

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 150_1773_A

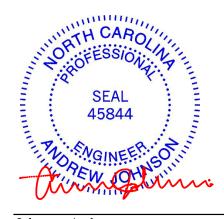
KB Home 150.1773.A

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I44541833 thru I44541846

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

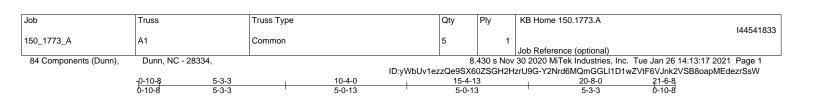
North Carolina COA: C-0844



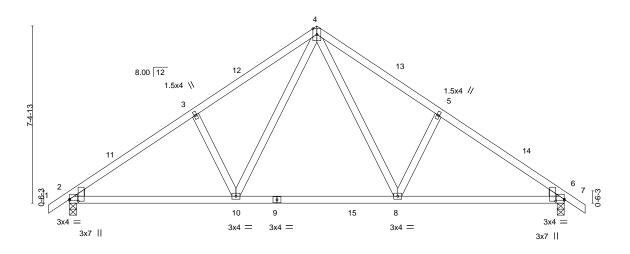
January 27,2021

Johnson, Andrew

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.



4x6 ||



13-8-9 20-8-0

| Plate Offsets (X,Y) [2:0-0-0, | 0-0-8], [2:0-0-15,0-4-5], [6:Edge,0-0-8], | [6:0-0-15,0-4-5] | | |
|--|--|---------------------------------------|---|---------------------|
| LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 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 0.35 BC 0.49 WB 0.18 | DEFL. in (loc) l/defl L/d PLATES Vert(LL) -0.10 8-10 >999 240 MT20 Vert(CT) -0.14 8-10 >999 180 Horz(CT) 0.03 6 n/a n/a | GRIP 197/144 |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Weight: 106 lb | FT = 20% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SP No.3

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 6=0-3-8

Max Horz 2=-157(LC 12)

Max Uplift 2=-54(LC 14), 6=-54(LC 15) Max Grav 2=876(LC 2), 6=876(LC 2)

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

TOP CHORD 2-3=-1154/78, 3-4=-1016/132, 4-5=-1016/132, 5-6=-1154/78

BOT CHORD 2-10=-82/958, 8-10=0/629, 6-8=0/875

WEBS 4-8=-81/492, 5-8=-267/172, 4-10=-81/495, 3-10=-267/172

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-4-0, Exterior(2) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 21-6-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.



Structural wood sheathing directly applied or 5-1-4 oc purlins.

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

Scale: 1/4"=1

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 KB Home 150.1773.A 144541834 150 1773 A ΑE Common Supported Gable Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 26 14:13:18 2021 Page 1 84 Components (Dunn), Dunn, NC - 28334, ID:yWbUv1ezzQe9SX60ZSGH2HzrU9G-0FxDqSM2XaOCwBoDUG06oJ2Z98VnBfLxpT5oA4zrSsV 21-6-8 0-10-8 -0-10-8 0-10-8 20-8-0

4x4 =

10-4-0

16

15

14

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

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

3x7 ||

6 8.00 12 10 11 3x4 = 3x4 =

18

20-8-0

20 19

3x4 =

21

| Plate Offsets (X,Y) [2:Edge,0 |)-0-12], [2:0-0-15,0-4-5], [12:Edge,0-0-1 | 2], [12:0-0-15,0-4-5] | | | |
|--|--|---------------------------------------|---|----------------|-----------------------|
| LOADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 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 0.06 BC 0.04 WB 0.12 | DEFL. in (loc) l/defl L/d Vert(LL) -0.00 12 n/r 120 Vert(CT) 0.00 12 n/r 120 Horz(CT) 0.00 12 n/a n/a | | GRIP 97/144 |
| BCLL 0.0 * BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 125 lb | FT = 20% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.3

WEDGE

Left: 2x4 SP No.3, Right: 2x4 SP No.3

REACTIONS. All bearings 20-8-0.

Max Horz 2=-157(LC 12) (lb) -

Max Uplift All uplift 100 b or less at joint(s) 2, 20, 21, 22, 23, 17, 16, 15, 14

Max Grav All reactions 250 lb or less at joint(s) 2, 18, 20, 21, 22, 23, 17, 16, 15, 14, 12

10-4-0

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

23

3x7 ||

22

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-4-0, Exterior(2) 2-4-0 to 10-4-0, Corner(3) 10-4-0 to 13-4-0, Exterior(2) 13-4-0 to 21-6-8 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 1.5x4 MT20 unless otherwise indicated
- 7) Gable requires continuous bottom chord bearing.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



Scale = 1:48.8

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



Job Truss Truss Type Qty Ply KB Home 150.1773.A 144541835 150 1773 A AG Common Girder | **Z** | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 26 14:13:20 2021 Page 1

4x6 ||

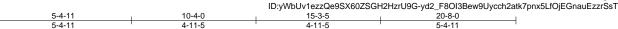
84 Components (Dunn), Dunn, NC - 28334,

7-0-

Structural wood sheathing directly applied or 5-4-3 oc purlins.

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

Scale = 1:45.8



3 8.00 12 1.5x4 \\ 1.5x4 // 2 5LUS24 5-9--6-3 ПП ПΠ ПΠ ПП ПΠ 9 10 12 7 13 1516 18 11 8 14 6 17 19 20 4x8 =NAILED LUS24 LUS24 LUS24 NAILED NAILED 4x6 = 8x8 = NAILED 8x8 =4x8 = NAILED LUS24 20-8-0 13-7-9

| Plate Offsets (X,Y) [1:0-4-0, | 0-1-9], [5:0-4-0,0-1-9], [6:0-4-0,0-5-8] | | | |
|---|---|---------------------------------------|---|------------------------------------|
| TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 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 0.43 BC 0.42 WB 0.70 | DEFL. in (loc) l/defl L/d Vert(LL) -0.07 5-6 >999 240 Vert(CT) -0.14 5-6 >999 180 Horz(CT) 0.02 5 n/a n/a | PLATES GRIP MT20 197/144 |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 267 lb FT = 20% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2

BOT CHORD 2x8 SP No.2 *Except*

5-7: 2x8 SP DSS

WEBS 2x4 SP No.3

REACTIONS. (size) 1=0-3-8, 5=0-3-8

Max Horz 1=146(LC 41)

Max Uplift 1=-292(LC 10), 5=-571(LC 11) Max Grav 1=2184(LC 2), 5=4248(LC 2)

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

7-0-

TOP CHORD 1-2=-3336/457, 2-3=-3193/516, 3-4=-4481/686, 4-5=-4608/628

BOT CHORD 1-8=-406/2679, 6-8=-247/2194, 5-6=-457/3744

WEBS 3-6=-534/3402, 4-6=-290/203, 3-8=-204/908, 2-8=-291/196

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: 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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 1. This connection is for uplift only and does not consider lateral forces.
- 9) Two H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 10) Use Simpson Strong-Tie LUS24 (4-SD9112 Girder, 2-SD9212 Truss, Single Ply Girder) or equivalent spaced at 2-3-0 oc max. Contistation rapage 0212 from the left end to 20-2-4 to connect truss(es) to back face of bottom chord.



January 27,2021

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

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Job Truss Truss Type Qty Ply KB Home 150.1773.A 144541835 150_1773_A AG Common Girder | **Z** | Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 26 14:13:20 2021 Page 2

84 Components (Dunn),

Dunn, NC - 28334,

ID:yWbUv1ezzQe9SX60ZSGH2HzrU9G-yd2_F8OI3Bew9Uycch2atk7pnx5LfOjEGnauEzzrSsT

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

12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

LOAD CASE(S) Standard

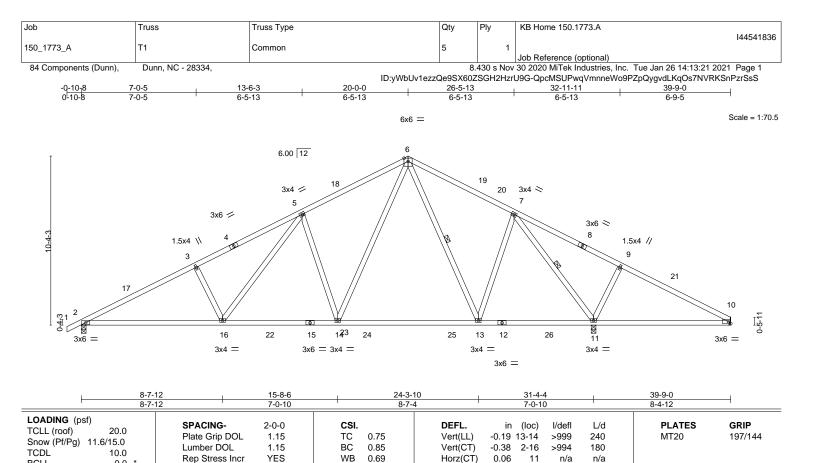
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-43, 3-5=-43, 1-5=-20

Concentrated Loads (lb)

Vert: 9=-58(B) 10=-58(B) 11=-58(B) 12=-58(B) 14=-58(B) 16=-717(B) 17=-717(B) 18=-717(B) 19=-717(B) 20=-724(B)



BRACING-

TOP CHORD

BOT CHORD

WEBS

Matrix-S

11

6-0-0 oc bracing: 10-11.

1 Row at midpt

Structural wood sheathing directly applied or 2-5-10 oc purlins.

6-13, 7-11

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

LUMBER-

BCLL

BCDL

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

0.0

10.0

WEBS 2x4 SP No.3

REACTIONS. 2=0-3-8, 11=0-3-8, 10=Mechanical (size)

Max Horz 2=154(LC 20)

Max Uplift 2=-97(LC 16), 11=-84(LC 17), 10=-66(LC 36) Max Grav 2=1239(LC 2), 11=1930(LC 3), 10=150(LC 35)

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

TOP CHORD 2-3=-2096/161, 3-5=-1939/201, 5-6=-1377/195, 6-7=-871/168, 7-9=-24/617,

Code IRC2015/TPI2014

9-10=-63/462

BOT CHORD 2-16=-214/1821, 14-16=-88/1363, 13-14=0/826, 11-13=0/552, 10-11=-344/71 WFBS 3-16=-362/179, 5-16=-84/618, 5-14=-664/222, 6-14=-127/927, 6-13=-334/75,

7-13=0/561, 7-11=-1751/92, 9-11=-405/183

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-1-3, Interior(1) 3-1-3 to 20-0-0, Exterior(2) 20-0-0 to 23-11-11, Interior(1) 23-11-11 to 39-8-4 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
- 10) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at it(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.



Weight: 214 lb

FT = 20%

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Job Truss Truss Type Qty KB Home 150.1773.A 144541837 **ROOF TRUSS** 150 1773 A T1A 5 Job Reference (optional) 84 Components (Dunn), Dunn, NC - 28334, 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 26 14:13:23 2021 Page 1 ID:yWbUv1ezzQe9SX60ZSGH2HzrU9G-MCk6t9QBM60V0ygBHqbHVNIGC9?psmVgzlpZrlzrSsQ 26-5-13 32-11-11 39-9-0 -0-10-8 0-10-8

6-5-13

Vert(CT)

BRACING-

WEBS

TOP CHORD

BOT CHORD

Horz(CT)

-0.54 18-20

1 Row at midpt

12

0.06

>698

n/a

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

180

n/a

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

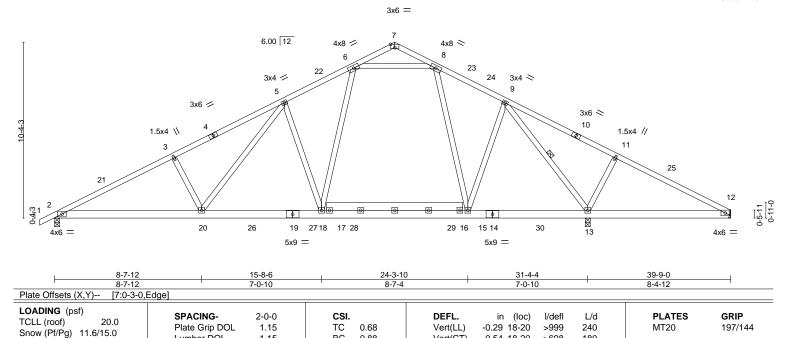
9-13

6-5-13

6-5-13

Scale = 1:67.7

6-9-5



LUMBER-

REACTIONS.

TCDL

BCLL

BCDL

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2

10.0

10.0

0.0

7-0-5

BOT CHORD 2x6 SP No.2

2x4 SP No.3 **WEBS**

(size) 2=0-3-8, 13=0-3-8, 12=Mechanical

Max Horz 2=155(LC 20)

Max Uplift 2=-140(LC 16), 13=-231(LC 17), 12=-113(LC 16) Max Grav 2=1448(LC 2), 13=1168(LC 36), 12=849(LC 2)

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

1.15

YES

BC

WB

Matrix-S

0.88

0.70

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

TOP CHORD 2-3=-2640/263, 3-5=-2490/300, 5-6=-1824/256, 8-9=-1667/271, 9-11=-1433/346,

11-12=-1487/310

BOT CHORD 2-20=-305/2335, 18-20=-163/1796, 15-18=-82/1435, 13-15=-123/1472, 12-13=-229/1305

6-5-13

WEBS 3-20=-362/180, 5-20=-107/756, 5-18=-738/213, 6-18=-72/766, 8-15=-50/430,

9-13=-817/170, 11-13=-394/192, 6-8=-1275/223

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-1-3, Interior(1) 3-1-3 to 20-0-0, Exterior(2) 20-0-0 to 23-11-11, Interior(1) 23-11-11 to 39-8-4 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) All plates are 4x4 MT20 unless otherwise indicated.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=113.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 13. This connection is for uplift only and does not consider lateral forces.
- 12) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



Weight: 266 lb

FT = 20%

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

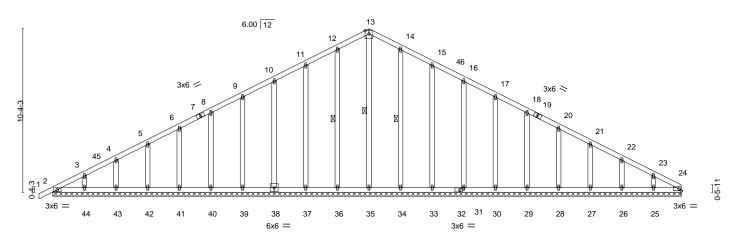
AMSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty KB Home 150.1773.A 144541838 150 1773 A T1E Common Supported Gable Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 26 14:13:25 2021 Page 1 84 Components (Dunn), Dunn, NC - 28334,

ID:yWbUv1ezzQe9SX60ZSGH2HzrU9G-JbsslrSRukGDFGqaOEemaoql8yuZKodzQ3lfwAzrSsO 20-0-0 19-9-0

> Scale = 1:72.9 6x6 =



39-9-0 [32:0-2-4 0-1-8] Plate Offsets (X V)--

| 1 late 0113ct3 (X,1) [52.0 2 = | 1,0 1 0] | | | |
|---|---|---------------------------------------|--|---|
| TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 BCLL 0.0 * | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014 | CSI. TC 0.07 BC 0.03 WB 0.15 Matrix-S | DEFL. in (loc) l/defl L/d Vert(LL) -0.00 1 n/r 120 Vert(CT) -0.00 1 n/r 120 Horz(CT) 0.01 24 n/a n/a | PLATES GRIP MT20 197/144 Weight: 270 lb FT = 20% |
| BCDL 10.0 | 0000 11102010/11 12011 | mann o | | 110.g.m. 2.0.b 1.1 2070 |

LUMBER-BRACING-

2x4 SP No.2 or 2x4 SPF No.2 TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. **BOT CHORD** 2x4 SP No.2 or 2x4 SPF No.2 **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.3 **WEBS** 13-35, 12-36, 14-34 1 Row at midpt

REACTIONS. All bearings 39-9-0.

-0-10₋₈

(lb) -Max Horz 2=154(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 37, 38, 39, 40, 41, 42, 43, 44, 34, 33, 31, 30, 29, 28,

27, 26, 25

Max Grav All reactions 250 lb or less at joint(s) 2, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 34, 33, 31, 30,

29, 28, 27, 26, 25, 24

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

TOP CHORD 12-13=-100/282, 13-14=-100/283

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-1-3, Exterior(2) 3-1-3 to 20-0-0, Corner(3) 20-0-0 to 24-0-0, Exterior(2) 24-0-0 to 39-9-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 1.5x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



January 27,2021

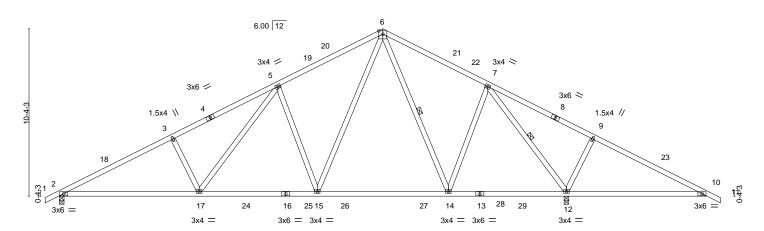


Job Truss Truss Type Qty KB Home 150.1773.A 144541839 150 1773 A T2 Common 3 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 26 14:13:27 2021 Page 1 84 Components (Dunn), Dunn, NC - 28334,

6x6 =

ID:yWbUv1ezzQe9SX60ZSGH2HzrU9G-FzzdjXThQLWxVZ_yWfgEfDwv9mNOoZiGtNnm_3zrSsM 32-11-1<u>1</u> 40-10₋8 0-10-8 26-5-13 40-0-0 6-5-13 6-5-13 6-5-13 6-5-13 7-0-5

Scale = 1:71.2



| 8-7-12 | 15-11-6 | 24-0-10 | 31-4-4 | 40-0-0 | |
|---|---|--|--------------------|-------------------------------------|------------------------------|
| 8-7-12 | 7-3-10 | 8-1-4 | 7-3-10 | 8-7-12 | |
| CADING (psf) TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 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 IRC2015/TPI2014 | CSI. TC 0.81 Vert(L BC 0.84 Vert(C WB 0.75 Horz(C Matrix-S | T) -0.37 2-17 >999 | L/d 240 MT20 180 n/a Weight: 216 lb | GRIP 197/144 FT = 20% |

BRACING-

WEBS

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SP No.3

-0-10-8 0-10-8

REACTIONS. 2=0-3-8, 12=0-3-8 (size) Max Horz 2=148(LC 20)

Max Uplift 2=-110(LC 16), 12=-133(LC 17) Max Grav 2=1199(LC 2), 12=2103(LC 2)

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

TOP CHORD 2-3=-2031/187, 3-5=-1887/227, 5-6=-1294/217, 6-7=-797/169, 7-9=-351/924,

9-10=-388/756

BOT CHORD $2\text{-}17\text{=-}231/1797,\ 15\text{-}17\text{=-}108/1330,\ 14\text{-}15\text{=-}0/800,\ 12\text{-}14\text{=-}0/499,\ 10\text{-}12\text{=-}577/408}$ WFBS

3-17=-363/178, 5-17=-80/624, 5-15=-664/219, 6-15=-124/904, 6-14=-392/165,

7-14=-35/593, 7-12=-1898/315, 9-12=-407/184

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 12. This connection is for uplift only and does not consider lateral forces.



Structural wood sheathing directly applied or 2-7-4 oc purlins.

6-14, 7-12

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

6-0-0 oc bracing: 10-12.

1 Row at midpt





6-5-13

6-5-13

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

7-14, 5-14

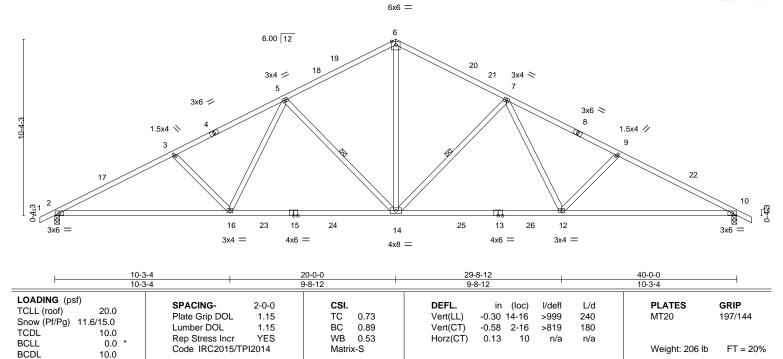
Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Row at midpt

6-5-13

0-10-8 Scale = 1:67.6

7-0-5



BRACING-TOP CHORD

WEBS

BOT CHORD

LUMBER-

-0-10₇8 0-10-8

7-0-5

6-5-13

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*

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

BOT CHORD 2x4 SP No.1

WEBS 2x4 SP No.3

REACTIONS.

(size) 2=0-3-8, 10=0-3-8

Max Horz 2=148(LC 16)

Max Uplift 2=-105(LC 16), 10=-105(LC 17) Max Grav 2=1650(LC 2), 10=1650(LC 2)

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

TOP CHORD 2-3=-2970/190, 3-5=-2695/177, 5-6=-1875/207, 6-7=-1875/207, 7-9=-2695/177,

9-10=-2970/190

BOT CHORD 2-16=-234/2586, 14-16=-102/2095, 12-14=-6/2095, 10-12=-86/2586

WEBS 6-14=-53/1281, 7-14=-738/196, 7-12=-9/585, 9-12=-376/185, 5-14=-738/196,

5-16=-9/585, 3-16=-376/185

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-1-8, Interior(1) 3-1-8 to 20-0-0, Exterior(2) 20-0-0 to 24-0-0, Interior(1) 24-0-0 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.



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

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

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

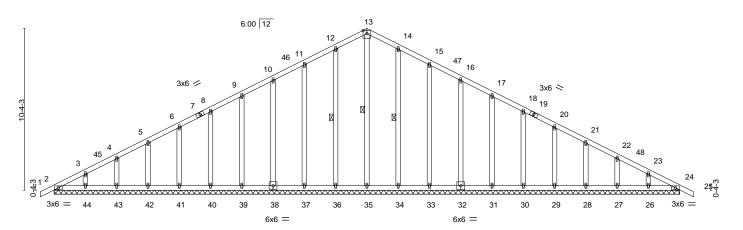


Job Truss Truss Type Qty Ply KB Home 150.1773.A 144541841 150 1773 A T3E Common Supported Gable Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 26 14:13:31 2021 Page 1 84 Components (Dunn),

Dunn, NC - 28334,

ID:yWbUv1ezzQe9SX60ZSGH2HzrU9G-7ID8ZvXCTa1M_BHjIVIAq34mcNxzkW6ro_I_7qzrSsI 40-10-8 0-10-8 20-0-0 20-0-0

> Scale = 1:73.7 6x6 =



| | | 40-0-0 | | | | | | |
|--|---|---------------------------------------|---|---|-----------------------------|--------------------------|----------------------------------|------------------------------|
| | | 40-0-0 | | | | | <u> </u> | |
| TCLL (roof) 20.0 Snow (Pf/Pg) 11.6/15.0 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 IRC2015/TPI2014 | CSI. TC 0.07 BC 0.03 WB 0.15 Matrix-S | DEFL. Vert(LL) Vert(CT) Horz(CT) | in (loc) -0.00 24 -0.00 24 0.01 24 | l/defl n/r n/r n/a | L/d 120 120 n/a | PLATES MT20 Weight: 272 lb | GRIP 197/144 FT = 20% |

40-0-0

BRACING-LUMBER-

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. **BOT CHORD** 2x4 SP No.2 or 2x4 SPF No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. **OTHERS** 2x4 SP No.3 **WEBS** 1 Row at midpt 13-35, 12-36, 14-34

REACTIONS. All bearings 40-0-0.

-0-10-8 0-10-8

(lb) -Max Horz 2=148(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 37, 38, 39, 40, 41, 42, 43, 44, 34, 33, 32, 31, 30, 29,

28, 27, 26

All reactions 250 lb or less at joint(s) 2, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 34, 33, 32, 31, Max Grav

30, 29, 28, 27, 26, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 11-12=-88/253, 12-13=-102/288, 13-14=-102/290, 14-15=-88/255

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-1-8, Exterior(2) 3-1-8 to 20-0-0, Corner(3) 20-0-0 to 24-0-0, Exterior(2) 24-0-0 to 40-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 1.5x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.





Job Truss Truss Type Qty KB Home 150.1773.A 144541842 150 1773 A V1 Valley Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 26 14:13:32 2021 Page 1 84 Components (Dunn), Dunn, NC - 28334, ID:yWbUv1ezzQe9SX60ZSGH2HzrU9G-bxnWmEXqEt9DbKswJDGPMGdvGnGmT_A?1eUXfGzrSsH 8-11-14 8-11-14 Scale = 1:37.2 3x4 = 8.00 12 15 6 16 13 3x4 / 12 11 10 9 8 3x4 =17-11-12 0-<u>0-6</u> 0-0-6 17-11-6 [4:0-2-0,Edge] Plate Offsets (X,Y)--LOADING (psf) SPACING-2-0-0 CSI. in (loc) I/defl L/d **PLATES** GRIP TCLL (roof) 20.0 Plate Grip DOL 1.15 TC 0.21 Vert(LL) 999 197/144 n/a n/a MT20 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 BC 0.12 Vert(CT) n/a n/a 999 **TCDL** 10.0 Rep Stress Incr YES WB 0.10 Horz(CT) 0.00 n/a n/a **BCLL** 0.0 * Code IRC2015/TPI2014 FT = 20% Weight: 78 lb Matrix-S BCDL 10.0

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.3

REACTIONS. All bearings 17-11-0.

(lb) -Max Horz 1=-120(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 9, 10 except 8=-106(LC 15), 12=-105(LC 14)

Max Grav All reactions 250 lb or less at joint(s) 1, 7, 9 except 8=363(LC 26), 12=361(LC 25), 10=257(LC 25)

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

WEBS

6-8=-269/154, 2-12=-268/153

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 8-11-14, Exterior(2) 8-11-14 to 11-11-14, Interior(1) 11-11-14 to 17-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



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

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



| OD | Truss | Truss Type | | Qty | Ply | KB Home | 3 150.17 | 73.A | | 144544040 |
|------------------------|---|-------------|---------------------|-----------|----------|-----------|----------|-----------|--|----------------|
| 50_1773_A | V2 | Valley | | 1 | 1 | | | | | 144541843 |
| | | • | | | | Job Refer | | | | |
| 84 Components (Dunn), | Dunn, NC - 28334, | | | | | | | | Tue Jan 26 14:13:33 20 | |
| | | 7-5-14 | ID:yWbUv | 1ezzQe9SX | (60ZSGH2 | | | S?BH4DUR6 | swnevU95OBclCSy8GII | E5CjzrSsG |
| | | 7-5-14 | | | | 7-5-14 | | | | |
| | | | | | | | | | | |
| | | | 4x4 = | | | | | | | Scale: 3/8"=1' |
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| | | 1.5x4 | 1.5x4 | | 1 | .5x4 | | | | |
| | | | | | | •• | | | | |
| | | | **** | | | | | | | |
| | 0- <u>9-6</u> 0-0-6 | | 14-11-12 14-11-6 | | | | | | | |
| | 0-0-0 | I | 14-11-0 | | | | | | | |
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) 20.0 | Plate Grip D | | TC 0.18 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 197/144 |
| Snow (Pf/Pg) 11.6/15.0 | Lumber DO | | BC 0.10 | Vert(CT) | | - | n/a | 999 | | |
| TCDL 10.0 BCLL 0.0 | * Rep Stress | | WB 0.06 | Horz(CT) | | 5 | n/a | n/a | | |
| BCDL 10.0 | | 015/TPI2014 | Matrix-S | . , | | | | | Weight: 60 lb | FT = 20% |
| | | | | | | | | | | |
| LUMBER- | | | BRACI | NG- | | | | | | |

TOP CHORD

BOT CHORD

LUMBER-

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

OTHERS 2x4 SP No.3

REACTIONS. All bearings 14-11-0. (lb) - Max Horz 1=-98(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 6=-102(LC 15), 8=-102(LC 14) Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 6=345(LC 26), 8=345(LC 25)

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

WEBS 4-6=-259/144, 2-8=-259/144

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 7-5-14, Exterior(2) 7-5-14 to 10-5-14, Interior(1) 10-5-14 to 14-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



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

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

| Job | Truss | Truss Type | | Qty | Ply | KB Hor | me 150.177 | 73.A | | |
|-------------------------------------|----------------|----------------------|----------|--------------|----------------|-------------------|------------|--|--|----------------|
| | | | | | | | | | | I44541844 |
| 150_1773_A | V3 | Valley | | 1 | 1 | lob Bof | erence (op | tional) | | |
| 84 Components (Dunn), | Dunn | , NC - 28334, | | | 8.430 s No | | | | ue Jan 26 14:13:34 2 | 021 Page 1 |
| ,, | | | ļ | | | GH2Hzrl | J9G-YKuGI | |)IQdltRhiF6axAxvSIU | |
| | <u> </u> | 5-11-14 5-11-14 | + | | | 11-11-1 5-11-1 | 12 | | —— | |
| | | 5-11-14 | | | | 5-11-1 | 4 | | | |
| | | | 3x4 | = | | | | | | Scale = 1:26.4 |
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| | | 5155 12 11.0 | | | 4 | .584 11 | | | | |
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| | | 1 | 5x4 | 1 | .5x4 | | | | | |
| | | | | | | | | | | |
| | 0-Q-6 | | 11-11 | -12 | | | | | 1 | |
| | 0-0-6 0-0-6 | | 11-11 | 1-6 | | | | | | |
| | :0-2-0,E | dge] | | | | | | | | |
| LOADING (psf) | | SPACING- 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) 20.0 | | Plate Grip DOL 1.15 | TC 0.25 | Vert(LL | | | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) 11.6/15.0 TCDL 10.0 | | Lumber DOL 1.15 | BC 0.19 | Vert(C1 | <u>^</u>) n/a | | n/a | 999 | | |
| BCLL 0.0 | | Rep Stress Incr YES | WB 0.05 | Horz(C | T) 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | | Code IRC2015/TPI2014 | Matrix-S | | | | | | Weight: 44 lb | FT = 20% |

LUMBER-

OTHERS

TOP CHORD 2x4 SP No.3 BOT CHORD 2x4 SP No.3

BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS. All bearings 11-11-0.

2x4 SP No.3

Max Horz 1=-77(LC 10) (lb) -

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

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 6=312(LC 26), 7=313(LC 25)

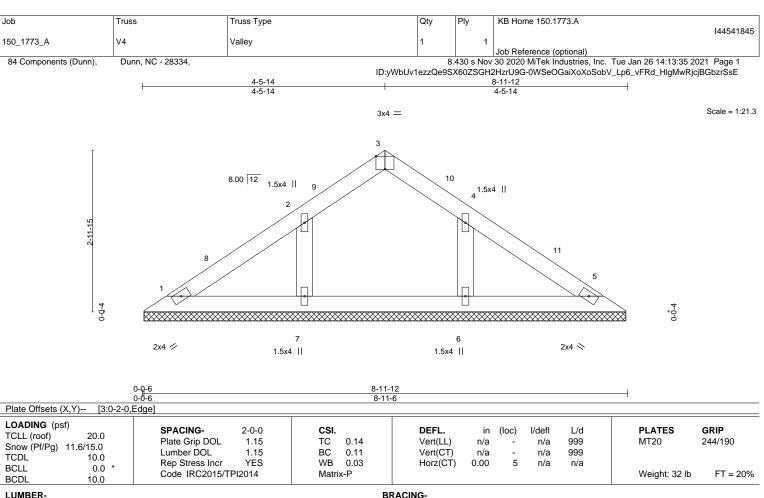
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 5-11-14, Exterior(2) 5-11-14 to 8-11-14, Interior(1) 8-11-14 to 11-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.







LUMBER-

TOP CHORD 2x4 SP No.3 BOT CHORD 2x4 SP No.3 **OTHERS** 2x4 SP No.3

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

REACTIONS. All bearings 8-11-0.

(lb) -Max Horz 1=-56(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 6, 7 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 6, 7

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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-5-12 to 3-5-12, Interior(1) 3-5-12 to 4-5-14, Exterior(2) 4-5-14 to 7-5-14, Interior(1) 7-5-14 to 8-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



Job Truss Truss Type Qty KB Home 150.1773.A 144541846 Valley 150 1773 A V5 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Tue Jan 26 14:13:36 2021 Page 1 84 Components (Dunn), Dunn, NC - 28334, ID:yWbUv1ezzQe9SX60ZSGH2HzrU9G-Ui01ccaKl6ff4yAhY2KLX6ncXOdwPpHbyGSlo2zrSsD 2-11-14 2-11-14 Scale = 1:15.5 4x4 = 2 8.00 12 3 0-0-4 0-0-4 1.5x4 || 2x4 / 2x4 🖎 0-0-6 0-0-6 5-11-12 5-11-6 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 0.19 n/a n/a MT20 Snow (Pf/Pg) 11.6/15.0 Lumber DOL 1.15 ВС 0.11 Vert(CT) 999 n/a n/a **TCDL** 10.0 Rep Stress Incr YES WB 0.03 Horz(CT) 0.00 3 n/a n/a **BCLL** 0.0 Code IRC2015/TPI2014 Matrix-P Weight: 20 lb FT = 20% **BCDL** 10.0 LUMBER-

TOP CHORD 2x4 SP No.3 2x4 SP No.3

BOT CHORD OTHERS 2x4 SP No.3 **BRACING-**

TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 5-11-12 oc purlins.

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

REACTIONS.

1=5-11-0, 3=5-11-0, 4=5-11-0 (size) Max Horz 1=-35(LC 10) Max Uplift 1=-16(LC 14), 3=-21(LC 15)

Max Grav 1=107(LC 2), 3=107(LC 2), 4=186(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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=11.6 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.





Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE



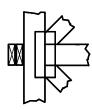
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

LATERAL BRACING LOCATION



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

BEARING



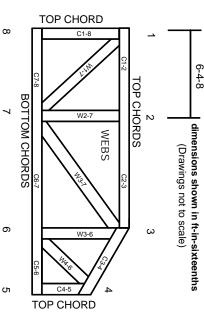
Min size shown is for crushing only number where bearings occur. reaction section indicates joint (supports) occur. Icons vary but Indicates location where bearings

Industry Standards:

National Design Specification for Metal Building Component Safety Information. Installing & Bracing of Metal Plate Connected Wood Trusses. Guide to Good Practice for Handling Design Standard for Bracing. Plate Connected Wood Truss Construction.

DSB-89: ANSI/TPI1:

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

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

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

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

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered. may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building

4.

- Cut members to bear tightly against each other
- 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.

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- 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
- 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 camber for dead load deflection. responsibility of truss fabricator. General practice is to
- 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
- 13. Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- 18. Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.