0-2-0], [11:Edge,0-2-0]						
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.78 BC 0.84 WB 0.51	- ' '	in (loc) -0.19 18 -0.42 15-16 0.16 11	l/defl L/d >999 360 >999 240 n/a n/a	PLATES MT20 MT20HS	GRIP 244/190 187/143
BCDI 10.0	Code IRC2018/TPI2014	Matrix-SH				Weight: 307 lb	FT = 3%

29-2-0

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1 *Except*

6-10-0

5-7: 2x4 SP No.2, 1-3: 2x4 SP 2400F 2.0E

BOT CHORD 2x4 SP No.2 *Except*

1-17: 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, 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 $1-3=-3583/33,\ 3-4=-3173/53,\ 4-5=-2543/67,\ 5-6=-2145/87,\ 6-7=-2038/72,\ 7-8=-2421/50,\ 3-4=-3173/53,\ 4-5=-2543/67,\ 5-6=-2145/87,\ 6-7=-2038/72,\ 7-8=-2421/50,\ 7-8=-2421/50,\ 7-8=$

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.



42-10-0

Structural wood sheathing directly applied, except end verticals.

4-16, 6-16, 6-15, 8-15

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

1 Row at midpt

February 9,2021



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 144715944 H3-90 T3GE **GABLE**

Mid America Truss, Jefferson City, MO - 65101, Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:00 2021 Page 1

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-5BaCkMczdo8h1LOLuwGHESpVVr4JqTYjP2sDdZznB5r 29-2-0 20-6-0 8-8-0 17-5-0

Scale = 1:95.0

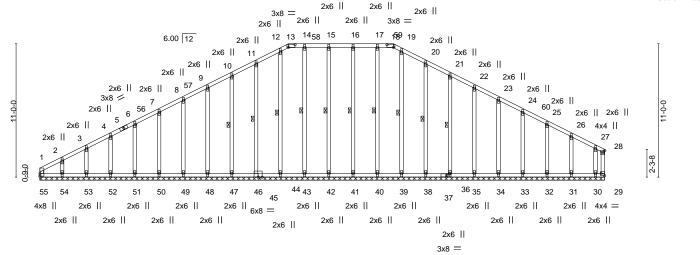


Plate Offsets (X,Y) [13:0-6-8,0-2-12], [18:0-6-8,0-2-12], [29:Edge,0-2-0], [37:0-2-8,0-1-8]									
LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 20.4/20.0 TCDL 10.0 BCDL 0.0 BCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2018/TPI2014	CSI. TC 0.10 BC 0.08 WB 0.17 Matrix-R	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 29	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 376 lb	GRIP 244/190 FT = 3%

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.

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.

2x4 SP No.2

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)

Max Grav All reactions 250 lb or less at joint(s) 55, 29, 54, 53, 52, 51, 50, 49, 48, 47, 46, 44, 43, 42, 41, 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.

OTHERS

- 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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715945 H3-90 T4 Common 2

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:01 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-ZN8axhdbO6GXfUzXSenWngLcxFNtZtJteibn9?znB5q

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

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

except end verticals.

1-0-0 9-11-0 12-6-0 4-11-8 4-11-8 2-7-0

> Scale = 1:39.9 5x6 =

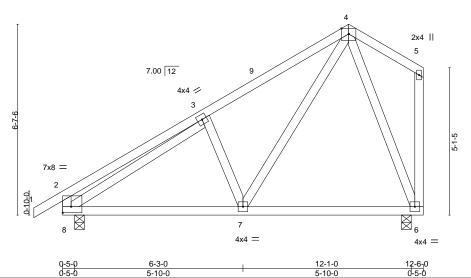


Plate Offsets (X,Y)-- [2:Edge,0-2-8]

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.37 BC 0.31 WB 0.33	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) -0.01 7 -0.05 7-8 0.01 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: 83 lb	FT = 3%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

WEBS

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

2x4 SP No.2

(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

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) 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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715946 H3-90 T4GE Common Structural Gable

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:03 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-VIGKMNfswjWFvo7wZ3q_s5RyP36d1rvA504tEuznB5o

0-10-8 0-10-8 9-11-0 12-6-0 4-11-8 4-11-8 2-7-0

Scale = 1:43.3

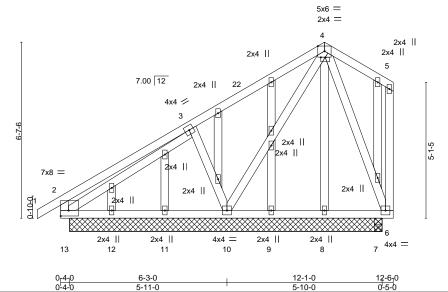


Plate Offsets (X,Y)-- [2:Edge,0-2-8], [4:0-2-0,0-0-0]

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. in (loc) l/defl L/d Vert(LL) -0.00 8 >999 360 Vert(CT) -0.00 11 >999 240 Horz(CT) -0.00 6 n/a n/a	PLATES GRIP MT20 244/190
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	11012(01) 0.00 0 100 100	Weight: 113 lb FT = 3%

LUMBER-BRACING-

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

2x4 SP No.2

TOP CHORD **BOT 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 11-9-0 except (jt=length) 7=0-3-8.

Max Horz 13=195(LC 10) (lb) -

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

NOTES-

OTHERS

- 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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715947 T5 H3-90 Roof Special 2 Job Reference (optional)

Mid America Truss, Jefferson City, MO - 65101,

1-1-12

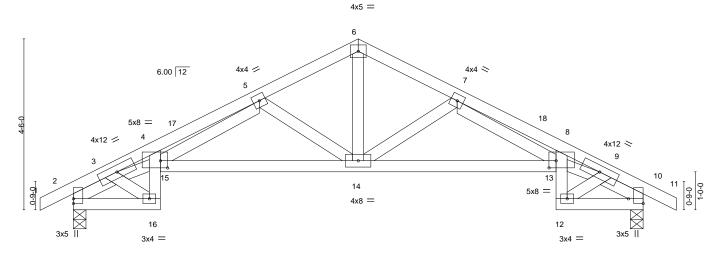
1-1-12

0-10-8

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:04 2021 Page 1

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-zypiajgUh1e6Wyi67mLDOIz7CSMwmEuJKgqRmKznB5n 13-10-4 | 15-0-0 | 15-10-8 | 1-1-12 | 1-1-12 | 0-10-8 | 12-8-8 10-1-4 2-7-4 2-7-4

Scale = 1:30.3



BRACING-

TOP CHORD

BOT CHORD

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

LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.37 BC 0.42 WB 0.34
BCLL 10.0	Rep Stress Incr YES	WB 0.34
BCDL 10.0	Code IRC2018/TPI2014	Matrix-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

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

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

PLATES GRIP 244/190 MT20

Weight: 86 lb

FT = 3%

LUMBER-

WEBS

SLIDER

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

2x4 SP No.2 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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715948 H3-90 T5A Roof Special Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:05 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-R8N5n3g6SLmz86HIhUsSxWWI?siBVhESZKZ_ImznB5m 0-10-5 9-9-12 13-6-12 14-8-8 2-7-4 3-9-0 2-7-4 3-9-0 1-1-12 Scale = 1:29.3 4x5 = 5 6.00 12 4x4 🖊 4x4 < 6 17 5x8 = 4x10 / 4x10 > П 2x4 2 0-10-12 12 5x12 = 4x8 = 14 10 15 3x4 = 3x4 =3x5 || 4x4 = 2-0-0 2-0-0 Plate Offsets (X,Y)--[3:0-2-4,0-2-4], [9:Edge,0-4-10]

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 0.42 WB 0.33	DEFL. in (loc) Vert(LL) -0.06 11 Vert(CT) -0.13 11-12 Horz(CT) 0.12 9	I/defl L/d >999 360 >999 240 n/a n/a	PLATES MT20	GRIP 244/190
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	(0.1)		Weight: 82 lb	FT = 3%

BOT CHORD

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

LUMBER-BRACING-

2x4 SP No.2 TOP CHORD TOP CHORD

Structural wood sheathing directly applied or 3-8-3 oc purlins, BOT CHORD 2x4 SP No.2 except end verticals.

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

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; 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) 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.



February 9,2021



Job Truss Truss Type Qty Ply SUMMIT HOMES 144715949 H3-90 T5G Roof Special Girder | **2** | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:07 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101,

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-OXVrCliM_y1hNQRhouuw0xbWmgKuzTal0e25NfznB5k 14-8-8 3-9-0 3-9-0

> 5x5 || Scale = 1:29.9

> > 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 OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT

WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER

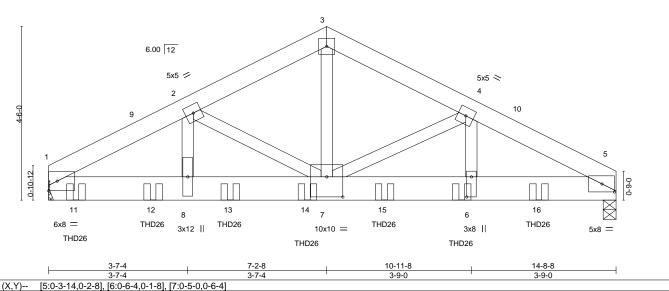


Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI. **DEFL** (loc) I/defl L/d **PLATES** GRIP 20.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.86 Vert(LL) -0.07 6-7 >999 360 244/190 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 BC 0.66 Vert(CT) -0.136-7 >999 240 TCDL 10.0 Rep Stress Incr NO WB 0.85 Horz(CT) 0.04 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-P Weight: 212 lb

BRACING-

TOP CHORD

BOT CHORD

OR THE BUILDING DESIGNER.

BCDL LUMBER-

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

10.0

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.
- 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.

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

- 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



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Continued on page 2

MRNING - 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



SUMMIT HOMES Job Truss Truss Type Qty Ply 144715949 H3-90 T5G Roof Special Girder

Mid America Truss,

Jefferson City, MO - 65101,

Job Reference (optional)

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:07 2021 Page 2
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-OXVrCliM_y1hNQRhouuw0xbWmgKuzTal0e25NfznB5k

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 144715950 H3-90 T6 Common Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:08 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-sj3DP5j_IG9Y?Z?tMcQ9Z88iK4kti7HvFloev5znB5j

7-0-0

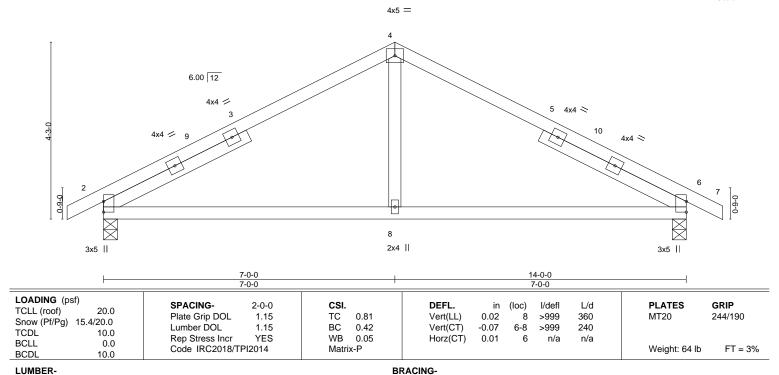
Structural wood sheathing directly applied or 3-6-8 oc purlins.

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

Scale = 1:27.7

14-10-8

0-10-8



TOP CHORD

BOT CHORD

TOP CHORD 2x4 SP No.1

-0-10-8 0-10-8

BOT CHORD 2x4 SP No.2

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.

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

7-0-0 7-0-0

- 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.



February 9,2021



144715951 H3-90 T₆A Common Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:09 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-KvdbdRjcWZHPdja4wJxO5MgtnT35RaW2UxYCRXznB5i 14-10-8 7-0-0 0-10-8 Scale = 1:27.2 4x5 = 3 6.00 12 4x4 🖊 4x4 <> 2 4x4 / 4x4 > 0-6-0 7 2x4 || 3x5 || 3x5 || 14-0-0 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) 0.02 244/190 1.15 0.83 >999 360 MT20 Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.42 Vert(CT) -0.07 5-7 >999 240 TCDI 10.0 Rep Stress Incr YES WB 0.05 Horz(CT) 0.01 5 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P Weight: 63 lb FT = 3%

BRACING-

TOP CHORD

BOT CHORD

Qty

SUMMIT HOMES

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

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

LUMBER-

BCDL

Job

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

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

Truss

Truss Type

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.

1-3=-694/4, 3-5=-696/0 TOP CHORD **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.



February 9,2021





Job Truss Truss Type Qty SUMMIT HOMES 144715952 Т7 H3-90 Piggyback Base Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:11 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-GlkM26lt1BX7s1kS1kzsBnmAmHgjvK2LxF1IWQznB5g 36-7-0 3-8-0 3-8-0 14-10-0 19-2-0 26-6-0 32-10-0 6-10-0 4-4-0 4-4-0 6-4-0 3-9-0 Scale = 1:66.0 5x5 = FLAT TOP CHORD MUST BE BRACED WITH SHEATHING 4x5 =3 19 4 20 5 5x6 = 6.00 12 4x5 / 4x5 ≥ 21 2 6 18 4x4 / 22 4x5 < 4x4 > 4-9-0 × 9 12 6x12 = 15 16 14 13 3x4 3x6 =4x5 = 5x10 = 5x10 = 11 10 3x4 =5x10 = 3x4 =19-2-0 32-10-0 3-8-0 10-6-0 26-6-0 36-7-0 7-4-0 3-8-0 6-10-0 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 FT = 3% Matrix-SH Weight: 265 lb 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. WEBS 2x4 SP No.2 **WEBS** 1 Row at midpt 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 14-16=-36/871, 13-14=0/1327, 12-13=0/2026

BOT CHORD 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 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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715953 H3-90 T8 Piggyback Base 2 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:13 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-Chs6Son7Zonr5Lur99?KGCrVU5LSNAwePZWPaJznB5e 36-4-0 39-8-0 40-6-8 3-4-0 0-10-8 14-10-0 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 = 1:74.8 FLAT TOP CHORD MUST BE BRACED WITH SHEATHING. 6x6 = 6x6 = 4x5 = 3 6.00 12 22 4 23 4x5 / 4x5 > 2 5x5 🖊 2 3x8 > 4x5 < 4x5 < 4-9-0 9 11 17 20 19 18 16 15 14 13 3x8 = 6x10 = 6x10 = 4x4 = 4x5 = 4x5 = 5x10 MT20HS = 7x12 MT20HS > 4x5 = 4.00 | 12 26-0-0 32-10-0 39-8-0 10-6-0 36-4-0 3-8-0 6-10-0 6-10-0 3-6-0 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-CSI. **DEFL** (loc) I/defl L/d **PLATES** 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. 2x4 SP No.2 *Except* **BOT CHORD BOT CHORD** 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

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-

BOT CHORD

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; 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.



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

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

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 144715954 H3-90 Т9 Piggyback Base Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:14 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-htQUg8nlK6vhjUT1isWZoPOiiUg56f?ndDFz7lznB5d 11-6-0 25-2-0 28-8-0 32-0-0 32-10₁8 4-0-8 6-10-0 6-10-0 3-6-0 3-4-0 0-10-8 6.00 12 6x8 = 3x4 || Scale = 1:68.1 6x8 = 322 21 4x5 🖊 4x5 < 5 3x6 > 11-0-0 6 4x5 > 4x5 > 8 10 15 14 13 12 5x12 16 **⊠** 20 4x5 = 4x5 = 7x10 =19 18 11 3x6 3x4 =7x10 > 5x10 = 3x4 =4x5 =

> 2-10-0 24-0-0 28-8-0 32-0-0 11-6-0 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 BCLL 0.0	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 (lo Vert(LL) -0.17 13-1 Vert(CT) -0.35 13-1 Horz(CT) 0.18	4 >999 360	PLATES MT20	GRIP 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-SH			Weight: 259 lb	FT = 3%

TOP CHORD

BOT CHORD

WEBS

LUMBER-BRACING-

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

2x4 SP No.2

(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-

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=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.



4.00 | 12

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

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

Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 3-17

except end verticals.

1 Row at midpt

1 Row at midpt

February 9,2021



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 chore 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/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 144715955 H3-90 T10 Piggyback Base 2 Job Reference (optional) Mid America Truss, Jefferson City, MO - 65101, 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:35 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-KNZIUoJIW7?EYV_XwAKQjBG2YmMDT0Z2ffIPFWznB6E 32-0-0 2-10-0 2-10-0 28-8-0 4-0-8 6-10-0 6-10-0 3-6-0 3-4-0 1-10-8 6.00 12 Scale = 1:68.9 6x8 = 3x4 || 6x8 = 322 21 4x5 / 4x5 < 5 3x6 > 6 4x5 < 4x5 < 15 14 13 12 ₩ 20 5x12 = 16 4x5 =4x5 =7x10 =19 18 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 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) SPACING-2-0-0 DEFL. (loc) I/defl L/d **PLATES** GRIP 20.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.88 Vert(LL) -0.17 13-14 >999 360 MT20 244/190 Snow (Pf/Pg) 20.4/20.0 Lumber DOL 1.15 BC 0.86 Vert(CT) -0.35 13-14 >999 240 **TCDL** 10.0 Rep Stress Incr YES WB 0.79 Horz(CT) 0.18 11 n/a n/a **BCLL** 0.0 Code IRC2018/TPI2014 FT = 3% Matrix-SH Weight: 261 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: 6-0-0 oc bracing: 11-12. 1 Row at midpt **WEBS** 1 Row at midpt 2-19, 4-17, 5-15, 1-20 REACTIONS. (size) 20=0-4-0, 11=0-4-0 Max Horz 20=-337(LC 7) 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 **BOT CHORD** 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 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) 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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715956 H3-90 T10A Piggyback Base Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:36 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-oZ77i8KwHQ749fZkUurfGOpC4Ai2CTUBuJ2yoyznB6D 2-10-0 32-0-0 25-2-0 28-8-0 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 = 4x5 = 5x5 = 2 24 3 25 4x4 / 4x5 < 3x6 > 1-0-0 6 4x5 🗢 4x5 < ă 14 18 3x4 =5x12 = []16 0-6-0 15 13 12 3x6 = 5x10 = 4x5 = 4x5 = 7x10 = 2x4 || 2x4 || 2x4 || 7x10 > 2x4 || 4.00 12 11-6-0 28-8-0 18-4-0 32-0-0 4-7-8 4-0-8 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 (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.96 Vert(LL) -0.16 12-13 >999 360 244/190 MT20 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** 3-17, 5-15

1 Row at midpt

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



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715957 H3-90 T10B PIGGYBACK BASE 5 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:38 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-kyFt6qLAp2NoPyj6bJt7LpuZn_NVgN0ULdX3sqznB6B 2-10-0 2-10-0 28-8-0 11-6-0 25-2-0 32-0-0 4-0-8 6-10-0 6-10-0 3-6-0 3-4-0 6.00 12 Scale = 1:67.5 6x8 = 3x4 || 6x8 = 321 20 4 4x5 / 4x5 < 5 3x6 <> 6 4x5 < 4x5 < 8 19-0-1 10-0-1 13 12 14 11 15 5x12 =Ħ 4x5 = 4x5 = 7x10 = 19 10 18 17 3x6 3x4 = 7x10 < 5x10 = 3x4 = 4x5 =4.00 12 11-6-0 28-8-0 32-0-0 2-10-0 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], [10:Edge,0-2-4], [17:Edge,0-1-8] LOADING (psf) SPACING-2-0-0 DEFL. (loc) I/defl L/d **PLATES** GRIP 20.0 TCLL (roof) Plate Grip DOL 1.15 TC 0.88 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-

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,

except end verticals.

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.



February 9,2021



16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek



Job Truss Truss Type Qty SUMMIT HOMES 144715958 H3-90 T11 Piggyback Base Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:41 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-8Xw0lsO26zlNGQRhHRRqzSW4gBOxtksw2bljT9znB68 2-10-0 2-10-0 25-2-0 7-1-0 18-1-0 28-8-0 32-0-0 6-4-8 2-3-8 3-3-8 3-3-8 3-6-0 3-4-0 6.00 12 Scale = 1:67.4 6x8 = 5x5 = 4x4 = 3 24 25 4 4x5 / 5x10 > 3x4 II 3x6 <> 4x5 < 8 4x5 < 19 6x12 = 10]-6-13 12 5x12 =Ŕ 7x10 = 4x5 = 23 22 21 16 15 18 3x4 = 7x10 < 5x10 = 5x10 = 3x4 = 3x4 = 4.00 12 11-2-8 28-8-0 32-0-0 2-10-0 9-2-8 14-9-8 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. 2x4 SP No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. Except: **WEBS** 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 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.



February 9,2021



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



16023 Swingley Ridge Rd Chesterfield, MO 63017

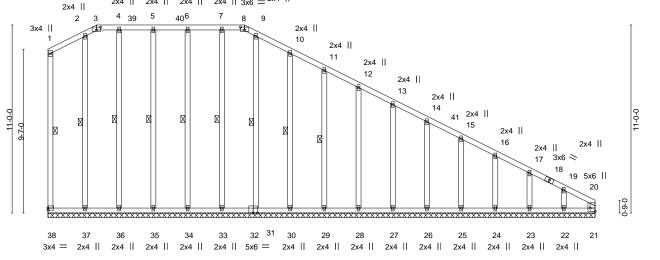
Job Truss Truss Type Qty SUMMIT HOMES 144715959 H3-90 T11GE **GABLE** Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:41:43 2021 Page 1

Mid America Truss, Jefferson City, MO - 65101,

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-5v2mAYPJda?5Vjb4OsTl2tcVS?EeLnKDVvEqX2znB66

2-10-0 2-10-0 11-6-0 8-8-0 20-6-0

6.00 12 Scale = 1:67.4 3x6 = $2x4 \parallel 2x4 \parallel 2x4 \parallel 2x4 \parallel 3x6 = 2x4 \parallel$



32-0-0

Plate Offsets (X,Y) [3:0-3-0,	0-2-0], [8:0-3-0,0-2-0], [20:Edge,0-3-8]				
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 0.50 BC 0.25 WB 0.17	DEFL. in (loc) Vert(LL) n/a - Vert(CT) n/a - Horz(CT) 0.01 21	n/a 999 n/a 999	PLATES GRIP MT20 244/190
BCDL 10.0	Code IRC2018/TPI2014	Matrix-R			Weight: 274 lb FT = 3%

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

- 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.



February 9,2021



Truss Type Qty 144715960 H3-90 V1 **GABLE** Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:15 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-93_ttUoN5P1YLe2EGa2oLdwvcu9wrl8xst?WfBznB5c 5-11-6 5-11-6 Scale = 1:20.4 4x5 = 2 6.00 12 6 4 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

BRACING-

TOP CHORD

BOT CHORD

Matrix-P

SUMMIT HOMES

LUMBER-

BCLL

BCDL

Job

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

0.0

10.0

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)

Truss

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.

Code IRC2018/TPI2014

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.



Weight: 39 lb

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

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

FT = 3%

February 9,2021



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 144715961 H3-90 V2 Valley Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:23 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-wcTuZDuODt2QltfmkFBggJGPG7whjvU6i7xxxkznB5U 3-11-6 3-11-6 Scale = 1:15.0 4x4 = 2 6.00 12 3 J-0-0 3x4 / 2x4 || 3x4 < 7-10-11

7-10-3

CSI.

TC

ВС

WB

Matrix-P

0.25

0.08

0.02

BCDL LUMBER-

LOADING (psf)

Snow (Pf/Pg) 15.4/20.0

TCLL (roof)

TCDL

BCLL

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

20.0

10.0

0.0

10.0

BOT CHORD OTHERS 2x4 SP No.2

2-0-0

1.15

1.15

YES

BRACING-TOP CHORD BOT CHORD

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

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

L/d

999

999

n/a

PLATES

Weight: 25 lb

MT20

GRIP

244/190

FT = 3%

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

I/defI

n/a

n/a

n/a

(loc)

3

n/a

n/a

0.00

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.

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2018/TPI2014

Lumber DOL

NOTES-

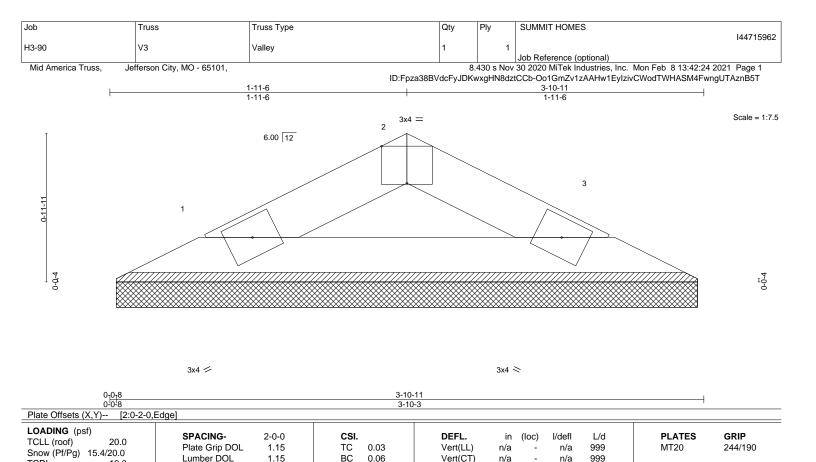
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate 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.







16023 Swingley Ridge Rd Chesterfield, MO 63017



LUMBER-

TCDL

BCLL

BCDL

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

10.0

10.0

0.0

BRACING-

TOP CHORD **BOT CHORD**

Horz(CT)

0.00

3

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

n/a

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

n/a

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.

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

YES

WB

Matrix-P

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.



FT = 3%

Weight: 10 lb



MiTek

Job Truss Truss Type Qty SUMMIT HOMES 144715963 H3-90 V4 **GABLE** Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:25 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-s_bf_vwfkUI8XBp9sgD8lkLkZwcsBpMP9RQ2?cznB5S 8-6-6 2-7-0 Scale = 1:31.0 4x5 = 3 2x4 || 7.00 12 2x4 || 3x5 / 5 2x4 || 6 2x4 || 2x4 || 11-1-6 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 0.26 n/a n/a MT20 Snow (Pf/Pg) 15.4/20.0

LUMBER-

TCDI

BCLL

BCDL

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

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

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

10.0

0.0

10.0

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.

Lumber DOL

Rep Stress Incr

Code IRC2018/TPI2014

WEBS 2-7=-313/130

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

ВС

WB

Matrix-P

0.10

0.06

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

n/a

-0.00

999

n/a

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

n/a

n/a

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

5

except end verticals.

- 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.



Weight: 49 lb

FT = 3%

February 9,2021





Job Truss Truss Type Qty SUMMIT HOMES 144715964 H3-90 V5 **GABLE** Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:26 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-KB81BFxHVoQ_9KOLPOkNIxuwfKybwGxYO59bY2znB5R 6-9-13 Scale = 1:26.2 4x4 = 3 7.00 12 2x4 || 2x4 || 2 2-5-10 0-0-4 ⁵2x4 || 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

LUMBER-

BCDL

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

10.0

BOT CHORD 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 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)

Code IRC2018/TPI2014

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

2-7=-262/109 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, 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.



Weight: 39 lb

FT = 3%

February 9,2021



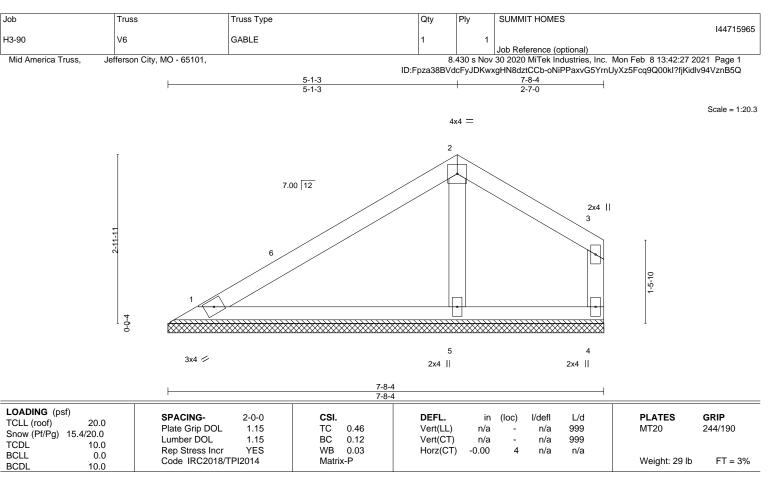
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



16023 Swingley Ridge Rd Chesterfield, MO 63017



LUMBER-

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

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

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

except end verticals.

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

REACTIONS. (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-

- 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.



February 9,2021



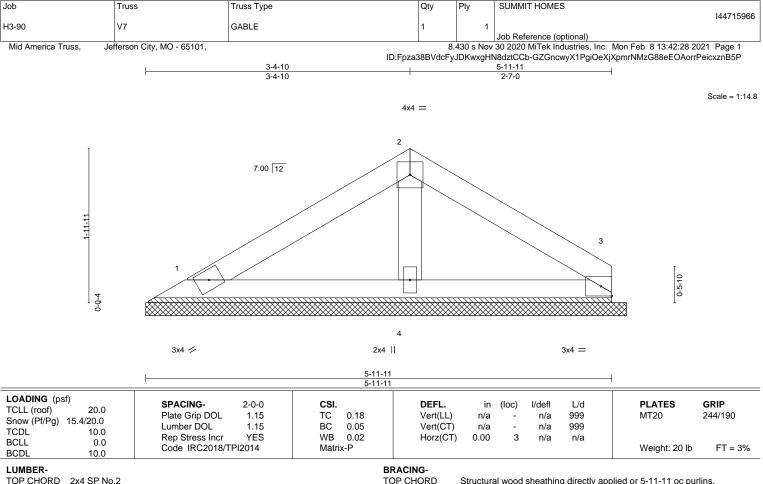
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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 chore 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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

16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek



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

BOT CHORD OTHERS 2x4 SP No.2 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.



February 9,2021



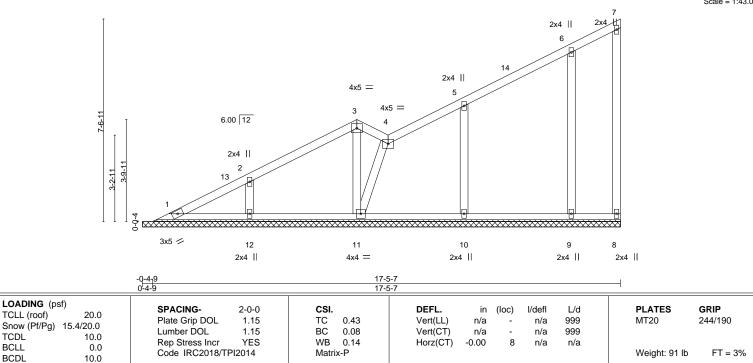
16023 Swingley Ridge Rd Chesterfield, MO 63017

MiTek

Job Truss Truss Type Qty SUMMIT HOMES 144715967 H3-90 V8 **GABLE** Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:29 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-kmq9pGz9ojoZ0o6w5WI4vaVNvXz47b5?43OF8NznB5O 7-7-7 7-7-7

1-2-0

Scale = 1:43.0



LUMBER-

TCDI

BCLL

BCDL

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

BOT CHORD 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.

8-8-0

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

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),

9=270(LC 2)

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

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

- 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.



February 9,2021





Job Truss Truss Type Qty SUMMIT HOMES 144715968 H3-90 V9 **GABLE** Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:30 2021 Page 1

Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-DyOY1c_oZ0wQeyh6eEpJSn2WYxJds358Jj7phqznB5N

999

999

n/a

n/a

n/a

n/a

1-2-0 8-8-0

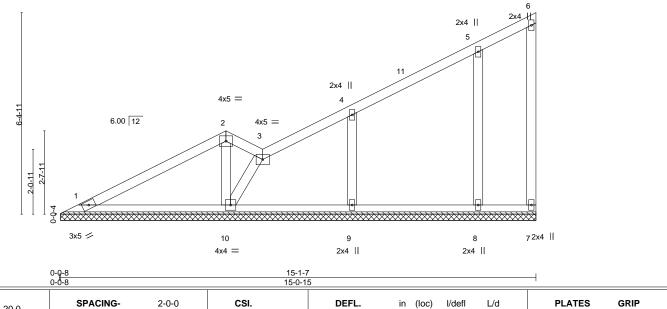
Scale = 1:36.5

244/190

FT = 3%

MT20

Weight: 73 lb



BCDL 10.0 LUMBER-BRACING-

Code IRC2018/TPI2014

1.15

1.15

YES

Plate Grip DOL

Rep Stress Incr

Lumber DOL

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

LOADING (psf)

Snow (Pf/Pg) 15.4/20.0

TCLL (roof)

TCDI

BCLL

OTHERS

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

20.0

10.0

0.0

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

Vert(LL)

Vert(CT)

Horz(CT)

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

n/a

n/a

-0.00

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

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)

TC

ВС

WB

Matrix-P

0.57

0.12

0.09

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

WEBS 4-9=-296/93

- 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) 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.



February 9,2021



Job Truss Truss Type Qty Ply SUMMIT HOMES 144715969 H3-90 V10 **GABLE** Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:16 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101, ID:Fpza38BVdcFyJDKwxgHN8dztCCb-dGYF5qp?sj9PyodQqHZ1uqTD_IYHalC45Xk3BdznB5b 12-9-7 2-11-7 1-2-0 8-8-0 Scale = 1:29.3 2x4 || 5 2x4 || 4x5 = 6.00 12 2 4x5 || -5-11 0-10-11 10 3x5 🖊 3x5 < 2x4 || 2x4 || 2x4 || 2x4 ||

Snow (Pf/Pg) 15.4/20.0 Lumber DOL 1.15 ВС 0.06 TCDI 10.0 Rep Stress Incr YES WB 0.06 **BCLL** 0.0 Code IRC2018/TPI2014 Matrix-P **BCDL** 10.0

SPACING-

Plate Grip DOL

DEFL. I/defI L/d (loc) Vert(LL) 999 n/a n/a Vert(CT) 999 n/a n/a Horz(CT) -0.00 n/a n/a **PLATES** MT20

244/190

GRIP

Weight: 58 lb FT = 3%

LUMBER-

LOADING (psf)

TCLL (roof)

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

20.0

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

BOT CHORD

12-9-7 12-8-15

CSI.

TC

0.19

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 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

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

2-0-0

1.15

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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715970 H3-90 V11 **GABLE**

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:17 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-5S6dlAqed1HGayBcO?4GQ20Mait?JBjEJBUdj4znB5a

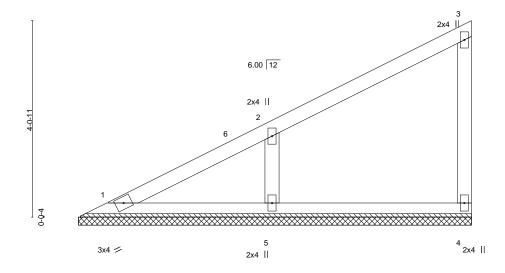
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

8-1-7

Scale: 1/2"=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 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-

REACTIONS.

TOP CHORD 2x4 SP No.2

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

OTHERS 2x4 SP No.2

(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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715971 H3-90 V12 Valley Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:18 2021 Page 1 Mid America Truss, Jefferson City, MO - 65101,

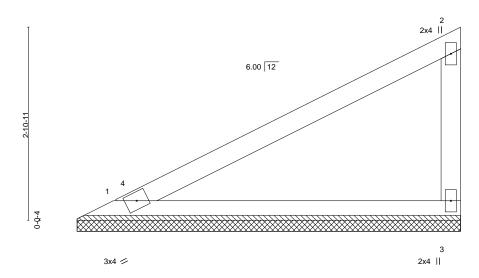
ID:Fpza38BVdcFyJDKwxgHN8dztCCb-Zeg?WVqGOKP7C6moxibVzFYRB6BK2ebNYrDAGWznB5Z 5-9-7 5-9-7

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 = 1:17.3



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

TOP CHORD

BOT CHORD

LUMBER-BRACING-

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

WEBS 2x4 SP No.2

> 1=5-8-15, 3=5-8-15 (size) 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.

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) 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.



February 9,2021



Job Truss Truss Type Qty SUMMIT HOMES 144715972 H3-90 V13 **GABLE**

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:19 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-1qDNjrru9eX_pGL?VQ6kVT5j5VZvn5HWnVzkoyznB5Y

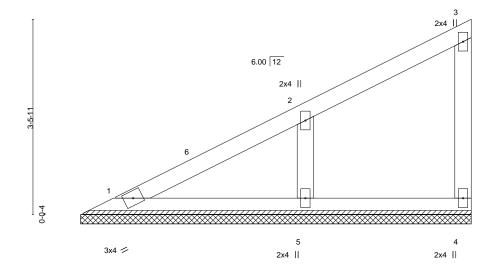
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

6-11-7

Scale = 1:20.5



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 0.20 BC 0.07 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: 27 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=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.



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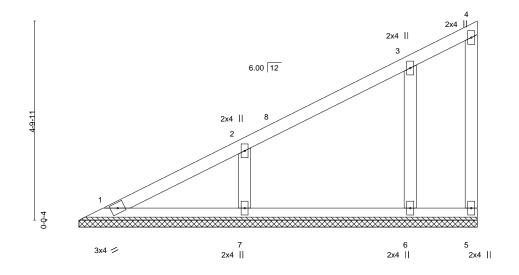
Job Truss Truss Type Qty SUMMIT HOMES 144715973 H3-90 V14 **GABLE** Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:19 2021 Page 1

Mid America Truss, Jefferson City, MO - 65101,

ID:Fpza38BVdcFyJDKwxgHN8dztCCb-1qDNjrru9eX_pGL?VQ6kVT5j0VZhn4pWnVzkoyznB5Y

9-7-7

Scale = 1:27.8



LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.20 BC 0.08 WB 0.07	DEFL. Vert(LL) Vert(CT) Horz(CT)	in n/a n/a -0.00	(loc) - - 5	I/defI 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%

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.

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

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) 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.



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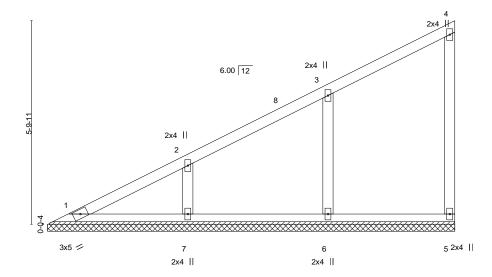
Job Truss Truss Type Qty SUMMIT HOMES 144715974 H3-90 V15 **GABLE**

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:20 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-V1nmxBsWwyfrRPwB37dz2geuHvvzWXvg09iHKPznB5X

11-7-7

Scale = 1:32.9



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 n/a n/a -0.00	(loc) - -	l/defl n/a n/a	L/d 999 999	PLATES MT20	GRIP 244/190
BCLL 0.0 BCDL 10.0	Code IRC2018/TPI2014	Matrix-P	11012(01)	-0.00	5	n/a	n/a	Weight: 51 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 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. WEBS 3-6=-306/97

- 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.



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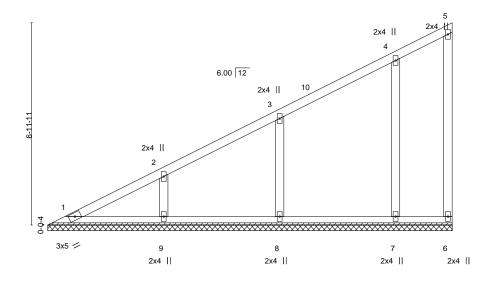
Job Truss Truss Type Qty SUMMIT HOMES 144715975 H3-90 V16 **GABLE**

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:21 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-zDL88Xt8hFni3ZVNdr8CbuA15JFDFzzpEpSqsrznB5W

13-11-7

Scale = 1:39.8



LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.36 BC 0.08 WB 0.15	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: 68 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 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.





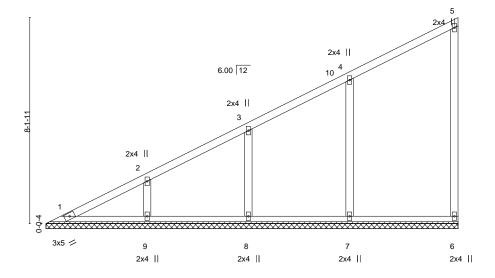
Job Truss Truss Type Qty SUMMIT HOMES 144715976 H3-90 V17 **GABLE**

Mid America Truss, Jefferson City, MO - 65101,

Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Feb 8 13:42:22 2021 Page 1 ID:Fpza38BVdcFyJDKwxgHN8dztCCb-SPvWLttmSZwZgj4aAYgR75j9Lja7_QhzTTBOPHznB5V

16-3-7

Scale = 1:45.5



LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 15.4/20.0 TCDL 10.0 BCLL 0.0	SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES	CSI. TC 0.52 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
BCDL 0.0	Code IRC2018/TPI2014	Matrix-P						Weight: 77 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 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.

4-7=-328/109 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) 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.



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Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

4 × 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.
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21.The design does not take into account any dynamic or other loads other than those expressly stated.