

Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 243\_2939\_C  
KB Home.243.2939.C

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: I48185412 thru I48185454

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

North Carolina COA: C-0844



October 4, 2021

Sevier, Scott

**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.

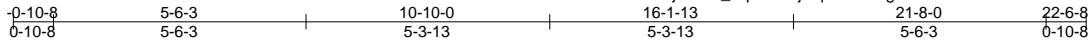
|                   |             |                      |          |          |                    |           |
|-------------------|-------------|----------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>A1 | Truss Type<br>Common | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185412 |
|-------------------|-------------|----------------------|----------|----------|--------------------|-----------|

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:17:43 2021 Page 1

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Scale = 1:50.3

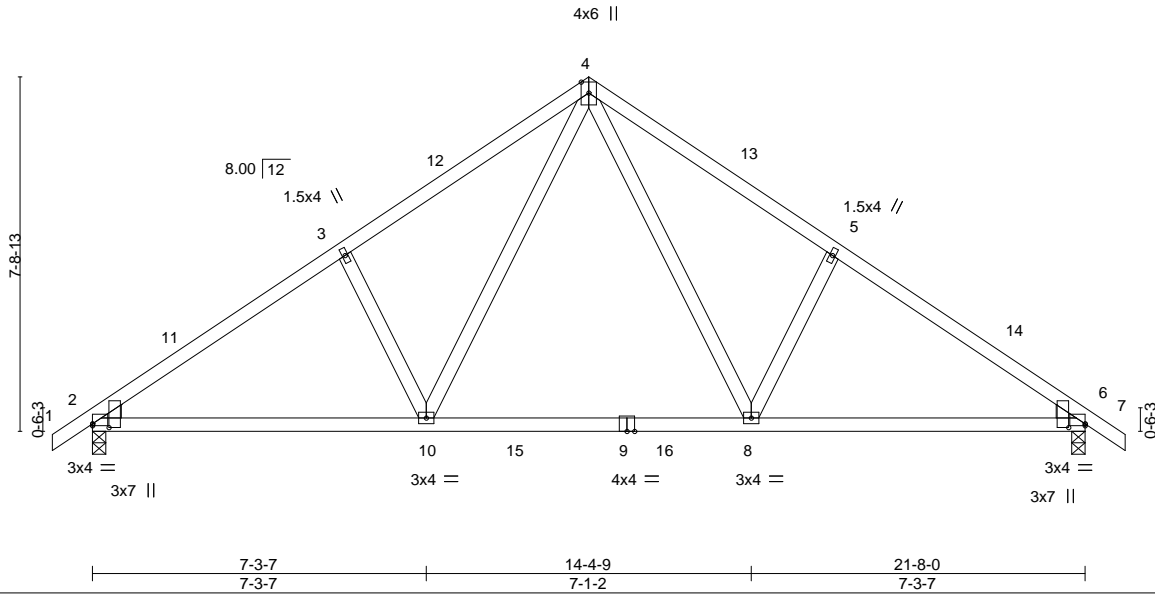


Plate Offsets (X,Y)-- [2:0-0-0,0-0-8], [2:0-0-15,0-4-5], [6:0-0-0,0-0-8], [6:0-0-15,0-4-5]

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                        | PLATES         | GRIP     |
|------------------------|----------------------|----------|------------------------------|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.39  | in (loc) l/defl L/d          | MT20           | 197/144  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.54  | Vert(LL) -0.11 8-10 >999 240 |                |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.19  | Vert(CT) -0.16 8-10 >999 180 |                |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.03 6 n/a n/a      |                |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                              | Weight: 111 lb | FT = 20% |

**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

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

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-164(LC 12)  
 Max Uplift 2=-56(LC 14), 6=-56(LC 15)  
 Max Grav 2=916(LC 2), 6=916(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1214/82, 3-4=-1070/138, 4-5=-1070/138, 5-6=-1214/82  
 BOT CHORD 2-10=-87/1008, 8-10=0/661, 6-8=0/922  
 WEBS 4-8=-85/521, 5-8=-283/181, 4-10=-85/520, 3-10=-283/181

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 10-10-0, Exterior(2) 10-10-0 to 13-10-0, Interior(1) 13-10-0 to 22-6-8 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
- 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
- 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.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.



October 4, 2021

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

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

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

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



818 Soundside Road  
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|                   |              |                             |          |          |                    |           |
|-------------------|--------------|-----------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>AG2 | Truss Type<br>Common Girder | Qty<br>1 | Ply<br>3 | KB Home.243.2939.C | 148185413 |
|-------------------|--------------|-----------------------------|----------|----------|--------------------|-----------|

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:17:44 2021 Page 1

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4x4 ||

Scale = 1:50.6

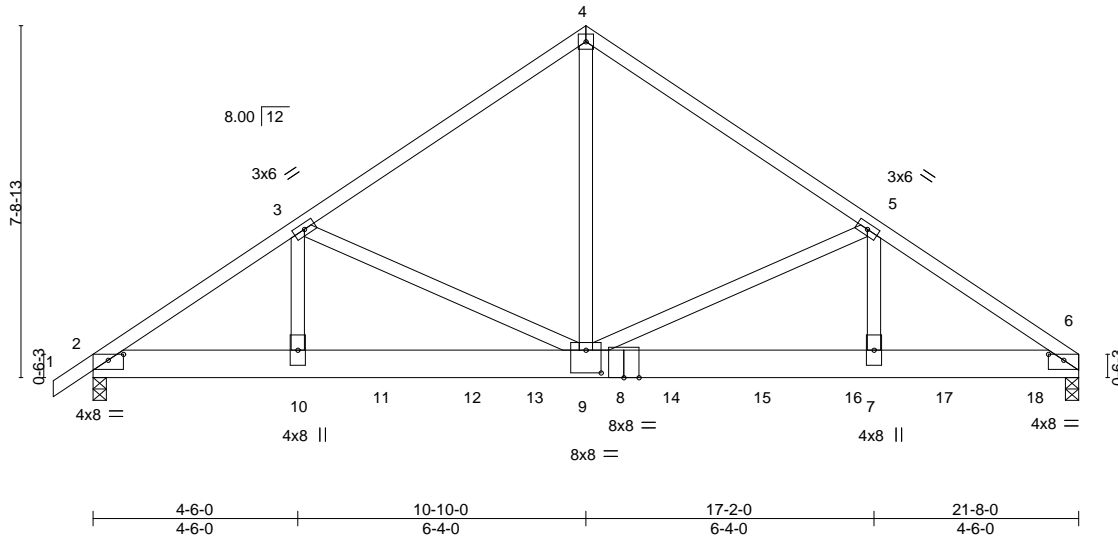


Plate Offsets (X,Y)-- [2:0-4-0,0-1-9], [6:0-4-0,0-1-9], [9:0-4-0,0-6-0]

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.    | in (loc)   | l/defl | L/d | PLATES         | GRIP     |
|------------------------|----------------------|----------|----------|------------|--------|-----|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.63  | Vert(LL) | -0.09 9-10 | >999   | 240 | MT20           | 197/144  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.89  | Vert(CT) | -0.17 9-10 | >999   | 180 |                |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.87  | Horz(CT) | 0.04 6     | n/a    | n/a |                |          |
| BCLL 0.0 *             | Rep Stress Incr NO   | Matrix-S |          |            |        |     |                |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |          |            |        |     | Weight: 436 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x8 SP No.2  
 WEBS 2x4 SP No.3

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

**REACTIONS.** (size) 6=0-3-8, 2=0-3-8  
 Max Horz 2=161(LC 7)  
 Max Uplift 6=-505(LC 11), 2=-628(LC 10)  
 Max Grav 6=6206(LC 2), 2=5164(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-8772/1067, 3-4=-6161/648, 4-5=-6162/648, 5-6=-9034/763  
 BOT CHORD 2-10=-925/7141, 9-10=-925/7141, 7-9=-575/7376, 6-7=-575/7376  
 WEBS 4-9=-597/6334, 5-9=-2611/279, 5-7=-91/2565, 3-9=-2408/553, 3-10=-391/2467

- NOTES-**
- 1) 3-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 0-5-0 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 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 5) 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 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=505, 2=628.



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Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **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



818 Soundside Road  
 Edenton, NC 27932

|                   |              |                             |          |                 |   |
|-------------------|--------------|-----------------------------|----------|-----------------|---|
| Job<br>243_2939_C | Truss<br>AG2 | Truss Type<br>Common Girder | Qty<br>1 | Ply<br><b>3</b> | KB Home.243.2939.C<br>I48185413<br>Job Reference (optional) |
|-------------------|--------------|-----------------------------|----------|-----------------|---|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:17:45 2021 Page 2  
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**NOTES-**

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1324 lb down and 350 lb up at 4-3-12, 1026 lb down and 118 lb up at 6-3-12, 972 lb down and 113 lb up at 8-3-12, 925 lb down and 108 lb up at 9-8-4, 920 lb down and 72 lb up at 11-11-4, 920 lb down and 72 lb up at 12-8-4, 920 lb down and 72 lb up at 14-8-4, 920 lb down and 72 lb up at 16-8-4, and 920 lb down and 72 lb up at 18-8-4, and 922 lb down and 70 lb up at 20-8-4 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: 1-4=-43, 4-6=-43, 2-6=-20

Concentrated Loads (lb)

Vert: 8=-722(B) 10=-1289(B) 11=-1026(B) 12=-972(B) 13=-925(B) 14=-722(B) 15=-722(B) 16=-722(B) 17=-722(B) 18=-723(B)

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|                   |              |                             |          |          |   |
|-------------------|--------------|-----------------------------|----------|----------|---|
| Job<br>243_2939_C | Truss<br>AGE | Truss Type<br>COMMON GIRDER | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>I48185414<br>Job Reference (optional) |
|-------------------|--------------|-----------------------------|----------|----------|---|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:17:46 2021 Page 2  
ID: XZssjAHNe\_IVplcdoAjGq3ztm9T-5Mi7Ta8w8rFB1rbDpHY?jZhgCD0?20ZT2dggPyyXjDp

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-6=-43, 6-11=-43, 2-10=-20, 3-9=-20

Concentrated Loads (lb)

Vert: 20=-143(F) 18=-412(F) 23=-176(F) 24=-143(F) 25=-143(F)

**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<br>243_2939_C | Truss<br>B | Truss Type<br>Common | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185415 |
|-------------------|------------|----------------------|----------|----------|--------------------|-----------|

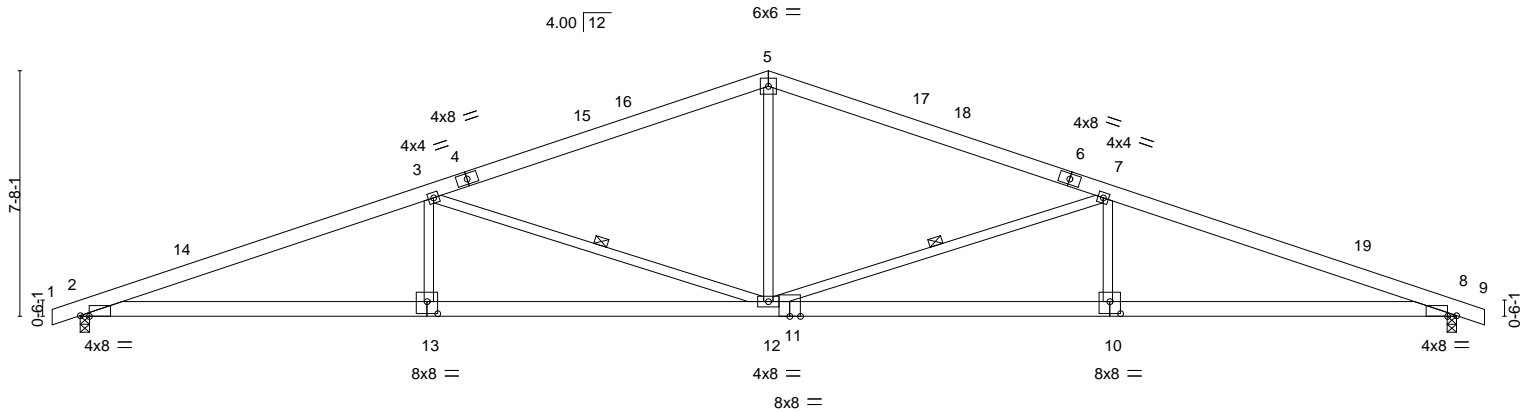
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:17:48 2021 Page 1

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|         |          |        |        |          |         |
|---------|----------|--------|--------|----------|---------|
| -0-10-8 | 10-10-11 | 21-6-0 | 32-1-5 | 43-0-0   | 43-10-8 |
| 0-10-8  | 10-10-11 | 10-7-5 | 10-7-5 | 10-10-11 | 0-10-8  |

Scale = 1:72.0



|          |        |        |          |
|----------|--------|--------|----------|
| 10-10-11 | 21-6-0 | 32-1-5 | 43-0-0   |
| 10-10-11 | 10-7-5 | 10-7-5 | 10-10-11 |

Plate Offsets (X, Y)-- [2:0-3-6,Edge], [8:0-3-6,Edge], [10:0-4-0,0-4-8], [13:0-4-0,0-4-8]

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|------------------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.87  | in (loc) l/defl L/d           | MT20           | 244/190  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.99  | Vert(LL) -0.26 12-13 >999 240 |                |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.95  | Vert(CT) -0.57 12-13 >904 180 |                |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.18 8 n/a n/a       |                |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                               | Weight: 263 lb | FT = 20% |

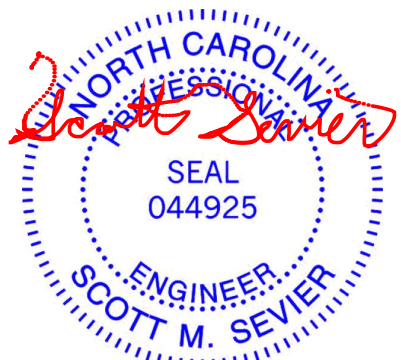
| LUMBER-               | BRACING-  |
|-----------------------|---|
| TOP CHORD 2x6 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins. |
| BOT CHORD 2x6 SP No.2 | BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.             |
| WEBS 2x4 SP No.3      | WEBS 1 Row at midpt 7-12, 3-12  |

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=106(LC 20)  
 Max Uplift 2=-161(LC 12), 8=-161(LC 13)  
 Max Grav 2=1770(LC 2), 8=1770(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4272/307, 3-5=-2850/205, 5-7=-2850/205, 7-8=-4272/308  
 BOT CHORD 2-13=-286/3959, 12-13=-288/3955, 10-12=-207/3955, 8-10=-204/3959  
 WEBS 5-12=0/1159, 7-12=-1473/262, 7-10=0/455, 3-12=-1473/261, 3-13=0/455

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 21-6-0, Exterior(2) 21-6-0 to 25-9-10, Interior(1) 25-9-10 to 43-10-8 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
- 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.



October 4, 2021



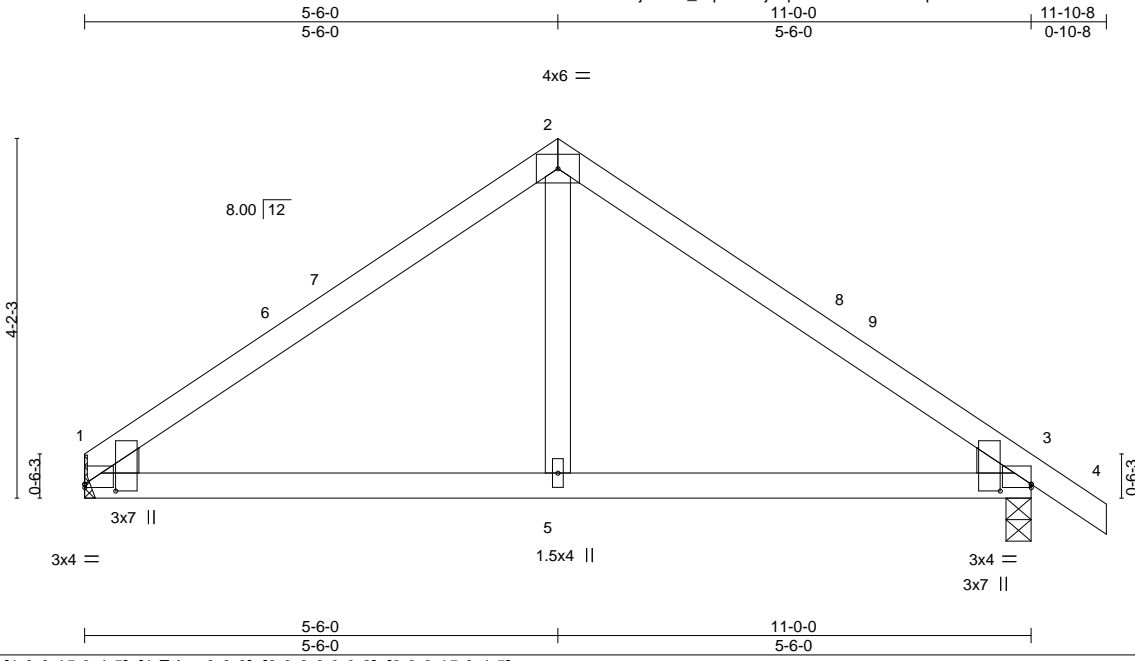
|                   |             |                      |          |          |                    |           |
|-------------------|-------------|----------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>C1 | Truss Type<br>Common | Qty<br>2 | Ply<br>1 | KB Home.243.2939.C | 148185416 |
|-------------------|-------------|----------------------|----------|----------|--------------------|-----------|

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:17:49 2021 Page 1

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Scale = 1:26.8

|                        |   |             |                             |               |             |
|------------------------|---|-------------|-----------------------------|---------------|-------------|
| Plate Offsets (X,Y)--  | [1:0-0-15,0-4-5], [1:Edge,0-0-8], [3:0-0-0,0-0-8], [3:0-0-15,0-4-5] |             |                             |               |             |
| <b>LOADING</b> (psf)   | <b>SPACING-</b>   | <b>CSI.</b> | <b>DEFL.</b>                | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0   | TC 0.46     | in (loc) l/defl L/d         | MT20          | 197/144     |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15   | BC 0.33     | Vert(LL) -0.02 1-5 >999 240 |               |             |
| TCDL 10.0              | Lumber DOL 1.15   | WB 0.10     | Vert(CT) -0.05 1-5 >999 180 |               |             |
| BCLL 0.0 *             | Rep Stress Incr YES   | Matrix-S    | Horz(CT) 0.01 3 n/a n/a     |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014  |             |                             | Weight: 45 lb | FT = 20%    |

**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

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

**REACTIONS.** (size) 3=0-3-8, 1=Mechanical  
 Max Horz 1=87(LC 10)  
 Max Uplift 3=36(LC 15), 1=19(LC 14)  
 Max Grav 3=496(LC 2), 1=429(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=515/62, 2-3=520/60  
 BOT CHORD 1-5=0/348, 3-5=0/348  
 WEBS 2-5=0/264

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-0-12 to 3-0-12, Interior(1) 3-0-12 to 5-6-0, Exterior(2) 5-6-0 to 8-6-0, Interior(1) 8-6-0 to 11-10-8 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
  - 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
  - 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.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 3. This connection is for uplift only and does not consider lateral forces.



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|                   |             |                                      |          |          |  |           |
|-------------------|-------------|--------------------------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>CE | Truss Type<br>Common Supported Gable | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185417 |
|-------------------|-------------|--------------------------------------|----------|----------|--|-----------|

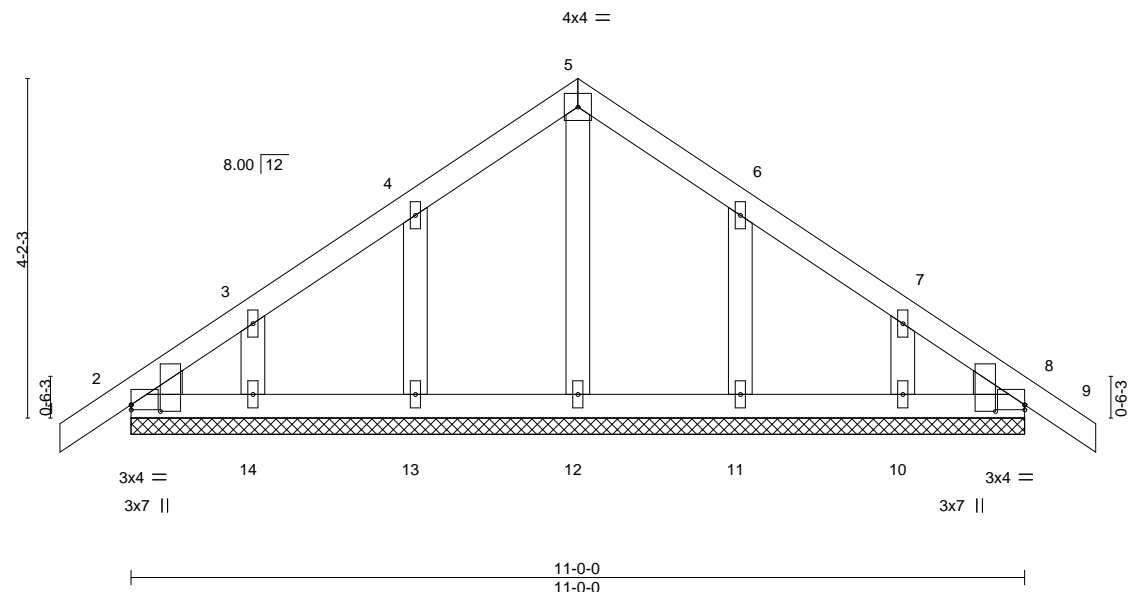
84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:17:50 2021 Page 1  
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|                       |  |
|-----------------------|--|
| Plate Offsets (X,Y)-- | [2:0-0-0,0-0-12], [2:0-0-15,0-4-5], [8:0-0-0,0-0-12], [8:0-0-15,0-4-5] |
|-----------------------|--|

| LOADING (psf)          | SPACING-             | CSL      | DEFL.                    | PLATES        | GRIP     |
|------------------------|----------------------|----------|--------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.05  | in (loc) l/defl L/d      | MT20          | 197/144  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.03  | Vert(LL) -0.00 8 n/r 120 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.03  | Vert(CT) -0.00 9 n/r 120 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.00 8 n/a n/a  |               |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                          | Weight: 56 lb | FT = 20% |

| LUMBER-                                | BRACING-  |
|--|---|
| 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                     |   |
| WEDGE                                  |   |
| Left: 2x4 SP No.3 , Right: 2x4 SP No.3 |   |

**REACTIONS.** All bearings 11-0-0.  
 (lb) - Max Horz 2=90(LC 13)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 13, 14, 11, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 5-6-0, Corner(3) 5-6-0 to 8-6-0, Exterior(2) 8-6-0 to 11-10-8 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
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; 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
- 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- N/A
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



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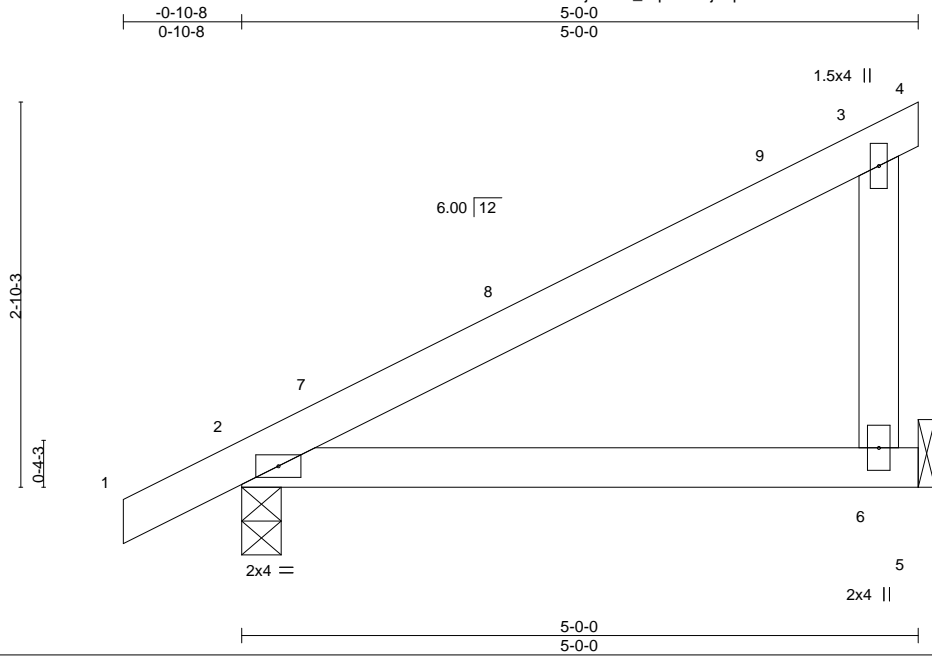
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| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b><br/>         Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY<br/> <b>TRENCO</b><br/>         A MiTek Affiliate</p> <p>818 Soundside Road<br/>         Edenton, NC 27932</p> |
|--|--|

|                   |             |                         |          |          |                    |           |
|-------------------|-------------|-------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>D1 | Truss Type<br>Jack-Open | Qty<br>3 | Ply<br>1 | KB Home.243.2939.C | 148185418 |
|-------------------|-------------|-------------------------|----------|----------|--------------------|-----------|

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|                        |                      |             |                             |               |             |
|------------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.37     | in (loc) l/defl L/d         | MT20          | 197/144     |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.25     | Vert(LL) -0.03 2-6 >999 240 |               |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.04     | Vert(CT) -0.05 2-6 >999 180 |               |             |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-P    | Horz(CT) 0.00 n/a n/a       |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                             | Weight: 21 lb | FT = 20%    |

**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

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

**REACTIONS.** (size) 2=0-3-8, 6=Mechanical  
Max Horz 2=94(LC 16)  
Max Uplift 2=-16(LC 16), 6=-42(LC 16)  
Max Grav 2=250(LC 2), 6=188(LC 2)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 5-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; 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
- 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 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 9) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.

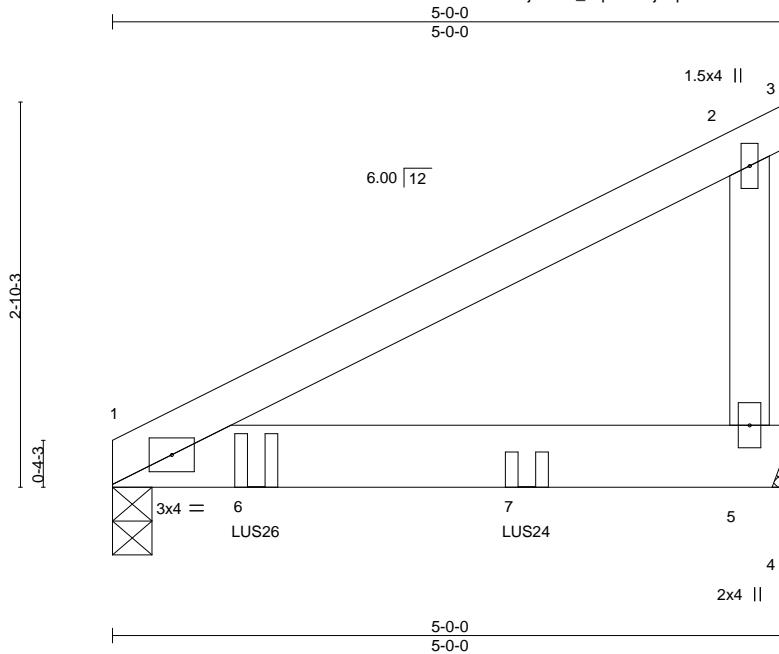


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|                   |              |                                |          |          |  |           |
|-------------------|--------------|--------------------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>D2G | Truss Type<br>Jack-Open Girder | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185419 |
|-------------------|--------------|--------------------------------|----------|----------|--|-----------|

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|                        |                      |             |                             |               |             |
|------------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.47     | in (loc) l/defl L/d         | MT20          | 197/144     |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.74     | Vert(LL) -0.04 1-5 >999 240 |               |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.03     | Vert(CT) -0.08 1-5 >711 180 |               |             |
| BCLL 0.0 *             | Rep Stress Incr NO   | Matrix-P    | Horz(CT) 0.00 n/a n/a       |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                             | Weight: 23 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**

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

**REACTIONS.**

(size) 1=0-3-8, 5=Mechanical  
Max Horz 1=80(LC 12)  
Max Uplift 1=-35(LC 12), 5=-69(LC 12)  
Max Grav 1=657(LC 2), 5=538(LC 2)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
- 2) 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
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5.
- 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) Use Simpson Strong-Tie LUS26 (4-10d Girder, 3-10d Truss, Single Ply Girder) or equivalent at 1-0-12 from the left end to connect truss(es) to front face of bottom chord.
- 10) Use Simpson Strong-Tie LUS24 (4-10d Girder, 2-10d Truss, Single Ply Girder) or equivalent at 3-0-12 from the left end to connect truss(es) to front face of bottom chord.
- 11) Fill all nail holes where hanger is in contact with lumber.
- 12) 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=-43, 1-4=-20  
Concentrated Loads (lb)  
Vert: 6=-319(F) 7=-318(F)



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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 **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



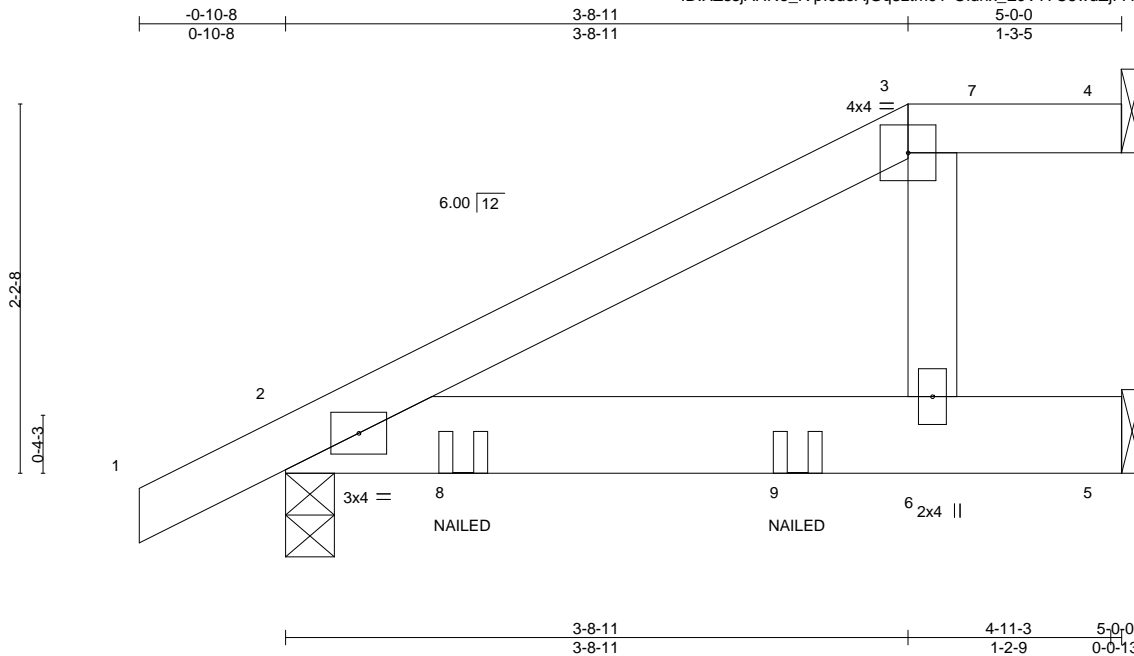
818 Soundside Road  
Edenton, NC 27932

|                   |              |                               |          |          |                    |           |
|-------------------|--------------|-------------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>D3G | Truss Type<br>Half Hip Girder | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185420 |
|-------------------|--------------|-------------------------------|----------|----------|--------------------|-----------|

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Dunn, NC - 28334,

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|                        |                      |             |                             |               |             |
|------------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.29     | in (loc) l/defl L/d         | MT20          | 197/144     |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.28     | Vert(LL) -0.02 2-6 >999 240 |               |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.03     | Vert(CT) -0.03 2-6 >999 180 |               |             |
| BCLL 0.0 *             | Rep Stress Incr NO   | Matrix-P    | Horz(CT) 0.01 4 n/a n/a     |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                             | Weight: 24 lb | FT = 20%    |

|                                       |  |
|---------------------------------------|--|
| <b>LUMBER-</b>                        | <b>BRACING-</b>  |
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 | TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except |
| BOT CHORD 2x6 SP No.2                 | 2-0-0 oc purlins: 3-4.   |
| WEBS 2x4 SP No.3                      | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                   |

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
 Max Horz 2=74(LC 12)  
 Max Uplift 4=13(LC 8), 2=66(LC 12), 5=35(LC 12)  
 Max Grav 4=46(LC 31), 2=375(LC 32), 5=201(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=30ft; 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
- 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) 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) 4.
- 11) One MTS12 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.
- 12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 15) 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=-43, 3-4=-53, 2-5=-20



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Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

|                   |              |                               |          |          |  |           |
|-------------------|--------------|-------------------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>D3G | Truss Type<br>Half Hip Girder | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | I48185420 |
|-------------------|--------------|-------------------------------|----------|----------|--|-----------|

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**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 8=-60(B) 9=-51(B)

**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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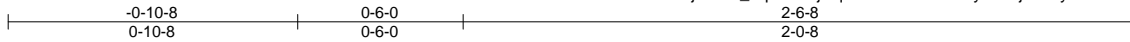


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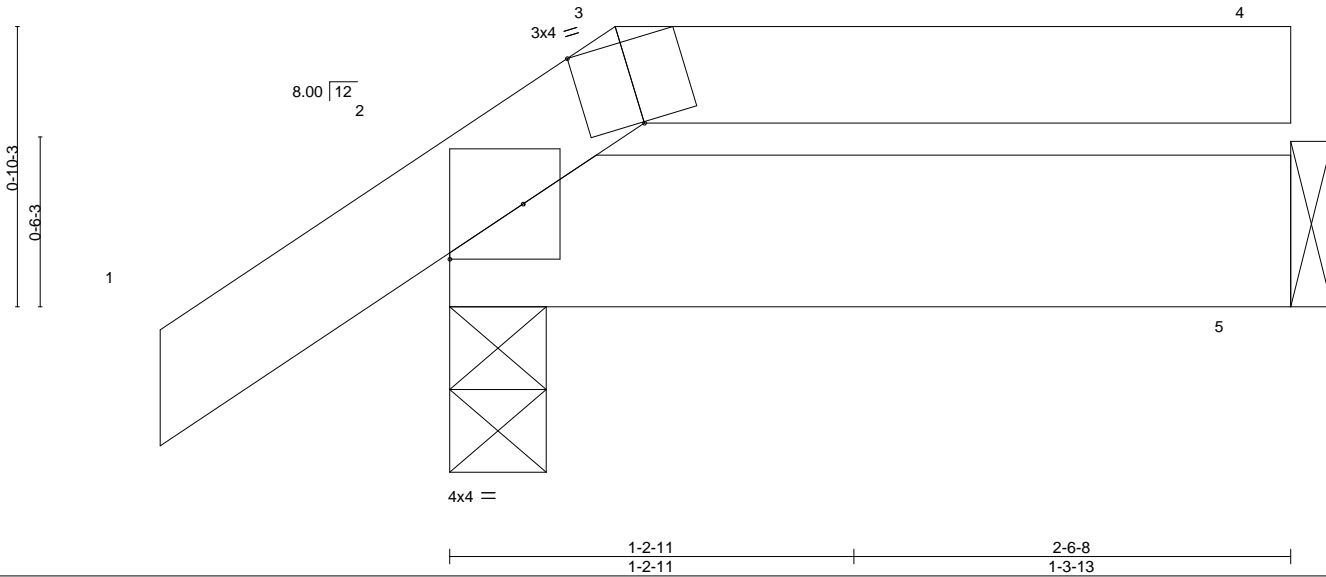
|                   |             |                        |          |          |                    |           |
|-------------------|-------------|------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>D4 | Truss Type<br>Half Hip | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185421 |
|-------------------|-------------|------------------------|----------|----------|--------------------|-----------|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:17:54 2021 Page 1  
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Scale = 1:7.0



|                        |                                |             |                             |               |             |
|------------------------|--------------------------------|-------------|-----------------------------|---------------|-------------|
| Plate Offsets (X, Y)-- | [2:Edge,0-2-0], [3:0-2-0,Edge] |             |                             |               |             |
| <b>LOADING</b> (psf)   | <b>SPACING-</b>                | <b>CSI.</b> | <b>DEFL.</b>                | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                          | TC 0.36     | in (loc) l/defl L/d         | MT20          | 197/144     |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15            | BC 0.16     | Vert(LL) -0.00 2-5 >999 240 |               |             |
| TCDL 10.0              | Lumber DOL 1.15                | WB 0.00     | Vert(CT) -0.00 2-5 >999 180 |               |             |
| BCLL 0.0 *             | Rep Stress Incr YES            | Matrix-P    | Horz(CT) 0.00 n/a n/a       |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014           |             |                             | Weight: 12 lb | FT = 20%    |

|                                       |   |
|---------------------------------------|---|
| <b>LUMBER-</b>                        | <b>BRACING-</b>   |
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 | TOP CHORD Structural wood sheathing directly applied or 2-6-8 oc purlins, except 2-0-0 oc purlins: 3-4. |
| BOT CHORD 2x6 SP No.2                 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  |

**REACTIONS.** (size) 2=0-3-8, 5=Mechanical  
 Max Horz 2=29(LC 14)  
 Max Uplift 2=-27(LC 14), 5=-24(LC 10)  
 Max Grav 2=168(LC 2), 5=91(LC 31)

**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=30ft; 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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) 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) Provide adequate drainage to prevent water ponding.
  - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 8) Refer to girder(s) for truss to truss connections.
  - 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 5. This connection is for uplift only and does not consider lateral forces.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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|  |   |
|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

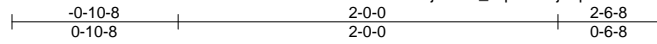


|                   |             |                        |          |          |                    |           |
|-------------------|-------------|------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>D5 | Truss Type<br>Half Hip | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185422 |
|-------------------|-------------|------------------------|----------|----------|--------------------|-----------|

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

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Scale = 1:12.1

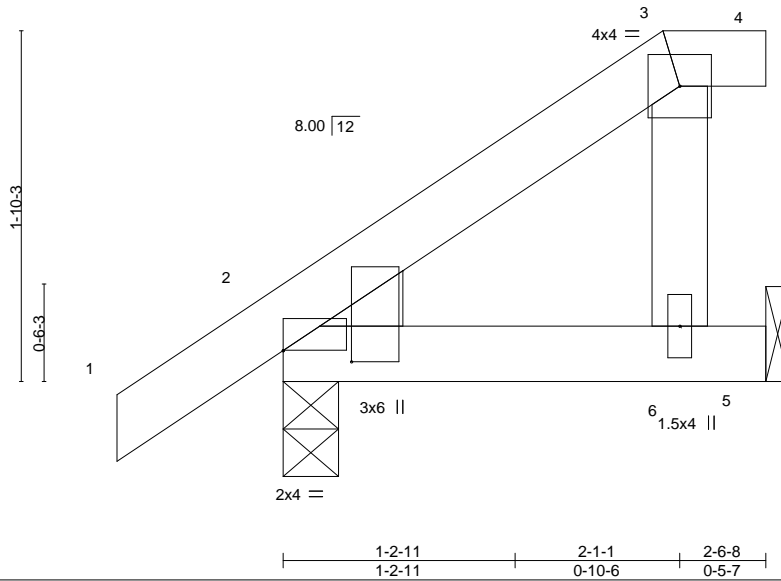


Plate Offsets (X,Y)-- [2:0-0-0,0-0-0], [2:0-0-11,0-4-5]

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                       | PLATES        | GRIP     |
|------------------------|----------------------|----------|-----------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.07  | in (loc) l/defl L/d         | MT20          | 197/144  |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.07  | Vert(LL) -0.00 6 >999 240   |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.02  | Vert(CT) -0.00 2-6 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-P | Horz(CT) 0.00 5 n/a n/a     |               |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                             | Weight: 13 lb | FT = 20% |

**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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-6-8 oc purlins, except 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 5=Mechanical  
 Max Horz 2=62(LC 14)  
 Max Uplift 2=-14(LC 14), 5=-16(LC 14)  
 Max Grav 2=168(LC 2), 5=84(LC 2)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
  - 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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.
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - One MTS12 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.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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





|                   |             |                   |          |          |                    |           |
|-------------------|-------------|-------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>H2 | Truss Type<br>Hip | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185423 |
|-------------------|-------------|-------------------|----------|----------|--------------------|-----------|

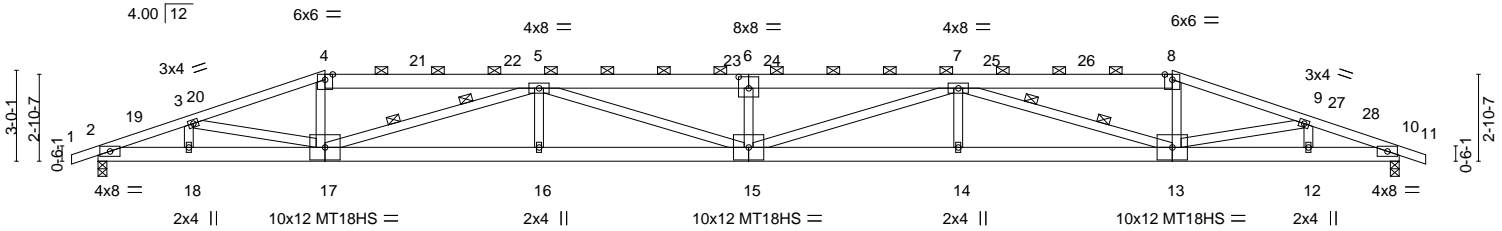
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:17:58 2021 Page 1

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|         |       |       |         |        |        |        |        |        |         |
|---------|-------|-------|---------|--------|--------|--------|--------|--------|---------|
| -0-10-8 | 3-0-0 | 7-6-0 | 14-6-14 | 21-6-0 | 28-5-2 | 35-6-0 | 40-0-0 | 43-0-0 | 43-10-8 |
| 0-10-8  | 3-0-0 | 4-6-0 | 7-0-14  | 6-11-2 | 6-11-2 | 7-0-14 | 4-6-0  | 3-0-0  | 0-10-8  |

Scale = 1:76.1



|       |       |         |        |        |        |        |        |
|-------|-------|---------|--------|--------|--------|--------|--------|
| 3-0-0 | 7-6-0 | 14-6-14 | 21-6-0 | 28-5-2 | 35-6-0 | 40-0-0 | 43-0-0 |
| 3-0-0 | 4-6-0 | 7-0-14  | 6-11-2 | 6-11-2 | 7-0-14 | 4-6-0  | 3-0-0  |

Plate Offsets (X, Y)-- [6:0-4-0,0-4-8]

|                      |           |                      |       |             |              |          |        |      |                |             |
|----------------------|-----------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-------------|
| <b>LOADING</b> (psf) |           | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in (loc) | l/defl | L/d  | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof)          | 20.0      | Plate Grip DOL       | 1.15  | TC          | Vert(LL)     | -0.74    | 15     | >696 | MT20           | 197/144     |
| Snow (Pf/Pg)         | 16.5/15.0 | Lumber DOL           | 1.15  | BC          | Vert(CT)     | -1.43    | 15     | >358 | MT18HS         | 244/190     |
| TCDL                 | 10.0      | Rep Stress Incr      | YES   | WB          | Horz(CT)     | 0.21     | 10     | n/a  |                |             |
| BCLL                 | 0.0 *     | Code IRC2015/TPI2014 |       | Matrix-S    |              |          |        |      |                |             |
| BCDL                 | 10.0      |                      |       |             |              |          |        |      | Weight: 264 lb | FT = 20%    |

|                |  |                 |  |
|----------------|--|-----------------|--|
| <b>LUMBER-</b> |  | <b>BRACING-</b> |  |
| TOP CHORD      | 2x4 SP No.2 or 2x4 SPF No.2 *Except*<br>4-6,6-8: 2x6 SP No.2 | TOP CHORD       | Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-2-0 max.): 4-8. |
| BOT CHORD      | 2x6 SP No.2 *Except*<br>13-15,15-17: 2x6 SP DSS              | BOT CHORD       | Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 17-18,12-13.                |
| WEBS           | 2x4 SP No.3  | WEBS            | 2 Rows at 1/3 pts 5-17, 7-13   |

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=38(LC 20)  
 Max Uplift 2=-216(LC 12), 10=-216(LC 13)  
 Max Grav 2=1770(LC 2), 10=1770(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4099/436, 3-4=-4425/481, 4-5=-4204/474, 5-6=-7828/810, 6-7=-7828/810, 7-8=-4204/474, 8-9=-4425/481, 9-10=-4099/436  
 BOT CHORD 2-18=-407/3786, 17-18=-407/3786, 16-17=-697/7044, 15-16=-697/7044, 14-15=-667/7044, 13-14=-667/7044, 12-13=-378/3786, 10-12=-378/3786  
 WEBS 4-17=-33/1049, 5-17=-3014/343, 5-16=0/269, 5-15=-101/860, 6-15=-413/136, 7-15=-102/860, 7-14=0/269, 7-13=-3014/343, 8-13=-33/1049, 3-17=-57/627, 9-13=-59/627

- 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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 7-6-0, Exterior(2) 7-6-0 to 13-7-0, Interior(1) 13-7-0 to 35-6-0, Exterior(2) 35-6-0 to 41-7-0, Interior(1) 41-7-0 to 43-10-8 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 10) 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.
  - 11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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|                   |             |                   |          |          |                    |           |
|-------------------|-------------|-------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>H3 | Truss Type<br>Hip | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185424 |
|-------------------|-------------|-------------------|----------|----------|--------------------|-----------|

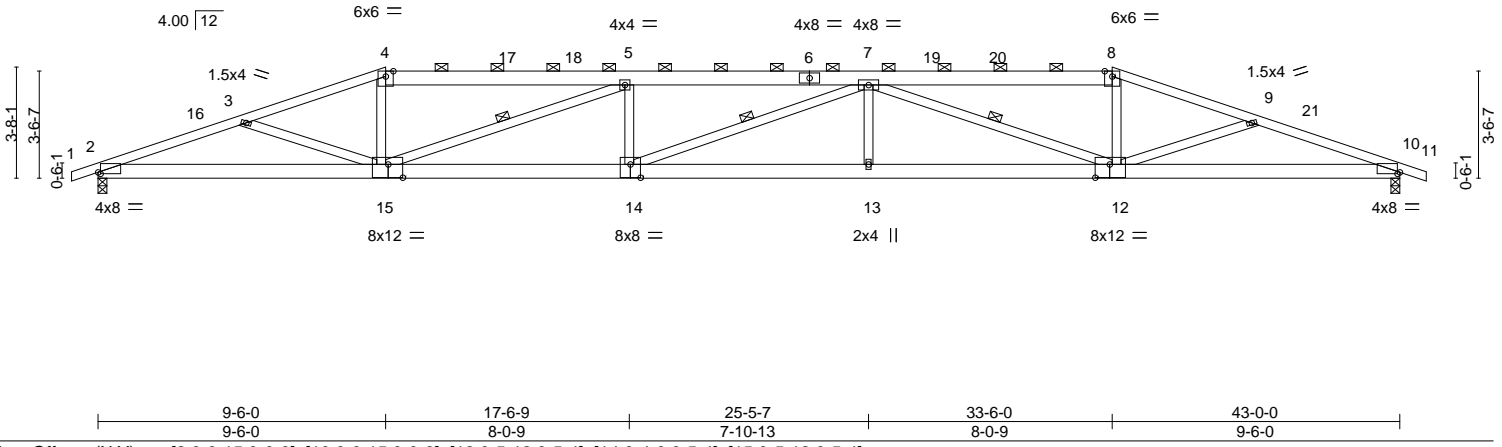
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:00 2021 Page 1

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|         |         |       |        |         |        |        |         |         |
|---------|---------|-------|--------|---------|--------|--------|---------|---------|
| -0-10-8 | 4-10-11 | 9-6-0 | 17-6-9 | 25-5-7  | 33-6-0 | 38-1-5 | 43-0-0  | 43-10-8 |
| 0-10-8  | 4-10-11 | 4-7-5 | 8-0-9  | 7-10-13 | 8-0-9  | 4-7-5  | 4-10-11 | 0-10-8  |

Scale = 1:76.1



|                      |           |                      |       |             |      |              |             |        |     |                |             |
|----------------------|-----------|----------------------|-------|-------------|------|--------------|-------------|--------|-----|----------------|-------------|
| <b>LOADING (psf)</b> |           | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> |      | <b>DEFL.</b> | in (loc)    | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof)          | 20.0      | Plate Grip DOL       | 1.15  | TC          | 0.72 | Vert(LL)     | -0.49 13-14 | >999   | 240 | MT20           | 197/144     |
| Snow (Pf/Pg)         | 16.5/15.0 | Lumber DOL           | 1.15  | BC          | 0.88 | Vert(CT)     | -0.98 13-14 | >521   | 180 |                |             |
| TCDL                 | 10.0      | Rep Stress Incr      | YES   | WB          | 0.92 | Horz(CT)     | 0.18 10     | n/a    | n/a |                |             |
| BCLL                 | 0.0 *     | Code IRC2015/TPI2014 |       | Matrix-S    |      |              |             |        |     | Weight: 257 lb | FT = 20%    |
| BCDL                 | 10.0      |                      |       |             |      |              |             |        |     |                |             |

|                |  |                 |   |
|----------------|--|-----------------|---|
| <b>LUMBER-</b> |  | <b>BRACING-</b> |   |
| TOP CHORD      | 2x4 SP No.2 or 2x4 SPF No.2 *Except*<br>4-6,6-8: 2x6 SP No.2 | TOP CHORD       | Structural wood sheathing directly applied or 2-3-5 oc purlins, except 2-0-0 oc purlins (2-7-14 max.): 4-8. |
| BOT CHORD      | 2x6 SP No.2 *Except*<br>14-15,12-14: 2x6 SP DSS              | BOT CHORD       | Rigid ceiling directly applied or 10-0-0 oc bracing.  |
| WEBS           | 2x4 SP No.3  | WEBS            | 1 Row at midpt<br>5-15, 7-14, 7-12  |

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=48(LC 16)  
 Max Uplift 2=-212(LC 12), 10=-212(LC 13)  
 Max Grav 2=1770(LC 2), 10=1770(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4343/516, 3-4=-4210/432, 4-5=-3942/428, 5-7=-5895/631, 7-8=-3941/428,  
 8-9=-4208/432, 9-10=-4342/516  
 BOT CHORD 2-15=-476/4027, 14-15=-561/5893, 13-14=-533/5906, 12-13=-533/5906, 10-12=-438/4026  
 WEBS 3-15=-241/256, 4-15=-5/917, 5-15=-2209/285, 5-14=0/302, 7-13=0/305, 7-12=-2225/287,  
 8-12=-6/919, 9-12=-242/256

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 9-6-0, Exterior(2) 9-6-0 to 15-7-0, Interior(1) 15-7-0 to 33-6-0, Exterior(2) 33-6-0 to 39-7-0, Interior(1) 39-7-0 to 43-10-8 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
  - 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 4, 2021

|  |   |
|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|                   |             |                   |          |          |                    |           |
|-------------------|-------------|-------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>H4 | Truss Type<br>Hip | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185425 |
|-------------------|-------------|-------------------|----------|----------|--------------------|-----------|

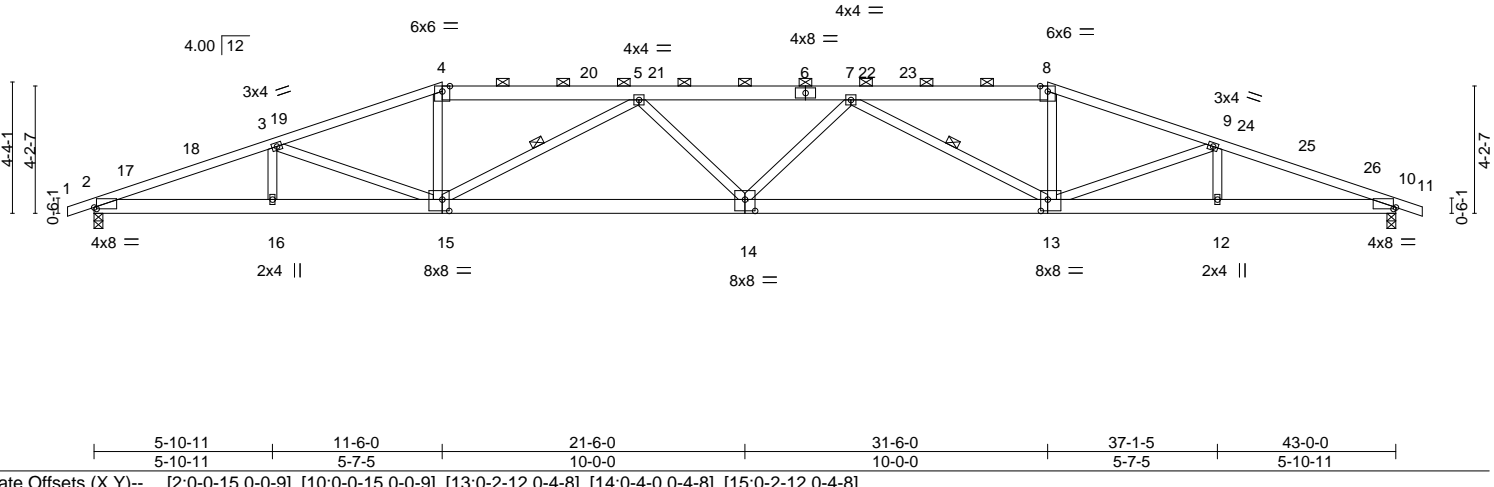
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:02 2021 Page 1

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|         |         |        |        |        |        |        |        |         |         |
|---------|---------|--------|--------|--------|--------|--------|--------|---------|---------|
| -0-10-8 | 5-10-11 | 11-6-0 | 18-0-0 | 21-6-0 | 25-0-0 | 31-6-0 | 37-1-5 | 43-0-0  | 43-10-8 |
| 0-10-8  | 5-10-11 | 5-7-5  | 6-6-0  | 3-6-0  | 3-6-0  | 6-6-0  | 5-7-5  | 5-10-11 | 0-10-8  |

Scale = 1:76.1



| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|------------------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL (roof) 20.0       | Plate Grip DOL 1.15  | TC 0.82  | Vert(LL) -0.41 14 >999 240    | MT20           | 197/144  |
| Snow (Pf/Pg) 16.5/15.0 | Lumber DOL 1.15      | BC 0.93  | Vert(CT) -0.83 14-15 >617 180 |                |          |
| TCDL 10.0              | Rep Stress Incr YES  | WB 0.44  | Horz(CT) 0.19 10 n/a n/a      |                |          |
| BCLL 0.0 *             | Code IRC2015/TPI2014 | Matrix-S |                               |                |          |
| BCDL 10.0              |                      |          |                               | Weight: 254 lb | FT = 20% |

| LUMBER-  | BRACING-  |
|--|---|
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*<br>4-6,6-8: 2x6 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except<br>2-0-0 oc purlins (3-0-6 max.): 4-8. |
| BOT CHORD 2x6 SP No.2  | BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.   |
| WEBS 2x4 SP No.3   | WEBS 1 Row at midpt 5-15, 7-13  |

**REACTIONS.** (size) 10=0-3-8, 2=0-3-8  
 Max Horz 2=57(LC 20)  
 Max Uplift 10=-206(LC 13), 2=-206(LC 12)  
 Max Grav 10=1770(LC 2), 2=1770(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4376/450, 3-4=-3980/413, 4-5=-3749/410, 5-7=-4839/457, 7-8=-3750/410,  
 8-9=-3980/413, 9-10=-4376/450  
 BOT CHORD 2-16=-415/4060, 15-16=-415/4060, 14-15=-447/4747, 13-14=-416/4747, 12-13=-371/4060,  
 10-12=-371/4060  
 WEBS 3-15=-510/148, 4-15=-14/898, 5-15=-1303/217, 5-14=0/284, 7-14=0/284,  
 7-13=-1303/216, 8-13=-14/898, 9-13=-510/149

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 11-6-0, Exterior(2) 11-6-0 to 17-7-0, Interior(1) 17-7-0 to 31-6-0, Exterior(2) 31-6-0 to 37-7-0, Interior(1) 37-7-0 to 43-10-8 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
  - 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 10 and 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | KB Home.243.2939.C       | 148185426 |
| 243_2939_C | H5    | Hip        | 1   | 1   | Job Reference (optional) |           |

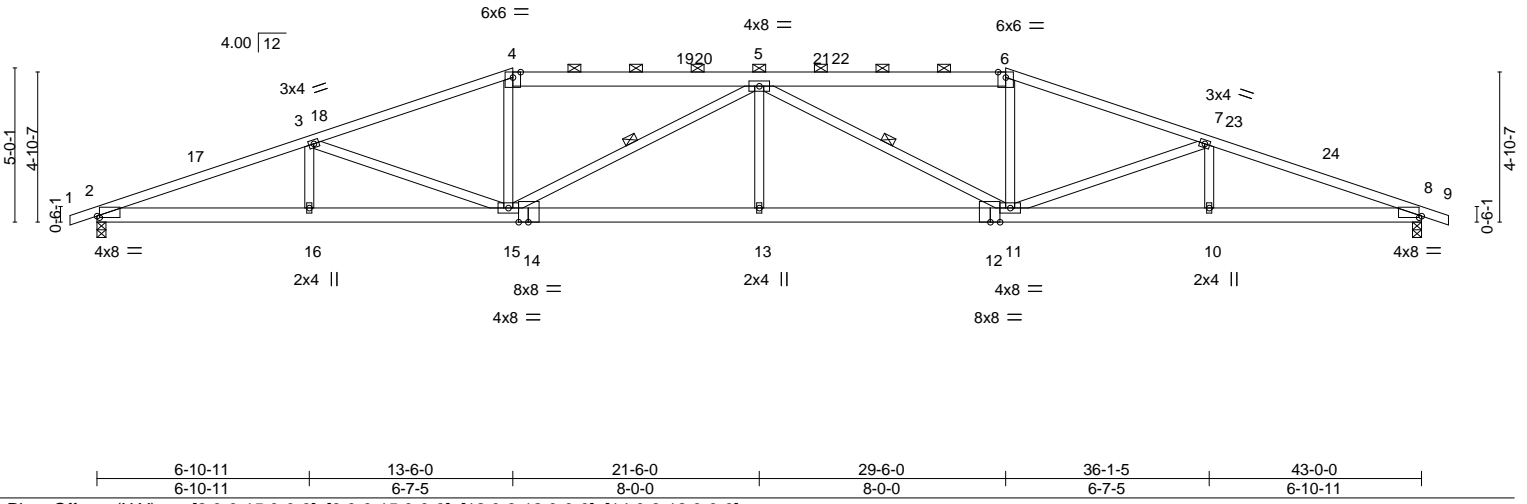
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:04 2021 Page 1

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|         |         |        |        |        |        |         |         |
|---------|---------|--------|--------|--------|--------|---------|---------|
| -0-10-8 | 6-10-11 | 13-6-0 | 21-6-0 | 29-6-0 | 36-1-5 | 43-0-0  | 43-10-8 |
| 0-10-8  | 6-10-11 | 6-7-5  | 8-0-0  | 8-0-0  | 6-7-5  | 6-10-11 | 0-10-8  |

Scale = 1:74.8



| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                      | PLATES         | GRIP     |
|------------------------|----------------------|----------|----------------------------|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.78  | in (loc) l/defl L/d        | MT20           | 244/190  |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.88  | Vert(LL) -0.34 13 >999 240 |                |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.67  | Vert(CT) -0.69 13 >740 180 |                |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.18 8 n/a n/a    |                |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                            | Weight: 253 lb | FT = 20% |

| LUMBER-  | BRACING-   |
|--|--|
| TOP CHORD 2x4 SP No.1 *Except*<br>4-6: 2x6 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-6-2 max.): 4-6. |
| BOT CHORD 2x6 SP No.2                              | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.   |
| WEBS 2x4 SP No.3                                   | WEBS 1 Row at midpt 5-15, 5-11   |

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
 Max Horz 2=67(LC 16)  
 Max Uplift 2=-199(LC 12), 8=-199(LC 13)  
 Max Grav 2=1770(LC 2), 8=1770(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4381/430, 3-4=-3764/383, 4-5=-3505/386, 5-6=-3505/386, 6-7=-3764/383, 7-8=-4381/430  
 BOT CHORD 2-16=-397/4063, 15-16=-397/4063, 13-15=-327/4211, 11-13=-327/4211, 10-11=-346/4063, 8-10=-346/4063  
 WEBS 3-15=-742/159, 4-15=0/766, 5-15=-988/154, 5-13=0/324, 5-11=-988/153, 6-11=0/766, 7-11=-742/160

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 13-6-0, Exterior(2) 13-6-0 to 19-7-0, Interior(1) 19-7-0 to 29-6-0, Exterior(2) 29-6-0 to 35-7-0, Interior(1) 35-7-0 to 43-10-8 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
  - 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 8. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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|  |   |
|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | KB Home.243.2939.C       | 148185427 |
| 243_2939_C | H6    | Hip        | 1   | 1   | Job Reference (optional) |           |

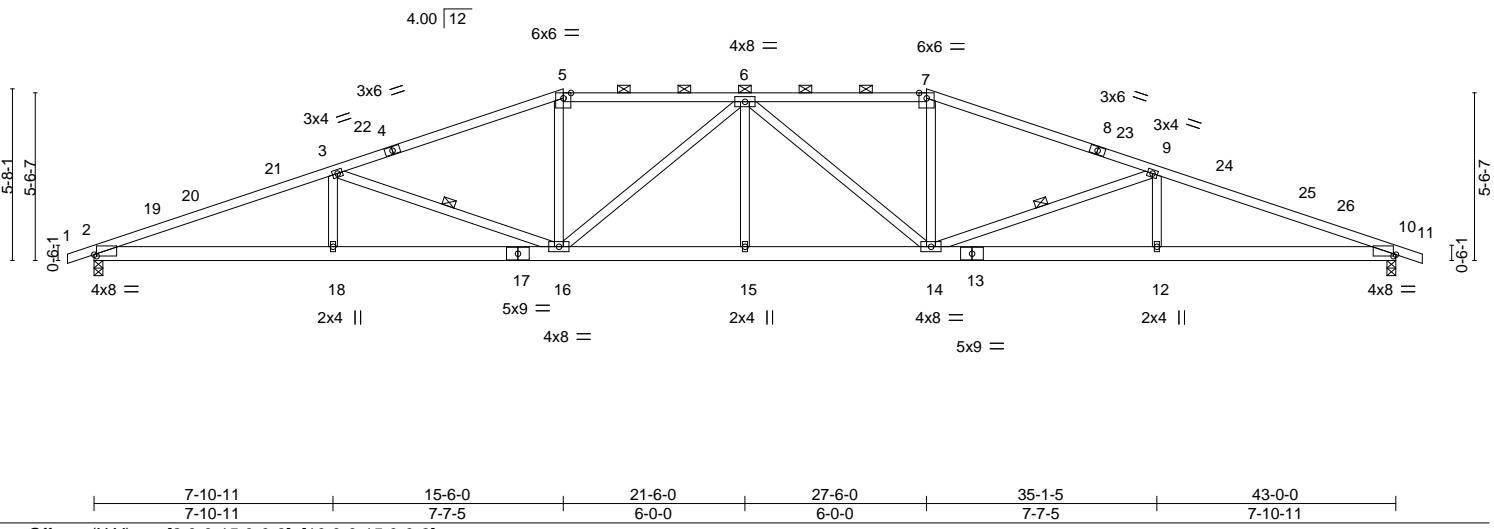
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:07 2021 Page 1

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Scale = 1:76.1



|                      |           |                      |       |             |              |          |        |      |                |             |
|----------------------|-----------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-------------|
| <b>LOADING</b> (psf) |           | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in (loc) | l/defl | L/d  | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof)          | 20.0      | Plate Grip DOL       | 1.15  | TC          | Vert(LL)     | -0.30    | 15     | >999 | MT20           | 197/144     |
| Snow (Pf/Pg)         | 16.5/15.0 | Lumber DOL           | 1.15  | BC          | Vert(CT)     | -0.61    | 15     | >844 |                |             |
| TCDL                 | 10.0      | Rep Stress Incr      | YES   | WB          | Horz(CT)     | 0.17     | 10     | n/a  |                |             |
| BCLL                 | 0.0 *     | Code IRC2015/TPI2014 |       | Matrix-S    |              |          |        |      |                |             |
| BCDL                 | 10.0      |                      |       |             |              |          |        |      | Weight: 244 lb | FT = 20%    |

|                |   |                 |   |
|----------------|---|-----------------|---|
| <b>LUMBER-</b> |   | <b>BRACING-</b> |   |
| TOP CHORD      | 2x4 SP DSS *Except*<br>5-7: 2x4 SP No.2 or 2x4 SPF No.2 | TOP CHORD       | Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (2-6-11 max.): 5-7. |
| BOT CHORD      | 2x6 SP No.2   | BOT CHORD       | Rigid ceiling directly applied or 10-0-0 oc bracing.  |
| WEBS           | 2x4 SP No.3   | WEBS            | 1 Row at midpt<br>3-16, 9-14  |

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-77(LC 21)  
 Max Uplift 2=-191(LC 12), 10=-191(LC 13)  
 Max Grav 2=1770(LC 2), 10=1770(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4358/405, 3-5=-3505/341, 5-6=-3239/348, 6-7=-3239/348, 7-9=-3505/341, 9-10=-4358/406  
 BOT CHORD 2-18=-375/4039, 16-18=-375/4039, 15-16=-233/3565, 14-15=-233/3565, 12-14=-317/4039, 10-12=-317/4039  
 WEBS 3-18=0/322, 3-16=-980/181, 5-16=0/722, 6-16=-607/108, 6-14=-607/108, 7-14=0/722, 9-14=-980/182, 9-12=0/322

**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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 15-6-0, Exterior(2) 15-6-0 to 21-6-0, Interior(1) 21-6-0 to 27-6-0, Exterior(2) 27-6-0 to 33-7-0, Interior(1) 33-7-0 to 43-10-8 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- 6) Provide adequate drainage to prevent water ponding.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 10. This connection is for uplift only and does not consider lateral forces.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

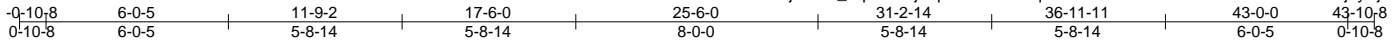


|                   |             |                   |          |          |                    |           |
|-------------------|-------------|-------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>H7 | Truss Type<br>Hip | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185428 |
|-------------------|-------------|-------------------|----------|----------|--------------------|-----------|

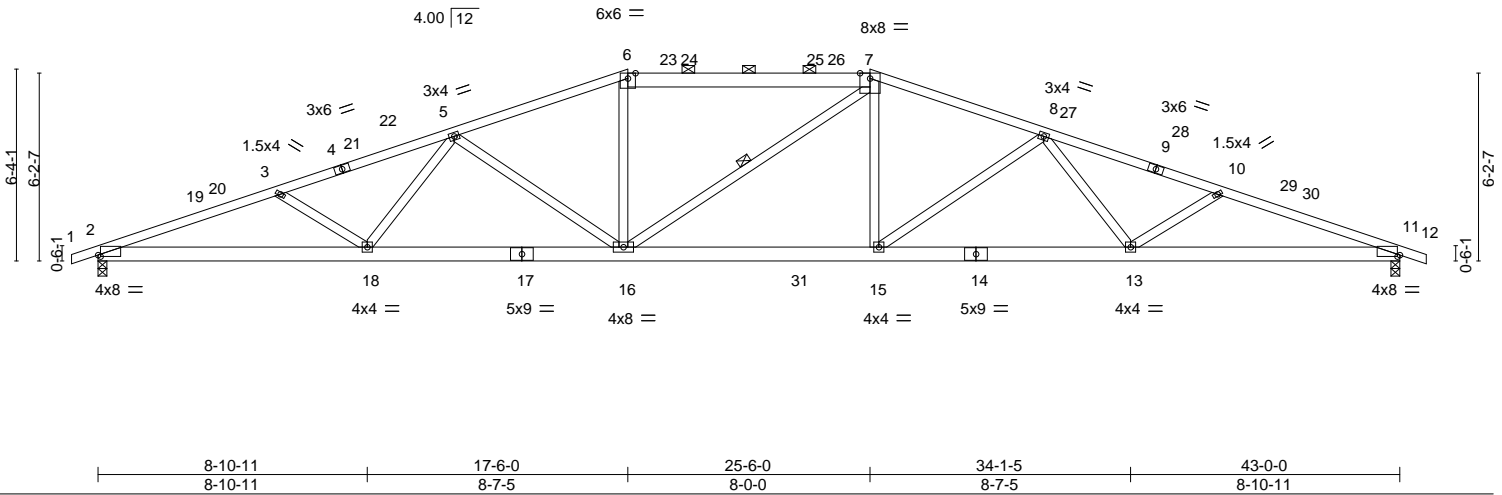
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:09 2021 Page 1

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Scale = 1:76.1



|                        |                                     |             |                               |                |             |
|------------------------|-------------------------------------|-------------|-------------------------------|----------------|-------------|
| Plate Offsets (X,Y)--  | [2:0-0-15,0-0-9], [11:0-0-15,0-0-9] |             |                               |                |             |
| <b>LOADING</b> (psf)   | <b>SPACING-</b>                     | <b>CSI.</b> | <b>DEFL.</b>                  | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                               | TC 0.76     | in (loc) l/defl L/d           | MT20           | 197/144     |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15                 | BC 0.90     | Vert(LL) -0.31 15 >999 240    |                |             |
| TCDL 10.0              | Lumber DOL 1.15                     | WB 0.69     | Vert(CT) -0.64 15-16 >806 180 |                |             |
| BCLL 0.0 *             | Rep Stress Incr YES                 | Matrix-S    | Horz(CT) 0.16 11 n/a n/a      |                |             |
| BCDL 10.0              | Code IRC2015/TPI2014                |             |                               | Weight: 252 lb | FT = 20%    |

|  |  |
|--|--|
| <b>LUMBER-</b>   | <b>BRACING-</b>  |
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*<br>6-7: 2x6 SP No.2 | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except 2-0-0 oc purlins (3-3-1 max.): 6-7. |
| BOT CHORD 2x6 SP No.2  | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.   |
| WEBS 2x4 SP No.3   | WEBS 1 Row at midpt 7-16   |

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
 Max Horz 2=86(LC 20)  
 Max Uplift 2=182(LC 12), 11=182(LC 13)  
 Max Grav 2=1770(LC 2), 11=1770(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4358/414, 3-5=-4078/344, 5-6=-3257/316, 6-7=-3041/325, 7-8=-3256/316,  
 8-10=-4079/344, 10-11=-4358/414  
 BOT CHORD 2-18=-402/4043, 16-18=-290/3584, 15-16=-150/3039, 13-15=-237/3584, 11-13=-337/4044  
 WEBS 3-18=-295/163, 5-18=0/473, 5-16=-756/161, 6-16=0/620, 7-16=-248/251, 7-15=0/619,  
 8-15=-757/161, 8-13=0/475, 10-13=-295/164

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 17-6-0, Exterior(2) 17-6-0 to 23-7-0, Interior(1) 23-7-0 to 25-6-0, Exterior(2) 25-6-0 to 31-7-0, Interior(1) 31-7-0 to 43-10-8 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
- 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 4, 2021

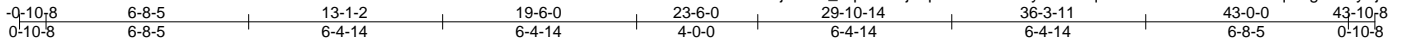
|  |  |
|--|--|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b><br/>         Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY<br/> <b>TRENCO</b><br/>         A MiTek Affiliate</p> <p>818 Soundside Road<br/>         Edenton, NC 27932</p> |
|--|--|

|                   |             |                   |          |          |                    |           |
|-------------------|-------------|-------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>H8 | Truss Type<br>Hip | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185429 |
|-------------------|-------------|-------------------|----------|----------|--------------------|-----------|

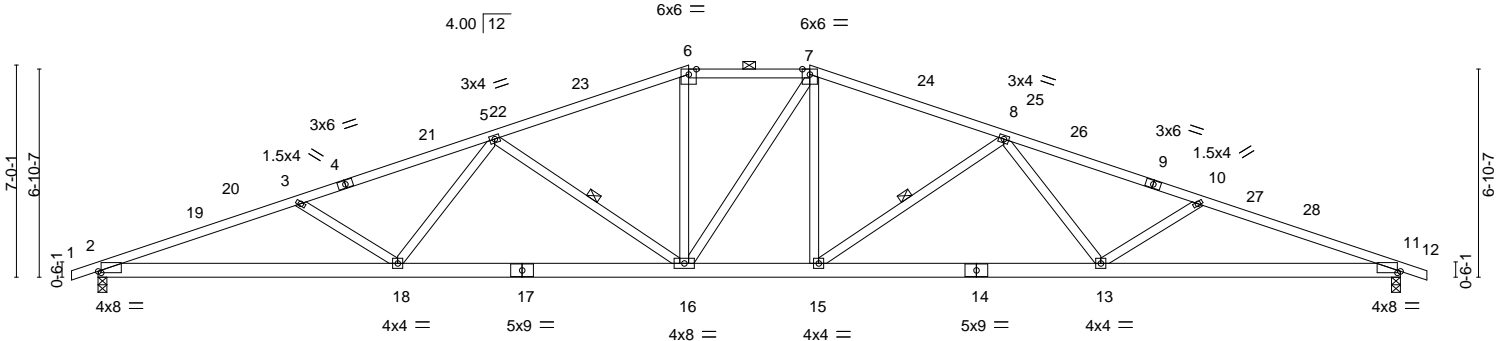
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:12 2021 Page 1

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Scale = 1:76.1



|         |        |        |        |         |
|---------|--------|--------|--------|---------|
| 9-10-11 | 19-6-0 | 23-6-0 | 33-1-5 | 43-0-0  |
| 9-10-11 | 9-7-5  | 4-0-0  | 9-7-5  | 9-10-11 |

|               |           |                      |       |          |       |          |        |     |                |          |
|---------------|-----------|----------------------|-------|----------|-------|----------|--------|-----|----------------|----------|
| 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       | 0.33  | 13-15    | >999   | 240 | MT20           | 197/144  |
| Snow (Pf/Pg)  | 16.5/15.0 | Lumber DOL           | 1.15  | BC       | -0.67 | 13-15    | >760   | 180 |                |          |
| TCDL          | 10.0      | Rep Stress Incr      | YES   | WB       | 0.16  | 11       | n/a    | n/a |                |          |
| BCLL          | 0.0 *     | Code IRC2015/TPI2014 |       | Matrix-S |       |          |        |     |                |          |
| BCDL          | 10.0      |                      |       |          |       |          |        |     | Weight: 249 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-3-13 max.): 6-7.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
 WEBS 1 Row at midpt 5-16, 8-15

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
 Max Horz 2=96(LC 16)  
 Max Uplift 2=-172(LC 12), 11=-172(LC 13)  
 Max Grav 2=1770(LC 2), 11=1770(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4364/385, 3-5=-4079/305, 5-6=-3024/281, 6-7=-2787/292, 7-8=-3022/281, 8-10=-4080/305, 10-11=-4365/385  
 BOT CHORD 2-18=-378/4067, 16-18=-252/3533, 15-16=-98/2785, 13-15=-196/3533, 11-13=-305/4068  
 WEBS 3-18=-357/182, 5-18=0/575, 5-16=-900/180, 6-16=-3/662, 7-15=-28/660, 8-15=-902/180, 8-13=0/577, 10-13=-356/182

- 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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-5-2, Interior(1) 3-5-2 to 19-6-0, Exterior(2) 19-6-0 to 29-7-0, Interior(1) 29-7-0 to 43-10-8 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - 6) Provide adequate drainage to prevent water ponding.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 11. This connection is for uplift only and does not consider lateral forces.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 4, 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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818 Soundside Road  
 Edenton, NC 27932





|                   |             |                          |          |                 |  |           |
|-------------------|-------------|--------------------------|----------|-----------------|--|-----------|
| Job<br>243_2939_C | Truss<br>HG | Truss Type<br>Hip Girder | Qty<br>1 | Ply<br><b>2</b> | KB Home.243.2939.C<br>Job Reference (optional) | I48185430 |
|-------------------|-------------|--------------------------|----------|-----------------|--|-----------|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:22 2021 Page 2  
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**NOTES-**

- 12) 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.
- 13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 14) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- 15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 112 lb down and 77 lb up at 5-5-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-43, 3-9=-53, 9-11=-43, 2-10=-20

Concentrated Loads (lb)

Vert: 3=-67(B) 6=-62(B) 9=-67(B) 19=-33(B) 12=-33(B) 20=-62(B) 21=-62(B) 22=-62(B) 23=-62(B) 24=-62(B) 25=-62(B) 27=-62(B) 28=-62(B) 30=-62(B) 31=-62(B) 32=-62(B) 33=-62(B) 34=-62(B) 35=-62(B) 36=-20(B) 37=-146(B) 38=-33(B) 39=-33(B) 40=-33(B) 41=-33(B) 42=-33(B) 43=-33(B) 44=-33(B) 45=-33(B) 46=-33(B) 47=-33(B) 48=-33(B) 49=-33(B) 50=-33(B) 51=-33(B) 52=-33(B) 53=-146(B)

**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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818 Soundside Road  
Edenton, NC 27932

|                   |             |                         |           |          |                    |           |
|-------------------|-------------|-------------------------|-----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>J1 | Truss Type<br>Jack-Open | Qty<br>17 | Ply<br>1 | KB Home.243.2939.C | 148185431 |
|-------------------|-------------|-------------------------|-----------|----------|--------------------|-----------|

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:23 2021 Page 1

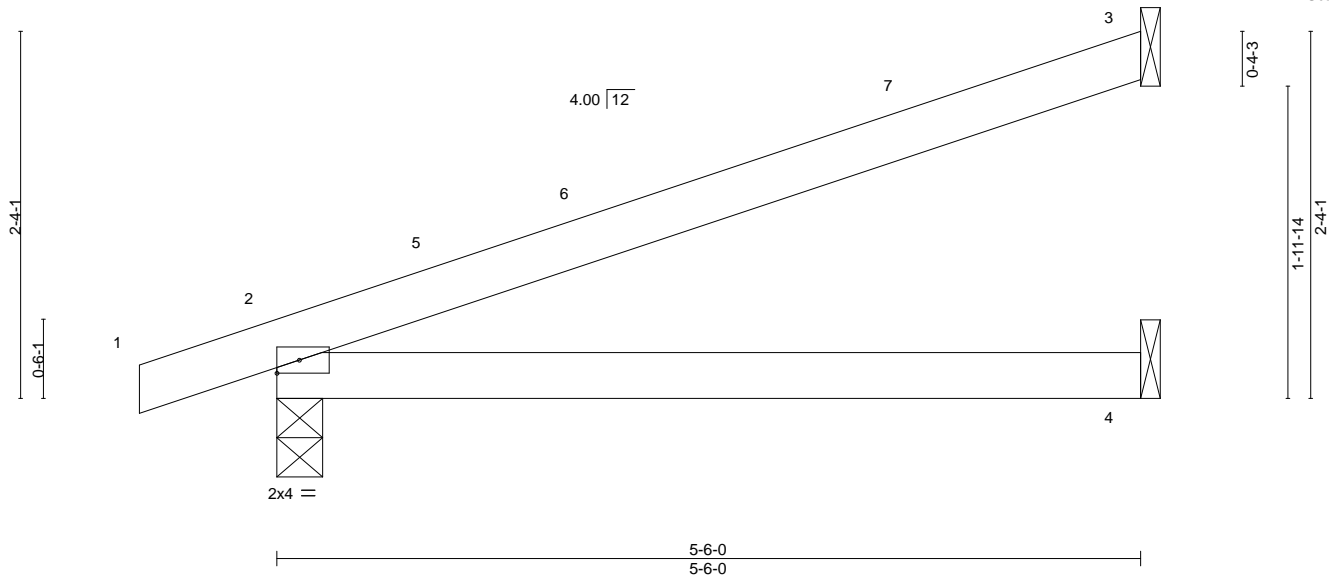
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Job Reference (optional)

-0-10-8  
0-10-8

5-6-0  
5-6-0

Scale = 1:14.7



|                        |                      |             |                             |               |             |
|------------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.51     | in (loc) l/defl L/d         | MT20          | 197/144     |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.35     | Vert(LL) -0.05 2-4 >999 240 |               |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00     | Vert(CT) -0.09 2-4 >675 180 |               |             |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-P    | Horz(CT) -0.00 3 n/a n/a    |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                             | Weight: 18 lb | FT = 20%    |

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=70(LC 12)  
Max Uplift 3=66(LC 16), 2=47(LC 12)  
Max Grav 3=153(LC 2), 2=279(LC 2), 4=106(LC 7)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 5-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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
- 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 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.
- 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) 3.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



October 4, 2021

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

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



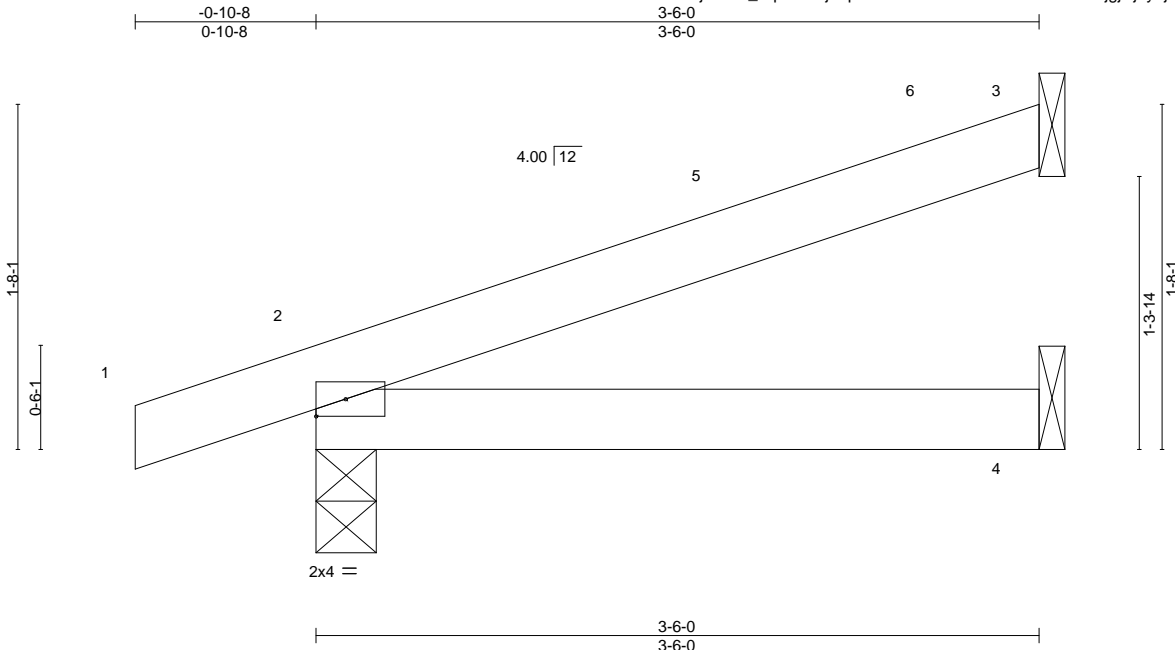
818 Soundside Road  
Edenton, NC 27932

|                   |             |                         |          |          |  |           |
|-------------------|-------------|-------------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>J2 | Truss Type<br>Jack-Open | Qty<br>2 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185432 |
|-------------------|-------------|-------------------------|----------|----------|--|-----------|

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:23 2021 Page 1  
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Scale = 1:11.2

|                        |                      |             |                             |               |             |
|------------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.16     | in (loc) l/defl L/d         | MT20          | 197/144     |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.13     | Vert(LL) -0.01 2-4 >999 240 |               |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00     | Vert(CT) -0.01 2-4 >999 180 |               |             |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-P    | Horz(CT) -0.00 3 n/a n/a    |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                             | Weight: 12 lb | FT = 20%    |

|                                       |   |
|---------------------------------------|---|
| <b>LUMBER-</b>                        | <b>BRACING-</b>   |
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 | TOP CHORD Structural wood sheathing directly applied or 3-6-0 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.            |

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=48(LC 12)  
 Max Uplift 3=-41(LC 16), 2=-43(LC 12)  
 Max Grav 3=89(LC 2), 2=202(LC 2), 4=66(LC 7)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 3-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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
- 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 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.
- 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) 3.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



October 4, 2021

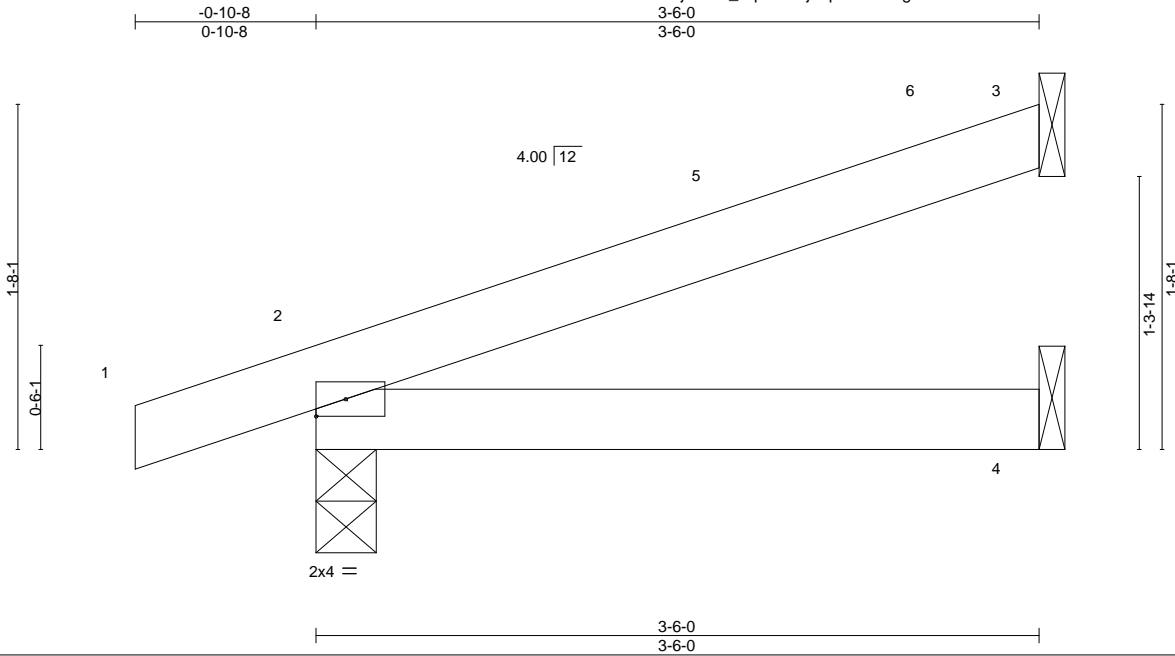
|                   |             |                         |          |          |  |           |
|-------------------|-------------|-------------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>J3 | Truss Type<br>Jack-Open | Qty<br>2 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185433 |
|-------------------|-------------|-------------------------|----------|----------|--|-----------|

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:24 2021 Page 1

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|                        |                      |             |                             |               |             |
|------------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.16     | in (loc) l/defl L/d         | MT20          | 197/144     |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.13     | Vert(LL) -0.01 2-4 >999 240 |               |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00     | Vert(CT) -0.01 2-4 >999 180 |               |             |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-P    | Horz(CT) -0.00 3 n/a n/a    |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                             | Weight: 12 lb | FT = 20%    |

|                                       |   |
|---------------------------------------|---|
| <b>LUMBER-</b>                        | <b>BRACING-</b>   |
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 | TOP CHORD Structural wood sheathing directly applied or 3-6-0 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.            |

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=48(LC 12)  
 Max Uplift 3=-41(LC 16), 2=-43(LC 12)  
 Max Grav 3=89(LC 2), 2=202(LC 2), 4=66(LC 7)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 3-5-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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
- 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 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.
- 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) 3.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



October 4, 2021

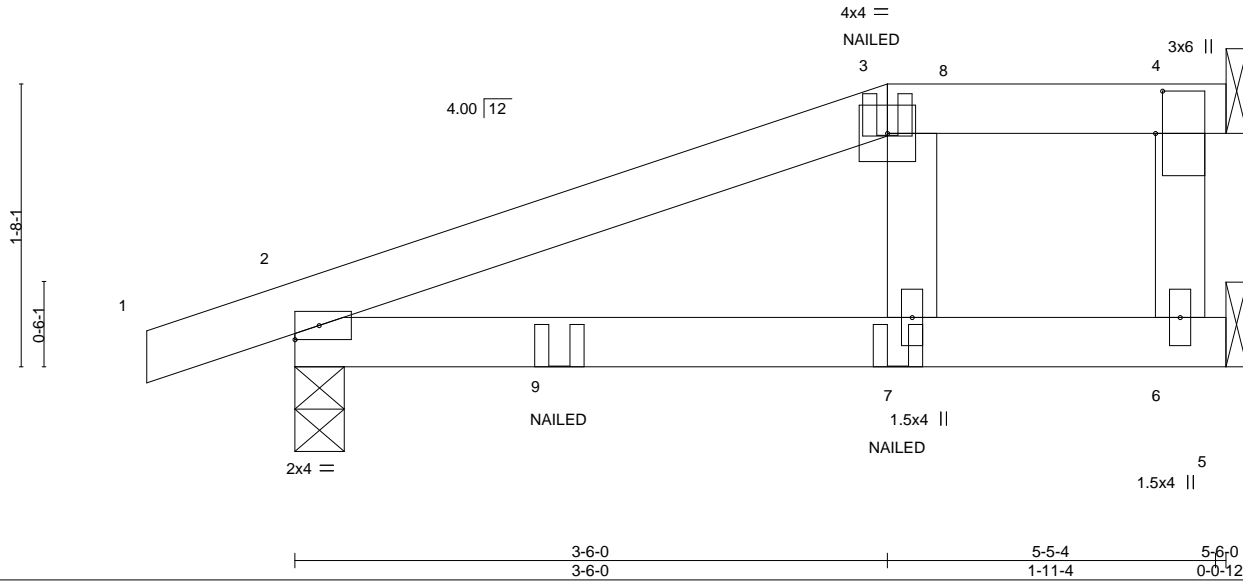
|                   |             |                               |          |          |                    |           |
|-------------------|-------------|-------------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>JG | Truss Type<br>Half Hip Girder | Qty<br>2 | Ply<br>1 | KB Home.243.2939.C | 148185434 |
|-------------------|-------------|-------------------------------|----------|----------|--------------------|-----------|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:25 2021 Page 1  
ID:XZssjAHNe\_IVplcdoAjGq3ztm9T-SsYfwdOzq9fxr4jblz8oooOQxFTHnbC0BdEHByXjDC



Scale = 1:13.6



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

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                       | PLATES        | GRIP     |
|------------------------|----------------------|----------|-----------------------------|---------------|----------|
| TCLL (roof) 20.0       | Plate Grip DOL 2-0-0 | TC 0.23  | in (loc) l/defl L/d         | MT20          | 197/144  |
| Snow (Pf/Pg) 16.5/15.0 | Lumber DOL 1.15      | BC 0.72  | Vert(LL) -0.06 2-7 >999 240 |               |          |
| TCDL 10.0              | Rep Stress Incr NO   | WB 0.03  | Vert(CT) -0.14 2-7 >443 180 |               |          |
| BCLL 0.0 *             | Code IRC2015/TPI2014 | Matrix-P | Horz(CT) 0.05 4 n/a n/a     |               |          |
| BCDL 10.0              |                      |          |                             | Weight: 21 lb | FT = 20% |

| LUMBER-                               | BRACING-  |
|---------------------------------------|---|
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 | TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except 2-0-0 oc purlins: 3-4. |
| BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  |
| WEBS 2x4 SP No.3                      |   |

**REACTIONS.** (size) 2=0-3-8, 4=Mechanical, 6=Mechanical  
 Max Horz 2=49(LC 8)  
 Max Uplift 2=-51(LC 8), 4=-18(LC 8), 6=-10(LC 8)  
 Max Grav 2=313(LC 32), 4=60(LC 31), 6=183(LC 2)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 4 and 6. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

|  |
|--|
| 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15 |
| Uniform Loads (plf)  |
| Vert: 1-3=-43, 3-4=-53, 2-5=-20                                      |



Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

|                   |             |                               |          |          |   |
|-------------------|-------------|-------------------------------|----------|----------|---|
| Job<br>243_2939_C | Truss<br>JG | Truss Type<br>Half Hip Girder | Qty<br>2 | Ply<br>1 | KB Home.243.2939.C<br>I48185434<br>Job Reference (optional) |
|-------------------|-------------|-------------------------------|----------|----------|---|

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

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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-16(F) 7=-13(F) 9=-13(F)

**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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Edenton, NC 27932

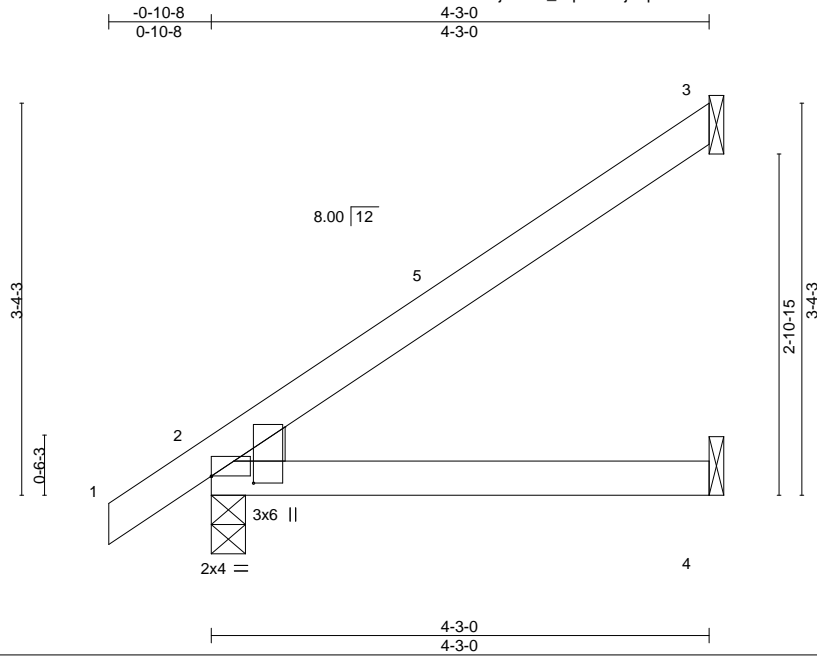


|                   |              |                         |           |          |  |           |
|-------------------|--------------|-------------------------|-----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>JU1 | Truss Type<br>Jack-Open | Qty<br>16 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185435 |
|-------------------|--------------|-------------------------|-----------|----------|--|-----------|

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

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4-3-0  
4-3-0



Scale = 1:19.7

|                       |                                   |
|-----------------------|-----------------------------------|
| Plate Offsets (X,Y)-- | [2:0-0-0,0-0-0], [2:0-0-11,0-4-5] |
|-----------------------|-----------------------------------|

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                       | PLATES        | GRIP     |
|------------------------|----------------------|----------|-----------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.28  | in (loc) l/defl L/d         | MT20          | 197/144  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.20  | Vert(LL) -0.02 2-4 >999 240 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00  | Vert(CT) -0.03 2-4 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-P | Horz(CT) -0.00 3 n/a n/a    |               |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                             | Weight: 16 lb | FT = 20% |

| LUMBER-                               | BRACING-  |
|---------------------------------------|---|
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 | TOP CHORD Structural wood sheathing directly applied or 4-3-0 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.            |
| WEDGE<br>Left: 2x4 SP No.3            |   |

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
 Max Horz 2=109(LC 14)  
 Max Uplift 3=-76(LC 14), 2=-1(LC 14)  
 Max Grav 3=122(LC 26), 2=231(LC 2), 4=81(LC 5)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 4-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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
  - 3) 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.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
  - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



October 4, 2021

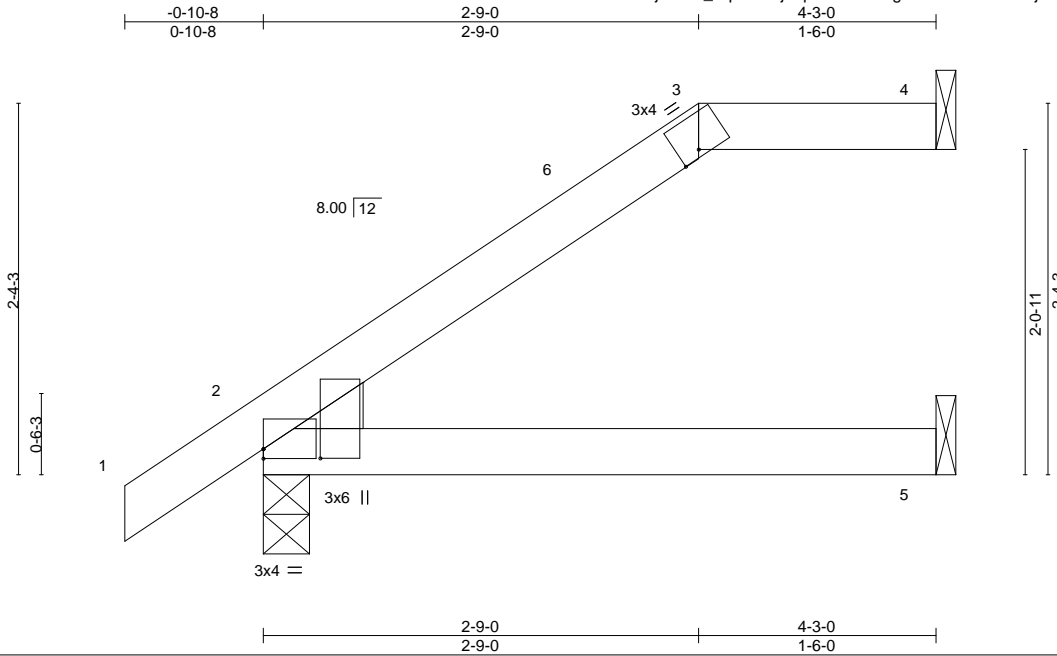
|  |  |
|--|--|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b><br/>         Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY<br/> <b>TRENCO</b><br/>         A MiTek Affiliate</p> <p>818 Soundside Road<br/>         Edenton, NC 27932</p> |
|--|--|

|                   |              |                         |          |          |                    |           |
|-------------------|--------------|-------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>JU2 | Truss Type<br>Jack-Open | Qty<br>3 | Ply<br>1 | KB Home.243.2939.C | 148185436 |
|-------------------|--------------|-------------------------|----------|----------|--------------------|-----------|

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:27 2021 Page 1  
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Scale = 1:14.6

Plate Offsets (X,Y)-- [2:0-0-11,0-4-5], [2:0-0-0,0-0-12], [3:0-1-8,0-0-9]

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                       | PLATES        | GRIP     |
|------------------------|----------------------|----------|-----------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.23  | in (loc) l/defl L/d         | MT20          | 197/144  |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.17  | Vert(LL) -0.01 2-5 >999 240 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00  | Vert(CT) -0.03 2-5 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-P | Horz(CT) 0.03 4 n/a n/a     |               |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                             | Weight: 16 lb | FT = 20% |

**LUMBER-**  
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2  
WEDGE  
Left: 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-3-0 oc purlins, except 2-0-0 oc purlins: 3-4.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=79(LC 14)  
Max Uplift 4=-32(LC 11), 2=-16(LC 14)  
Max Grav 4=106(LC 2), 2=231(LC 2), 5=76(LC 5)

**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=30ft; 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 2-9-0, Exterior(2) 2-9-0 to 4-2-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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) 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) Provide adequate drainage to prevent water ponding.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- 10) One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 5. This connection is for uplift only and does not consider lateral forces.
- 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



October 4, 2021

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

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



818 Soundside Road  
Edenton, NC 27932

|                   |              |                                |          |          |                    |           |
|-------------------|--------------|--------------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>JU3 | Truss Type<br>Jack-Open Girder | Qty<br>3 | Ply<br>1 | KB Home.243.2939.C | 148185437 |
|-------------------|--------------|--------------------------------|----------|----------|--------------------|-----------|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:28 2021 Page 1  
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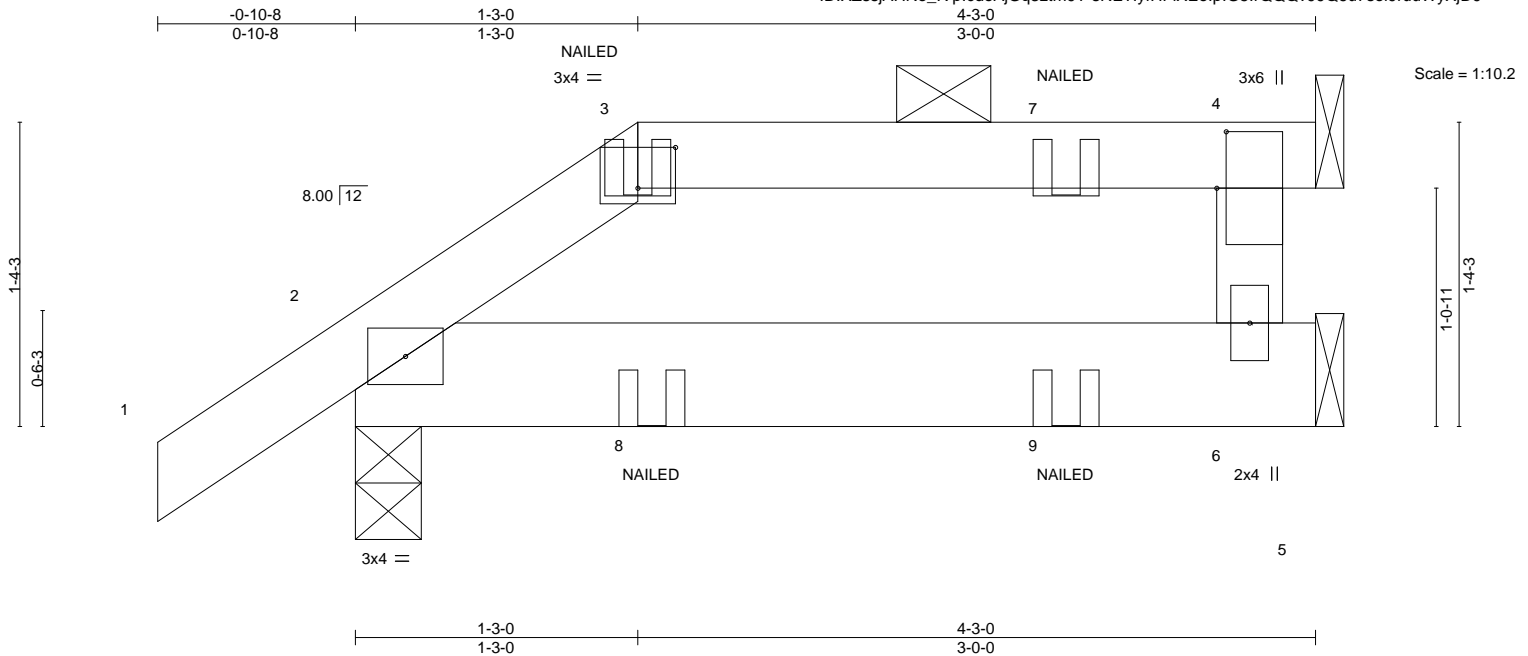


Plate Offsets (X, Y)-- [3:0-2-0,0-2-3], [4:0-3-0,0-0-8]

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                       | PLATES        | GRIP     |
|------------------------|----------------------|----------|-----------------------------|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.20  | in (loc) l/defl L/d         | MT20          | 197/144  |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.08  | Vert(LL) -0.00 2-6 >999 240 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00  | Vert(CT) -0.01 2-6 >999 180 |               |          |
| BCLL 0.0 *             | Rep Stress Incr NO   | Matrix-P | Horz(CT) 0.01 4 n/a n/a     |               |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                             | Weight: 19 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-3-0 oc purlins, except 2-0-0 oc purlins: 3-4.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=Mechanical, 6=Mechanical  
 Max Horz 2=45(LC 10)  
 Max Uplift 2=-29(LC 10), 4=-36(LC 7)  
 Max Grav 2=222(LC 2), 4=93(LC 2), 6=90(LC 5)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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.
- 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.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- One MTS12 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 6. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=43, 3-4=53, 2-5=20



October 4, 2021

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

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

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

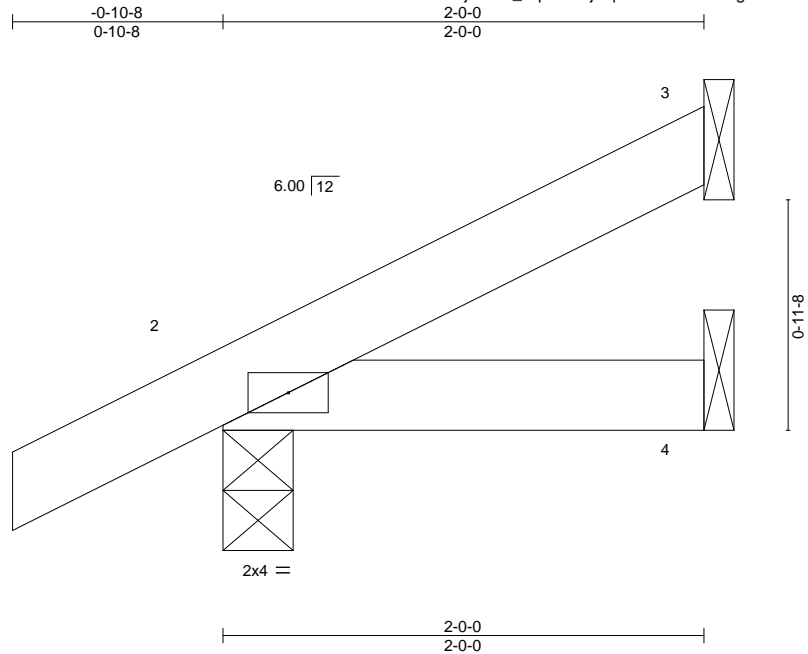


818 Soundside Road  
 Edenton, NC 27932

|                   |              |                         |          |          |                    |           |
|-------------------|--------------|-------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>JU4 | Truss Type<br>Jack-Open | Qty<br>6 | Ply<br>1 | KB Home.243.2939.C | 148185438 |
|-------------------|--------------|-------------------------|----------|----------|--------------------|-----------|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:29 2021 Page 1  
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|                        |                      |             |                             |               |             |
|------------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.06     | in (loc) l/defl L/d         | MT20          | 197/144     |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.04     | Vert(LL) -0.00 2 >999 240   |               |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.00     | Vert(CT) -0.00 2-4 >999 180 |               |             |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-P    | Horz(CT) -0.00 3 n/a n/a    |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                             | Weight: 8 lb  | FT = 20%    |

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

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

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=45(LC 16)  
Max Uplift 3=-25(LC 16), 2=-19(LC 16)  
Max Grav 3=46(LC 2), 2=145(LC 2), 4=39(LC 7)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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
- 2) 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
- 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 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.
- 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) 3.
- 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



October 4, 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

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



818 Soundside Road  
Edenton, NC 27932

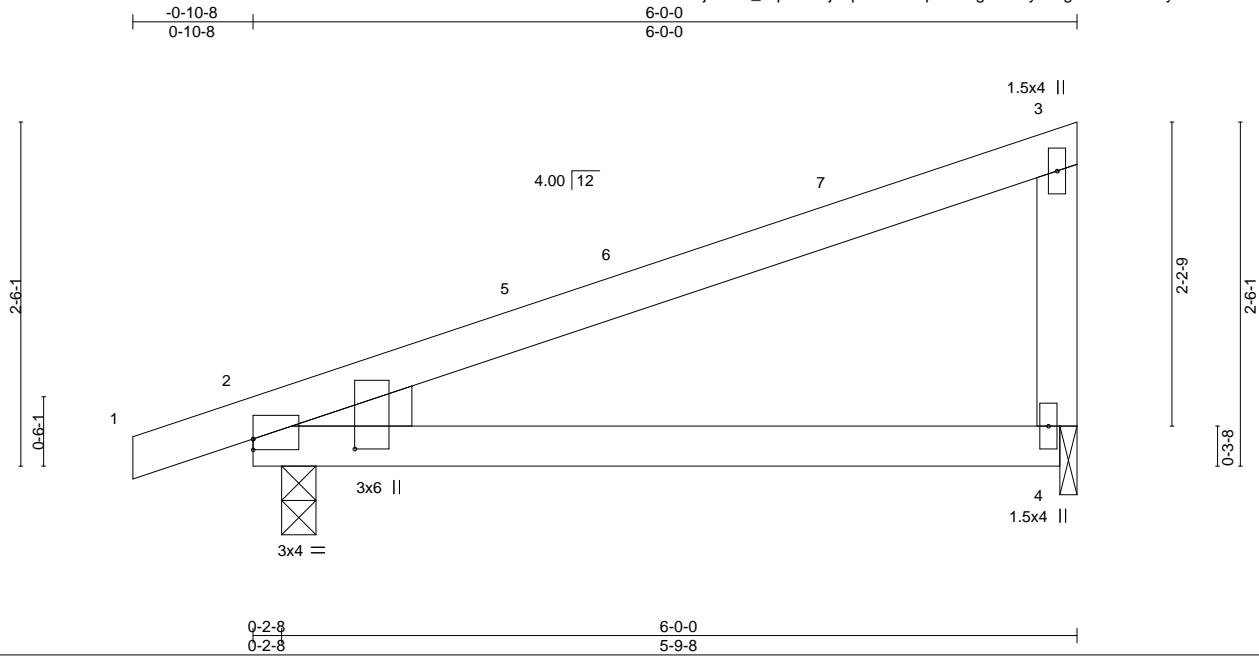
|                   |             |                          |          |          |                    |           |
|-------------------|-------------|--------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>M1 | Truss Type<br>MONOPIITCH | Qty<br>7 | Ply<br>1 | KB Home.243.2939.C | 148185439 |
|-------------------|-------------|--------------------------|----------|----------|--------------------|-----------|

84 Components (Dunn),

Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:30 2021 Page 1

ID:XZssjAHNe\_IVplcdoAjGq3ztm9T-opMmidgXnMny1czgOWLJvrV92y1LM1Lx9TK?yPyXjD7  
6-0-0 6-0-0



Scale = 1:16.8

|                        |                                     |          |                |              |          |        |               |               |             |
|------------------------|-------------------------------------|----------|----------------|--------------|----------|--------|---------------|---------------|-------------|
| Plate Offsets (X,Y)--  | [2:0-0-0,0-0-15], [2:0-0-14,0-8-14] |          |                |              |          |        |               |               |             |
| <b>LOADING</b> (psf)   | <b>SPACING-</b>                     | 2-0-0    | <b>CSI.</b>    | <b>DEFL.</b> | in (loc) | l/defl | L/d           | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0       | Plate Grip DOL 1.15                 | TC 0.62  | Vert(LL) -0.06 | 2-4          | >999     | 240    | MT20          | 197/144       |             |
| Snow (Pf/Pg) 11.6/15.0 | Lumber DOL 1.15                     | BC 0.42  | Vert(CT) -0.13 | 2-4          | >532     | 180    |               |               |             |
| TCDL 10.0              | Rep Stress Incr YES                 | WB 0.00  | Horz(CT) 0.00  | 4            | n/a      | n/a    |               |               |             |
| BCLL 0.0 *             | Code IRC2015/TPI2014                | Matrix-P |                |              |          |        |               |               |             |
| BCDL 10.0              |                                     |          |                |              |          |        | Weight: 24 lb | FT = 20%      |             |

**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

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

**REACTIONS.** (size) 2=0-3-0, 4=0-1-8  
Max Horz 2=79(LC 13)  
Max Uplift 2=-54(LC 12), 4=-31(LC 16)  
Max Grav 2=294(LC 2), 4=224(LC 2)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 5-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) 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
  - 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 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.
  - 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 4. This connection is for uplift only and does not consider lateral forces.



October 4, 2021



|                   |             |                                   |          |          |  |           |
|-------------------|-------------|-----------------------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>ME | Truss Type<br>MONOPITCH SUPPORTED | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185440 |
|-------------------|-------------|-----------------------------------|----------|----------|--|-----------|

84 Components (Dunn),

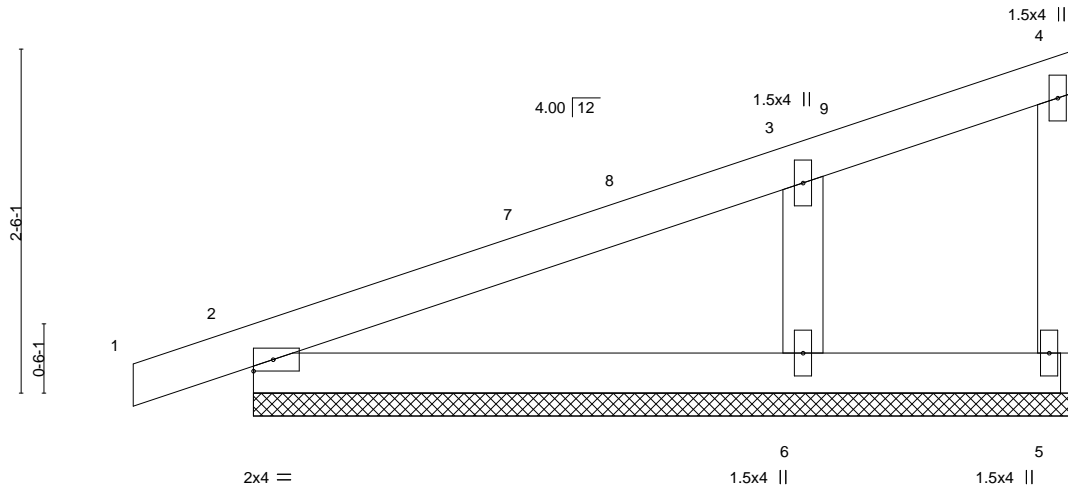
Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:30 2021 Page 1

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-0-10-8  
0-10-86-0-0  
6-0-0

Scale = 1:16.8



| LOADING (psf)          | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------------|----------------------|----------|----------------|----------|--------|-----|---------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.19  | Vert(LL) -0.00 | 1        | n/r    | 120 | MT20          | 197/144  |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.13  | Vert(CT) 0.00  | 1        | n/r    | 120 |               |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.07  | Horz(CT) 0.00  | 5        | n/a    | n/a |               |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-P |                |          |        |     |               |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                |          |        |     | Weight: 24 lb | FT = 20% |

**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  
 OTHERS 2x4 SP No.3

**BRACING-**

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

**REACTIONS.**

(size) 5=6-0-0, 2=6-0-0, 6=6-0-0  
 Max Horz 2=79(LC 13)  
 Max Uplift 5=5(LC 13), 2=-34(LC 12), 6=-52(LC 16)  
 Max Grav 5=15(LC 23), 2=190(LC 2), 6=317(LC 2)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 2-1-8, Exterior(2) 2-1-8 to 5-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) TCLL: ASCE 7-10; 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) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



October 4, 2021

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

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

ENGINEERING BY  
**TRENCO**  
 A MiTek Affiliate

818 Soundside Road  
 Edenton, NC 27932

|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>R1 | Truss Type<br>Common | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185441 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

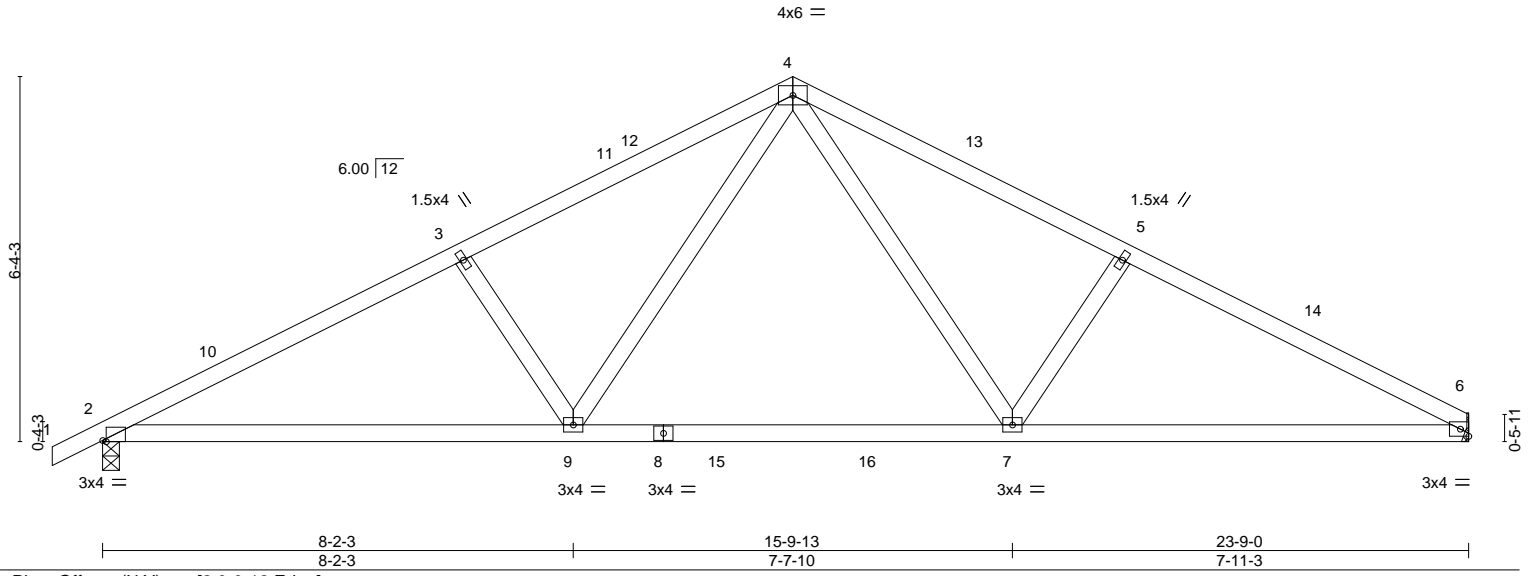
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:32 2021 Page 1

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Scale = 1:40.1



|                      |           |                      |       |             |      |              |          |        |      |                |             |
|----------------------|-----------|----------------------|-------|-------------|------|--------------|----------|--------|------|----------------|-------------|
| <b>LOADING</b> (psf) |           | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> |      | <b>DEFL.</b> | in (loc) | l/defl | L/d  | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof)          | 20.0      | Plate Grip DOL       | 1.15  | TC          | 0.50 | Vert(LL)     | -0.14    | 7-9    | >999 | MT20           | 197/144     |
| Snow (Pf/Pg)         | 11.6/15.0 | Lumber DOL           | 1.15  | BC          | 0.72 | Vert(CT)     | -0.27    | 2-9    | >999 |                |             |
| TCDL                 | 10.0      | Rep Stress Incr      | YES   | WB          | 0.23 | Horz(CT)     | 0.05     | 6      | n/a  |                |             |
| BCLL                 | 0.0 *     | Code IRC2015/TPI2014 |       | Matrix-S    |      |              |          |        |      |                |             |
| BCDL                 | 10.0      |                      |       |             |      |              |          |        |      | Weight: 107 lb | FT = 20%    |

|                |                             |                 |  |
|----------------|-----------------------------|-----------------|--|
| <b>LUMBER-</b> |                             | <b>BRACING-</b> |  |
| TOP CHORD      | 2x4 SP No.2 or 2x4 SPF No.2 | TOP CHORD       | Structural wood sheathing directly applied or 3-9-14 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.             |
| WEBS           | 2x4 SP No.3                 |                 |  |

**REACTIONS.** (size) 6=Mechanical, 2=0-3-8  
 Max Horz 2=97(LC 16)  
 Max Uplift 6=-52(LC 17), 2=-70(LC 16)  
 Max Grav 6=940(LC 2), 2=1004(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1631/117, 3-4=-1448/136, 4-5=-1436/149, 5-6=-1615/130  
 BOT CHORD 2-9=-119/1401, 7-9=0/924, 6-7=-50/1381  
 WEBS 4-7=-61/542, 5-7=-340/175, 4-9=-60/559, 3-9=-355/174

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 12-0-0, Exterior(2) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 23-8-4 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
- 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
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.



October 4, 2021



|                   |              |                          |          |          |                    |           |
|-------------------|--------------|--------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>R1A | Truss Type<br>ROOF TRUSS | Qty<br>5 | Ply<br>1 | KB Home.243.2939.C | 148185442 |
|-------------------|--------------|--------------------------|----------|----------|--------------------|-----------|

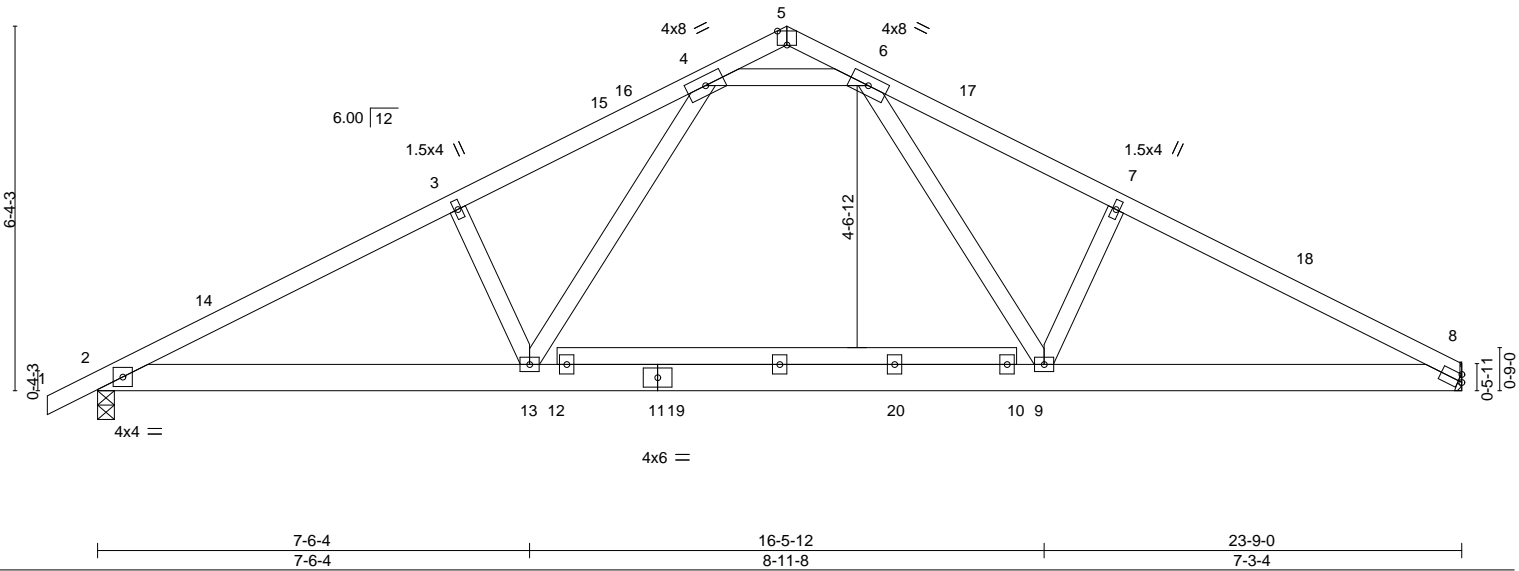
84 Components (Dunn), Dunn, NC - 28334,

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Scale = 1:40.1



|  |  |  |
|--|--|--|
| Plate Offsets (X, Y)-- [5:0-2-0, Edge] |  |  |
|--|--|--|

|                        |                      |             |                              |                |             |
|------------------------|----------------------|-------------|------------------------------|----------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                 | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.49     | in (loc) l/defl L/d          | MT20           | 197/144     |
| Snow (Pf/Pg) 11.6/15.0 | Plate Grip DOL 1.15  | BC 0.41     | Vert(LL) -0.09 2-13 >999 240 |                |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.23     | Vert(CT) -0.14 2-13 >999 180 |                |             |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S    | Horz(CT) 0.03 8 n/a n/a      |                |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                              | Weight: 139 lb | FT = 20%    |

|  |   |
|--|---|
| <b>LUMBER-</b>   | <b>BRACING-</b>   |
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2                                | TOP CHORD Structural wood sheathing directly applied or 3-9-7 oc purlins. |
| BOT CHORD 2x6 SP No.2 *Except*<br>10-12: 2x4 SP No.2 or 2x4 SPF No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| WEBS 2x4 SP No.3   |   |

**REACTIONS.** (size) 8=Mechanical, 2=0-3-8  
 Max Horz 2=98(LC 16)  
 Max Uplift 8=52(LC 17), 2=-70(LC 16)  
 Max Grav 8=940(LC 2), 2=1004(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1675/104, 3-4=-1529/133, 6-7=-1516/152, 7-8=-1660/122  
 BOT CHORD 2-13=-97/1424, 9-13=-9/1033, 8-9=-43/1408  
 WEBS 6-9=-46/540, 7-9=-335/171, 4-13=-44/558, 3-13=-347/167, 4-6=-989/146

- 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=30ft; 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 12-0-0, Exterior(2) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 23-8-4 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 3x4 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.
  - 9) 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) 8.
  - 11) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - 12) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



October 4, 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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818 Soundside Road  
Edenton, NC 27932





|                   |              |                               |          |          |   |
|-------------------|--------------|-------------------------------|----------|----------|---|
| Job<br>243_2939_C | Truss<br>UG1 | Truss Type<br>Half Hip Girder | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>I48185444<br>Job Reference (optional) |
|-------------------|--------------|-------------------------------|----------|----------|---|

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8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:36 2021 Page 2  
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**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-43, 3-7=-53, 2-8=-20

Concentrated Loads (lb)

Vert: 3=-33(F) 5=-28(F) 11=-20(F) 10=-20(F) 4=-28(F) 9=-20(F) 6=-28(F) 13=-45(F) 15=-28(F) 16=-28(F) 17=-28(F) 18=-28(F) 19=-28(F) 20=-36(F) 21=-25(F) 22=-20(F) 23=-20(F) 24=-20(F) 25=-20(F) 26=-20(F) 27=-20(F)

**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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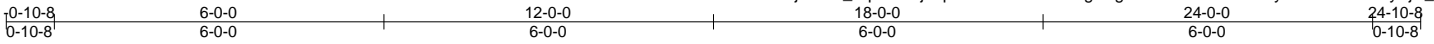
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | KB Home.243.2939.C       | 148185445 |
| 243_2939_C | UG2   | Hip Girder | 1   | 1   | Job Reference (optional) |           |

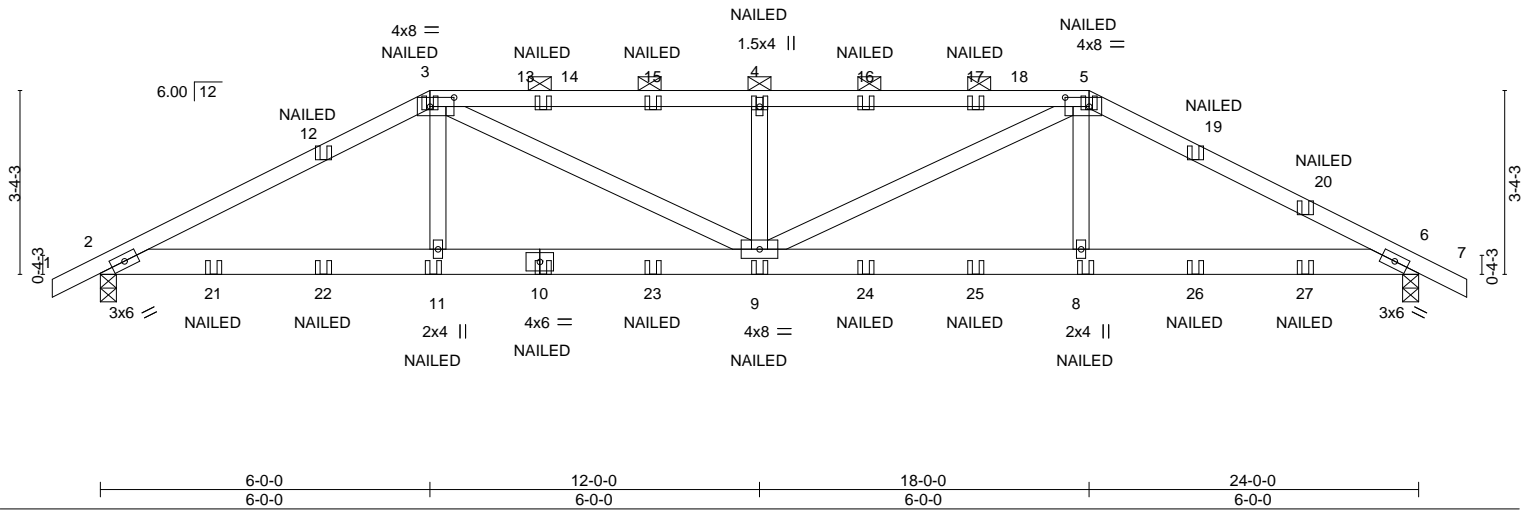
84 Components (Dunn), Dunn, NC - 28334,

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:39 2021 Page 1

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Scale = 1:41.9



|                        |                                  |       |             |                |          |        |     |                |             |
|------------------------|----------------------------------|-------|-------------|----------------|----------|--------|-----|----------------|-------------|
| Plate Offsets (X,Y)--  | [3:0-5-4,0-2-0], [5:0-5-4,0-2-0] |       |             |                |          |        |     |                |             |
| <b>LOADING</b> (psf)   | <b>SPACING-</b>                  | 2-0-0 | <b>CSI.</b> | <b>DEFLL.</b>  | in (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof) 20.0       | Plate Grip DOL 1.15              |       | TC 0.91     | Vert(LL) 0.12  | 9        | >999   | 240 | MT20           | 197/144     |
| Snow (Pf/Pg) 16.5/15.0 | Lumber DOL 1.15                  |       | BC 0.64     | Vert(CT) -0.23 | 9        | >999   | 180 |                |             |
| TCDL 10.0              | Rep Stress Incr NO               |       | WB 0.35     | Horz(CT) 0.05  | 6        | n/a    | n/a |                |             |
| BCLL 0.0 *             | Code IRC2015/TPI2014             |       | Matrix-S    |                |          |        |     |                |             |
| BCDL 10.0              |                                  |       |             |                |          |        |     | Weight: 127 lb | FT = 20%    |

|  |  |
|--|--|
| <b>LUMBER-</b>   | <b>BRACING-</b>  |
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*<br>3-5: 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 2-3-11 oc purlins, except<br>2-0-0 oc purlins (3-1-0 max.): 3-5. |
| BOT CHORD 2x6 SP No.2  | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.   |
| WEBS 2x4 SP No.3   |  |

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
 Max Horz 2=-49(LC 63)  
 Max Uplift 2=-206(LC 12), 6=-217(LC 13)  
 Max Grav 2=1384(LC 2), 6=1412(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2459/442, 3-4=-2837/629, 4-5=-2837/629, 5-6=-2486/453  
 BOT CHORD 2-11=-378/2115, 9-11=-372/2127, 8-9=-356/2141, 6-8=-362/2129  
 WEBS 3-11=0/412, 3-9=-277/849, 4-9=-574/334, 5-9=-260/819, 5-8=0/414

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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=16.5 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**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=53, 5-7=43, 2-6=20



October 4, 2021

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **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

**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932

|                   |              |                          |          |          |   |
|-------------------|--------------|--------------------------|----------|----------|---|
| Job<br>243_2939_C | Truss<br>UG2 | Truss Type<br>Hip Girder | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>I48185445<br>Job Reference (optional) |
|-------------------|--------------|--------------------------|----------|----------|---|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:39 2021 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-33(B) 5=-33(B) 10=-20(B) 11=-20(B) 9=-20(B) 4=-28(B) 8=-20(B) 12=-45(B) 14=-28(B) 15=-28(B) 16=-28(B) 17=-28(B) 19=-45(B) 20=-39(B) 21=-36(B)  
22=-25(B) 23=-20(B) 24=-20(B) 25=-20(B) 26=-25(B) 27=-36(B)

**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<br>243_2939_C | Truss<br>UH2 | Truss Type<br>Half Hip | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185446 |
|-------------------|--------------|------------------------|----------|----------|--------------------|-----------|

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

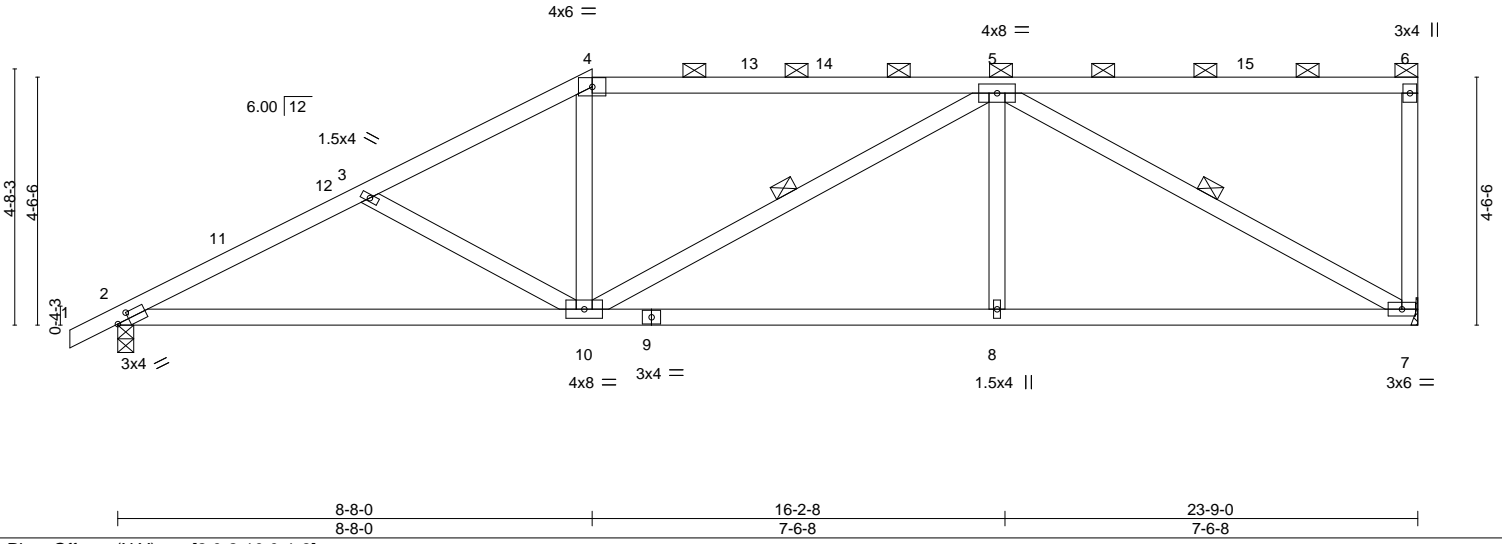
8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:41 2021 Page 1

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Job Reference (optional)



Scale = 1:42.1



|  |
|--|
| Plate Offsets (X,Y)-- [2:0-2-10,0-1-8] |
|--|

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                        | PLATES         | GRIP     |
|------------------------|----------------------|----------|------------------------------|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.75  | in (loc) l/defl L/d          | MT20           | 197/144  |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.75  | Vert(LL) -0.14 2-10 >999 240 |                |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.61  | Vert(CT) -0.30 2-10 >953 180 |                |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.05 7 n/a n/a      |                |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                              | Weight: 123 lb | FT = 20% |

| LUMBER-  | BRACING-   |
|--|--|
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*<br>4-6: 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 4-1-14 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-0 max.): 4-6. |
| BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2                              | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.   |
| WEBS 2x4 SP No.3   | WEBS 1 Row at midpt 5-10, 5-7  |

**REACTIONS.** (size) 7=Mechanical, 2=0-3-8  
 Max Horz 2=148(LC 15)  
 Max Uplift 7=98(LC 13), 2=-47(LC 16)  
 Max Grav 7=1046(LC 35), 2=1001(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1668/150, 3-4=-1427/118, 4-5=-1228/124  
 BOT CHORD 2-10=-289/1442, 8-10=-158/1348, 7-8=-158/1348  
 WEBS 3-10=-346/140, 4-10=0/369, 5-8=0/312, 5-7=-1502/145

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 8-8-0, Exterior(2) 8-8-0 to 12-10-15, Interior(1) 12-10-15 to 23-7-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- 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.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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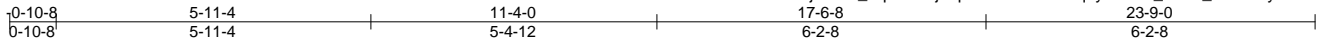


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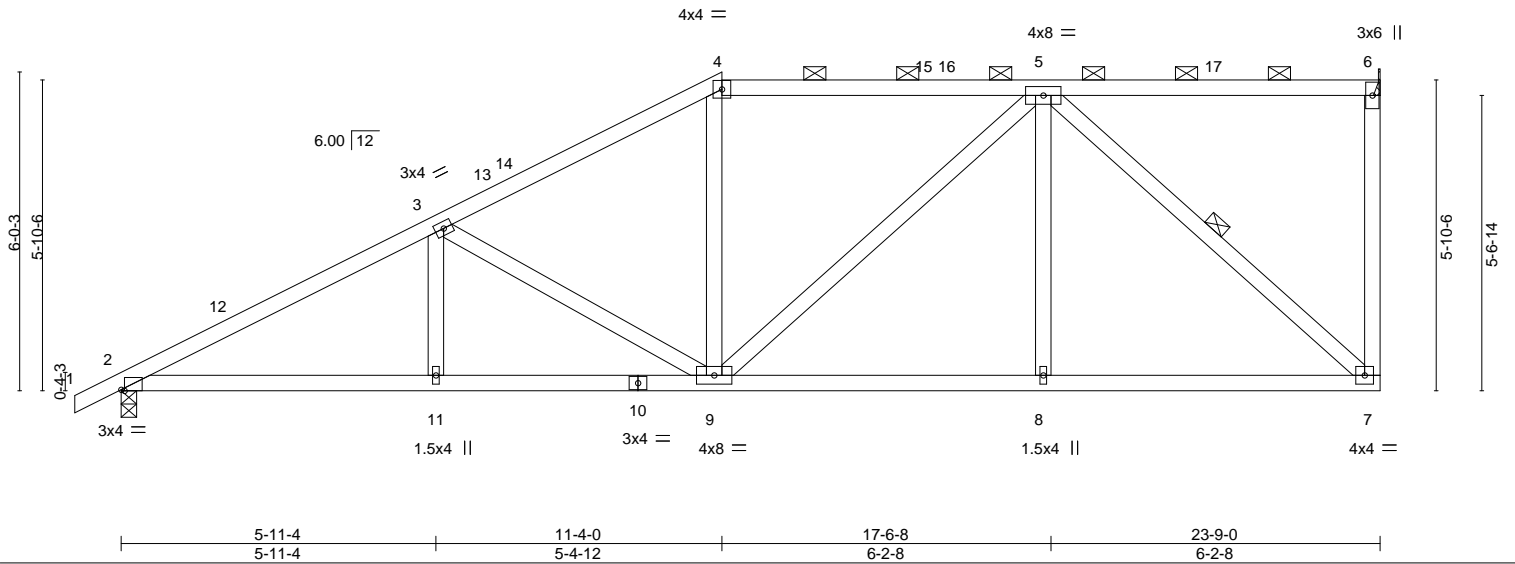
|                   |              |                        |          |          |                    |           |
|-------------------|--------------|------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>UH3 | Truss Type<br>Half Hip | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185447 |
|-------------------|--------------|------------------------|----------|----------|--------------------|-----------|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:42 2021 Page 1  
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Scale = 1:43.5



|                       |                 |
|-----------------------|-----------------|
| Plate Offsets (X,Y)-- | [2:0-0-12,Edge] |
|-----------------------|-----------------|

|                        |                      |             |                              |                |             |
|------------------------|----------------------|-------------|------------------------------|----------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                 | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.69     | in (loc) l/defl L/d          | MT20           | 197/144     |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.56     | Vert(LL) -0.05 11 >999 240   |                |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.44     | Vert(CT) -0.11 2-11 >999 180 |                |             |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S    | Horz(CT) 0.01 6 n/a n/a      |                |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                              | Weight: 134 lb | FT = 20%    |

|                                       |   |
|---------------------------------------|---|
| <b>LUMBER-</b>                        | <b>BRACING-</b>   |
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 | TOP CHORD Structural wood sheathing directly applied or 3-10-9 oc purlins, except end verticals, and 2-0-0 oc purlins (5-3-15 max.): 4-6. |
| BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  |
| WEBS 2x4 SP No.3                      | WEBS 1 Row at midpt 5-7   |

**REACTIONS.** (size) 6=Mechanical, 2=0-3-8  
 Max Horz 2=192(LC 15)  
 Max Uplift 6=93(LC 13), 2=65(LC 16)  
 Max Grav 6=992(LC 35), 2=1011(LC 36)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1689/102, 3-4=-1194/127, 4-5=-999/133, 6-7=-57/796  
 BOT CHORD 2-11=-269/1432, 9-11=-269/1432, 8-9=-140/842, 7-8=-140/842  
 WEBS 3-9=-623/128, 4-9=0/279, 5-9=-73/337, 5-8=0/275, 5-7=-1108/127

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 11-4-0, Exterior(2) 11-4-0 to 15-6-15, Interior(1) 15-6-15 to 23-7-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.



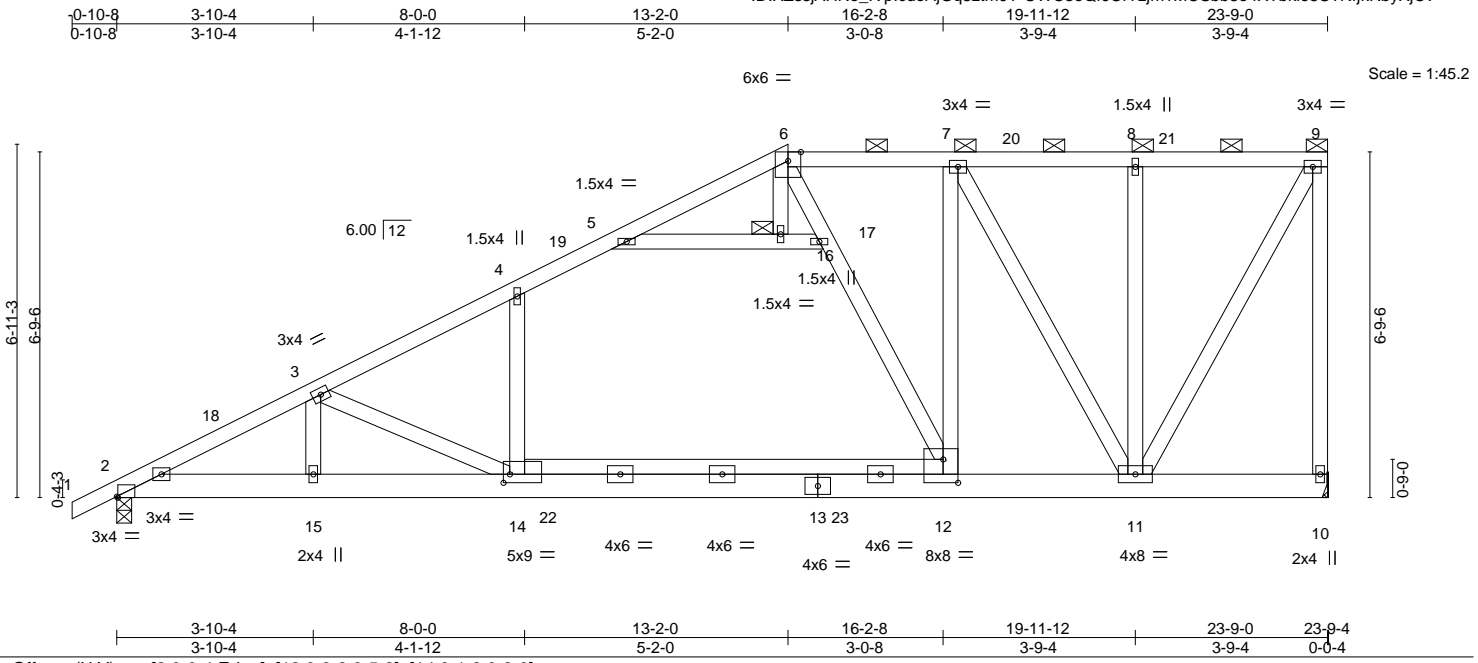
October 4, 2021

|                   |               |                          |          |          |                    |           |
|-------------------|---------------|--------------------------|----------|----------|--------------------|-----------|
| Job<br>243_2939_C | Truss<br>UH4A | Truss Type<br>ROOF TRUSS | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C | 148185448 |
|-------------------|---------------|--------------------------|----------|----------|--------------------|-----------|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:44 2021 Page 1

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| LOADING (psf)          | SPACING-             | CSI.     | DEFL.                      | PLATES         | GRIP     |
|------------------------|----------------------|----------|----------------------------|----------------|----------|
| TCLL (roof) 20.0       | 2-0-0                | TC 0.69  | in (loc) l/defl L/d        | MT20           | 197/144  |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.73  | Vert(LL) -0.33 14 >865 240 |                |          |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.98  | Vert(CT) -0.59 14 >480 180 |                |          |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.01 10 n/a n/a   |                |          |
| BCDL 10.0              | Code IRC2015/TPI2014 |          |                            | Weight: 186 lb | FT = 20% |

| LUMBER-   | BRACING-  |
|---|---|
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2                               | TOP CHORD Structural wood sheathing directly applied or 3-11-14 oc purlins, except end verticals, and 2-0-0 oc purlins (5-7-1 max.): 6-9. |
| BOT CHORD 2x6 SP DSS *Except*<br>12-14: 2x4 SP No.2 or 2x4 SPF No.2 | BOT CHORD Rigid ceiling directly applied or 6-9-12 oc bracing.  |
| WEBS 2x4 SP No.3 *Except*<br>6-12: 2x4 SP No.2 or 2x4 SPF No.2      | JOINTS 1 Brace at Jt(s): 9, 16  |

**REACTIONS.** (size) 10=Mechanical, 2=0-3-8  
 Max Horz 2=222(LC 15)  
 Max Uplift 10=88(LC 13), 2=-74(LC 16)  
 Max Grav 10=945(LC 36), 2=1001(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2032/133, 3-4=-1120/77, 4-5=-1037/125, 5-6=-792/123, 6-7=-912/136,  
 7-8=-433/116, 8-9=-433/116, 9-10=-870/120  
 BOT CHORD 2-15=-292/1786, 14-15=-292/1786, 12-14=-210/956, 11-12=-162/909  
 WEBS 3-15=-37/527, 3-14=-1009/179, 9-11=-110/866, 8-11=-307/92, 5-16=-257/47,  
 16-17=-257/47, 7-12=-56/855, 7-11=-977/107

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 13-2-0, Exterior(2) 13-2-0 to 17-4-15, Interior(1) 17-4-15 to 23-7-4 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=15.0 psf (ground snow); Pf=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



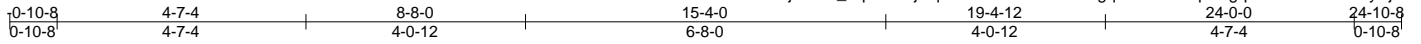
October 4, 2021

|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | KB Home.243.2939.C       | 148185449 |
| 243_2939_C | UH5   | Hip        | 1   | 1   | Job Reference (optional) |           |

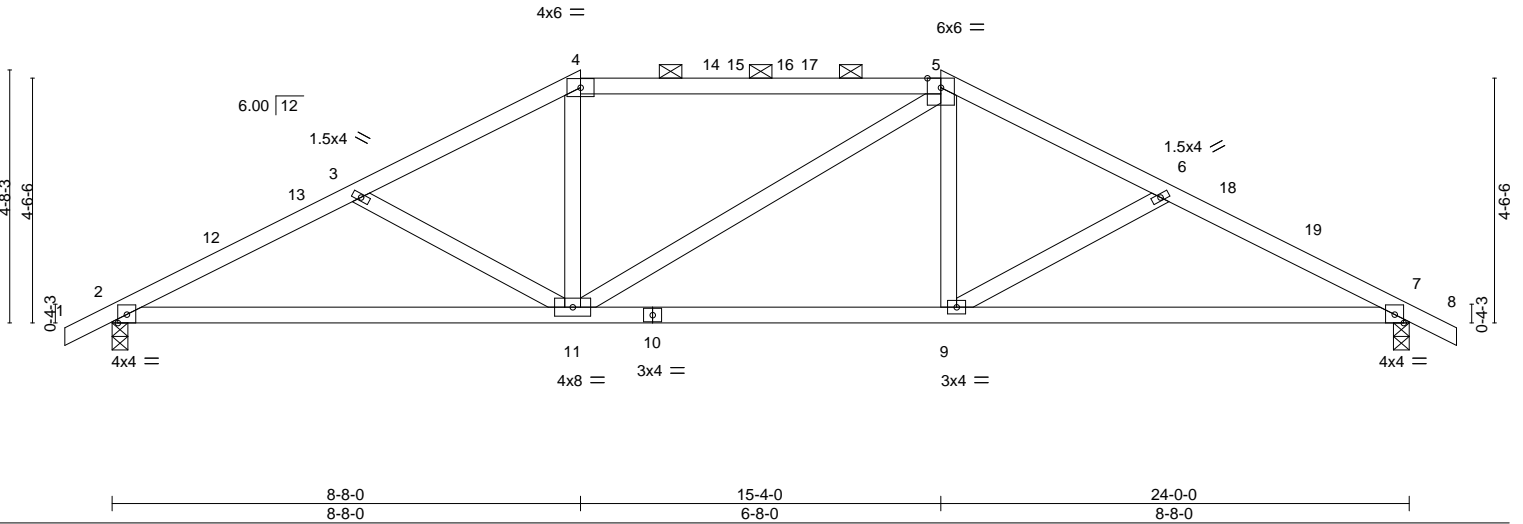
84 Components (Dunn), Dunn, NC - 28334,

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ID: XZssjAHNe\_IVplcdoAjGq3ztm9T-simRsmxsfzggKwcZmA6qc0dgg?4mNon9cJTiz1yXjCu



Scale = 1:42.6



|                        |                      |             |                             |                |             |
|------------------------|----------------------|-------------|-----------------------------|----------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.78     | in (loc) l/defl L/d         | MT20           | 197/144     |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.74     | Vert(LL) -0.15 7-9 >999 240 |                |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.15     | Vert(CT) -0.32 7-9 >897 180 |                |             |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S    | Horz(CT) 0.05 7 n/a n/a     |                |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                             | Weight: 114 lb | FT = 20%    |

|  |   |
|--|---|
| <b>LUMBER-</b>   | <b>BRACING-</b>   |
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 *Except*<br>4-5: 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 4-1-7 oc purlins, except 2-0-0 oc purlins (3-10-5 max.): 4-5. |
| BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2                              | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  |
| WEBS 2x4 SP No.3   |   |

**REACTIONS.** (size) 2=0-3-8, 7=0-3-8  
 Max Horz 2=67(LC 16)  
 Max Uplift 2=-48(LC 16), 7=-48(LC 17)  
 Max Grav 2=1049(LC 39), 7=1049(LC 39)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1686/196, 3-4=-1444/154, 4-5=-1243/168, 5-6=-1444/154, 6-7=-1686/196  
 BOT CHORD 2-11=-121/1455, 9-11=-27/1243, 7-9=-125/1455  
 WEBS 3-11=-338/139, 4-11=0/361, 5-9=0/361, 6-9=-338/139

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; 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 8-8-0, Exterior(2) 8-8-0 to 12-10-15, Interior(1) 12-10-15 to 15-4-0, Exterior(2) 15-4-0 to 19-6-10, Interior(1) 19-6-10 to 24-10-8 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
  - 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - Unbalanced snow loads have been considered for this design.
  - 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.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



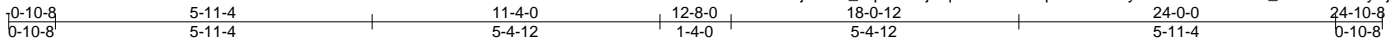
October 4, 2021

|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | KB Home.243.2939.C       | 148185450 |
| 243_2939_C | UH6   | Hip        | 1   | 1   | Job Reference (optional) |           |

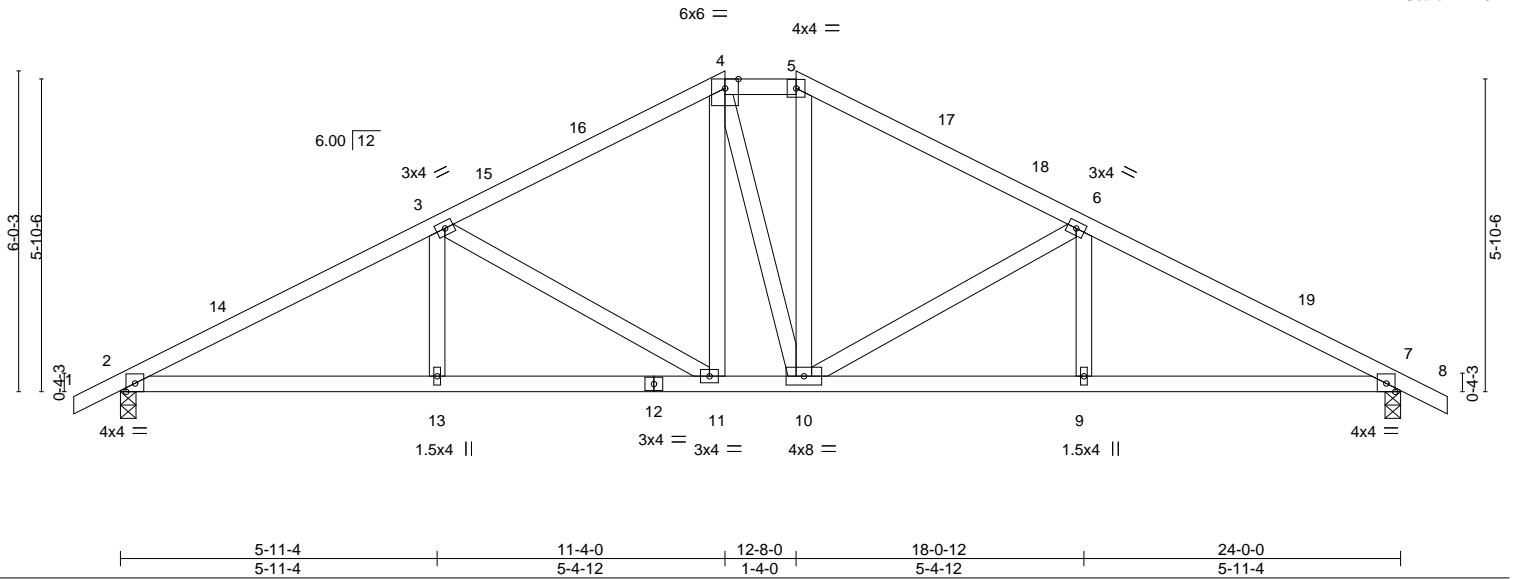
84 Components (Dunn), Dunn, NC - 28334,

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ID: XZssjAHNe\_IVplcdoAjGq3ztm9T-KuKp36iZ0Hohy3BlKtd38DAv0PR\_6AXlrzCrV/TyXjCt



Scale = 1:43.2



|                        |                      |             |                               |                |             |
|------------------------|----------------------|-------------|-------------------------------|----------------|-------------|
| <b>LOADING</b> (psf)   | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>                  | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL (roof) 20.0       | 2-0-0                | TC 0.56     | in (loc) l/defl L/d           | MT20           | 197/144     |
| Snow (Pf/Pg) 16.5/15.0 | Plate Grip DOL 1.15  | BC 0.62     | Vert(LL) -0.08 11 >999 240    |                |             |
| TCDL 10.0              | Lumber DOL 1.15      | WB 0.43     | Vert(CT) -0.15 11-13 >999 180 |                |             |
| BCLL 0.0 *             | Rep Stress Incr YES  | Matrix-S    | Horz(CT) 0.06 7 n/a n/a       |                |             |
| BCDL 10.0              | Code IRC2015/TPI2014 |             |                               | Weight: 128 lb | FT = 20%    |

|                                       |  |
|---------------------------------------|--|
| <b>LUMBER-</b>                        | <b>BRACING-</b>  |
| TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2 | TOP CHORD Structural wood sheathing directly applied or 3-6-3 oc purlins, except |
| BOT CHORD 2x4 SP No.2 or 2x4 SPF No.2 | 2-0-0 oc purlins (5-3-8 max.): 4-5.  |
| WEBS 2x4 SP No.3                      | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                   |

**REACTIONS.** (size) 2=0-3-8, 7=0-3-8  
 Max Horz 2=-86(LC 17)  
 Max Uplift 2=-66(LC 16), 7=-66(LC 17)  
 Max Grav 2=1146(LC 39), 7=1146(LC 39)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1982/125, 3-4=-1377/145, 4-5=-1138/156, 5-6=-1380/144, 6-7=-1981/125  
 BOT CHORD 2-13=-88/1681, 11-13=-88/1681, 10-11=0/1135, 9-10=-53/1680, 7-9=-53/1680  
 WEBS 3-13=0/251, 3-11=-619/123, 4-11=-21/362, 5-10=-25/364, 6-10=-614/124

- 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=30ft; 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 11-4-0, Exterior(2) 11-4-0 to 16-10-15, Interior(1) 16-10-15 to 24-10-8 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=16.5 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Partially Exp.; 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 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
  - 6) Provide adequate drainage to prevent water ponding.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 7. This connection is for uplift only and does not consider lateral forces.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

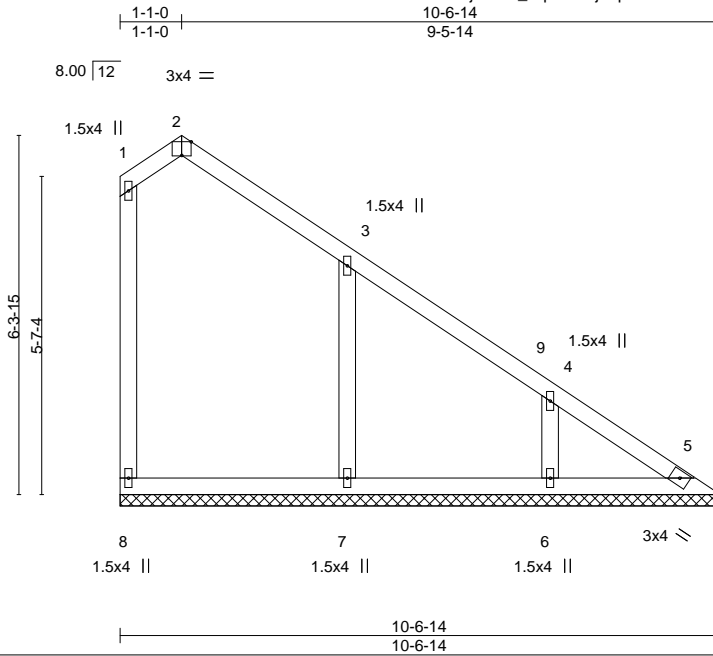




|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>V1 | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185451 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

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8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:47 2021 Page 1  
 ID: XZssjAHNe\_IVplcd0AjGq3ztm9T-o5uBHRuBnaxYaDmXub8lhRi6RpsUriER4dyO2wyXjCs  
 10-6-14  
 9-5-14



|                                      |           |                      |       |             |      |              |          |        |     |               |             |                        |
|--------------------------------------|-----------|----------------------|-------|-------------|------|--------------|----------|--------|-----|---------------|-------------|------------------------|
| Plate Offsets (X,Y)-- [2:0-2-0,Edge] |           |                      |       |             |      |              |          |        |     |               |             |                        |
| <b>LOADING</b> (psf)                 |           | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> |      | <b>DEFL.</b> | in (loc) | l/defl | L/d | <b>PLATES</b> | <b>GRIP</b> |                        |
| TCLL (roof)                          | 20.0      | Plate Grip DOL       | 1.15  | TC          | 0.32 | Vert(LL)     | n/a      | -      | n/a | 999           | MT20        | 244/190                |
| Snow (Pf/Pg)                         | 11.6/15.0 | Lumber DOL           | 1.15  | BC          | 0.28 | Vert(CT)     | n/a      | -      | n/a | 999           |             |                        |
| TCDL                                 | 10.0      | Rep Stress Incr      | YES   | WB          | 0.09 | Horz(CT)     | 0.00     | 5      | n/a | n/a           |             |                        |
| BCLL                                 | 0.0 *     | Code IRC2015/TPI2014 |       | Matrix-S    |      |              |          |        |     |               |             |                        |
| BCDL                                 | 10.0      |                      |       |             |      |              |          |        |     |               |             |                        |
|                                      |           |                      |       |             |      |              |          |        |     |               |             | Weight: 50 lb FT = 20% |

|                |             |                 |   |
|----------------|-------------|-----------------|---|
| <b>LUMBER-</b> |             | <b>BRACING-</b> |   |
| TOP CHORD      | 2x4 SP No.3 | TOP CHORD       | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD      | 2x4 SP No.3 | BOT CHORD       | Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |
| WEBS           | 2x4 SP No.3 |                 |   |
| OTHERS         | 2x4 SP No.3 |                 |   |

**REACTIONS.** All bearings 10-6-8.  
 (lb) - Max Horz 8--186(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 5, 6, 7  
 Max Grav All reactions 250 lb or less at joint(s) 8, 5 except 6=261(LC 30), 7=408(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-7=-262/153

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-0-0, Interior(1) 4-0-0 to 10-1-2 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
  - 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
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



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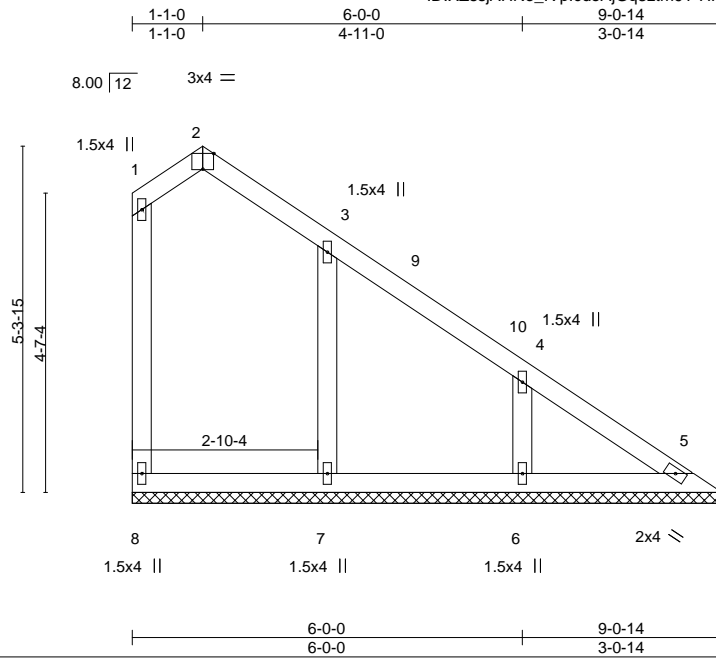
|  |  |
|--|--|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b><br/>         Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY<br/> <b>TRENCO</b><br/>         A MiTek Affiliate</p> <p>818 Soundside Road<br/>         Edenton, NC 27932</p> |
|--|--|



|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>V2 | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185452 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

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Scale = 1:35.4

|                                      |                       |             |               |          |        |     |               |             |
|--------------------------------------|-----------------------|-------------|---------------|----------|--------|-----|---------------|-------------|
| Plate Offsets (X,Y)-- [2:0-2-0,Edge] |                       |             |               |          |        |     |               |             |
| <b>LOADING</b> (psf)                 | <b>SPACING-</b> 2-0-0 | <b>CSI.</b> | <b>DEFL.</b>  | in (loc) | l/defl | L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL (roof) 20.0                     | Plate Grip DOL 1.15   | TC 0.21     | Vert(LL) n/a  | -        | n/a    | 999 | MT20          | 244/190     |
| Snow (Pf/Pg) 11.6/15.0               | Lumber DOL 1.15       | BC 0.15     | Vert(CT) n/a  | -        | n/a    | 999 |               |             |
| TCDL 10.0                            | Rep Stress Incr YES   | WB 0.06     | Horz(CT) 0.00 | 5        | n/a    | n/a |               |             |
| BCLL 0.0 *                           | Code IRC2015/TPI2014  | Matrix-S    |               |          |        |     | Weight: 43 lb | FT = 20%    |
| BCDL 10.0                            |                       |             |               |          |        |     |               |             |

|                       |   |
|-----------------------|---|
| <b>LUMBER-</b>        | <b>BRACING-</b>   |
| TOP CHORD 2x4 SP No.3 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.3 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |
| WEBS 2x4 SP No.3      |   |
| OTHERS 2x4 SP No.3    |   |

**REACTIONS.** All bearings 9-0-8.  
 (lb) - Max Horz 8=154(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 8, 5, 7, 6  
 Max Grav All reactions 250 lb or less at joint(s) 8, 5, 6 except 7=310(LC 26)

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-1-0, Interior(1) 4-1-0 to 8-7-2 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
  - 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
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

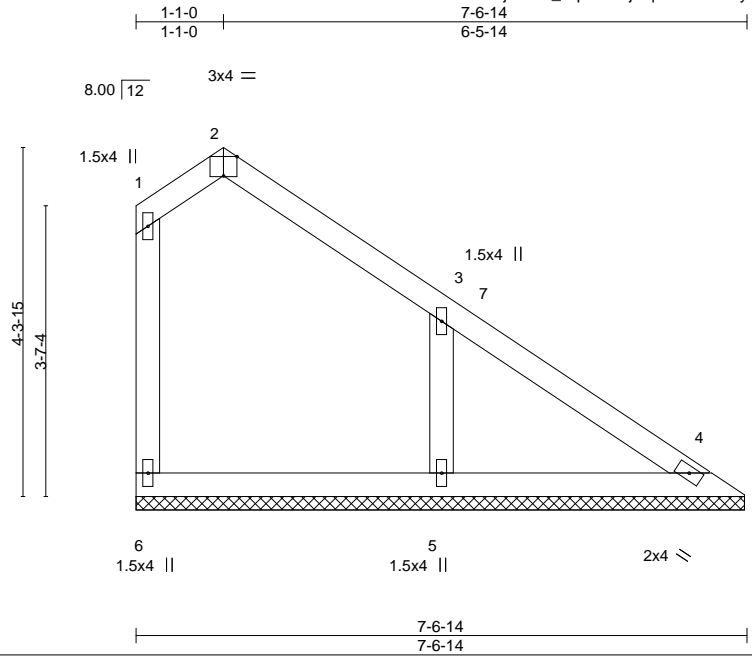


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|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>V3 | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185453 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

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Scale = 1:28.6

|               |           |                 |                 |          |      |          |      |   |     |        |                        |         |  |
|---------------|-----------|-----------------|-----------------|----------|------|----------|------|---|-----|--------|------------------------|---------|--|
| LOADING (psf) |           | SPACING-        |                 | CSI.     |      | DEFL.    |      |   |     | PLATES |                        | GRIP    |  |
| TCLL (roof)   | 20.0      | Plate Grip DOL  | 2-0-0           | TC       | 0.29 | Vert(LL) | n/a  | - | n/a | 999    | MT20                   | 244/190 |  |
| Snow (Pf/Pg)  | 11.6/15.0 | Lumber DOL      | 1.15            | BC       | 0.19 | Vert(CT) | n/a  | - | n/a | 999    | Weight: 32 lb FT = 20% |         |  |
| TCDL          | 10.0      | Rep Stress Incr | YES             | WB       | 0.05 | Horz(CT) | 0.00 | 4 | n/a | n/a    |                        |         |  |
| BCLL          | 0.0 *     | Code            | IRC2015/TPI2014 | Matrix-S |      |          |      |   |     |        |                        |         |  |
| BCDL          | 10.0      |                 |                 |          |      |          |      |   |     |        |                        |         |  |

|                |             |                 |   |
|----------------|-------------|-----------------|---|
| <b>LUMBER-</b> |             | <b>BRACING-</b> |   |
| TOP CHORD      | 2x4 SP No.3 | TOP CHORD       | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD      | 2x4 SP No.3 | BOT CHORD       | Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |
| WEBS           | 2x4 SP No.3 |                 |   |
| OTHERS         | 2x4 SP No.3 |                 |   |

**REACTIONS.** (size) 6=7-6-8, 4=7-6-8, 5=7-6-8  
 Max Horz 6=-122(LC 10)  
 Max Uplift 6=-9(LC 14), 5=-80(LC 15)  
 Max Grav 6=124(LC 2), 4=121(LC 25), 5=335(LC 26)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-5=-251/142

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=120mph Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 3-9-7, Interior(1) 3-9-7 to 7-1-2 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
  - 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
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



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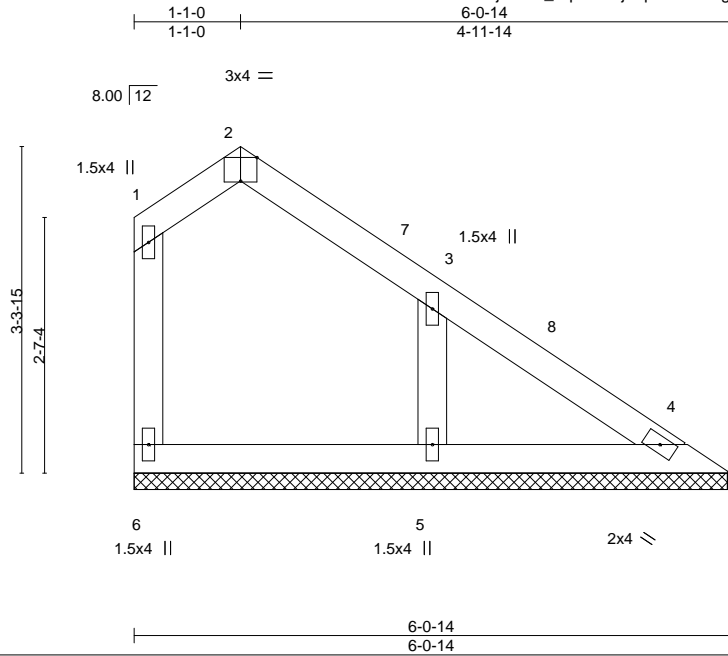
|  |   |
|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, 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 <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>243_2939_C | Truss<br>V4 | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | KB Home.243.2939.C<br>Job Reference (optional) | 148185454 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

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

8.520 s Aug 27 2021 MiTek Industries, Inc. Fri Oct 1 17:18:50 2021 Page 1

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Scale = 1:23.5

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

| LOADING (psf)          | SPACING-             | CSI.     | DEFL.         | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------------|----------------------|----------|---------------|----------|--------|-----|---------------|----------|
| TCLL (roof) 20.0       | Plate Grip DOL 1.15  | TC 0.18  | Vert(LL) n/a  | -        | n/a    | 999 | MT20          | 244/190  |
| 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 0.04  | Horz(CT) 0.00 | 4        | n/a    | n/a |               |          |
| BCLL 0.0 *             | Code IRC2015/TPI2014 | Matrix-S |               |          |        |     | Weight: 25 lb | FT = 20% |
| BCDL 10.0              |                      |          |               |          |        |     |               |          |

**LUMBER-**  
TOP CHORD 2x4 SP No.3  
BOT CHORD 2x4 SP No.3  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

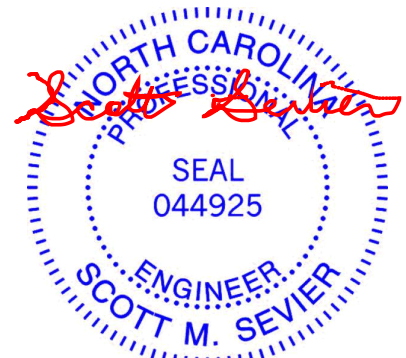
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=6-0-8, 4=6-0-8, 5=6-0-8  
Max Horz 6=-90(LC 10)  
Max Uplift 6=-7(LC 14), 5=-58(LC 15)  
Max Grav 6=101(LC 2), 4=93(LC 25), 5=258(LC 26)

**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=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-1-0, Interior(1) 4-1-0 to 5-7-2 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.



October 4, 2021

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

**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



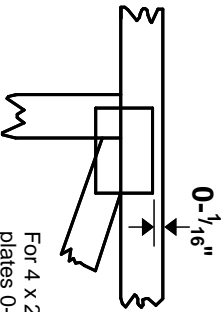
818 Soundside Road  
Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

**4 X 4**

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

## LATERAL BRACING LOCATION



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

## BEARING



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

## Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020

# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

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